

Energie termica preluata de punctele termice din reseaua primara anexa 5

PT	Sarcina termica instalata totala (incalzire+a.c.c.) [Gcal/h]	Gcal/luna						
		Oct. 2009	Nov. 2009	Dec. 2009	Jan. 2010	Febr. 2010	Martie 2010	Aprilie 2010
19	8,80	167,87	709,33	1.154,98	1.555,83	1.330,59	1.119,98	326,80
20	4,80	117,39	490,63	685,27	933,27	824,91	690,07	204,08
21	2,50	74,39	350,97	423,03	547,22	454,34	381,84	79,55
22	2,95	94,77	450,47	582,99	1.066,92	1.092,29	915,73	329,81
25	7,68	91,16	583,30	606,71	805,09	766,01	673,10	226,02
26	2,70	5,93	70,50	91,50	108,07	101,81	70,80	21,54
28	1,30	38,23	231,83	231,54	389,07	172,76	220,31	64,44
29	4,38	138,37	588,93	794,64	1.038,36	870,49	764,54	244,15
33	2,80	62,87	367,06	700,12	927,34	833,86	678,35	201,39
35	2,50	130,63	488,74	605,70	823,36	688,09	587,47	171,57
TOTAL PT-uri	40,41	921,63	4.331,74	5.874,49	8.194,52	7.135,14	3.910,29	1.258,92

PT ale consumatorilor (module termice racordate la reseaua primara)

PT	Sarcina termica instalata totala [Gcal/h]	Gcal/luna						
		Oct. 2009	Nov. 2009	Dec. 2009	Jan. 2010	Febr. 2010	Martie 2010	Aprilie 2010
SC. ELECTROTEH NO (fost PEROM) MOTOR STAR	0,80	0,00	3,46	5,25	8,36	5,28	5,11	0,00
TOTAL terti	2,80	0,00	25,80	51,60	48,16	61,06	37,84	0,00
TOTAL PT-uri + terti	3,60	0,00	29,26	56,85	56,52	66,34	42,95	0,00
	44,01	921,63	4.361,00	5.931,34	8.251,04	7.201,48	3.953,24	1.258,92

S.C.CET S.A BACAU

DATE PRIVIND PARAMETRII INREGISTRATI LA INTRAREA IN RETEAUA DE TRANSPORT APA FIEBINTE
Perioada octombrie 2009-aprilie 2010

anexa 6

Luna	Energie termica introdusa in retea primara [Gcal]	Ore de functionare	Energie termica intrata in PT-ur[Gcal]*	T tur CET [°C]	T retur CET [°C]	Pres. tur CET [bar]	Temp ext. [°C]	Consum apă adaos (dedu) [m3], total din care :	Adaos in retele primare [m3]	Adaos in retele secundare ale PT-urilor [m3]
Octombrie 2009	10.058,09	679,00	6.089,44	68,83	59,92	6,71	3,95	66.594,00	66.594,00	0,00
Noiembrie 2009	27.249,04	663,00	23.918,91	84,76	63,52	8,16	3,89	88.018,00	55.897,00	32.121,00
Decembrie 2009	44.210,21	740,00	33.673,91	88,94	64,34	8,39	3,81	67.553,00	49.885,00	17.668,00
Ianuarie 2010	51.919,51	744,00	43.967,68	93,88	66,49	8,32	3,90	64.844,00	51.557,00	13.287,00
Februarie 2010	42.052,41	672,00	37.114,13	91,83	65,96	8,07	3,86	50.072,00	36.023,00	14.049,00
Martie 2010	33.551,04	744,00	32.081,41	81,86	61,03	8,53	3,86	43.814,00	27.611,00	16.203,00
Aprilie 2010	12.502,89	601,00	9.515,40	74,87	61,26	8,05	3,90	26.411,00	20.944,00	5.467,00

*) Puncte termice urbane si puncte termice ale consumatorilor racordati la retea primara

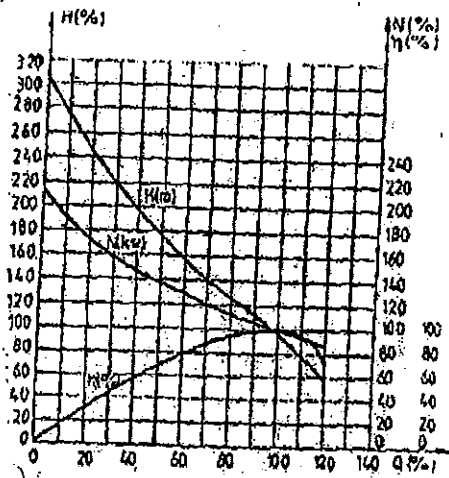
Regimuri de presiuni in functie de sursele de productie aflate in exploatare

Perioada	CAF+CET			CET		
	Ore de functionare	Pres. tur CET [bar]	Pres. retur CET [bar]	Ore de functionare	Pres. tur CET [bar]	Pres. retur CET [bar]
Octombrie 2009	0	-	-	679,00	6,71	3,95
Noiembrie 2009	0	-	-	663,00	8,16	3,89
Decembrie 2009	48	10,75	3,92	692,00	8,21	3,81
Ianuarie 2010	55	10,7	3,96	689,00	8,13	3,9
Februarie 2010	0	-	-	672,00	8,07	3,86
Martie 2010	279	9,28	3,88	465,00	8,09	3,85
Aprilie 2010	272	9,27	3,81	329,00	7,04	3,98

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A 22/50

DIAGRAMA DE TA



1. Instalație de preparare apă fierbinte echipată cu boilere de vârf.

Tipul schimbătorului de căldură (tubular sau cu plăci)	Capacitatea MW (Gcal/h)	Parametrii aburului nominali/reali				Parametrii apei nominali./ reali.			Anul punerii în funcțiune
		Debit [t/h]	Presiunea [bar]	Temperatura aburului [°C]	Temperatura de ieșire a condensatului [°C]	Debit [t/h]	Temperatura de intrare [°C]	Temperatura de ieșire [°C]	
Boiler de termoficare de vîrf nr.1 (tubular)	46,5 MWt (40 Gcal/h)	70	13	260	nespecificat	1100	90	125	1998
Boiler de termoficare de vîrf nr.2 (tubular)	46,5 Mt (40 Gcal/h)	70	13	260	nespecificat	1100	90	125	2005

2. Cazan de apă fierbinte 100 Gcal/h (str.Letea nr.28)

Mărimea	U.M.	Valoarea	Observații	
Tipul cazanului CAF 100 Gcal/h	-		Gaz 6 arzătoare din care/ mixte (pacura/gaz) 3 arzătoare	
Parametrii nominali	Debitul de apă fierbinte	t/h	3170	Obiectivul : creșterea temperaturii în cazan cu 30°C la sarcina de 100Gcal/h
	Presiunea	bar	19	
	Debitul de căldură	Gcal/h	100	
	Temperatura de ieșire a apei	°C	180	
	Randament	%	87,9	
Parametrii reali	Debitul de apă fierbinte	t/h	3204	Motivale scăderii parametrilor. Adaptare la necesitățile rețelei de

	Presiunea	Gcal/h	7,5	termoficare * prin modernizare
	Debitul de căldură	bar	18,93	
	Temperatura de ieșire a apei	°C	76,46	
	Randament	%	91	
Anul punerii în funcțiune		-	1979	
Anul ultimei reparații capitale		-	2003	

3. Schimbătoare de căldură cu plăci din cadrul centralei existente echipate cu TG (14 MWe și 23 MWt):

Identificare <funcție/denumire în schema termică a centralei	u.m.	1	2	3
Tip		FP 100-325-4-N		
Fabricant		FUNKE Wärmeaustauscher Apparatebau GmbH		
Puterea termică instalată	[Gcal/h]	10,75	10,75	10,75
	[MW]	12,5	12,5	12,5

4. Ciclul combinat gaze – abur (10,8 MWe și 14 MWt) prevăzut a fi instalat ca sursă de bază în cadrul amplului proiect de reabilitare a sistemului de alimentare cu energie termică a municipiului Bacău : caietul de sarcini privind achiziția acestuia prevede condiții tehnice necesare funcționării în paralel cu instalațiile de bază ale centralei cu TG existente pe platforma CET Bacău.

Anexa 9

1. Date tehnice privind punctul termic PT19.
Aleea Oțelariilor

1.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	M10-BFG		ALFA LAVAL
2	Numărul		Buc.	2		
3	Capacitatea		MW	2.32	2.32	
4	Temperatura nominală a agentului primar	intrare	°C	115	115	
		ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	intrare	°C	60	60	
		ieșire	°C	80	80	

1.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	M6-FG M15-MFG		ALFA LAVAL
7	Numărul		buc.	2 2		
8	Capacitatea		MW	1.74 0.35	1.74 0.35	
9	Temperatura nominală a agentului primar	intrare	°C	70	70	
		ieșire	°C	40	40	
10	Temperatura nominală a agentului secundar	intrare	°C	10	10	
		ieșire	°C	60	60	

1.3. Date tehnice privind pompele

Nr.	Pompa	Tipul	Caracteristica				Observații
			Nr. [buc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire	GRUNDFOS	3	101	28.7	11	
12	Apă de adaos	EA-MVI1603-12-25-65/65-2x2000					Modul de expansiune
13	Circuitul de apă caldă de consum	GRUNDFOS	1	60	15	7.5	
14	Recirculare apă caldă (P+4)	GRUNDFOS	1	20	15	2.2	
15	Recirculare apă caldă (P+10)	GRUNDFOS	1	4	15	1.1	

1.4. Automatizare și contorizare

	Circuitul	Automatizare		Contorizare	
		Da	Nu	Da	Nu
16	Sistem de distribuție pentru încălzire	da		da	
17	Sistem de distribuție pentru apă caldă de consum	da		da	
18	La consumatori		nu	da	

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2. Date tehnice privind punctul termic PT20
 Alea Proiectantului

2.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	M10-BFG		ALFA LAVAL
2	Numărul		Buc.	2		
3	Capacitatea		MW	1.45	1.45	
4	Temperatura nominală a agentului primar	intrare	°C	115	115	
		ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	intrare	°C	60	60	
		ieșire	°C	80	80	

2.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	M6-FG M15-MFG		ALFA LAVAL
7	Numărul		buc.	2 1		
8	Capacitatea		MW	1.16 0.35	1.16 0.35	
9	Temperatura nominală a agentului primar	intrare	°C	70	70	
		ieșire	°C	40	40	
10	Temperatura nominală a agentului secundar	intrare	°C	10	10	
		ieșire	°C	60	60	

2.3. Date tehnice privind pompele

Nr.	Pompa	Tipul	Caracteristica				Observații
			Nr. [buc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire	GRUNDFOS	1	124	25.6	11	
12	Apă de adaos	EA-MHI805-12-25-50/50-2500					Modul de expansiune
13	Circuitul de apă caldă de consum	GRUNDFOS	1	40	15	5.5	
14	Recirculare apă caldă (P+4)	GRUNDFOS	1	3	15	2.2	
15	Recirculare apă caldă (P+10)	GRUNDFOS	1	2	15	1.1	

2.4. Automatizare și contorizare

	Circuitul	Automatizare		Contorizare	
		Da	Nu	Da	Nu
16	Sistem de distribuție pentru încălzire	da		da	
17	Sistem de distribuție pentru apă caldă de consum	da		da	
18	La consumatori		nu	da	

3. Date tehnice privind punctul termic PT21
Str. Republicii

3.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărima		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	M10-BFG		ALFA LAVAL
2	Numărul		Buc.	2		
3	Capacitatea		MW	0.87	0.87	
4	Temperatura nominală a agentului primar	intrare	°C	115	115	
		ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	intrare	°C	60	60	
		ieșire	°C	80	80	

3.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

Nr	Mărima		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	M6-FG		ALFA LAVAL
7	Numărul		buc.	2		
8	Capacitatea		MW	0.58	0.58	
9	Temperatura nominală a agentului primar	intrare	°C	70	70	
		ieșire	°C	40	40	
10	Temperatura nominală a agentului secundar	intrare	°C	10	10	
		ieșire	°C	60	60	

3.3. Date tehnice privind pompele

Nr.	Pompa	Tipul	Caracteristica				Obs.
			Nr. [buc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire	GRUNDFOS	2	75.2	27.1	7.5	
12	Apă de adaos	EA-MHIL505-12-25-40/40-1500					Modul de expansiune
13	Ridicare presiune apă rece	GRUNDFOS	1	20	12	2.2	
14	Recirculare apă caldă (P+4)	GRUNDFOS	1	7	15	1.1	

3.4. Automatizare și controlare

	Circuitul	Automatizare		Controlare	
		Da	Nu	Da	Nu
15	Rețeaua de distribuție pentru încălzire	da		da	
16	Rețeaua de distribuție pentru apă caldă de consum	da		da	
17	La consumator		nu	da	

4. Date tehnice privind punctul termic PT22
Str. Aeroportului

4.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	M10-BFG		ALFA LAVAL
2	Numărul		Buc.	2		
3	Capacitatea		MW	1.45	1.45	
4	Temperatura nominală a agentului primar	intrare	°C	115	115	
		ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	intrare	°C	60	60	
		ieșire	°C	80	80	

4.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	M6-FG		ALFA LAVAL
7	Numărul		buc.	2 1		
8	Capacitatea		MW	0.81 0.35	0.81 0.35	
9	Temperatura nominală a agentului primar	intrare	°C	70	70	
		ieșire	°C	40	40	
10	Temperatura nominală a agentului secundar	intrare	°C	10	10	
		ieșire	°C	60	60	

4.3. Date tehnice privind pompele

Nr.	Pompa	Tipul	Caracteristica				Obs.
			Nr. [buc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire	GRUNDFOS	3	124	25.6	1.1	
12	Apă de adaos	EA-MHI805-12-25-50/50-2500					Modul expansiune
13	Circuitul de apă caldă de consum	GRUNDFOS	1	28	12	2.2	
14	Recirculare apă caldă (P+4)	GRUNDFOS	1	9	15	1.1	
15	Recirculare apă caldă (P+10)	GRUNDFOS	1	2	15	1.1	

4.4. Automatizare și contorizare

	Circuitul	Automatizare		Contorizare	
		Da	Nu	Da	Nu
16	Sistem de distribuție pentru încălzire	da		da	
17	Sistem de distribuție pentru apă caldă de consum	da		da	
18	La consumatori		nu	da	

5. Date tehnice privind punctul termic PT25
Str. Condorilor

5.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	ICPIAF		
2	Numărul		Buc.	3		
3	Capacitatea		MW	0.89	0.89	
4	Temperatura nominală a agentului primar	Intrare	°C	115	115	
		Ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	Intrare	°C	60	60	
		Ieșire	°C	80	80	

5.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	ICPIAF		
7	Numărul		buc.	2		
8	Capacitatea		MW	0.77	0.77	
9	Temperatura nominală a agentului primar	Intrare	°C	70	70	
		Ieșire	°C	40	40	
10	Temperatura nominală a agentului secundar	Intrare	°C	10	10	
		Ieșire	°C	60	60	

5.3. Date tehnice privind pompele

Nr.	Pompa	Tipul	Caracteristica				Obs.
			Nr. [buc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire						
12	Apă de adaos						
13	Circuitul de apă caldă de consum						
14	Recirculare apă caldă (apă caldă de consum)						

5.4. Automatizare și contorizare

	Circuitul	Automatizare		Contorizare	
		Da	Nu	Da	Nu
15	Sistem de distribuție pentru încălzire	nu		da	
16	Sistem de distribuție pentru apă caldă de consum	nu		da	
17	La consumatori		nu	da	

6. Date tehnice privind punctul termic PT26
Str. Letea

6.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	ICPIAF		
2	Numărul		Buc.	1		
3	Capacitatea		MW	5.8	5.8	
4	Temperatura nominală a agentului primar	Intrare	°C	115	115	
		Ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	Intrare	°C	60	60	
		Ieșire	°C	80	80	

6.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	ICPIAF		
7	Numărul		buc.	1		
8	Capacitatea		MW	1.16	1.16	
9	Temperatura nominală a agentului primar	Intrare	°C	115	115	
		Ieșire	°C	65	65	
10	Temperatura nominală a agentului secundar	Intrare	°C	60	60	
		Ieșire	°C	80	80	

6.3. Date tehnice privind pompele

Nr.	Pompa	Tipul	Caracteristica				Observații
			Nr. [buc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire						
12	Apă de adaos						
13	Circuitul de apă caldă de consum						
14	Recirculare apă caldă (apă caldă de consum)						

6.4. Automatizare și contorizare

	Circuitul	Automatizare		Contorizare	
		Da	Nu	Da	Nu
15	Sistem de distribuție pentru încălzire		NU	da	
16	Sistem de distribuție pentru apă caldă de consum		NU	da	
17	La consumatori		NU	da	

7. Date tehnice privind punctul termic PT28
Str. Letea

7.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	SCHMIDT		
2	Numărul		Buc.	1		
3	Capacitatea		MW	2.32	2.32	
4	Temperatura nominală a agentului primar	Intrare	°C	115	115	
		Ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	Intrare	°C	60	60	
		Ieșire	°C	80	80	

7.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	SCHMIDT		
7	Numărul		buc.	1		
8	Capacitatea		MW	0.81	0.81	
9	Temperatura nominală a agentului primar	Intrare	°C	70	70	
		Ieșire	°C	40	40	
10	Temperatura nominală a agentului secundar	Intrare	°C	10	10	
		Ieșire	°C	60	60	

7.3. Date tehnice privind pompele

Nr.	Pompa	Tipul	Caracteristica				Observații
			Nr. [buc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire						
12	Apă de adaos						
13	Circuitul de apă caldă de consum						
14	Recirculare apă caldă (apă caldă de consum)						

7.4. Automatizare și contorizare

	Circuitul	Automatizare		Contorizare	
		Da	NU	Da	Nu
15	Rețeaua de distribuție pentru încălzire		NU	da	
16	Rețeaua de distribuție pentru apă caldă de consum		NU	da	
17	La consumatori		NU	da	

8. Date tehnice privind punctul termic PT29
Str. Bicăz

8.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	M10-BFG		ALFA LAVAL
2	Numărul		Buc.	2		
3	Capacitatea		MW	1.74	1.74	
4	Temperatura nominală a agentului primar	intrare	°C	115	115	
		ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	intrare	°C	60	60	
		ieșire	°C	80	80	

8.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	M15-MFG		ALFA LAVAL
7	Numărul		buc.	2		
8	Capacitatea		MW	1.74	1.74	
9	Temperatura nominală a agentului primar	intrare	°C	70	70	
		ieșire	°C	40	40	
10	Temperatura nominală a agentului secundar	intrare	°C	10	10	
		ieșire	°C	60	60	

8.3. Date tehnice privind pompele

Nr.	Pompa	Tipul	Caracteristica				Obs.
			Nr. [bc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire	GRUNDFOS	3	76.2	26.9	7.5	
12	Apă de adaos	EA-MHI805-12-25-50/50-2x1500					Modul de expansiune
13	Ridicare presiune apă rece	GRUNDFOS	1	60	15	7.5	
14	Recirculare apă caldă (P+4)	GRUNDFOS	1	20	15	2.2	

8.4. Automatizare și contorizare

	Circuitul	Automatizare		Contorizare	
		Da	Nu	Da	Nu
15	Sistem de distribuție pentru încălzire	da		da	
16	Sistem de distribuție pentru apă caldă de consum	da		da	
17	La consumator!		nu	da	

9. Date tehnice privind punctul termic PT33
Str. Neptun

9.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	M10-BFG		ALFA LAVAL
2	Numărul		Buc.	2		
3	Capacitatea		MW	0.85	0.85	
4	Temperatura nominală a agentului primar	intrare	°C	115	115	
		ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	intrare	°C	60	60	
		ieșire	°C	80	80	

9.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	M10-BFG		ALFA LAVAL
7	Numărul		buc.	2		
8	Capacitatea		MW	0.77	0.77	
9	Temperatura nominală a agentului primar	intrare	°C	70	70	
		ieșire	°C	40	40	
10	Temperatura nominală a agentului secundar	intrare	°C	10	10	
		ieșire	°C	60	60	

9.3. Date tehnice privind pompele

Nr.	Pompa	Tipul	Caracteristica				Observații
			Nr. [buc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire	WILO DL 80	2 1	96.8 79.4	16	7.5 5.5	
12	Apă de adaos					1.5	Modul de expansiune
13	Ridicare presiune apă rece						
14	Recirculare apă caldă (P+4)					1.1	
15	Recirculare apă caldă (P+10)						

9.4. Automatizare și contorizare

	Circuitul	Automatizare		Contorizare	
		Da	Nu	Da	Nu
16	Sistemul de distribuție pentru încălzire	da		da	
17	Sistemul de distribuție pentru apă caldă de consum	da		da	
18	La consumatori		nu	da	

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10. Date tehnice privind punctul termic PT35
Str. Aviatori 1

10.1. Date tehnice privind schimbătoarele de căldură pentru încălzire

Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
1	Tipul		-	M10-BFG		ALFA LAVAL
2	Numărul		Buc.	3		
3	Capacitatea		MW	2.28	2.28	
4	Temperatura nominală a agentului primar	intrare	°C	115	115	
		ieșire	°C	65	65	
5	Temperatura nominală a agentului secundar	intrare	°C	60	60	
		ieșire	°C	80	80	

10.2. Date tehnice privind schimbătoarele de căldură pentru apa caldă de consum

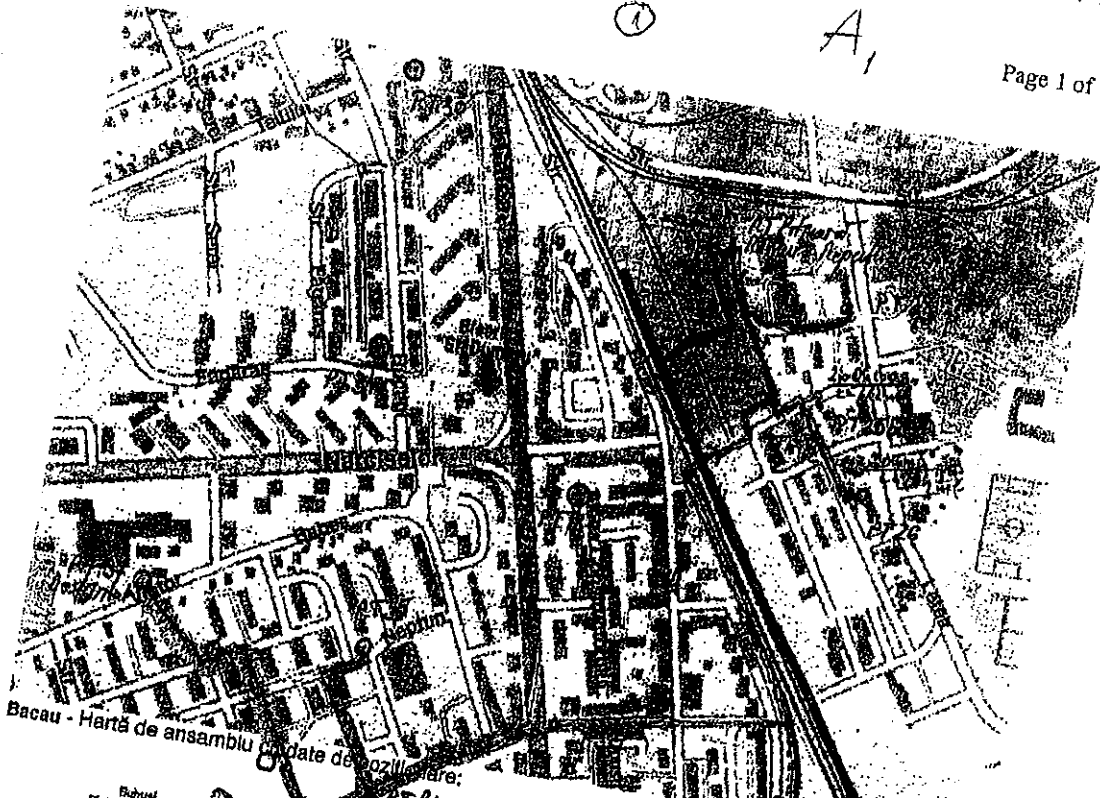
Nr	Mărimea		U.M.	Valoarea		Observații
				Proiect	Actuală	
6	Tipul		-	M10 MGF		
7	Numărul		buc.	2		
8	Capacitatea		MW	1	1	
9	Temperatura nominală a agentului primar	intrare	°C	70	70	
		ieșire	°C	55	55	
10	Temperatura nominală a agentului secundar	intrare	°C	10	10	
		ieșire	°C	55	55	

10.3. Date tehnice privind pompele

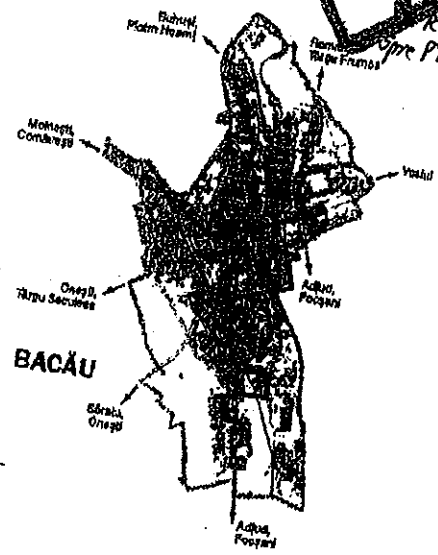
Nr.	Pompa	Tipul	Caracteristica				Obs.
			Nr. [buc]	Debit [m ³ /h]	Înălțimea de pompare [mca.]	Puterea [kW]	
11	Circuitul de încălzire	WILLO DPn100	2	126 139	14.3 16	11 15	
12	Apă de adaos					3.5	Modul de expansiune
13	Ridicare presiune apă rece						
14	Recirculare apă caldă (P+4)		1	27.1	19.6	19.6	

10.4. Automatizare și contorizare

	Circuitul	Automatizare		Contorizare	
		Da	Nu	Da	Nu
15	Sistemul de distribuție pentru încălzire	da		da	
16	Sistemul de distribuție pentru apă caldă de consum	da		da	
17	La consumatori		nu	da	



Bacău - Hartă de ansamblu cu date de poziționare:



R.T. Primăria
spre PT 83, 85, 87

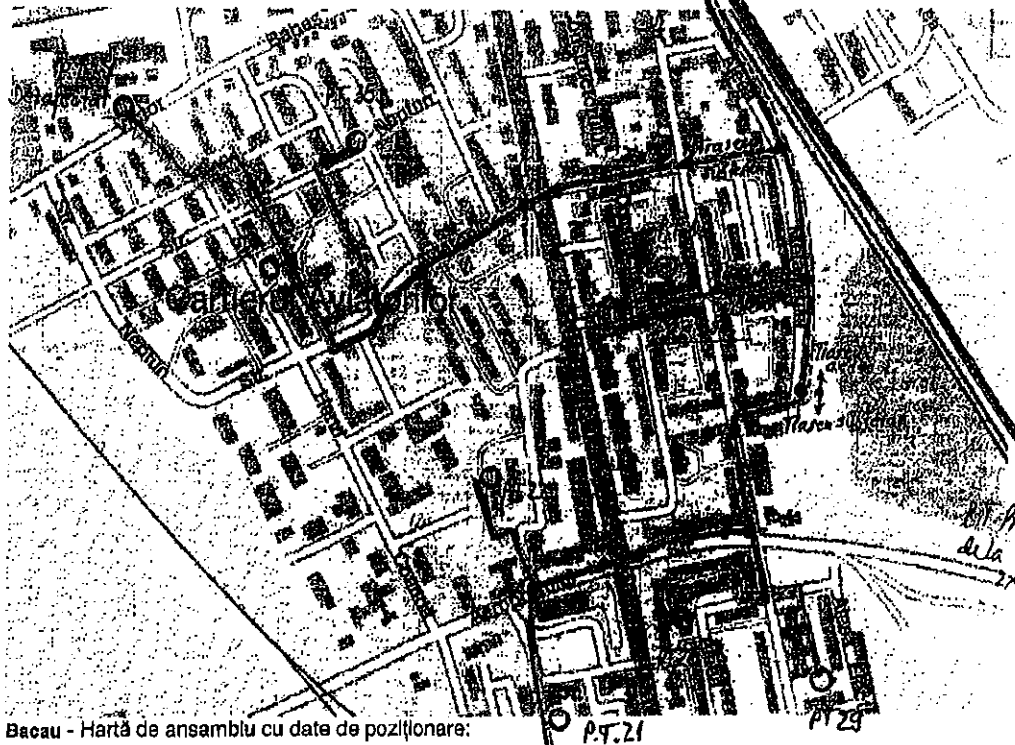
R.T. primăria
Ramura Republicii
Spre PT 13, 20, 29,
21, 22, 25 - Lic. H. Coanda -
Aeromotoare, Perom.



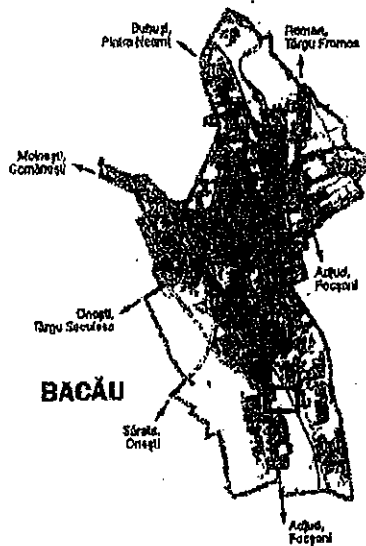
A46/50

② A2

R.T. Primara
Camera Republicii 2x400



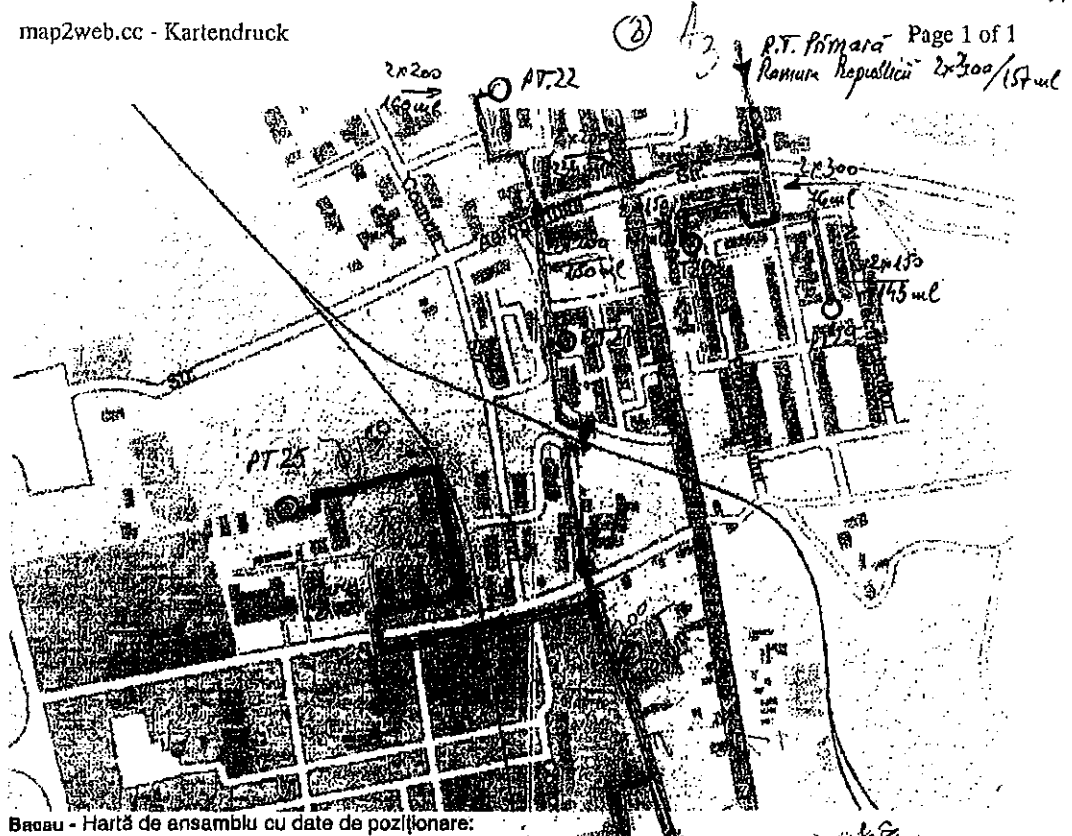
Bacau - Harta de ansamblu cu date de pozitionare:



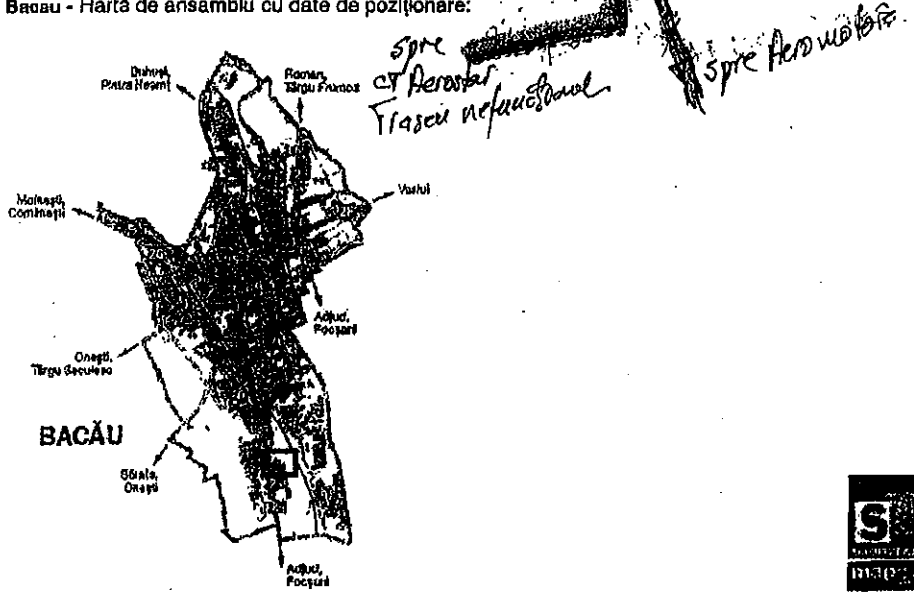
R.T. Primara
Spre P.T. 25 Lic. H. Candea
P.T. Heromolovs, Perom



my



Bacău - Hartă de ansamblu cu date de poziționare:

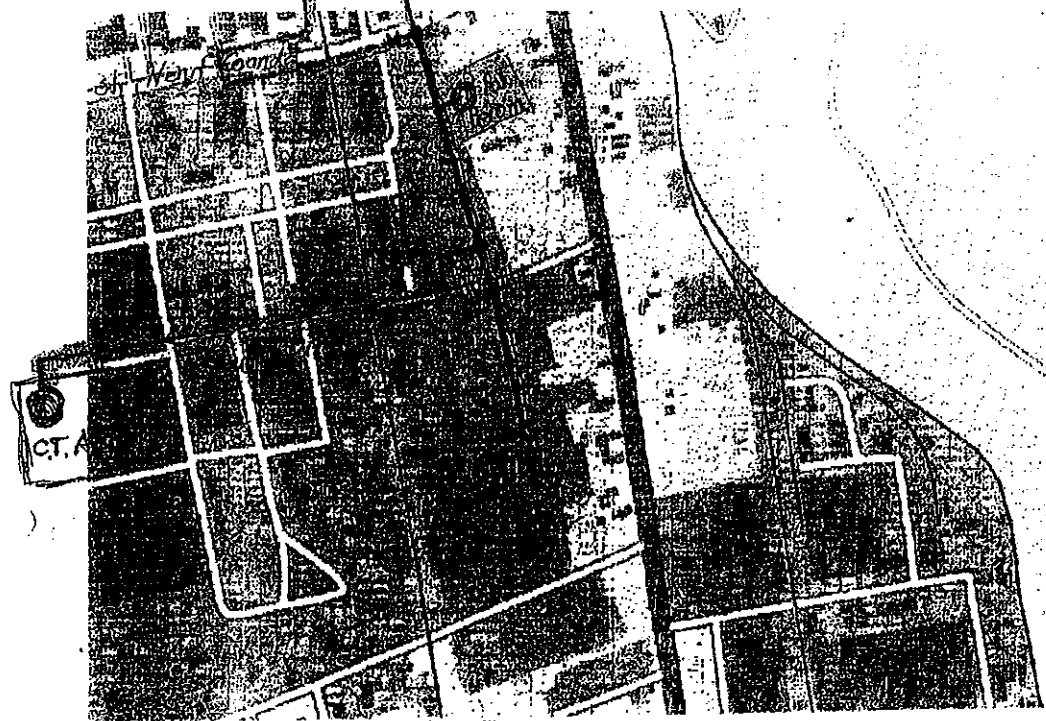


map2web.cc - Kartendruck
0123 El R.T. P. M. W. S. P. R.
PT 25-

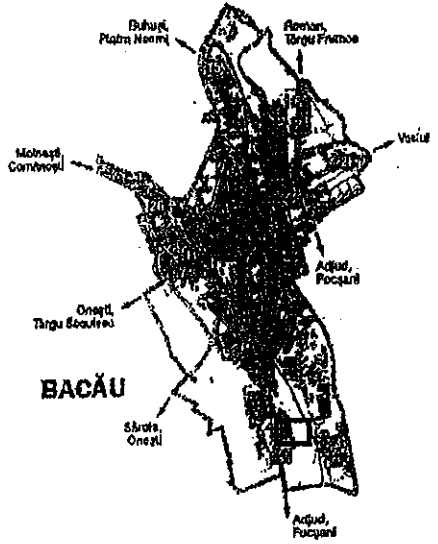
De la CET Bac

(4)

A4



Bacău - Hartă de ansamblu cu date de poziționare:



ANEXA B

Completări la Tema de proiectare din partea SC CET
SA Bacău

ANEXA B 1/34



PRIMĂRIA MUNICIPIULUI BACĂU

Județul Bacău, România

Str. Mărășești nr.6, Bacău, 600017
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Tel: (+40) 234 581849
Fax: (+40) 234 588757



SERVICIUL ACHIZITII
NR. 9464 din 23.09.2010

CLARIFICARI

Referitor la achiziția publică de:
Servicii de proiectare – faza studiu de fezabilitate pentru ob. de inv. „Racordare la SACET a SC Aerostar SA Bacau” din 28.09.2010, cod CPV 79314000 - 8.

La solicitările unor participanți la procedura cumpărare directă, va transmitem următoarele clarificări:

1. Intrebare:

In tema de proiectare se solicita realizarea studiului de regim hidraulic pentru ramura Republicii.
Va rugam pentru a elabora oferta, sa ne transmiteti o schema de functionare a retelei termice primare, in special un detaliu de racord al CAF-ului la reseaua termica primara.

1. Raspuns:

Schema de principiu din interior CET si legatura CAF se gaseste in anexa 9, ultima pagina.

2. Intrebare:

Pentru elaborarea studiului de regim hidraulic, va rugam sa ne spuneti care este regimul de presiuni asigurat de CAF in punctul de racord la reseaua termica primara.

2. Raspuns:

Parametri din exploatare:

- a) functionare CET cu CAF : pres. T dupa CAF = 6,0 bar, pres. R CAF = 3,5 bar
- b) functionare CET fara CAF : pres. T CET = 8,0 bar, pres. R CET = 3,5 bar
pres. T CAF = 7,0 bar, pres. R CAF = 4,0 bar.

3. Intrebare:

In tema de proiectare se solicita realizarea studiului de regim hidraulic pentru ramura Republicii.
Va rugam sa ne spuneti daca trebuie facut regimul hidraulic pentru toata reseaua primara. In cazul in care trebuie, va rugam sa specificati pentru ce regim de functionare (iarna si/sau vara) si va rugam sa furnizati datele cu privire la lungimile de conducta (tur si retur) pe fiecare diametru in parte, pe fiecare magistrala in parte.

3. Raspuns:

Calculul hidraulic al retelei de termoficare cu apa fierbinte stabileste diametrele conductelor retelei si pierderile de presiune pe fiecare tronson, permitand intocmirea proiectelor de executie a retelei si stabilirea regimurilor hidraulice de functionare a acesteia.

Calculul hidraulic se desfasoara in urmatoarele etape:

- determinarea debitelor de ag. termic. pentru fiecare tronson in parte, calculul efectuandu-se incepand de la ultimele puncte termice spre sursa, pe tronsoanele de distributie si magistrale;

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- determinarea diametrului fiecarui tronson in parte, pe baza valorilor pierderilor liniare specifice de presiune
- determinarea valorilor exacte ale pierderilor liniare specifice de presiune pe baza diametrelor stabilite, a debitelor de agent termic si pierderilor liniare totale de presiune.
- determinarea pierderilor locale de presiune
- stabilirea presiunilor disponibile in fiecare punct al retelei (graficul piezometric) pe baza pierderilor liniare si locale de presiune pe conductele de tur si retur si a caderilor de presiune necesare la consumatori si pe instalatiile din CET, pentru punctele termice si instalatiile din CET;
- stabilirea pe baza graficului piezometric, a inaltimii de pompare a instalatiilor din CET si a eventualelor statii intermediare de pompare;

In cazul prezentel teme de proiectare se va efectua calculul hidraulic pentru intreg sistemul de termoficare, in regim de iarna, din care vor rezulta :

*diametrele conductelor din ramura Republicii.

*graficul de repartizare a presiunilor care permite stabilirea masurilor in vederea echilibrarii retelei si verificarea alegerii instalatiilor de pompare din CET, CAF sau din eventualele statii intermediare de pompare.

Pentru regimul de vara se va efectua un calcul hidraulic de verificare.

Anexam datele ce le detinem despre lungimi, diametre retea primara:

SITUATIA RETELEI DE TRANSPORT APA FIERBINTE

Nr. crt.	Denumire tronson	Dn [mm]	Lungime tronson [m]	Lungime conducte [m]	Mod de amplasare	Tip izolatie	Tip tronson	Data PIF
1	200-300	1000	744.5	1489	suprateran	teava preizolata	magistrala	1998
2	200-300	1000	1324	2648	suprateran	tabla	magistrala	1998
3	211-278	150	30	60	suprateran	tabla	racord	1998
4	231-239	700	337	674	subteran	carton	magistrala	1998
5	239-243	700	230	460	subteran	carton	magistrala	1998
6	243-246	700	906	1812	suprateran	tabla	magistrala	1998
7	246-272	700	846	1692	suprateran	tabla	magistrala	1998
8	247-248	800	515	1030	suprateran	tabla	magistrala	1998
9	247-272	800	95	190	suprateran	tabla	magistrala	1998
10	248-271	800	2089	4178	suprateran	tabla	magistrala	1998
11	271-300	800	448	896	suprateran	tabla	magistrala	1998
12	227- PT 40	250	159	318	subteran	carton	racord	1985
13	227-228	400	252	504	subteran	carton	magistrala	1985
14	228-229	400	370	740	subteran	carton	magistrala	1985
15	228-240	350	120	240	subteran	carton	magistrala	1985
16	228-230	400	467	934	suprateran	tabla	magistrala	1985
17	230-231	400	197	394	suprateran	tabla	magistrala	1985
18	230-PT124	65	100	200	subteran	tabla	racord	1985
19	231-232	400	143	286	subteran	carton	magistrala	1985
20	232-233	400	399	798	suprateran	tabla	magistrala	1985

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21	232-238	200	60	120	suprateran	carton	racord	1985
22	233-234	350	531	1062	suprateran	tabla	magistrala	1985
23	234- PT 59	150	40	80	subteran	carton	racord	1985
24	234-235	350	405	810	suprateran	tabla	magistrala	1985
25	235- PT 64	250	250	500	subteran	carton	racord	1985
26	235-236	350	123	246	subteran	carton	magistrala	1985
27	236- PT 61	250	28	56	suprateran	carton	racord	1985
28	236-237	350	94	188	subteran	carton	magistrala	1985
29	237- PT 62	200	222	444	subteran	carton	racord	1985
30	237- PT 63	250	296	590	subteran	carton	racord	1985
31	238-277	150	170	340	subteran	carton	racord	1985
32	240 -PT 41	250	96	192	subteran	carton	racord	1985
33	240-241	350	60	120	subteran	carton	magistrala	1985
34	241-276	350	416	832	subteran	carton	racord	1985
35	243-244	300	63	126	subteran	carton	magistrala	1985
36	244- PT 44	250	89	178	subteran	carton	racord	1985
37	244-245	300	748	1496	subteran	carton	magistrala	1985
38	245- PT 151	250	301	602	subteran	carton	racord	1985
39	245- PT 152	250	270	540	subteran	carton	racord	1985
40	276- PT 43	250	60	120	subteran	carton	racord	1985
41	277- PT 58	125	100	200	subteran	carton	racord	1985
42	201-260	400	212	424	suprateran	tabla	magistrala	1978
43	205-249	150	155	310	suprateran	tabla	racord	1978
44	206- PT 14	200	262	524	suprateran	tabla	racord	1978
45	207- PT 12	150	218	436	subteran	carton	racord	1978
46	208-223	400	481	962	subteran	carton	magistrala	1978
47	211-212	400	180	360	subteran	carton	magistrala	1978
48	212- PT 24	150	84	168	subteran	teava prelzolata	racord	2008
49	212-213	400	80	160	subteran	carton	magistrala	1978
50	213-214	300	59	118	subteran	carton	magistrala	1978
51	213-218	200	30	60	subteran	carton	racord	1978
52	214-215	300	228	456	suprateran	carton	magistrala	1978
53	215- PT 2	200	120	240	subteran	carton	racord	1978
54	215-216	300	207	414	suprateran	carton	magistrala	1978
55	216- PT 1	150	192	384	subteran	carton	racord	1978
56	216-217	250	283	526	suprateran	carton	magistrala	1978
57	217- PT 3	150	12	24	subteran	carton	racord	1978
58	217- PT 8	200	114	228	subteran	carton	racord	1978
59	218-219	200	90	180	subteran	carton	racord	1978
60	219-220	200	114	228	suprateran	tabla	racord	1978
61	220- PT 4	200	15	30	suprateran	tabla	racord	1978
62	221-222	150	32	64	suprateran	tabla	racord	1978

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63	221-278	150	121	242	subteran	carton	racord	1978
64	222- PT 6	150	38	76	subteran	tabla	racord	1978
65	223- PT 154	150	150	300	subteran	carton	racord	1978
66	249- PT 17	150	180	360	subteran	carton	racord	1978
67	256-257	150	30	60	subteran	carton	magistrala	1978
68	260- PT 26	80	101	202	suprateran	tabla	racord	1978
69	260-261	400	151	302	suprateran	tabla	magistrala	1978
70	261-262	400	28	56	suprateran	tabla	magistrala	1978
71	262-263	400	350	700	suprateran	tabla	magistrala	1978
72	262-279	200	52	104	suprateran	tabla	magistrala	1978
73	263-264	400	150	300	suprateran	tabla	magistrala	1978
74	264- PT 19	400	150	300	subteran	carton	racord	1978
75	264-265	300	157	314	suprateran	tabla	magistrala	1978
76	265-266	300	213	426	subteran	carton	magistrala	1978
77	266-267	300	76	152	subteran	carton	magistrala	1978
78	266-268	200	234	468	subteran	carton	magistrala	1978
79	267- PT 20	150	171	342	subteran	carton	racord	1978
80	267- PT 29	150	143	286	subteran	carton	racord	1978
81	268- PT 21	200	150	300	subteran	carton	racord	1978
82	268- PT 22	200	160	320	subteran	carton	racord	1978
83	279- PT 18	200	80	160	subteran	carton	racord	1978
84	201-300	1*700	5	5	suprateran	tabla	racord	1978
85	201-300	2*400		10	suprateran	tabla	racord	1978
86	201-202	1*600	30	30	suprateran	tabla	racord	1978
87	201-202	2*400		60	suprateran	tabla	racord	1978
88	202-203	1*600	257	257	suprateran	tabla	magistrala	1978
89	202-203	2*400		514	suprateran	tabla	magistrala	1978
90	203-204	1*600	191	191	suprateran	tabla	magistrala	1978
91	203-204	2*400		382	suprateran	tabla	magistrala	1978
92	204- PT 15	1*200	47	47	subteran	carton	racord	1978
93	204- PT 15	2*125		94	subteran	carton	racord	1978
94	204-205	1*600	245	245	suprateran	tabla	magistrala	1978
95	204-205	2*400		490	suprateran	tabla	magistrala	1978
96	205-206	1*600	219	219	suprateran	tabla	magistrala	1978
97	205-206	2*400		438	suprateran	tabla	magistrala	1978
98	206-207	1*600	111	111	suprateran	tabla	magistrala	1978
99	206-207	2*400		222	suprateran	tabla	magistrala	1978
100	207-208	1*600	605	605	suprateran	tabla	magistrala	1978
101	207-208	2*400		1210	suprateran	tabla	magistrala	1978
102	208-209	1*600	290	290	suprateran	tabla	magistrala	1978
103	208-209	2*400		580	suprateran	tabla	magistrala	1978
104	209-210	1*600	174	174	subteran	carton	magistrala	1978

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105	209-210	2*400		348	subteran	carton	magistrala	1978
106	210-211	1*600	55	55	suprateran	tabla	magistrala	1978
107	210-211	2*400		110	suprateran	tabla	magistrala	1978
108	283- PT 31	250	235	470	subteran	carton	racord	2003
109	285- PT 33	200	181	362	subteran	carton	racord	2003
110	284- PT 35	200	181	362	subteran	carton	racord	2003
111	PT33-PT37	200	269	538	subteran	carton	racord	2003
112	286- PT 69	200	43	86	subteran	carton	racord	2003
113	287- PT 95	200	173	346	subteran	carton	racord	2003
114	288- PT 96	200	23	46	subteran	carton	racord	2003
115	289- PT 97	200	99	198	subteran	carton	racord	2003
116	290- PT 115	250	281	562	subteran	carton	racord	2003
117	271-283	300	261	522	suprateran	tabla	magistrala	2003
	263-284	300	509	1018	subteran	carton	magistrala	2003
	284-285	300	509	1018	subteran	carton	magistrala	2003
	272-287	500	872	1744	subteran	carton	magistrala	2003
	287-288	500	217	434	subteran	carton	magistrala	2003
	288-289	500	508	1016	subteran	carton	magistrala	2003
	239-243	700	230	460	subteran	carton	magistrala	2003
	A-PT 28	125	147	294	subteran	carton si tabla	racord	2003
	A-B	100	112	224	aerian	carton	magistrala	2003
	B-PT As 13	100	2	4	aerian	carton	racord	1978
	B-PT 28	100	104	208	aerian	carton	racord	2003
	56- Aerostar	80	101	202	suprateran	tabla	racord	1978
	212- PT 5	150	35	70	suprateran	tabla	racord	2004
	296- PT 10	200	168	336	subteran	teava preizolata	racord	2004
	280- PT 13	200	50.5	101	subteran	teava preizolata	racord	2004
	281- PT 27	200	90.5	181	subteran	teava preizolata	racord	2004
	291- PT 117	150	90.5	181	subteran	teava preizolata	racord	2004
✓	L FERDINAND	125	270	540	subteran	teava preizolata	racord	2006
	L PEDAGOCIC	125	302	604	subteran	teava preizolata	racord	2006
	racord PT 7	200	158	316	subteran	teava preizolata	racord	2007
	racord PT 32	150	244.5	489	subteran	teava preizolata	racord	2007
	racord PT 42	125	203.5	407	subteran	teava preizolata	racord	2007
	racord PT 79	125	244	488	subteran	teava preizolata	racord	2007
	racord PT 84	80	212.5	425	subteran	teava preizolata	racord	2007
	racord PT 153	168	80	160	subteran	teava preizolata	racord	2006
			29660.5	61550				
			Lungime tronson [m]	Lungime conducte [m]				

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5

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TOTAL REȚEA PRIMĂRĂ	29660,5	61550			
	15511	31173	subteran		
	14149,5	30377	suprateran		

Nota: Pozițiile marcate în bold fac obiectul Ramurii Republicii.

4. Intrebare:

Studiile topo, geo, inclusiv întocmirea documentațiilor pentru obținerea avizelor și acordurilor, conform legislației în vigoare, fac obiectul acestui contract.

4. Raspuns:

Studiile topo, geo, inclusiv întocmirea documentațiilor pentru obținerea avizelor și acordurilor **nu fac obiectul acestei achiziții.**

ADMINISTRATOR PUBLIC,
EC. LEONARD PADUREANU



DIRECTOR EXECUTIV
DIRECȚIA TEHNICĂ
ING. CRISTINA BUZDUGAN

ȘEF SERVICIU ACHIZIȚII
ING. CORINA NEAGA



0234519650



B.7/34

Nr. 7412 / 10.12.2010

SC CET SA BACAU
CONSILIUL LOCAL BACAU
BACAU, 600286, str. Chimiei 6
Tel: +40 234 58 50 50
Fax: +40 234 51 98 50
secretariat@cetbacau.ro
www.cetbacau.ro
capital social: 31,993 mil.lei
JO4/320/2002; CUI R 14639374
ABN AMRO Bacau
RO04ABNA0400264100126981

Catre,
ISPE BUCURESTI

In atentia d-lui Serban Iosifescu –sef sectie Termomecanice
d-nei Cristina Stanisteanu-sef colectiv STM3

Referitor adresa dumneavoastra cu nr. de inregistrare 210.398/06.12.2010 –elaborare SF „Racordarea la SACET a
S.C.AEROSTAR S.A. Bacau”

Spre stiinta Primaria Municipiului Bacau
d-nei Camelia Iordan ,Serv.Tehnic Investitiil

Raspundem prin prezenta solicitarilor dumneavoastra de clarificari din adresa mai sus mentionata:

1. Se vor lua in considerare cotele de amplasare a punctelor termice din proiectele ISPE.
2. Au fost reverificate sarcinile termice pentru incalzire si apa calda de consum, iar explicatiile v-au fost transmise prin e-mail in data de 08.12.2010.

De asemenea, in data de 09.12.2010 am transmis prin e-mail cantitatile de energie termica furnizata din punctele termice in perioada oct 2009-aug. 2010.

Urmare solicitarii telefonice va transmitem caracteristicile pompelor de adaos:

Pp. nr. 1 –tip Lotru 125;
-Q =100 mc/h
-H = 45 m.C.A.
-N = 22 KW
-n =2930 rot/min

Pp. nr.2 -tip Lotru 125;
-Q =140 mc/h
-H = 45 m.C.A.
-N = 37 KW
-n = 2930 rot/min

In situatii exceptionale, se mai folosesc si urmatoarele pompe pentru adaos in retea termoficare:

a) Electropompa presiune statica cu urmatoarele caracteristici:

-Q =100 mc/h
-H = 70 m.C.A.
-N = 45 KW
-n = 3000 rot/min

b) Electropompa apa avarie cu urmatoarele caracteristici:

-Q = 250 mc/h
-H = 75 m.C.A.
-N = 75 KW
-n =2930 rot/min

3. Caracteristici solicitate pentru modulul termic montat in locul PT 94 :

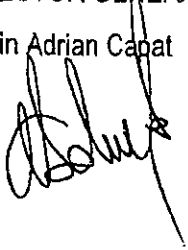
- Q in = 0,220 MW
- Q a.c.c = 0,188 MW
- Dn primar = 65 mm
- Ltraseu primar = 20 m

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4. La solicitarea dumneavoastra anexat va transmitem si diagrama de reglaj a livrării agentului termic primar.

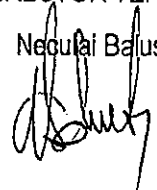
DIRECTOR GENERAL,

Sorin Adrian Capat



DIRECTOR TEHNIC,

Neculai Balus



SEF BIROU IMPL. PROIECTE,

Lidia Virlian



0234519650

B 9/34

1570
Prezentata diagrama
de reglaj in
vizuale incepand cu
14.02.2007

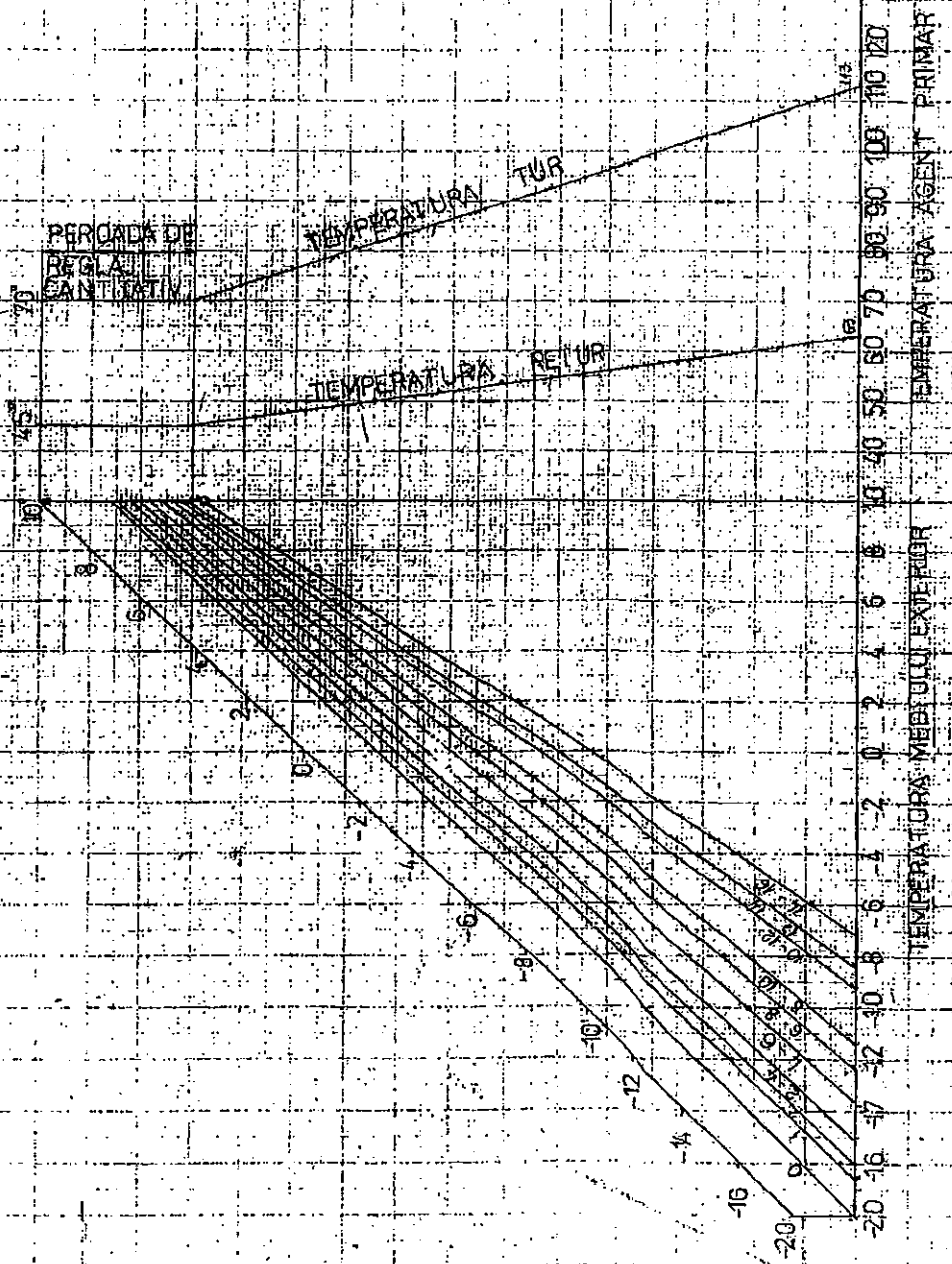


DIAGRAMA DE REGLAJ A LIVRARI
AGENTULUI TERMIC PRIMAR

B 10/3

Constantin Beldiman

From: "Petrica Gradinaru" <pgradinaru@cetbacau.ro>
To: <constantin.beldiman@ispe.ro>
Cc: "Virlian Lidia" <lvirlian@cetbacau.ro>
Sent: Wednesday, December 08, 2010 10:24 AM
Attach: Sarcina termica pe PT nov.2007.xls
Subject: FW: Sarcina termica PT-uri nov 2007

Va transmitem anexat tabelul cu sarcinile termice instalate in fiecare punct termic in parte.
 Mentionam ca, la a.c.c. schema de functionare pentru punctele termice PT 31,33,35,69,95,96,97,115,
 5,10,13,27,117

Este realizata in doua trepte serie, in treapata a doua cu injectie din tur primar care functioneaza pe timp de vara.

La celelalte puncte termice schema de functionare este paralel incalzire-a.c.c.;

Avand in vedere calitatea scazuta a apei potabile din Bacau, s-a optat pentru montarea a cate doua scp a.c.c. pentru regimul de presiune bara (fara instalatie hidrofor), cu functionare alternative.

Din acest motiv, la unele puncte termice sarcina termica pentru a.c.c. este mai mare decat sarcina termica pentru incalzire.

Sarcinile termice precizate in anexa la Caietul de sarcini reprezinta suma sarcinilor termice ale tuturor scp a.c.c. din punctul termic respectiv (bara si turn).

Celelalte date va vor fi transmise ulterior.

-----Original Message-----

From: Manuela Perju [mailto:mperju@cetbacau.ro]
Sent: Wednesday, December 08, 2010 9:17 AM
To: Virlian Lidia; pgradinaru@cetbacau.ro
Subject: Sarcina termica PT-uri nov 2007

_____ Informatii de la ESET Smart Security, versiunea bazei de semnaturi 5683 (20101208)

Mesajul a fost verificat de ESET Smart Security.

<http://www.eset.ro>

_____ Informatii de la ESET Smart Security, versiunea bazei de semnaturi 5683 (20101208)

Mesajul a fost verificat de ESET Smart Security.

<http://www.eset.ro>

_____ Informatii de la ESET Smart Security, versiunea bazei de semnaturi 5683 (20101208)

Mesajul a fost verificat de ESET Smart Security.

<http://www.eset.ro>

debit vehiculat ?

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Constantin Beldiman

From: "Petrica Gradinaru" <pgradinaru@cetbacau.ro>
To: <constantin.beldiman@ispe.ro>
Sent: Wednesday, December 08, 2010 11:24 AM
Attach: ISPE BELDIMAN.doc
Subject: CARACTERISTICI POMPE ADAOS TERMOFICARE

Buna ziua,
D-le Beldiman, va transmit caracteristicile solicitate telefonic.

_____ Informatii de la ESET Smart Security, versiunea bazei de semnaturi 5683 (20101208)

Mesajul a fost verificat de ESET Smart Security.

<http://www.eset.ro>

Urmare solicitarii telefonice va transmitem caracteristicile pompelor de adaos:

Pp. nr. 1 --tip Lotru 125;
-Q = 100 mc/h
-H = 45 m.C.A.
-N = 22 KW
-n = 2930 rot/min

Pp. nr.2 -tip Lotru 125;
-Q = 140 mc/h
-H = 45 m.C.A.
-N = 37 KW
-n = 2930 rot/min

In situatii exceptionale, se mai folosesc si urmatoarele pompe pentru adios in retea termoficare:

a) Electropompa Presiune statica cu urmatoarele caracteristici:

-Q = 100 mc/h
-H = 70 m.C.A.
-N = 45 KW
-n = 3000 rot/min

b) Electropompa apa avarie cu urmatoarele caracteristici:

-Q = 250 mc/h
-H = 75 m.C.A.
-N = 75 KW
-n = 2930 rot/min

B 13/34

Carmen Scarlet

From: "Constantin Beldiman" <constantin.beldiman@ispe.ro>
To: <carmen.scarlet@ispe.ro>
Cc: "Gabriela Novac" <novac@ispe.ro>; "Cristina Stanisteanu" <cristina.stanisteanu@ispe.ro>
Sent: Thursday, December 09, 2010 9:11 AM
Attach: rapoarte parametri.rar
Subject: Fw: parametri

----- Original Message -----

From: Jechei Cristian
To: constantin.beldiman@ispe.ro
Sent: Thursday, December 09, 2010 8:46 AM
Subject: parametri

Cu stima,

Cristian Jechei

0720550236

12/9/2010

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Raport OCT. 2009

B 14/34

PT/CT	l)	Primar(Gca Distribuita		Pierderi		Distribuita pierderi			Distribuita pierderi			Adaos(mcu
		INC(Gcal)	INC(Gcal)	INC(Gcal)	A(Gcal)	ACMBAR	acmBARA	ACMTUR	acmTUR	acmTUR	bi)	
1	39.9040	5.3421	2.1149	9.1532	2.6068	1.3448	1.2597	51				
2	78.1740	11.2811	0.3379	36.2959	8.1367	0	0.0000	153				
3	21.2420	10.0986	8.6367	5.2607	2.1897	0	0.0000	47				
4	155.3160	58.1725	29.3321	84.2063	8.5444	7.2305	0.7212	153				
5	57.9124	12.0055	6.8387	36.8422	30.6119	0	0.0000	59				
6	101.7380	40.0828	20.2867	40.9343	6.7763	0	0.0000	237				
7	63.2200	16.4157	9.6687	46.7926	16.5504	0	0.0000	4				
8	47.9020	19.6867	10.6008	12.9884	2.3107	0	0.0000	19				
9	189.0280	105.004	4.4037	51.342	1.0450	12.4806	0.2484	581				
10	113.1226	53.6343	0.4889	59.0028	23.4859	0	0.0000	117				
11	163.5720	77.131	0.0546	76.7193	10.8429	3.2235	1.3703	723				
12	52.2020	39.794	0.7956	11.9393	0.2272	0	0.0000	49				
13	94.6000	35.738	0.2651	32.7586	21.5861	20.4968	16.2287	31				
14	199.4340	104.415	2.0887	61.2312	1.2243	15.9687	6.9405	350				
15	167.5687	99.794	77.9237	52.4066	6.9339	14.5421	6.2463	236				
16	43.1720	5.134	1.0662	22.7141	6.5328	0	0.0000	170				
17	87.0320	31.8883	16.6623	42.0182	13.6574	0	0.0000	195				
18	121.2600	51.842	1.0385	53.801	6.0688	0.7726	0.0516	158				
19	167.8720	29.19	0.3939	76.4736	15.4984	7.9212	0.1575	677				
20	117.3900	43.786	1.1021	54.7586	20.5322	0.884	0.0870	342				
21	74.3900	37.736	0.2744	25.4642	0.2350	0	0.0000	210				
22	94.7720	40.184	1.3421	33.6544	4.2320	0.2356	0.1586	111				
25	91.1610	41.8829	4.1155	49.2781	17.3369	0	0.0000	0				
26	5.9306	2.2923	0.6754	3.6	0.5130	0	0.0000	9				
27	103.3720	35.082	0.1575	17.3121	1.7083	15.4418	4.2268	210				
28	38.2330	32.1871	0.6438	6.0019	0.1206	0	0.0000	8				
29	138.3740	33.288	2.1396	77.4912	20.2610	0	0.0000	36				
30	13.2440	6.558	3.7285	0	0.0000	3.2671	0.2355	231				
31	245.3580	77.954	11.1904	57.7881	19.7859	123.5374	32.3606	818				
32	33.6246	20.3097	17.2453	7.6179	6.5151	5.3667	3.5430	98				

33	62.8746	14.218	0.2843	48.0974	19.0604	0	0.0000	423
35	130.6340	72.226	25.8986	56.2983	30.9997	0	0.0000	240
40	59.3400	2.5388	1.0072	37.335	28.0493	0.4761	0.2640	45
41	62.8660	11.4948	4.9072	32.6725	21.0883	0	0.0000	143
42	64.1560	34.6104	14.3033	0	0.0000	11.3128	1.9161	183
43	58.2220	30.7226	23.1409	3.0623	0.4461	6.8419	4.6880	112
44	84.1940	59.272	16.8352	0	0.0000	12.015	9.3423	146
45	41.6240	34.6716	9.1967	0	0.0000	4.0521	1.7473	60
58	30.2720	11.81	4.5332	6.1214	0.9419	0	0.0000	48
59	75.1640	42.178	18.1308	9.2365	2.0006	3.1258	1.0143	216
61	78.1740	29.149	9.4792	26.9841	5.1986	4.7069	1.5622	114
62	97.1800	40.6945	19.108	37.9235	5.0588	0	0.0000	261
63	137.3420	49.81	11.7774	59.6659	10.2519	0	0.0000	39
64	39.5600	18.1908	7.5956	13.3472	2.5179	7.5594	3.9167	41
69	113.4340	40.52	0.3534	9.663	0.1125	31.01	19.1756	96
79	49.5360	16.0299	4.8594	16.559	10.4126	0	0.0000	97
84	28.1564	11.104	3.4142	14.7992	2.3423	0	0.0000	62
94	13.1390	7.3683	0.9957	1.1215	0.0224	0	0.0000	0
95	102.2368	31.95	21.0778	46.099	26.0497	18.5168	12.2259	161
96	90.1280	11.793	4.3746	51.007	30.6018	10.8360	9.1693	455
97	119.7120	64.404	22.8198	46.827	10.0393	0	0.0000	1099
115	56.7600	26.1222	12.2245	19.6704	3.2730	6.2744	0.8592	148
117	53.8360	13.5236	5.9766	26.9827	13.3058	0	0	651
151	41.0220	13.918	8.5155	20.5484	14.5283	0	0	154
152	169.0760	69.492	15.7909	67.5752	21.8062	0	0	56
153	83.2480	25.498	14.0314	28.4462	25.0940	0	0	97
154	96.0620	25.5804	10.8865	51.0928	22.2842	0	0	160
5 SC	5.5556	5.5556	0	0	0.0000	0	0	0
TOTAL:	4963.6253	1992.3551	527.1302	1876.9823	581.5552	349.4406	139.7166	11390.0000

Raport NOV. 2009

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PT/CT	I)	Primar(Gca Distribuita		Pierderi		Distribuita pierderi		Distribuita pierderi		acmTURN	Adaos(mcu
		INC(Gcal)	INC(Gcal)	INC(Gcal)	INC(Gcal)	ACMBAR	acmBARA	ACMTUR	acmTURN		
1	134.5040	93.1219	44.2207	14.7501	3.5338	1.1015	1.0076	5			
2	378.8300	239.6324	31.8786	55.3951	7.0822	0	0.0000	10			
3	110.3380	92.5662	46.3487	10.9537	5.9250	0	0.0000	85			
4	881.6720	691.9516	98.6266	149.773	26.1687	10.9265	1.4700	1804			
5	204.9208	140.168	67.8084	49.9888	38.4053	0	0.0000	284			
6	523.4820	397.502	121.2053	72.9684	17.5534	0	0.0000	260			
7	437.3880	365.101	62.6129	71.5434	64.7170	0	0.0000	288			
8	238.4780	195.5448	55.9926	20.4891	3.1315	0	0.0000	58			
9	782.4280	643.342	15.5946	73.9674	0.0096	18.5685	2.3101	544			
10	475.3362	382.291	31.2527	91.9052	29.1388	0	0.0000	228			
11	859.3980	667.063	179.0677	125.1678	32.5277	4.4703	1.7561	1271			
12	223.4280	196.07	3.9216	16.486	0.3124	0	0.0000	88			
13	374.1000	238.92	59.6848	57.3903	39.0269	33.7193	30.4678	450			
14	1006.2860	849.067	20.8597	101.9043	2.0368	24.627	9.7933	579			
15	747.8560	592.614	147.0764	79.4931	14.2989	21.2322	10.8008	131			
16	262.3860	193.238	51.9043	41.0348	14.3995	0	0.0000	101			
17	449.6940	348.328	82.5321	89.2307	36.8523	0	0.0000	368			
18	682.8400	551.054	51.9415	82.275	14.3707	3.8528	1.0232	484			
19	709.3280	498.4954	46.0041	127.1872	44.9222	9.3604	0.7969	811			
20	490.6300	409.682	12.7102	73.3544	27.9259	2.3133	0.9956	642			
21	350.9660	302.961	35.0308	42.1118	1.1848	0	0.0000	319			
22	450.4680	354.297	79.0451	55.5386	9.6701	2.1755	2.1437	77			
25	583.3015	459.4464	9.3134	117.5904	88.7632	0	0.0000	924			
26	70.4950	66.711	40.9476	4.95	0.0990	0	0.0000	22			
27	393.1060	241.374	0.2581	20.9331	4.4149	30.9565	12.8522	382			
28	231.8319	220.9108	4.4181	10.8721	0.2168	0	0.0000	7			
29	588.9280	417.536	60.0203	115.175	27.2217	0	0.0000	96			
30	49.4500	39.842	20.8884	0	0.0000	4.2796	0.8919	125			
31	1317.0040	1020.808	151.5324	112.989	62.2041	221.0866	97.6140	2594			
32	316.4440	295.2026	131.8283	12.1845	9.8832	8.4189	5.8135	249			

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33	367.0566	341.786	6.8355	57.55	22.6268	0	0.0000	223
35	488.7380	352.716	116.4798	130.0568	88.3444	0	0.0000	252
40	148.7400	122.3696	6.0843	24.795	12.9321	0.9578	0.5406	177
41	286.0360	233.1409	86.1878	25.9675	14.1077	0	0.0000	413
42	288.0140	265.1114	87.3754	0	0.0000	9.7834	0.7488	336
43	303.3220	243.1495	106.9426	4.8836	1.1655	31.9166	28.9640	250
44	281.0480	270.7708	77.6115	0	0.0000	13.824	9.5123	187
45	189.7160	183.127	47.756	0	0.0000	6.7234	3.2834	100
58	118.1640	77.354	12.4509	10.8923	5.0785	0	0.0000	422
59	361.9740	312.5556	97.0558	13.0307	3.2556	5.4693	1.7903	313
61	319.4900	249.1703	51.3533	31.7519	3.0813	6.2186	2.0319	145
62	465.1740	386.6456	102.6807	55.0638	8.0981	0	0.0000	59
63	577.9200	445.476	84.8819	94.4359	26.9407	0	0.0000	474
64	197.6000	169.1248	42.894	20.7862	3.7769	10.105	5.6659	156
69	352.1000	302.3065	52.2188	21.492	9.4445	42.5222	23.9182	135
79	224.7180	168.668	38.7477	20.6445	12.8666	0	0.0000	231
84	155.9868	135.2634	34.3138	18.4502	1.4809	0	0.0000	213
94	114.9068	109.9599	8.1101	1.3833	0.0271	0	0.0000	0
95	499.3848	303.9845	74.1097	112.699	96.1648	17.0764	7.7359	425
96	407.8120	209.5251	15.6315	95.7932	66.6397	25.8464	23.3327	791
97	391.8160	386.9906	47.1175	66.1254	20.7946	0	0.0000	1049
115	212.0600	169.5119	27.6885	26.5688	3.3100	8.8206	0.2882	122
117	238.5167	162.3362	63.2433	59.1942	44.5119	0	0	238
151	139.1480	88.1239	29.5031	40.1172	32.6723	0	0	9
152	825.5140	662.8933	143.7186	64.7669	12.7558	0	0	175
153	418.2180	335.6428	137.3707	41.7775	36.5191	0	0	174
154	385.2800	276.4386	60.0663	84.5674	42.1015	0	0	376
5 SC	72.6012	72.6012	0	0	0.0000	0	0	0
TOTAL:	23156.3723	18241.6045	3422.9551	3020.3956	1194.6928	576.3526	287.5489	20731.0000

PT/CT

Raport DEC 2009

B 18/34

PT/CT	i)	Primar(Gca)		Distribuita		Pierderi		Distribuita pierderi		Distribuita pierderi		Adaos(mcu bi)
		INC(Gcal)	INC(Gcal)	INC(Gcal)	INC(Gcal)	ACMBAR	acmBARA	ACMTUR	acmTURN	(Gcal)	(Gcal)	
1	168.3880	129.5974	54.179	15.1301	3.9129	0.9954	0.8999	1				
2	475.3220	321.8894	21.1488	51.6846	5.5961	0	0.0000	82				
3	149.1240	133.5388	58.1925	12.6932	5.9476	0	0.0000	28				
4	1302.4700	1066.4308	142.3613	152.7663	25.0461	11.5514	0.9008	495				
5	276.3782	209.5515	79.8776	48.6152	36.3376	0	0.0000	102				
6	682.2380	557.0859	150.8739	75.7034	18.6883	0	0.0000	259				
7	786.3800	726.7354	131.7963	57.5226	29.3640	0	0.0000	413				
8	339.8720	295.4332	79.4864	25.2505	3.6826	0	0.0000	12				
9	1212.2560	1057.7392	18.9232	78.3541	0.0200	31.2995	15.6580	332				
10	658.0720	563.142	65.7297	90.0032	28.7647	0	0.0000	227				
11	1311.5860	1112.9944	194.5352	132.4212	35.4248	4.3521	1.6685	707				
12	308.1969	284.1103	5.6826	17.0295	0.3479	0	0.0000	76				
13	547.6480	386.7605	85.0553	49.8729	30.5198	28.6404	24.0092	1655				
14	1472.4060	1301.6263	107.6818	119.5085	17.4631	27.8236	11.8832	299				
15	1080.5040	922.8011	227.4078	85.1884	15.6815	21.8419	6.2520	141				
16	412.5420	341.8531	78.2795	38.4833	6.8757	0	0.0000	36				
17	649.3860	523.2234	126.0733	99.9943	42.4257	0	0.0000	239				
18	838.7580	695.658	32.4999	103.3344	33.4598	4.042	0.9126	420				
19	1154.9800	960.16	200.559	118.1875	18.6004	11.2617	0.5198	264				
20	683.2700	572.303	16.6631	83.2667	32.1878	1.6254	0.3068	225				
21	423.0340	382.373	1.9506	35.0672	2.0498	0	0.0000	231				
22	582.9940	494.59	52.1665	56.264	10.1704	1.8302	1.5739	200				
25	606.7128	555.6598	11.1178	50.9031	6.1294	0	0.0000	18				
26	91.5024	77.2614	43.9556	14.025	10.0364	0	0.0000	36				
27	513.0760	328.096	6.5693	18.0567	0.2078	34.9099	15.0208	427				
28	231.5413	220.7221	4.4149	10.7432	0.2152	0	0.0000	11				
29	794.6400	627.046	99.0343	127.2749	38.8714	0	0.0000	54				
30	65.7900	55.053	26.8047	0	0.0000	3.9148	0.3734	35				
31	1693.6840	1468.814	168.6584	127.1446	69.6822	196.24	58.6976	1774				
32	400.7500	377.8255	137.5816	12.9163	10.3363	8.6443	5.6743	253				

33	700.1174	569.356	13.531	80.476	32.1341	0	0.0000	37
35	605.6980	503.456	87.373	96.3116	53.3889	0	0.0000	588
40	347.7840	273.8391	81.3126	26.3492	10.8201	0.9347	0.0187	19
41	428.4520	348.036	122.552	40.845	16.7658	0	0.0000	400
42	447.7160	434.095	24.9882	0	0.0000	9.1841	0.3361	550
43	398.4380	337.8923	128.1063	5.8496	1.5188	33.3165	30.7954	165
44	371.0900	355.4183	86.6744	0	0.0000	15.8391	10.6699	57
45	276.9200	264.7764	52.4745	0	0.0000	8.7808	4.9366	98
58	150.2420	117.1028	25.575	10.9469	4.7740	0	0.0000	588
59	534.4900	446.1261	126.0883	31.4506	20.3822	5.7501	0.8307	269
61	487.3620	404.2206	94.0312	35.8195	3.3637	6.7402	1.7375	157
62	645.0860	575.8655	142.3993	60.918	13.6232	0	0.0000	86
63	922.0920	763.3852	151.7749	119.6196	44.0848	0	0.0000	212
64	276.9286	243.1149	50.3975	23.2286	4.8837	9.718	5.1853	130
69	538.8760	470.068	98.5337	24.528	17.0386	32.6033	16.2833	60
79	302.2040	245.435	54.2782	27.1242	21.0200	0	0.0000	958
84	207.9566	187.9745	49.1715	21.304	4.7353	0	0.0000	43
94	128.7625	121.5289	10.0471	3.1061	0.0608	0	0.0000	0
95	639.1864	457.874	137.6558	82.9238	57.1902	33.4754	23.0608	484
96	593.5720	338.174	28.765	108.6556	77.2795	13.9222	10.9885	1315
97	768.4960	615.602	65.9013	57.4368	2.9956	0	0.0000	582
115	317.7614	262.9116	37.6813	31.3038	5.9251	9.5016	3.8370	142
117	381.6362	280.3772	102.9446	90.5677	73.1989	0	0	274
151	163.0560	120.0654	42.1537	31.7598	24.7301	0	0	56
152	937.7440	772.0239	135.3223	75.6829	6.3967	0	0	958
153	514.2800	425.5781	172.1926	47.6057	40.2659	0	0	174
154	565.7080	452.4495	102.5676	88.4437	43.4022	0	0	214
5 SC	98.2378	98.2378	0	0	0.0000	0	0	0
TOTAL:	32663.3945	27235.0586	4653.7528	3129.6636	1118.0235	568.7386	253.0306	17668.0000

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PT/CT	l)	Primar(Gca Distribuita		Pierderi		Distribuita pierderi		Distribuita pierderi		adaos(mcu bi)
		INC(Gcal)	INC(Gcal)	INC(Gcal)	A(Gcal)	ACMBAR (Gcal)	acmBARA (Gcal)	ACMTUR (Gcal)	acmTURN (Gcal)	
1	231.9420	165.1988	75.531	15.5131	4.7610	1.0716	0.9216	1		
2	606.9020	421.964	10.4072	75.9462	20.8025	0	0.0000	16		
3	194.0000	179.1414	64.3002	14.7227	7.0343	0	0.0000	11		
4	1690.3300	1393.5782	214.3903	180.0144	31.6593	13.099	0.7898	315		
5	357.3312	271.3253	107.174	60.5144	47.4039	0	0.0000	146		
6	893.7980	737.9268	211.3982	90.8431	28.3559	0	0.0000	319		
7	1038.2780	958.5827	130.6717	56.674	21.9960	0	0.0000	258		
8	438.7720	380.4246	120.1878	31.6696	8.9225	0	0.0000	31		
9	1506.2900	1342.6074	28.3504	86.3765	1.9578	29.093	8.8122	348		
10	833.4900	654.8514	6.1471	110.8013	38.9497	0	0.0000	250		
11	1578.5300	1350.1974	156.1426	155.5286	57.0699	4.8222	1.5887	263		
12	347.5000	333.2442	6.6652	17.1437	0.3339	0	0.0000	10		
13	707.7800	479.5517	87.3658	36.3911	20.3936	17.3747	12.2555	402		
14	1731.0940	1530.3558	30.607	138.4342	12.3096	30.7426	11.2731	143		
15	1340.1380	1166.1068	220.6704	95.6168	17.0938	28.2782	13.7106	194		
16	506.4540	424.1893	77.329	50.365	12.8030	0	0.0000	44		
17	779.4180	638.8339	111.9097	112.7194	47.1645	0	0.0000	181		
18	1108.1100	912.8334	59.808	132.4595	47.5765	7.1807	3.6394	569		
19	1555.8260	1280.028	289.8734	143.9174	25.3413	13.3653	1.2299	279		
20	933.2720	791.244	98.3926	102.8489	41.6111	1.4706	0.1266	175		
21	547.2180	489.254	104.06	43.6871	5.4653	0	0.0000	215		
22	1066.9160	669.6591	179.957	65.8635	18.0690	0.5929	0.4477	153		
25	805.0884	736.0653	14.7298	68.6511	9.1196	0	0.0000	40		
26	108.0680	101.259	57.123	6.545	3.1493	0	0.0000	33		
27	659.8780	431.304	0.0162	19.646	0.3866	37.8544	15.4744	577		
28	389.0666	375.1694	7.5028	13.76	0.2751	0	0.0000	14		
29	1038.3640	838.8275	122.4992	146.8068	37.1782	0	0.0000	85		
30	93.8260	80.472	42.9679	0	0.0000	5.5836	1.5252	45		
31	2245.3740	1956.046	218.8614	144.3386	74.6296	240.986	85.7132	1902		
32	487.7200	458.036	176.2306	18.9088	16.1807	10.7666	7.9357	176		

33	927.3380	743.6411	14.8732	81.8369	29.4625	0	0.0000	31
35	823.3840	684.074	193.7768	131.8897	80.7299	0	0.0000	40
40	465.7760	376.2404	113.3458	36.6556	17.7078	1.3502	0.0270	1
41	618.4260	502.2708	175.0445	67.3672	40.9241	0	0.0000	220
42	630.6380	610.2033	99.2744	0	0.0000	10.7426	0.6384	659
43	509.0340	472.5089	219.58	6.2356	2.0367	4.4866	3.3106	127
44	482.2880	461.2669	147.665	0	0.0000	21.3733	16.3305	65
45	336.6040	326.0699	56.995	0	0.0000	9.1434	4.8693	112
58	214.1400	165.9562	38.7325	12.1409	4.3184	0	0.0000	420
59	684.4740	587.4545	189.6149	16.0898	4.1504	20.1608	14.4586	104
61	643.1940	541.5036	130.6454	45.9877	4.1125	8.241	2.5018	35
62	882.6180	792.6239	195.6916	69.5878	15.1118	0	0.0000	283
63	1178.8000	1000.1838	250.6126	129.5155	39.6320	0	0.0000	184
64	377.5400	334.7798	93.2746	29.3088	6.8893	11.5584	6.6891	70
69	782.9440	636.4964	118.2681	31.7398	18.0686	48.7311	31.5234	324
79	421.0560	352.39	79.1135	37.1515	30.2503	0	0.0000	207
84	263.2976	236.0782	48.1949	26.5235	4.1407	0	0.0000	248
94	185.3798	177.8448	15.3091	2.6368	0.0516	0	0.0000	0
95	854.8830	642.076	191.1108	82.4805	49.4299	35.4954	22.4475	301
96	775.0320	463.306	42.1047	106.2956	68.4628	12.6092	9.1615	1071
97	1037.8480	852.025	110.2025	70.4616	2.9562	0	0.0000	353
115	392.1428	324.7856	33.4503	34.1936	5.2031	11.7416	4.2622	148
117	411.6768	365.1724	126.8653	40.0019	16.6565	0	0	146
151	216.2900	179.0881	61.465	21.7796	14.2457	0	0	12
152	1237.5400	1027.929	226.5999	139.1505	57.8421	0	0	491
153	688.0000	582.3841	242.6863	54.164	46.1520	0	0	243
154	716.9820	584.4786	126.307	96.9081	46.1507	0	0	197
5 SC	125.8168	125.388	0	0.4288	0.0086	0	0	0
TOTAL:	42703.8970	35696.4967	6372.0732	3607.2381	1262.6877	637.9150	281.6635	13287.0000

Raport FEBR. 2010

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PT/CT	l)	Primar(Gca)		Distribuita		Pierderi		Distribuita pierderi		Distribuita pierderi		Adaos(mcu)
		INC(Gcal)	INC(Gcal)	INC(Gcal)	INC(Gcal)	ACMBARA(Gcal)	acmBARA(Gcal)	ACMTUR N(Gcal)	acmTUR N(Gcal)	bi)		
1	143.5900	130.027	53.6466	12.4236	3.2290	1.1341	1.0330	1				
2	500.0900	341.9186	3.1589	58.6203	9.3174	0	0.0000	26				
3	154.8860	140.4537	48.6605	12.0875	6.0685	0	0.0000	29				
4	1235.1320	1008.89	4.1252	147.497	8.0414	11.8109	0.8074	499				
5	293.9800	212.9038	72.3212	58.692	46.5797	0	0.0000	132				
6	665.8980	543.0425	102.3202	69.264	14.1619	0	0.0000	297				
7	792.9200	728.8883	18.053	41.944	0.8390	0	0.0000	311				
8	314.4160	279.586	63.0466	20.7001	2.6420	0	0.0000	0				
9	1286.0440	1133.0418	23.6874	82.2436	0.0452	25.8362	7.1269	837				
10	687.5620	508.5341	0.0599	109.0329	47.1707	0	0.0000	361				
11	1395.9520	1204.559	209.5477	128.6795	34.3903	4.5067	1.5968	225				
12	302.3760	287.548	5.7505	19.418	0.3840	0	0.0000	6				
13	590.2180	401.836	86.8438	33.1699	20.5852	18.6334	14.0261	232				
14	1468.1920	1282.7291	101.3058	131.4628	22.2916	26.7874	11.3948	334				
15	1142.5960	987.822	201.6417	87.1094	15.9777	24.6446	14.3780	200				
16	456.1440	378.9191	79.2809	45.1694	13.2943	0	0.0000	21				
17	654.8040	540.1058	120.6258	93.3448	36.1709	0	0.0000	164				
18	945.3980	770.416	44.5932	124.6736	50.7687	6.2257	3.4759	426				
19	1330.5920	1092.642	237.4527	128.5464	19.7612	14.2601	2.3272	213				
20	824.9120	706.91	102.7159	85.5712	32.3053	1.634	0.0337	284				
21	454.3380	402.382	49.7476	37.8971	5.1013	0	0.0000	303				
22	1092.2860	583.536	114.259	55.89	13.5534	0.3591	0.2027	158				
25	766.0057	698.9753	13.9832	66.8715	6.3906	0	0.0000	17				
26	101.8130	98.353	62.3188	3.3	0.1199	0	0.0000	16				
27	595.2920	374.84	0.021	24.6501	6.8202	37.3805	17.8320	445				
28	172.7560	172.626	10.8124	7.5104	0.1504	0	0.0000	13				
29	870.4920	692.786	86.6107	127.9454	30.6769	0	0.0000	91				
30	80.6680	66.858	36.046	0	0.0000	8.09	4.0558	123				
31	1880.8200	1639.778	240.4654	133.9064	74.7741	226.8456	68.9930	2074				
32	419.6900	375.8476	139.6166	13.3842	8.3751	10.9595	8.7392	249				

33	833.8560	661.1271	13.2224	71.9633	20.1324	0	0.0000	13
35	688.0860	578.254	153.3763	100.3333	53.3405	0	0.0000	87
40	422.7760	317.3194	108.3756	58.1061	43.2430	4.1505	2.4151	4
41	516.1720	426.6809	155.4065	45.5049	22.3708	0	0.0000	206
42	578.3500	564.922	75.5185	0	0.0000	9.2458	0.1843	518
43	408.4140	356.592	154.687	10.2351	6.2431	11.6669	7.4197	166
44	382.2700	368.2726	76.5031	0	0.0000	16.0304	11.0408	43
45	282.9400	274.3495	55.1805	0	0.0000	7.7336	2.9435	88
58	186.6200	145.5214	33.5693	13.3375	7.2061	0	0.0000	596
59	534.0600	449.6302	133.8135	31.622	18.5512	6.204	2.8091	198
61	534.0600	440.9709	99.8779	40.9065	4.3111	7.2631	2.6093	177
62	750.4360	668.5377	163.2628	58.6694	8.4104	0	0.0000	127
63	1015.3160	866.7238	187.2392	97.9498	14.6842	0	0.0000	286
64	327.6600	286.661	65.082	26.66	6.5511	10.6812	6.7558	100
69	702.5340	573.828	111.5382	34.7329	12.6475	38.2548	20.0192	426
79	330.3260	269.3673	46.9665	29.8794	21.6078	0	0.0000	193
84	240.4560	217.479	49.8179	21.5256	2.5430	0	0.0000	89
94	145.9627	140.6849	9.9563	1.7351	0.0340	0	0.0000	0
95	718.0570	542.073	150.8896	60.1833	36.4424	40.8606	29.0459	685
96	664.6080	392.081	30.8859	107.7406	73.2222	15.0280	11.1175	313
97	931.6920	747.43	113.6472	77.3476	18.9586	0	0.0000	429
115	346.3564	281.5486	41.8624	33.0119	7.0517	10.3081	2.9113	88
117	348.9639	287.6714	86.2314	36.8737	14.2056	0	0	138
151	201.4980	156.516	57.1086	26.4939	15.7975	0	0	96
152	1059.0040	886.329	191.6175	106.3563	23.4842	0	0	505
153	608.4500	512.522	222.4661	49.9763	41.6724	0	0	203
154	566.6780	449.2183	76.2532	79.3786	34.1003	0	0	188
5 SC	100.3332	99.2612	0	1.072	0.0214	0	0	
TOTAL:	36035.7979	29748.3269	4997.0736	3182.6002	1036.8184	596.3348	255.2940	14049.0000

PT/CT	l)	Primar(Gca Distribuita		Pierderi INC(Gcal)	Distribuita pierderi		ACMBARA (Gcal)	Distribuita pierderi		ACMTUR N(Gcal)	acmTURN (Gcal)	Adaos(mcu bi)
		INC(Gcal)	INC(Gcal)		ACMBARA (Gcal)	acmTURN (Gcal)						
1	128.1300	108.36	51.64	16.769	4.7371	1.515	1.4126	0	0			
2	463.0240	287.756	12.059	73.9623	20.1901	0	0.0000	0	0			
3	142.2440	120.1472	42.2534	13.2546	4.9921	0	0.0000	168	168			
4	1147.2400	869.6542	151.5102	200.1476	47.7299	13.1352	0.9802	592	592			
5	262.8740	180.9576	75.4099	61.6341	47.8331	0	0.0000	115	115			
6	586.7780	441.3965	120.6977	84.3696	18.4767	0	0.0000	233	233			
7	705.8880	625.4244	70.3706	54.2247	13.9477	0	0.0000	245	245			
8	326.5420	267.6155	75.5578	31.9533	8.2159	0	0.0000	22	22			
9	1098.3900	924.9485	20.6296	99.0307	9.1903	31.7961	12.7541	1094	1094			
10	651.9700	421.8046	1.0558	139.7776	65.5290	0	0.0000	158	158			
11	1142.1660	906.3	166.3195	154.4862	39.7194	5.9274	2.6828	888	888			
12	257.3120	234.35	4.6869	18.8748	0.3916	0	0.0000	43	43			
13	511.0120	334.193	79.5864	40.3408	23.5825	26.5035	21.2443	121	121			
14	1243.8180	1039.18	120.2319	134.9889	7.3230	34.2871	15.1538	570	570			
15	1001.2120	813.6759	186.7125	105.4698	25.3880	25.6891	13.2023	337	337			
16	369.0260	285.4215	68.2573	43.8605	9.8854	0	0.0000	41	41			
17	575.1680	435.258	119.6591	114.8218	42.1046	0	0.0000	290	290			
18	760.4120	595.494	98.1147	124.9782	34.9042	6.4152	4.4609	444	444			
19	1119.9780	853.86	211.4495	141.8502	27.6811	14.534	0.1577	245	245			
20	650.0740	512.26	100.4518	102.7543	40.0517	2.1587	0.3269	21	21			
21	381.8400	317.42	43.1832	50.7536	3.5963	0	0.0000	156	156			
22	915.7280	472.956	95.6422	72.2455	15.0134	1.2735	1.1295	122	122			
25	673.1008	589.7924	50.6776	81.84	10.2320	0	0.0000	195	195			
26	70.7960	64.737	36.1636	5.995	0.1738	0	0.0000	16	16			
27	479.4500	397.124	134.5058	29.3998	10.5797	44.1437	19.6714	735	735			
28	220.3123	209.6943	4.1944	10.566	0.2113	0	0.0000	13	13			
29	764.5400	543.334	69.8576	160.4689	38.0177	0	0.0000	111	111			
30	70.0900	52.072	28.4937	0	0.0000	14.595	9.2071	108	108			
31	1700.3060	1363.281	267.2873	156.9147	81.8521	257.723	104.1124	2061	2061			
32	366.3600	334.022	138.8903	16.0338	12.5366	14.274	11.5229	200	200			

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33	678.3508	483.174	9.663	117.3208	48.4701	0	0.0000	20
35	587.4660	464.362	141.8861	119.7459	60.8192	0	0.0000	74
40	370.8320	268.9564	107.3479	55.4115	39.3962	11.1804	10.5164	490
41	387.5160	312.8335	121.7843	33.0845	9.1670	0	0.0000	249
42	455.5420	430.2261	67.3559	0	0.0000	12.622	2.1492	1193
43	354.0620	297.8797	140.9019	5.4798	0.9353	14.7605	8.2470	191
44	349.0740	332.4286	110.6839	0	0.0000	17.8	12.6820	38
45	248.9700	240.2154	63.6341	0	0.0000	8.8906	4.2896	116
58	163.4000	116.2554	25.0903	15.1434	4.2416	0	0.0000	610
59	497.9400	406.1374	128.0066	25.5492	11.9942	6.7652	1.5632	126
61	480.7400	378.8553	91.3219	48.6059	5.4558	8.4624	3.0202	67
62	637.6040	547.2471	154.9895	65.0284	7.8118	0	0.0000	38
63	886.6600	726.3726	178.348	113.234	21.0631	0	0.0000	181
64	288.1000	242.849	59.884	31.8028	8.4721	11.7648	7.5859	118
69	592.8840	474.3376	99.5993	49.941	23.2808	47.8291	26.0922	519
79	328.7780	240.483	57.3045	31.3946	22.9514	0	0.0000	76
84	210.9236	184.275	36.7007	26.5584	4.0074	0	0.0000	50
94	93.8844	87.2254	11.9152	1.4	0.0274	0	0.0000	0
95	642.3942	428.635	130.4137	115.7557	85.4047	50.3294	36.6055	703
96	605.5260	298.5872	4.8811	131.7504	90.0860	17.0594	13.0073	251
97	775.3760	571.9908	51.2825	88.1838	18.9538	0.0000	0.0000	429
115	304.7238	216.9214	28.8874	39.5412	10.0346	12.2086	1.3399	127
117	331.4354	258.0698	93.3769	45.1725	19.4946	0	0	148
151	188.1680	144.802	61.9745	24.9804	12.5390	0	0	199
152	837.2960	678.92	142.9648	100.1433	15.5115	0	0	268
153	486.5020	383.5675	158.1151	52.2738	43.9024	0	0	237
154	511.6140	385.4223	95.1596	96.3554	45.5196	0	0	341
5 SC	84.2220	83.0846	0	1.1374	0.0226	0	0	0
TOTAL:	31165.7653	24286.6037	5019.0220	3776.7604	1273.6485	713.6429	345.1173	16203.0000

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Raport AAJILIE 2010

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PT/CT	P	Primar(Gca Distribuita		Pierderi	Distribuita pierderi		Distribuita pierderi		Adaos(mcu
		INC(Gcal)	INC(Gcal)		ACMBARA(acmTURN	acmTURN	bi)	
1	57.3620	20.21	11.8506	11.8506	3.3649	1.1147	1.0162	0	
2	156.5200	50.888	0.986	51.2746	10.8650	0	0.0000	56	
3	64.7580	16.4524	4.7107	41.2344	35.7156	0	0.0000	96	
4	314.5880	128.1236	24.288	144.5011	19.3919	10.7908	0.7981	313	
5	90.5692	34.2732	18.3864	42.0506	32.2313	0	0.0000	40	
6	173.7200	65.233	17.0823	56.2894	5.4891	0	0.0000	77	
7	153.5100	96.342	2.1809	44.106	12.5298	0	0.0000	30	
8	87.6340	44.5728	15.0809	23.7758	5.2561	0	0.0000	17	
9	265.1380	150.1414	1.8012	75.1245	2.9858	20.2776	4.2760	547	
10	198.3742	95.9093	1.9184	102.0542	46.9146	0	0.0000	111	
11	255.4200	118.068	21.8639	85.2776	15.1959	3.1922	1.1563	204	
12	85.4840	58.4568	1.1694	16.871	0.3640	0	0.0000	26	
13	152.2851	61.268	13.283	35.2236	18.9332	22.1235	17.4321	37	
14	361.4580	245.1458	61.8674	96.9072	1.9380	21.7608	8.3462	177	
15	309.9440	216.9958	97.3224	75.9492	17.5491	24.2776	15.2733	127	
16	81.1840	23.0264	7.4045	31.5577	0.6483	0	0.0000	156	
17	150.8440	63.8362	24.1874	68.471	20.1133	0	0.0000	163	
18	217.1500	94.812	15.7677	82.4251	11.4347	5.3237	3.6202	162	
19	326.8000	142.548	37.2995	99.0636	17.2797	10.6259	0.5075	53	
20	204.0780	88.184	21.2192	86.9915	47.0249	1.449	0.1191	26	
21	79.5500	30.3	9.0494	30.65	3.3241	0	0.0000	46	
22	329.8100	97.816	23.4097	45.7564	3.7287	1.36	1.3170	66	
25	226.0153	173.8169	15.2991	51.5264	6.5416	0	0.0000	112	
26	21.5374	16.1824	9.0934	6.325	0.1265	0	0.0000	5	
27	378.2487	318.2424	296.5854	17.3314	2.3912	22.4896	10.8489	154	
28	64.4432	60.6202	1.2124	3.7874	0.0753	0	0.0000	4	
29	244.1540	91.934	19.6029	114.328	24.3040	0	0.0000	43	
30	22.1020	9.374	5.4836	0	0.0000	10.6389	7.6037	0	
31	544.8100	228.882	51.5873	107.0939	49.5086	216.5694	103.6483	848	
32	78.6900	59.6133	36.8184	9.3757	7.0489	7.7663	5.9917	69	

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33	201.3948	119.842	2.3432	96.7301	52.8870	0	0.0000	14
35	171.5700	90.19	26.4342	84.1942	42.5737	0	0.0000	49
40	115.9280	39.3624	16.7122	46.812	34.6923	5.104	4.3537	253
41	103.8880	47.279	21.4733	26.898	7.5054	0	0.0000	73
42	79.2920	60.158	4.9897	0	0.0000	7.984	2.0423	358
43	115.7560	58.738	33.3274	3.9517	0.4890	21.7321	17.1328	0
44	85.8280	64.182	17.5154	0	0.0000	12.9951	10.0080	12
45	70.7780	59.9415	11.908	0	0.0000	7.2135	3.2747	55
58	55.9000	20.6357	4.8436	11.9578	5.6508	0	0.0000	141
59	134.1600	74.3902	25.8833	14.2056	2.1814	4.222	0.9117	118
61	136.9120	70.692	17.7791	34.2471	3.0903	5.7277	2.1191	0
62	160.8200	89.1176	28.3359	48.233	5.5764	0	0.0000	40
63	223.6860	110.2913	27.478	75.2391	9.1281	0	0.0000	112
64	79.1200	48.659	11.6188	19.8402	5.9593	9.4256	6.8676	42
69	181.6320	99.287	29.2666	32.26	15.6220	43.713	29.7978	215
79	78.0880	42.6366	12.5714	15.1716	9.8250	0	0.0000	34
84	61.8512	39.3511	16.4536	22.0009	0.9592	0	0.0000	97
94	3.8222	0	0	0.614	0.0121	0	0.0000	0
95	167.3216	58.914	14.4932	63.368	41.1137	9.946	0.7802	85
96	192.0380	116.571	65.4062	78.3836	49.7156	3.3542	0.9417	102
97	200.2080	116.505	27.2416	64.328	16.9161	0.0000	0.0000	117
115	84.3316	46.088	13.4223	24.4171	8.0817	7.7486	2.1858	40
117	93.0520	49.5696	13.1983	38.0669	15.9202	0	0	38
151	58.5660	34.088	19.3691	10.9648	2.8100	0	0	78
152	290.4220	156.748	32.0416	91.5145	24.0751	0	0	29
153	164.2600	81.284	38.1062	37.3219	30.8144	0	0	61
154	159.1000	66	13.8344	78.1576	41.7884	0	0	98
5 SC	24.9288	24.8798	0	0.049	0.0010	0	0	0
TOTAL:	9190.8353	4786.6687	1413.8580	2676.1058	849.6623	518.9258	262.3700	6026.0000

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oct 2009

denumire tert	Facturata (Gcal)
COL. NAT.PEDAGOGIC	36.98
COLEG. FERDINAND I	98.47
AG. PROT.MEDIULUI	0
C.B LETEA- SCOLA NR 8	13.6375
AS.PROP. 130	0
SC.ELECTROTEHNO	0
CB.ION GHICA NR.2	4.5752
MOTOR STAR	0
REGENT	0
BAZIN INOT	114.38
GAMUS	0.0401
TERM NORD EST	0
ATANASIU IRINEL CATALIN	0.8093
TOTAL	268.8921

0 0107

NOV. 2009

denumire tert	Facturata (Gcal)
COL. NAT.PEDAGOGIC	208.98
COLEG. FERDINAND I	210.614
AG. PROT.MEDIULUI	20.815
C.B LETEA- SCOLA NR 8	36.501
AS.PROP. 130	27.2712
SC.ELECTROTEHNO	3.4639
CB.ION GHICA NR.2	50.6368
MOTOR STAR	25.8
REGENT	1.3846
BAZIN INOT	176.3
GAMUS	0.24
TERM NORD EST	0
ATANASIU IRINEL CATALIN	0.5358
TOTAL	762.5423

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DEC. 2009

denumire tert	Facturata (Gcal)
COL. NAT.PEDAGOGIC	289.562
COLEG. FERDINAND I	280.102
AG. PROT.MEDIULUI	23.6022
C.B LETEA- SCOLA NR 8	44.1662
AS.PROP. 130	37.4979
SC.ELECTROTEHNO	5.2556
CB.ION GHICA NR.2	61.318
MOTOR STAR	51.6
REGENT	2.1758
BAZIN INOT	214.226
GAMUS	0.33
TERM NORD EST	0
ATANASIU IRINEL CATALIN	0.6828
TOTAL	1010.5185

B. 31/34
Ianuarie 2010

denumire tert	Facturata (Gcal)
COL. NAT.PEDAGOGIC	360.856
COLEG. FERDINAND I	381.324
AG. PROT.MEDIULUI	19.8832
C.B LETEA- SCOLA NR 8	60.6814
AS.PROP. 130	44.3157
SC.ELECTROTEHNO	8.3612
CB.ION GHICA NR.2	80.8056
MOTOR STAR	48.16
REGENT	3.6722
BAZIN INOT	253.27
GAMUS	0.495
TERM NORD EST	0
ATANASIU IRINEL CATALIN	1.9565
TOTAL	1263.7808

B 32/34

FEBR. 2010

denumire tert	Facturata (Gcal)	
COL. NAT.PEDAGOGIC	302.204	
COLEG. FERDINAND I	320.866	
AG. PROT.MEDIULUI	13.4418	
C.B LETEA- SCOLA NR 8	50.9724	
AS.PROP. 130	37.4979	4931.716
SC.ELECTROTEHNO	5.2795	
CB.ION GHICA NR.2	86.4816	
MOTOR STAR	61.06	
REGENT	2.6316	
BAZIN INOT	195.478	
GAMUS	0.42	
ATANASIU IRINEL CATALIN	1.9969	1038.835
TOTAL	1078.3297	

B 33/34

MARTIE 2010

denumire tert	Facturata (Gcal)
COL. NAT.PEDAGOGIC	272.964
COLEG. FERDINAND I	273.652
AG. PROT.MEDIULUI	13.5364
C.B LETEA- SCOLA NR 8	42.8168
AS.PROP. 130 ..	29.9983
SC.ELECTROTEHNO	5.1123
CB.ION GHICA NR.2	54.8422
MOTOR STAR	37.84
REGENT	1.7114
BAZIN INOT	181.202
GAMUS	0.336
ATANASIU IRINEL CATALIN	1.6297
TOTAL	915.6411

B 34/34

APRILIE 2010

denumire tert	Facturata (Gcal)
COL. NAT.PEDAGOGIC	22.618
COLEG. FERDINAND I	116.53
AG. PROT.MEDIULUI	1.978
C.B LETEA- SCOLA NR 8	12.845
AS.PROP. 130	8.1814
SC.ELECTROTEHNO	0
CB.ION GHICA NR.2	4.7644
MOTOR STAR	0
REGENT	0.1462
BAZIN INOT	155.832
GAMUS	0.15
ATANASIU IRINEL CATALIN	1.5067
TOTAL	324.5517

ANEXA C

**Calculul hidraulic al conductelor de apă fierbinte -
iarna**

ANEXA C 1/20

Sarcina termica consumatorilor urbani si industriali 1											
Nr		Sarcina termica orara [Gcal/h]							Sch. Nec.		
crt	Denumire consumator	Nr sch	Maxima			Medie			de rac.	de pres.	
			Qinc	Qacm	Total	Qinc	Qacm	Total			
											[mca]
1	PT1	1	0.400	0.070	0.470	0.400	0.035	0.435	I 1P	15.00	
2	PT2	2	1.180	0.220	1.400	1.180	0.110	1.290	I 1P	15.00	
3	PT3	3	0.370	0.700	1.070	0.370	0.350	0.720	I 1P	15.00	
4	PT4	4	2.990	0.560	3.550	2.990	0.280	3.270	I 1P	15.00	
5	PT5	5	0.690	0.130	0.820	0.690	0.065	0.755	I 2S	10.00	
6	PT6	6	1.610	0.300	1.910	1.610	0.150	1.760	I 1P	15.00	
7	PT7	7	1.770	0.330	2.100	1.770	0.165	1.935	I 2S	10.00	
8	PT8	8	0.800	0.150	0.950	0.800	0.075	0.875	I 1P	15.00	
9	PT9	9	2.820	0.520	3.340	2.820	0.260	3.080	I 1P	15.00	
10	PT10	10	1.610	0.300	1.910	1.610	0.150	1.760	I 2S	10.00	
11	PT11	11	2.980	0.550	3.530	2.980	0.275	3.255	I 1P	15.00	
12	PT12	12	0.700	0.130	0.830	0.700	0.065	0.765	I 1P	15.00	
13	PT13	13	1.320	0.250	1.570	1.320	0.125	1.445	I 2S	10.00	
14	PT14	14	3.320	0.620	3.940	3.320	0.310	3.630	I 1P	15.00	
15	PT15	15	2.570	0.480	3.050	2.570	0.240	2.810	I 1P	15.00	
16	PT16	16	0.950	0.180	1.130	0.950	0.090	1.040	I 1P	15.00	
17	PT17	17	1.490	0.280	1.770	1.490	0.140	1.630	I 1P	15.00	
18	PT18	18	2.080	0.390	2.470	2.080	0.195	2.275	I 1P	15.00	
19	PT19	19	2.830	0.530	3.360	2.830	0.265	3.095	I 2S	10.00	
20	PT20	20	1.730	0.320	2.050	1.730	0.160	1.890	I 2S	10.00	
21	PT21	21	1.030	0.190	1.220	1.030	0.095	1.125	I 2S	10.00	
22	PT22	22	2.010	0.370	2.380	2.010	0.185	2.195	I 2S	10.00	
23	PT24	24	0.570	0.110	0.680	0.570	0.055	0.625	I 1P	15.00	
24	PT25 (MT1)	713	0.450	0.150	0.600	0.450	0.075	0.525	I 1P	10.00	
25	PT25 (MT2)	714	0.100	0.060	0.160	0.100	0.030	0.130	I 1P	10.00	
26	PT25 (MT3)	715	0.220	0.150	0.370	0.220	0.075	0.295	I 1P	10.00	
27	PT25 (MT4)	716	0.230	0.170	0.400	0.230	0.085	0.315	I 1P	10.00	
28	PT25 (MT5)	717	0.280	0.210	0.490	0.280	0.105	0.385	I 1P	10.00	
29	PT25 (MT6)	718	0.260	0.160	0.420	0.260	0.080	0.340	I 1P	10.00	
30	PT26	26	0.210	0.040	0.250	0.210	0.020	0.230	I 2S	15.00	
31	PT27	27	1.380	0.260	1.640	1.380	0.130	1.510	I 2S	10.00	
32	PT28	28	0.600	0.110	0.710	0.600	0.055	0.655	I 2S	15.00	
33	PT29	29	1.970	0.370	2.340	1.970	0.185	2.155	I 1P	15.00	
34	PT30	30	0.180	0.030	0.210	0.180	0.015	0.195	I 1P	15.00	
35	PT-Sc.nr.8	706	0.150	0.000	0.150	0.150	0.000	0.150	I 1P	15.00	
36	PT31	31	4.280	0.800	5.080	4.280	0.400	4.680	I 2S	15.00	
37	PT32	32	0.930	0.170	1.100	0.930	0.085	1.015	I 2S	10.00	
38	PT33	33	1.680	0.310	1.990	1.680	0.155	1.835	I 2S	10.00	
39	PT35	35	1.550	0.290	1.840	1.550	0.145	1.695	I 2S	10.00	
40	PT40	40	0.860	0.160	1.020	0.860	0.080	0.940	I 1P	15.00	
41	PT41	41	1.070	0.200	1.270	1.070	0.100	1.170	I 1P	15.00	
42	PT42	42	1.130	0.210	1.340	1.130	0.105	1.235	I 2S	10.00	
43	PT43	43	0.950	0.180	1.130	0.950	0.090	1.040	I 1P	15.00	
44	PT44	44	0.900	0.170	1.070	0.900	0.085	0.985	I 1P	15.00	
45	PT45	45	0.640	0.120	0.760	0.640	0.060	0.700	I 1P	15.00	
46	PT58	58	0.410	0.080	0.490	0.410	0.040	0.450	I 1P	15.00	
47	PT59	59	1.250	0.230	1.480	1.250	0.115	1.365	I 1P	15.00	
48	PT61	61	1.190	0.220	1.410	1.190	0.110	1.300	I 1P	15.00	
49	PT62	62	1.620	0.300	1.920	1.620	0.150	1.770	I 1P	15.00	
50	PT63	63	2.200	0.410	2.610	2.200	0.205	2.405	I 1P	15.00	
51	PT64	64	0.700	0.130	0.830	0.700	0.065	0.765	I 1P	15.00	
52	PT69	69	1.450	0.270	1.720	1.450	0.135	1.585	I 2S	15.00	
53	PT79	79	0.770	0.140	0.910	0.770	0.070	0.840	I 2S	10.00	
54	PT84	84	0.520	0.100	0.620	0.520	0.050	0.570	I 2S	10.00	
55	PT94	94	0.300	0.060	0.360	0.300	0.030	0.330	I 2S	10.00	
56	PT95	95	1.610	0.300	1.910	1.610	0.150	1.760	I 2S	15.00	
57	PT96	96	1.480	0.270	1.750	1.480	0.135	1.615	I 2S	15.00	
58	PT97	97	1.880	0.350	2.230	1.880	0.175	2.055	I 2S	15.00	
59	PT115	115	0.760	0.140	0.900	0.760	0.070	0.830	I 2S	15.00	
60	PT117	117	0.830	0.150	0.980	0.830	0.075	0.905	I 2S	15.00	
61	PT151	151	0.450	0.080	0.530	0.450	0.040	0.490	I 1P	15.00	
62	PT152	152	2.380	0.440	2.820	2.380	0.220	2.600	I 1P	15.00	
63	PT153	153	1.320	0.240	1.560	1.320	0.120	1.440	I 1P	15.00	
64	PT154	154	1.330	0.250	1.580	1.330	0.125	1.455	I 1P	15.00	
65	PTCol. Ferd	700	0.750	0.140	0.890	0.750	0.070	0.820	I 2S	10.00	
66	PTLic. Peda	703	0.660	0.120	0.780	0.660	0.060	0.720	I 2S	10.00	
67	PTAg.Mediu	701	0.050	0.000	0.050	0.050	0.000	0.050	I 1P	10.00	
68	PTAs.130	704	0.110	0.000	0.110	0.110	0.000	0.110	I 1P	10.00	
69	PT PEROM	709	0.020	0.000	0.020	0.020	0.000	0.020	I 1P	15.00	
70	PT MOTORSTAR	710	0.160	0.000	0.160	0.160	0.000	0.160	I 1P	15.00	
71	PT BISERICA	705	0.120	0.040	0.160	0.120	0.020	0.140	I 2S	10.00	
72	PT CENTR3	707	0.430	0.260	0.690	0.430	0.130	0.560	I 2S	10.00	
73	PT C.LOG.	708	0.120	0.040	0.160	0.120	0.020	0.140	I 2S	10.00	
74	PT AEROST-MT1	711	2.260	0.000	2.260	2.260	0.000	2.260	I 1P	10.00	
75	PT AEROST-MT2-7	712	16.800	0.000	16.800	16.800	0.000	16.800	I 1P	15.00	

NT

C 2/20

* 76 * PT-Sc.Gen.2 * 702 * 0.190 * 0.000 * 0.190 * 0.190 * 0.000 * 0.190 * I 1P * 10.00 *

TOTAL	101.960	16.760	101.960	8.380
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Calculul hidraulic al magistralei 1

Nr.	Tronson	Tip agent	Debit	Dn	Lungime[m]	i [mmca/m]	dh[mc]	Viteza					
crt	Ni	Ne	[t/h]	[mm]	reala	calcul	duc	int	duc	int	[m/s]		
1	200	300	*Mag	2374.00	1000	* 2068.0	* 2585.0	* 0.642	* 0.613	* 1.659	* 1.585	* 0.898	
2	300	402	*Mag	2374.00	600	* 170.0	* 212.5	* 0.642	* 2.047	* 2.521	* 2.521	*	
3	402	403	*Mag	2374.00	600	* 1.0	* 1.3	* 0.642	* 0.012	* 2.521	* 2.521	*	
4	303	271	*Mag	943.80	800	* 243.0	* 303.7	* 0.642	* 0.100	* 0.559	* 0.559	*	
5	271	500	*Mag	853.26	800	* 259.0	* 323.7	* 0.269	* 0.257	* 0.087	* 0.083	* 0.505	
6	500	501	*Mag	853.26	800	* 56.0	* 70.0	* 0.269	* 0.257	* 0.019	* 0.018	* 0.505	
7	501	301	*Mag	845.80	800	* 139.0	* 173.7	* 0.264	* 0.252	* 0.046	* 0.044	* 0.501	
8	301	302	*Mag	822.40	800	* 160.0	* 200.0	* 0.250	* 0.239	* 0.050	* 0.048	* 0.487	
9	302	502	*Mag	678.47	800	* 1079.0	* 1348.7	* 0.170	* 0.162	* 0.229	* 0.219	* 0.402	
10	502	503	*Mag	664.33	800	* 837.0	* 1046.2	* 0.163	* 0.156	* 0.170	* 0.163	* 0.394	
11	503	248	*Mag	664.33	800	* 164.0	* 205.0	* 0.163	* 0.156	* 0.033	* 0.032	* 0.394	
12	248	247	*Mag	647.57	800	* 163.0	* 203.7	* 0.155	* 0.148	* 0.032	* 0.030	* 0.384	
13	247	272	*Mag	641.03	800	* 97.0	* 121.2	* 0.152	* 0.145	* 0.018	* 0.018	* 0.380	
14	272	504	*Mag	501.30	800	* 62.0	* 77.5	* 0.093	* 0.089	* 0.007	* 0.007	* 0.297	
15	504	340	*Mag	501.30	700	* 558.0	* 697.5	* 0.188	* 0.180	* 0.131	* 0.126	* 0.389	
16	340	246	*Mag	489.98	700	* 280.0	* 350.0	* 0.180	* 0.172	* 0.063	* 0.060	* 0.380	
17	246	505	*Mag	473.65	700	* 20.0	* 25.0	* 0.168	* 0.161	* 0.004	* 0.004	* 0.367	
18	505	506	*Mag	472.58	700	* 212.0	* 265.0	* 0.167	* 0.160	* 0.044	* 0.042	* 0.367	
19	506	243	*Mag	447.99	700	* 737.0	* 921.3	* 0.150	* 0.144	* 0.139	* 0.132	* 0.348	
20	243	239	*Mag	284.79	700	* 247.0	* 308.8	* 0.061	* 0.058	* 0.019	* 0.018	* 0.221	
21	239	507	*Mag	268.00	700	* 35.0	* 43.8	* 0.054	* 0.051	* 0.002	* 0.002	* 0.208	
22	507	231	*Mag	268.00	700	* 315.0	* 393.8	* 0.054	* 0.051	* 0.021	* 0.020	* 0.208	
23	231	115	*Rac	17.11	250	* 281.0	* 365.3	* 0.041	* 0.039	* 0.015	* 0.014	* 0.097	
24	115	506	* 42	*Rac	25.06	* 125	* 207.0	* 269.1	* 3.847	* 3.676	* 1.035	* 0.989	* 0.601

25	* 505 *	701 *Rac *	1.07 *	100 *	75.0 *	97.5 *	0.017 *	0.016 *	0.002 *	0.002 *	0.036 *
26	* 246 *	700 *Rac *	16.64 *	125 *	270.0 *	351.0 *	1.695 *	1.620 *	0.595 *	0.569 *	0.399 *
27	* 340 *	84 *Rac *	11.55 *	80 *	213.0 *	276.9 *	7.470 *	7.139 *	2.068 *	1.977 *	0.644 *
28	* 272 *	286 *Mag *	139.73 *	500 *	430.0 *	537.5 *	0.090 *	0.086 *	0.048 *	0.046 *	0.216 *
29	* 286 *	69 *Rac *	32.16 *	200 *	43.0 *	55.9 *	0.448 *	0.429 *	0.025 *	0.024 *	0.281 *
30	* 286 *	287 *Mag *	108.17 *	500 *	442.0 *	552.5 *	0.054 *	0.051 *	0.030 *	0.028 *	0.167 *
31	* 287 *	95 *Rac *	35.71 *	200 *	173.0 *	224.9 *	0.553 *	0.528 *	0.124 *	0.119 *	0.312 *
32	* 287 *	288 *Mag *	73.12 *	500 *	217.0 *	271.3 *	0.025 *	0.023 *	0.007 *	0.006 *	0.113 *
33	* 288 *	96 *Rac *	32.80 *	200 *	24.0 *	31.2 *	0.466 *	0.446 *	0.015 *	0.014 *	0.287 *
34	* 288 *	289 *Mag *	41.70 *	500 *	506.0 *	632.5 *	0.008 *	0.008 *	0.005 *	0.005 *	0.065 *
35	* 289 *	97 *Rac *	41.70 *	200 *	99.0 *	128.7 *	0.754 *	0.720 *	0.097 *	0.093 *	0.365 *
36	* 247 *	94 *Rac *	6.67 *	65 *	20.0 *	26.0 *	7.795 *	7.449 *	0.203 *	0.194 *	0.574 *
37	* 248 *	79 *Rac *	17.06 *	125 *	244.0 *	317.2 *	1.783 *	1.704 *	0.566 *	0.541 *	0.409 *
38	* 502 *	703 *Rac *	14.41 *	125 *	302.0 *	392.6 *	1.272 *	1.215 *	0.499 *	0.477 *	0.346 *
39	* 302 *	351 *Ram *	143.92 *	250 *	349.0 *	453.7 *	2.849 *	2.756 *	1.293 *	1.250 *	0.813 *
40	* 351 *	352 *Rac *	85.21 *	200 *	409.0 *	531.7 *	3.148 *	3.008 *	1.674 *	1.599 *	0.746 *
41	* 501 *	256 *Ram *	7.46 *	200 *	78.0 *	101.4 *	0.024 *	0.023 *	0.002 *	0.002 *	0.065 *
42	* 256 *	257 *Rac *	7.46 *	150 *	240.0 *	312.0 *	0.107 *	0.102 *	0.033 *	0.032 *	0.115 *
43	* 257 *	258 *Rac *	4.96 *	150 *	45.0 *	58.5 *	0.047 *	0.045 *	0.003 *	0.003 *	0.076 *
44	* 258 *	30 *Rac *	4.96 *	150 *	42.0 *	54.6 *	0.047 *	0.045 *	0.003 *	0.002 *	0.076 *
45	* 257 *	706 *Rac *	3.11 *	150 *	37.0 *	48.1 *	0.019 *	0.018 *	0.001 *	0.001 *	0.048 *
46	* 231 *	232 *Mag *	189.72 *	400 *	143.0 *	178.8 *	0.557 *	0.532 *	0.099 *	0.095 *	0.466 *
47	* 232 *	238 *Rac *	12.16 *	200 *	60.0 *	78.0 *	0.064 *	0.061 *	0.005 *	0.005 *	0.106 *
48	* 238 *	277 *Rac *	12.16 *	150 *	170.0 *	221.0 *	0.283 *	0.271 *	0.063 *	0.060 *	0.187 *
49	* 277 *	58 *Rac *	12.16 *	125 *	100.0 *	130.0 *	0.906 *	0.866 *	0.118 *	0.113 *	0.292 *
50	* 232 *	233 *Mag *	179.19 *	400 *	399.0 *	498.8 *	0.496 *	0.474 *	0.248 *	0.237 *	0.440 *

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* 51 * 233 * 234 *Mag *179.19 * 350 * 531.0 * 663.7 * 0.796 * 0.761* 0.528 * 0.505 * 0.527 *
* 52 * 234 * 59 *Rac * 36.52 * 150 * 40.0 * 52.0 * 2.553 * 2.439* 0.133 * 0.127 * 0.563 *
* 53 * 234 * 335 *Mag *147.38 * 350 * 405.0 * 506.3 * 0.539 * 0.515* 0.273 * 0.261 * 0.434 *
* 54 * 335 * 64 *Rac * 20.73 * 250 * 250.0 * 325.0 * 0.060 * 0.057* 0.019 * 0.019 * 0.118 *
* 55 * 335 * 336 *Mag *129.31 * 350 * 123.0 * 153.8 * 0.415 * 0.396* 0.064 * 0.061 * 0.380 *
* 56 * 336 * 61 *Rac * 35.20 * 250 * 28.0 * 36.4 * 0.172 * 0.165* 0.006 * 0.006 * 0.200 *
* 57 * 336 * 337 *Mag * 98.62 * 350 * 94.0 * 117.5 * 0.241 * 0.230* 0.028 * 0.027 * 0.290 *
* 58 * 337 * 62 *Rac * 47.94 * 200 * 222.0 * 288.6 * 0.996 * 0.952* 0.288 * 0.275 * 0.419 *
* 59 * 337 * 63 *Rac * 65.21 * 250 * 295.0 * 383.5 * 0.592 * 0.566* 0.227 * 0.217 * 0.370 *
* 60 * 223 * 154 *Rac * 38.21 * 150 * 150.0 * 195.0 * 2.795 * 2.671* 0.545 * 0.521 * 0.589 *
* 61 * 243 * 515 *Mag * 18.79 * 300 * 110.0 * 137.5 * 0.019 * 0.018* 0.003 * 0.002 * 0.074 *
* 62 * 515 * 45 *Rac * 18.79 * 250 * 34.0 * 44.2 * 0.049 * 0.047* 0.002 * 0.002 * 0.107 *
* 63 * 243 * 244 *Mag *146.87 * 300 * 140.0 * 175.0 * 1.161 * 1.109* 0.203 * 0.194 * 0.580 *
* 64 * 244 * 44 *Rac * 26.47 * 250 * 89.0 * 115.7 * 0.098 * 0.093* 0.011 * 0.011 * 0.150 *
* 65 * 244 * 291 *Mag *123.87 * 300 * 115.0 * 143.8 * 0.826 * 0.789* 0.119 * 0.113 * 0.490 *
* 66 * 291 * 117 *Rac * 18.67 * 150 * 91.0 * 118.3 * 0.667 * 0.638* 0.079 * 0.075 * 0.288 *
* 67 * 245 * 152 *Rac * 69.62 * 250 * 188.0 * 244.4 * 0.675 * 0.645* 0.165 * 0.158 * 0.395 *
* 68 * 291 * 516 *Mag *105.54 * 300 * 430.0 * 537.5 * 0.600 * 0.573* 0.322 * 0.308 * 0.417 *
* 69 * 516 * 153 *Rac * 38.45 * 150 * 80.0 * 104.0 * 2.829 * 2.704* 0.294 * 0.281 * 0.592 *
* 70 * 516 * 245 *Mag * 72.00 * 300 * 160.0 * 200.0 * 0.279 * 0.267* 0.056 * 0.053 * 0.285 *
* 71 * 208 * 209 *Mag * 244.55 * 600 * 180.0 * 225.0 * 0.102 * 0.221* 0.023 * 0.050 * 0.260 *
* 72 * 209 * 209 *Mag * 244.55 * 400 * 180.0 * 225.0 * 0.102 * 0.221* 0.023 * 0.050 * 0.287 *
* 73 * 209 * 210 *Mag * 224.61 * 600 * 174.0 * 217.5 * 0.086 * 0.186* 0.019 * 0.041 * 0.239 *
* 74 * 210 * 211 *Mag * 224.61 * 600 * 55.0 * 68.8 * 0.086 * 0.186* 0.006 * 0.013 * 0.239 *
* 75 * 211 * 211 *Mag * 224.61 * 400 * 55.0 * 68.8 * 0.086 * 0.186* 0.006 * 0.013 * 0.264 *
* 76 * 211 * 278 *Rac * 46.15 * 150 * 30.0 * 39.0 * 4.077 * 3.896* 0.159 * 0.152 * 0.711 *

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* 76	* 278	* 221 *Rac	* 46.15	* 150	* 121.0	* 157.3	* 4.077	* 3.896	* 0.641	* 0.613	* 0.711
* 77	* 221	* 222 *Rac	* 46.15	* 150	* 32.0	* 41.6	* 4.077	* 3.896	* 0.170	* 0.162	* 0.711
* 78	* 222	* 6 *Rac	* 46.15	* 150	* 38.0	* 49.4	* 4.077	* 3.896	* 0.201	* 0.192	* 0.711
* 79	* 211	* 212 *Mag	* 184.60	* 400	* 180.0	* 225.0	* 0.527	* 0.504	* 0.119	* 0.113	* 0.454
* 80	* 212	* 24 *Rac	* 16.49	* 150	* 84.0	* 109.2	* 0.521	* 0.498	* 0.057	* 0.054	* 0.254
* 81	* 212	* 213 *Mag	* 170.36	* 400	* 80.0	* 100.0	* 0.449	* 0.429	* 0.045	* 0.043	* 0.419
* 82	* 213	* 218 *Rac	* 89.17	* 200	* 30.0	* 39.0	* 3.447	* 3.294	* 0.134	* 0.128	* 0.780
* 83	* 218	* 219 *Rac	* 85.83	* 200	* 90.0	* 117.0	* 3.194	* 3.052	* 0.374	* 0.357	* 0.751
* 84	* 219	* 220 *Rac	* 85.83	* 200	* 114.0	* 148.2	* 3.194	* 3.052	* 0.473	* 0.452	* 0.751
* 85	* 220	* 4 *Rac	* 85.83	* 200	* 15.0	* 19.5	* 3.194	* 3.052	* 0.062	* 0.060	* 0.751
* 86	* 218	* 5 *Rac	* 15.08	* 150	* 35.0	* 45.5	* 0.436	* 0.416	* 0.020	* 0.019	* 0.232
* 87	* 213	* 214 *Mag	* 81.19	* 300	* 59.0	* 73.8	* 0.355	* 0.339	* 0.026	* 0.025	* 0.321
* 88	* 214	* 215 *Mag	* 81.19	* 300	* 228.0	* 285.0	* 0.355	* 0.339	* 0.101	* 0.097	* 0.321
* 89	* 215	* 2 *Rac	* 33.83	* 200	* 120.0	* 156.0	* 0.496	* 0.474	* 0.077	* 0.074	* 0.296
* 90	* 215	* 216 *Mag	* 51.86	* 300	* 207.0	* 258.8	* 0.145	* 0.138	* 0.037	* 0.036	* 0.205
* 91	* 216	* 1 *Rac	* 11.28	* 150	* 192.0	* 249.6	* 0.244	* 0.233	* 0.061	* 0.058	* 0.174
* 92	* 216	* 217 *Ram	* 42.01	* 250	* 263.0	* 328.7	* 0.246	* 0.235	* 0.081	* 0.077	* 0.238
* 93	* 217	* 3 *Rac	* 36.44	* 150	* 12.0	* 15.6	* 2.541	* 2.429	* 0.040	* 0.038	* 0.561
* 94	* 217	* 8 *Rac	* 22.97	* 200	* 114.0	* 148.2	* 0.229	* 0.219	* 0.034	* 0.032	* 0.201
* 95	* 245	* 151 *Rac	* 13.03	* 250	* 301.0	* 391.3	* 0.024	* 0.023	* 0.009	* 0.009	* 0.074
* 96	* 403	* 201 *Mag	* 1430.20	* 600	* 20.0	* 25.0	* 0.024	* 0.024	* 0.087	* 0.087	* 1.519
* 97	* 201	* 202 *Mag	* 606.45	* 600	* 30.0	* 37.5	* 0.629	* 1.359	* 0.024	* 0.051	* 0.644
* 201	* 202	* 202 *Mag	* 606.45	* 400	* 30.0	* 37.5	* 0.629	* 1.359	* 0.024	* 0.051	* 0.712
* 98	* 202	* 203 *Mag	* 606.45	* 600	* 257.0	* 321.3	* 0.629	* 1.359	* 0.202	* 0.436	* 0.644
* 202	* 203	* 203 *Mag	* 606.45	* 400	* 257.0	* 321.3	* 0.629	* 1.359	* 0.202	* 0.436	* 0.712
* 99	* 203	* 204 *Mag	* 606.45	* 600	* 191.0	* 238.8	* 0.629	* 1.359	* 0.150	* 0.324	* 0.644
* 203	* 204	* 204 *Mag	* 606.45	* 400	* 191.0	* 238.8	* 0.629	* 1.359	* 0.150	* 0.324	* 0.712
* 100	* 204	* 205 *Mag	* 543.29	* 600	* 245.0	* 306.3	* 0.504	* 1.090	* 0.154	* 0.334	* 0.577
* 204	* 205	* 205 *Mag	* 543.29	* 400	* 245.0	* 306.3	* 0.504	* 1.090	* 0.154	* 0.334	* 0.638

* 101 *	205	* 206 *Mag *	506.64 *	600 *	219.0 *	273.7 *	0.439 *	0.948 *	0.120 *	0.260 *	0.538 *
* 102 *	206	* 206 *Mag *	506.64 *	400 *	219.0 *	273.7 *	0.439 *	0.948 *	0.120 *	0.260 *	0.595 *
* 103 *	206	* 280 *Mag *	425.05 *	600 *	101.0 *	126.3 *	0.309 *	0.667 *	0.039 *	0.084 *	0.451 *
* 104 *	207	* 281 *Mag *	379.73 *	600 *	505.0 *	631.3 *	0.246 *	0.533 *	0.156 *	0.336 *	0.403 *
* 105 *	207	* 281 *Mag *	379.73 *	400 *	505.0 *	631.3 *	0.246 *	0.533 *	0.156 *	0.336 *	0.446 *
* 106 *	208	* 208 *Mag *	350.13 *	600 *	100.0 *	125.0 *	0.209 *	0.453 *	0.026 *	0.057 *	0.372 *
* 107 *	208	* 208 *Mag *	350.13 *	400 *	100.0 *	125.0 *	0.209 *	0.453 *	0.026 *	0.057 *	0.411 *
* 108 *	207	* 12 *Rac *	20.05 *	150 *	218.0 *	283.4 *	0.769 *	0.735 *	0.218 *	0.208 *	0.309 *
* 109 *	206	* 14 *Rac *	94.28 *	200 *	262.0 *	340.6 *	3.853 *	3.682 *	1.312 *	1.254 *	0.825 *
* 110 *	205	* 249 *Rac *	42.38 *	150 *	155.0 *	201.5 *	3.438 *	3.286 *	0.693 *	0.662 *	0.653 *
* 111 *	249	* 17 *Rac *	42.38 *	150 *	180.0 *	234.0 *	3.438 *	3.286 *	0.805 *	0.769 *	0.653 *
* 112 *	204	* 15 *Rac *	72.98 *	200 *	47.0 *	61.1 *	2.309 *	7.794 *	0.141 *	0.476 *	0.639 *
* 113 *	204	* 15 *Rac *	72.98 *	125 *	47.0 *	61.1 *	2.309 *	7.794 *	0.141 *	0.476 *	0.837 *
* 114 *	352	* 11 *Rac *	85.21 *	200 *	168.0 *	218.4 *	3.148 *	3.008 *	0.687 *	0.657 *	0.746 *
* 115 *	351	* 9 *Rac *	80.61 *	200 *	5.0 *	6.5 *	2.817 *	2.692 *	0.018 *	0.018 *	0.705 *
* 116 *	301	* 16 *Rac *	27.08 *	150 *	59.0 *	76.7 *	1.404 *	1.342 *	0.108 *	0.103 *	0.417 *
* 117 *	271	* 283 *Mag *	92.27 *	300 *	261.0 *	326.3 *	0.458 *	0.438 *	0.149 *	0.143 *	0.365 *
* 118 *	283	* 31 *Rac *	92.27 *	250 *	235.0 *	305.5 *	1.185 *	1.133 *	0.362 *	0.346 *	0.524 *
* 119 *	280	* 207 *Mag *	397.12 *	600 *	10.0 *	12.5 *	0.270 *	0.583 *	0.003 *	0.007 *	0.422 *
* 120 *	280	* 207 *Mag *	397.12 *	400 *	10.0 *	12.5 *	0.270 *	0.583 *	0.003 *	0.007 *	0.466 *
* 121 *	280	* 13 *Rac *	28.47 *	200 *	40.0 *	52.0 *	0.351 *	0.336 *	0.018 *	0.017 *	0.249 *
* 122 *	281	* 27 *Rac *	30.17 *	200 *	91.0 *	118.3 *	0.395 *	0.377 *	0.047 *	0.045 *	0.264 *
* 123 *	208	* 296 *Mag *	105.58 *	400 *	181.0 *	226.3 *	0.172 *	0.165 *	0.039 *	0.037 *	0.259 *
* 124 *	296	* 10 *Rac *	35.18 *	200 *	168.0 *	218.4 *	0.537 *	0.513 *	0.117 *	0.112 *	0.308 *
* 125 *	296	* 509 *Mag *	71.06 *	400 *	300.0 *	375.0 *	0.078 *	0.075 *	0.029 *	0.028 *	0.175 *
* 126 *	509	* 7 *Rac *	38.68 *	200 *	158.0 *	205.4 *	0.649 *	0.620 *	0.133 *	0.127 *	0.338 *
* 127 *	509	* 223 *Mag *	38.21 *	400 *	210.0 *	262.5 *	0.023 *	0.022 *	0.006 *	0.006 *	0.094 *
* 128 *	201	* 510 *Mag *	823.75 *	400 *	115.0 *	143.8 *	10.492 *	10.327 *	1.508 *	1.441 *	2.024 *

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* 124 * 510 * 28 * Rac * 12.93 * 125 * 147.0 * 191.1 * 1.023 * 0.978 * 0.196 * 0.187 * 0.310 *
* 125 * 510 * 260 * Mag * 811.06 * 400 * 95.0 * 118.8 * 10.171 * 9.720 * 1.208 * 1.154 * 1.993 *
* 126 * 261 * 262 * Mag * 753.19 * 400 * 28.0 * 35.0 * 8.772 * 8.382 * 0.307 * 0.293 * 1.851 *
* 127 * 262 * 263 * Mag * 753.19 * 400 * 350.0 * 437.5 * 8.772 * 8.382 * 3.838 * 3.667 * 1.851 *
* 128 * 263 * 264 * Mag * 681.17 * 400 * 150.0 * 187.5 * 7.174 * 6.856 * 1.345 * 1.285 * 1.674 *
* 129 * 264 * 265 * Mag * 621.29 * 350 * 157.0 * 196.2 * 9.571 * 9.146 * 1.878 * 1.795 * 1.828 *
* 130 * 265 * 266 * Mag * 621.29 * 350 * 213.0 * 266.2 * 9.571 * 9.146 * 2.548 * 2.435 * 1.828 *
* 131 * 266 * 267 * Mag * 86.11 * 300 * 76.0 * 95.0 * 0.399 * 0.381 * 0.038 * 0.036 * 0.340 *
* 132 * 267 * 20 * Rac * 37.79 * 150 * 171.0 * 222.3 * 2.734 * 2.613 * 0.608 * 0.581 * 0.582 *
* 133 * 267 * 29 * Rac * 56.59 * 150 * 143.0 * 185.9 * 6.130 * 5.858 * 1.140 * 1.089 * 0.872 *
* 134 * 266 * 268 * Mag * 535.18 * 350 * 234.0 * 304.2 * 7.102 * 6.787 * 2.160 * 2.064 * 1.575 *
* 135 * 268 * 341 * Mag * 477.69 * 350 * 140.0 * 182.0 * 5.658 * 5.407 * 1.030 * 0.984 * 1.405 *
* 136 * 341 * 21 * Rac * 22.50 * 200 * 10.0 * 13.0 * 0.219 * 0.210 * 0.003 * 0.003 * 0.197 *
* 137 * 354 * 22 * Rac * 43.90 * 200 * 10.0 * 13.0 * 0.836 * 0.799 * 0.011 * 0.010 * 0.384 *
* 138 * 264 * 19 * Rac * 61.01 * 250 * 236.0 * 306.8 * 0.518 * 0.495 * 0.159 * 0.152 * 0.346 *
* 139 * 511 * 279 * Rac * 59.13 * 200 * 206.0 * 267.8 * 1.516 * 1.448 * 0.406 * 0.388 * 0.517 *
* 140 * 279 * 18 * Rac * 59.13 * 200 * 80.0 * 104.0 * 1.516 * 1.448 * 0.158 * 0.151 * 0.517 *
* 141 * 403 * 303 * Mag * 943.80 * 600 * 170.0 * 212.5 * 1.516 * 1.516 * 0.323 * 0.323 * 1.002 *
* 300 * 600 * Mag * 2374.0 * 1000 * 15.0 * 18.8 * 0.613 * 0.613 * 0.011 * 0.011 * 0.859 *
* 600 * 271 * Mag * 943.8 * 800 * 243.0 * 303.7 * 0.314 * 0.314 * 0.095 * 0.095 * 0.534 *
* 600 * 201 * Mag * 1430.2 * 600 * 170.0 * 212.5 * 3.340 * 3.340 * 0.710 * 0.710 * 1.451 *
* 145 * 231 * 230 * Mag * 78.28 * 400 * 197.0 * 246.3 * 0.095 * 0.091 * 0.023 * 0.022 * 0.192 *
* 146 * 230 * 229 * Mag * 78.28 * 400 * 297.0 * 371.3 * 0.095 * 0.091 * 0.035 * 0.034 * 0.192 *
* 147 * 229 * 228 * Mag * 78.28 * 400 * 576.0 * 720.0 * 0.095 * 0.091 * 0.068 * 0.065 * 0.192 *
* 148 * 228 * 227 * Mag * 25.48 * 400 * 272.0 * 340.0 * 0.010 * 0.010 * 0.003 * 0.003 * 0.063 *
* 149 * 227 * 40 * Rac * 25.48 * 250 * 159.0 * 206.7 * 0.090 * 0.086 * 0.019 * 0.018 * 0.145 *
* 150 * 228 * 240 * Mag * 56.07 * 350 * 120.0 * 150.0 * 0.078 * 0.074 * 0.012 * 0.011 * 0.165 *

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* 151 *	240 *	41 *Rac *	31.39 *	250 *	96.0 *	124.8 *	0.137 *	0.131*	0.017 *	0.016 *	0.178 *
* 152 *	240 *	241 *Mag *	28.78 *	350 *	60.0 *	75.0 *	0.021 *	0.020*	0.002 *	0.001 *	0.085 *
* 153 *	241 *	508 *Mag *	28.78 *	350 *	291.0 *	363.8 *	0.021 *	0.020*	0.007 *	0.007 *	0.085 *
* 154 *	508 *	702 *Rac *	4.18 *	80 *	39.0 *	50.7 *	0.980 *	0.936*	0.050 *	0.047 *	0.233 *
* 155 *	508 *	276 *Mag *	28.28 *	350 *	130.0 *	162.5 *	0.020 *	0.019*	0.003 *	0.003 *	0.083 *
* 156 *	276 *	43 *Rac *	28.28 *	250 *	65.0 *	84.5 *	0.111 *	0.106*	0.009 *	0.009 *	0.161 *
* 157 *	260 *	512 *Ram *	6.73 *	80 *	112.0 *	140.0 *	2.535 *	2.423*	0.355 *	0.339 *	0.375 *
* 158 *	512 *	704 *Rac *	2.28 *	80 *	2.0 *	2.6 *	0.292 *	0.279*	0.001 *	0.001 *	0.127 *
* 159 *	512 *	26 *Rac *	4.53 *	80 *	104.0 *	135.2 *	1.150 *	1.099*	0.155 *	0.149 *	0.253 *
* 160 *	260 *	511 *Mag *	804.33 *	400 *	25.0 *	31.3 *	10.003 *	9.560*	0.313 *	0.299 *	1.977 *
* 161 *	511 *	261 *Mag *	753.19 *	400 *	126.0 *	157.5 *	8.772 *	8.382*	1.382 *	1.320 *	1.851 *
* 162 *	268 *	353 *Ram *	57.49 *	200 *	120.0 *	156.0 *	1.433 *	1.369*	0.224 *	0.214 *	0.503 *
* 163 *	353 *	354 *Ram *	45.87 *	200 *	30.0 *	39.0 *	0.912 *	0.872*	0.036 *	0.034 *	0.401 *
* 164 *	354 *	708 *Rac *	3.03 *	40 *	28.0 *	36.4 *	17.495 *	16.719*	0.637 *	0.609 *	0.648 *
* 165 *	353 *	707 *Rac *	14.19 *	80 *	130.0 *	169.0 *	11.273 *	10.773*	1.905 *	1.821 *	0.791 *
* 166 *	263 *	513 *Mag *	72.02 *	300 *	87.0 *	113.1 *	0.279 *	0.267*	0.032 *	0.030 *	0.285 *
* 167 *	513 *	705 *Rac *	3.02 *	40 *	31.0 *	40.3 *	17.376 *	16.606*	0.700 *	0.669 *	0.646 *
* 168 *	513 *	284 *Mag *	69.26 *	300 *	422.0 *	548.6 *	0.258 *	0.247*	0.142 *	0.135 *	0.274 *
* 169 *	284 *	35 *Rac *	33.88 *	200 *	181.0 *	235.3 *	0.498 *	0.475*	0.117 *	0.112 *	0.296 *
* 170 *	284 *	514 *Ram *	36.70 *	250 *	509.0 *	661.7 *	0.188 *	0.179*	0.124 *	0.119 *	0.208 *
* 171 *	514 *	285 *Ram *	36.70 *	200 *	94.0 *	122.2 *	0.584 *	0.558*	0.071 *	0.068 *	0.321 *
* 172 *	285 *	33 *Rac *	36.70 *	150 *	10.0 *	13.0 *	2.578 *	2.463*	0.034 *	0.032 *	0.565 *
* 173 *	341 *	342 *Mag *	455.60 *	300 *	196.0 *	254.8 *	11.172 *	10.677*	2.847 *	2.720 *	1.801 *
* 174 *	342 *	349 *Mag *	404.79 *	300 *	138.0 *	179.4 *	8.819 *	8.428*	1.582 *	1.512 *	1.600 *
* 175 *	349 *	517 *Mag *	401.00 *	300 *	190.0 *	247.0 *	8.655 *	8.271*	2.138 *	2.043 *	1.585 *
* 176 *	517 *	711 *Rac *	47.55 *	125 *	15.0 *	19.5 *	13.847 *	13.232*	0.270 *	0.258 *	1.141 *

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* 177 * 517 * 712 * Rac * 353.45 * 300 * 160.0 * 208.0 * 6.724 * 6.426 * 1.399 * 1.337 * 1.397 *
* 178 * 349 * 350 * Ram * 3.79 * 250 * 128.0 * 166.4 * 0.002 * 0.002 * 0.000 * 0.000 * 0.000 * 0.021 *
* 179 * 350 * 709 * Rac * 0.42 * 200 * 10.0 * 13.0 * 0.000 * 0.000 * 0.000 * 0.000 * 0.000 * 0.004 *
* 180 * 350 * 710 * Rac * 3.37 * 300 * 286.0 * 371.8 * 0.001 * 0.001 * 0.001 * 0.000 * 0.000 * 0.013 *
* 181 * 342 * 343 * Ram * 50.82 * 125 * 88.0 * 114.4 * 15.818 * 15.116 * 1.810 * 1.729 * 1.220 *
* 182 * 343 * 716 * Rac * 11.80 * 65 * 2.0 * 2.6 * 24.369 * 23.288 * 0.063 * 0.061 * 1.016 *
* 183 * 343 * 344 * Ram * 42.50 * 125 * 2.0 * 2.6 * 11.063 * 10.573 * 0.029 * 0.027 * 1.020 *
* 184 * 344 * 717 * Rac * 14.49 * 65 * 10.0 * 13.0 * 36.745 * 35.115 * 0.478 * 0.456 * 1.247 *
* 185 * 344 * 345 * Ram * 32.31 * 125 * 70.0 * 91.0 * 6.395 * 6.111 * 0.582 * 0.556 * 0.775 *
* 186 * 345 * 715 * Rac * 10.77 * 50 * 2.0 * 2.6 * 58.793 * 56.185 * 0.153 * 0.146 * 1.390 *
* 187 * 345 * 346 * Ram * 24.61 * 125 * 57.0 * 74.1 * 3.711 * 3.546 * 0.275 * 0.263 * 0.591 *
* 188 * 346 * 347 * Ram * 15.87 * 100 * 70.0 * 91.0 * 3.665 * 3.503 * 0.334 * 0.319 * 0.530 *
* 189 * 347 * 714 * Rac * 4.56 * 40 * 12.0 * 15.6 * 39.549 * 37.795 * 0.617 * 0.590 * 0.974 *
* 190 * 347 * 713 * Rac * 15.61 * 100 * 100.0 * 130.0 * 3.545 * 3.388 * 0.461 * 0.440 * 0.521 *
* 191 * 346 * 718 * Rac * 12.02 * 65 * 87.0 * 113.1 * 25.294 * 24.172 * 2.861 * 2.734 * 1.035 *

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011/20

Repartitia in retea a debitelor de caldura si agent termic 1

* Nr.* Tronson * Debit [t/h] * Sarcina termica [Gcal/h] *									

* crt*	Ni	Ne	inc	acm	total	inc	acm	total	*

* 1 *	200 *	300 *	2156.4	*217.59*	2374.00*	101.960*	8.380*	110.340*	*
* 2 *	300 *	402 *	2156.4	*217.59*	2374.00*	101.960*	8.380*	110.340*	*
* 3 *	402 *	403 *	2156.4	*217.59*	2374.00*	101.960*	8.380*	110.340*	*
* 4 *	303 *	271 *	850.3	*93.50*	943.80*	39.680*	3.645*	43.325*	*
* 5 *	271 *	500 *	761.5	*91.77*	853.26*	35.400*	3.245*	38.645*	*
* 6 *	500 *	501 *	761.5	*91.77*	853.26*	35.400*	3.245*	38.645*	*
* 7 *	501 *	301 *	754.6	*91.16*	845.80*	35.070*	3.230*	38.300*	*
* 8 *	301 *	302 *	734.9	*87.47*	822.40*	34.120*	3.140*	37.260*	*
* 9 *	302 *	502 *	612.9	*65.58*	678.47*	28.320*	2.605*	30.925*	*
* 10 *	502 *	503 *	599.0	*65.31*	664.33*	27.660*	2.545*	30.205*	*
* 11 *	503 *	248 *	599.0	*65.31*	664.33*	27.660*	2.545*	30.205*	*
* 12 *	248 *	247 *	582.6	*65.00*	647.57*	26.890*	2.475*	29.365*	*
* 13 *	247 *	272 *	576.2	*64.87*	641.03*	26.590*	2.445*	29.035*	*
* 14 *	272 *	504 *	439.1	*62.23*	501.30*	20.170*	1.850*	22.020*	*
* 15 *	504 *	340 *	439.1	*62.23*	501.30*	20.170*	1.850*	22.020*	*
* 16 *	340 *	246 *	428.0	*62.01*	489.98*	19.650*	1.800*	21.450*	*
* 17 *	246 *	505 *	412.0	*61.70*	473.65*	18.900*	1.730*	20.630*	*
* 18 *	505 *	506 *	410.9	*61.70*	472.58*	18.850*	1.730*	20.580*	*
* 19 *	506 *	243 *	386.8	*61.23*	447.99*	17.720*	1.625*	19.345*	*
* 20 *	243 *	239 *	245.4	*39.41*	284.79*	11.200*	1.025*	12.225*	*
* 21 *	239 *	507 *	228.9	*39.09*	268.00*	10.440*	0.955*	11.395*	*
* 22 *	507 *	231 *	228.9	*39.09*	268.00*	10.440*	0.955*	11.395*	*
* 23 *	239 *	115 *	16.5	* 0.63*	17.11*	0.760*	0.140*	0.900*	*
* 24 *	506 *	42 *	24.1	* 0.93*	25.06*	1.130*	0.210*	1.340*	*
* 25 *	505 *	701 *	1.1	* 0.00*	1.07*	0.050*	0.000*	0.050*	*
* 26 *	246 *	700 *	16.0	* 0.62*	16.64*	0.750*	0.140*	0.890*	*
* 27 *	340 *	84 *	11.1	* 0.44*	11.55*	0.520*	0.100*	0.620*	*
* 28 *	272 *	286 *	137.1	* 2.64*	139.73*	6.420*	0.595*	7.015*	*
* 29 *	286 *	69 *	31.0	* 1.20*	32.16*	1.450*	0.270*	1.720*	*
* 30 *	286 *	287 *	106.1	* 2.04*	108.17*	4.970*	0.460*	5.430*	*
* 31 *	287 *	95 *	34.4	* 1.33*	35.71*	1.610*	0.300*	1.910*	*
* 32 *	287 *	288 *	71.7	* 1.38*	73.12*	3.360*	0.310*	3.670*	*
* 33 *	288 *	96 *	31.6	* 1.20*	32.80*	1.480*	0.270*	1.750*	*
* 34 *	288 *	289 *	40.1	* 1.55*	41.70*	1.880*	0.350*	2.230*	*
* 35 *	289 *	97 *	40.1	* 1.55*	41.70*	1.880*	0.350*	2.230*	*
* 36 *	247 *	94 *	6.4	* 0.27*	6.67*	0.300*	0.060*	0.360*	*
* 37 *	248 *	79 *	16.4	* 0.62*	17.06*	0.770*	0.140*	0.910*	*
* 38 *	502 *	703 *	13.9	* 0.52*	14.41*	0.660*	0.120*	0.780*	*
* 39 *	302 *	351 *	122.0	*21.90*	143.92*	5.800*	0.535*	6.335*	*

```

*****
* 40 * 351 * 352 * 62.7 *22.51* 85.21* 2.980* 0.550* 3.530*
*****
* 41 * 501 * 256 * 6.8 * 0.61* 7.46* 0.330* 0.015* 0.345*
*****
* 42 * 256 * 257 * 6.8 * 0.61* 7.46* 0.330* 0.015* 0.345*
*****
* 43 * 257 * 258 * 3.7 * 1.23* 4.96* 0.180* 0.030* 0.210*
*****
* 44 * 258 * 30 * 3.7 * 1.23* 4.96* 0.180* 0.030* 0.210*
*****
* 45 * 257 * 706 * 3.1 * 0.00* 3.11* 0.150* 0.000* 0.150*
*****
* 46 * 231 * 232 * 161.7 *28.04* 189.72* 7.370* 0.685* 8.055*
*****
* 47 * 232 * 238 * 8.9 * 3.27* 12.16* 0.410* 0.080* 0.490*
*****
* 48 * 238 * 277 * 8.9 * 3.27* 12.16* 0.410* 0.080* 0.490*
*****
* 49 * 277 * 58 * 8.9 * 3.27* 12.16* 0.410* 0.080* 0.490*
*****
* 50 * 232 * 233 * 152.8 *26.40* 179.19* 6.960* 0.645* 7.605*
*****
* 51 * 233 * 234 * 152.8 *26.40* 179.19* 6.960* 0.645* 7.605*
*****
* 52 * 234 * 59 * 27.1 * 9.41* 36.52* 1.250* 0.230* 1.480*
*****
* 53 * 234 * 335 * 125.7 *21.69* 147.38* 5.710* 0.530* 6.240*
*****
* 54 * 335 * 64 * 15.4 * 5.32* 20.73* 0.700* 0.130* 0.830*
*****
* 55 * 335 * 336 * 110.3 *19.03* 129.31* 5.010* 0.465* 5.475*
*****
* 56 * 336 * 61 * 26.2 * 9.01* 35.20* 1.190* 0.220* 1.410*
*****
* 57 * 336 * 337 * 84.1 *14.53* 98.62* 3.820* 0.355* 4.175*
*****
* 58 * 337 * 62 * 35.7 *12.28* 47.94* 1.620* 0.300* 1.920*
*****
* 59 * 337 * 63 * 48.4 *16.78* 65.21* 2.200* 0.410* 2.610*
*****
* 60 * 223 * 154 * 28.0 *10.23* 38.21* 1.330* 0.250* 1.580*
*****
* 61 * 243 * 515 * 13.9 * 4.91* 18.79* 0.640* 0.120* 0.760*
*****
* 62 * 515 * 45 * 13.9 * 4.91* 18.79* 0.640* 0.120* 0.760*
*****
* 63 * 243 * 244 * 127.5 *19.37* 146.87* 5.800* 0.540* 6.420*
*****
* 64 * 244 * 44 * 19.5 * 6.96* 26.47* 0.900* 0.170* 1.070*
*****
* 65 * 244 * 291 * 108.0 *15.89* 123.87* 4.980* 0.455* 5.435*
*****
* 66 * 291 * 117 * 18.0 * 0.67* 18.67* 0.830* 0.150* 0.980*
*****
* 67 * 245 * 152 * 51.6 *18.01* 69.62* 2.380* 0.440* 2.820*
*****
* 68 * 291 * 516 * 90.0 *15.55* 105.54* 4.150* 0.380* 4.530*
*****
* 69 * 516 * 153 * 28.6 * 9.82* 38.45* 1.320* 0.240* 1.560*
*****
* 70 * 516 * 245 * 61.4 *10.64* 72.00* 2.830* 0.260* 3.090*
*****
* 71 * 208 * 209 * 200.7 *43.84* 244.55* 9.540* 1.205* 10.745*
*****
* 72 * 209 * 32 * 19.6 * 0.74* 20.31* 0.930* 0.170* 1.100*
*****
* 73 * 209 * 210 * 181.1 *43.47* 224.61* 8.610* 1.120* 9.730*
*****
* 74 * 210 * 211 * 181.1 *43.47* 224.61* 8.610* 1.120* 9.730*
*****
* 75 * 211 * 278 * 33.9 *12.28* 46.15* 1.610* 0.300* 1.910*
*****
* 76 * 278 * 221 * 33.9 *12.28* 46.15* 1.610* 0.300* 1.910*
*****
* 77 * 221 * 222 * 33.9 *12.28* 46.15* 1.610* 0.300* 1.910*
*****
* 78 * 222 * 6 * 33.9 *12.28* 46.15* 1.610* 0.300* 1.910*
*****
* 79 * 211 * 212 * 147.3 *37.33* 184.60* 7.000* 0.970* 7.970*
*****
* 80 * 212 * 24 * 12.0 * 4.50* 16.49* 0.570* 0.110* 0.680*
*****

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* 81 * 212 * 213 * 135.3 *35.08* 170.36* 6.430* 0.915* 7.345*
*****
* 82 * 213 * 218 * 77.4 *11.74* 89.17* 3.680* 0.345* 4.025*
*****
* 83 * 218 * 219 * 62.9 *22.92* 85.83* 2.990* 0.560* 3.550*
*****
* 84 * 219 * 220 * 62.9 *22.92* 85.83* 2.990* 0.560* 3.550*
*****
* 85 * 220 * 4 * 62.9 *22.92* 85.83* 2.990* 0.560* 3.550*
*****
* 86 * 218 * 5 * 14.5 * 0.57* 15.08* 0.690* 0.130* 0.820*
*****
* 87 * 213 * 214 * 57.9 *23.33* 81.19* 2.750* 0.570* 3.320*
*****
* 88 * 214 * 215 * 57.9 *23.33* 81.19* 2.750* 0.570* 3.320*
*****
* 89 * 215 * 2 * 24.8 * 9.01* 33.83* 1.180* 0.220* 1.400*
*****
* 90 * 215 * 216 * 33.0 *18.83* 51.86* 1.570* 0.460* 2.030*
*****
* 91 * 216 * 1 * 8.4 * 2.87* 11.28* 0.400* 0.070* 0.470*
*****
* 92 * 216 * 217 * 24.6 *17.40* 42.01* 1.170* 0.425* 1.595*
*****
* 93 * 217 * 3 * 7.8 *28.65* 36.44* 0.370* 0.700* 1.070*
*****
* 94 * 217 * 8 * 16.8 * 6.14* 22.97* 0.800* 0.150* 0.950*
*****
* 95 * 245 * 151 * 9.8 * 3.27* 13.03* 0.450* 0.080* 0.530*
*****
* 96 * 403 * 201 * 1306.1 *124.10* 1430.20* 62.280* 4.735* 67.015*
*****
* 97 * 201 * 202 * 524.1 *82.34* 606.45* 25.030* 2.655* 27.685*
*****
* 98 * 202 * 203 * 524.1 *82.34* 606.45* 25.030* 2.655* 27.685*
*****
* 99 * 203 * 204 * 524.1 *82.34* 606.45* 25.030* 2.655* 27.685*
*****
*100 * 204 * 205 * 470.8 *72.52* 543.29* 22.460* 2.415* 24.875*
*****
*101 * 205 * 206 * 439.9 *66.79* 506.64* 20.970* 2.275* 23.245*
*****
*102 * 206 * 280 * 371.0 *54.10* 425.05* 17.650* 1.965* 19.615*
*****
*103 * 207 * 281 * 328.8 *50.90* 379.73* 15.630* 1.775* 17.405*
*****
*104 * 281 * 208 * 299.8 *50.33* 350.13* 14.250* 1.645* 15.895*
*****
*105 * 207 * 12 * 14.7 * 5.32* 20.05* 0.700* 0.130* 0.830*
*****
*106 * 206 * 14 * 68.9 *25.38* 94.28* 3.320* 0.620* 3.940*
*****
*107 * 205 * 249 * 30.9 *11.46* 42.38* 1.490* 0.280* 1.770*
*****
*108 * 249 * 17 * 30.9 *11.46* 42.38* 1.490* 0.280* 1.770*
*****
*109 * 204 * 15 * 53.3 *19.65* 72.98* 2.570* 0.480* 3.050*
*****
*110 * 352 * 11 * 62.7 *22.51* 85.21* 2.980* 0.550* 3.530*
*****
*111 * 351 * 9 * 59.3 *21.28* 80.61* 2.820* 0.520* 3.340*
*****
*112 * 301 * 16 * 19.7 * 7.37* 27.08* 0.950* 0.180* 1.130*
*****
*113 * 271 * 283 * 88.8 * 3.45* 92.27* 4.280* 0.800* 5.080*
*****
*114 * 283 * 31 * 88.8 * 3.45* 92.27* 4.280* 0.800* 5.080*
*****
*115 * 280 * 207 * 343.6 *53.56* 397.12* 16.330* 1.840* 18.170*
*****
*116 * 280 * 13 * 27.4 * 1.08* 28.47* 1.320* 0.250* 1.570*
*****
*117 * 281 * 27 * 29.0 * 1.13* 30.17* 1.380* 0.260* 1.640*
*****
*118 * 208 * 296 * 99.1 * 6.49* 105.58* 4.710* 0.440* 5.150*
*****
*119 * 296 * 10 * 33.9 * 1.31* 35.18* 1.610* 0.300* 1.910*
*****
*120 * 296 * 509 * 65.2 * 5.84* 71.06* 3.100* 0.290* 3.390*
*****
*121 * 509 * 7 * 37.2 * 1.44* 38.68* 1.770* 0.330* 2.100*
*****
*122 * 509 * 223 * 28.0 *10.23* 38.21* 1.330* 0.250* 1.580*

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*123 * 201 * 510 * 782.0 *41.76* 823.75* 37.250* 2.080* 39.330*

*124 * 510 * 28 * 12.5 * 0.47* 12.93* 0.600* 0.110* 0.710*

*125 * 510 * 260 * 769.5 *41.52* 811.06* 36.650* 2.025* 38.675*

*126 * 261 * 262 * 719.7 *33.45* 753.19* 34.250* 1.810* 36.060*

*127 * 262 * 263 * 719.7 *33.45* 753.19* 34.250* 1.810* 36.060*

*128 * 263 * 264 * 649.3 *31.88* 681.17* 30.900* 1.490* 32.390*

*129 * 264 * 265 * 590.6 *30.74* 621.29* 28.070* 1.225* 29.295*

*130 * 265 * 266 * 590.6 *30.74* 621.29* 28.070* 1.225* 29.295*

*131 * 266 * 267 * 77.8 * 8.27* 86.11* 3.700* 0.345* 4.045*

*132 * 267 * 20 * 36.4 * 1.40* 37.79* 1.730* 0.320* 2.050*

*133 * 267 * 29 * 41.4 *15.15* 56.59* 1.970* 0.370* 2.340*

*134 * 266 * 268 * 512.7 *22.47* 535.18* 24.370* 0.880* 25.250*

*135 * 268 * 341 * 458.9 *18.83* 477.69* 21.810* 0.545* 22.355*

*136 * 341 * 21 * 21.7 * 0.83* 22.50* 1.030* 0.190* 1.220*

*137 * 354 * 22 * 42.3 * 1.62* 43.90* 2.010* 0.370* 2.380*

*138 * 264 * 19 * 58.7 * 2.28* 61.01* 2.830* 0.530* 3.360*

*139 * 511 * 279 * 43.2 *15.96* 59.13* 2.080* 0.390* 2.470*

*140 * 279 * 18 * 43.2 *15.96* 59.13* 2.080* 0.390* 2.470*

*141 * 403 * 303 * 850.3 *93.50* 943.80* 39.680* 3.645* 43.325*

*142 * 300 * 600 * 2156.4 *217.59* 2374.00* 101.960* 8.380* 110.340*

*143 * 600 * 271 * 850.3 *93.50* 943.80* 39.680* 3.645* 43.325*

*144 * 600 * 201 * 1306.1 *124.10* 1430.20* 62.280* 4.735* 67.015*

*145 * 231 * 230 * 67.2 *11.05* 78.28* 3.070* 0.270* 3.340*

*146 * 230 * 229 * 67.2 *11.05* 78.28* 3.070* 0.270* 3.340*

*147 * 229 * 228 * 67.2 *11.05* 78.28* 3.070* 0.270* 3.340*

*148 * 228 * 227 * 18.9 * 6.55* 25.48* 0.860* 0.160* 1.020*

*149 * 227 * 40 * 18.9 * 6.55* 25.48* 0.860* 0.160* 1.020*

*150 * 228 * 240 * 48.3 * 7.78* 56.07* 2.210* 0.190* 2.400*

*151 * 240 * 41 * 23.2 * 8.19* 31.39* 1.070* 0.200* 1.270*

*152 * 240 * 241 * 25.1 * 3.68* 28.78* 1.140* 0.090* 1.230*

*153 * 241 * 508 * 25.1 * 3.68* 28.78* 1.140* 0.090* 1.230*

*154 * 508 * 702 * 4.2 * 0.00* 4.18* 0.190* 0.000* 0.190*

*155 * 508 * 276 * 20.9 * 7.37* 28.28* 0.950* 0.180* 1.130*

*156 * 276 * 43 * 20.9 * 7.37* 28.28* 0.950* 0.180* 1.130*

*157 * 260 * 512 * 6.6 * 0.09* 6.73* 0.320* 0.020* 0.340*

*158 * 512 * 704 * 2.3 * 0.00* 2.28* 0.110* 0.000* 0.110*

*159 * 512 * 26 * 4.4 * 0.17* 4.53* 0.210* 0.040* 0.250*

*160 * 260 * 511 * 762.9 *41.44* 804.33* 36.330* 2.005* 38.335*

*161 * 511 * 261 * 719.7 *33.45* 753.19* 34.250* 1.810* 36.060*

*162 * 268 * 353 * 53.9 * 3.63* 57.49* 2.560* 0.335* 2.895*

*163 * 353 * 354 * 44.8 * 1.06* 45.87* 2.130* 0.205* 2.335*

015/20

*164	* 354	* 708	*	2.5	* 0.51*	3.03*	0.120*	0.040*	0.160*
*165	* 353	* 707	*	9.0	* 5.14*	14.19*	0.430*	0.260*	0.690*
*166	* 263	* 513	*	70.4	* 1.58*	72.02*	3.350*	0.320*	3.670*
*167	* 513	* 705	*	2.5	* 0.53*	3.02*	0.120*	0.040*	0.160*
*168	* 513	* 284	*	68.0	* 1.31*	69.26*	3.230*	0.300*	3.530*
*169	* 284	* 35	*	32.6	* 1.27*	33.88*	1.550*	0.290*	1.840*
*170	* 284	* 514	*	35.3	* 1.35*	36.70*	1.680*	0.310*	1.990*
*171	* 514	* 285	*	35.3	* 1.35*	36.70*	1.680*	0.310*	1.990*
*172	* 285	* 33	*	35.3	* 1.35*	36.70*	1.680*	0.310*	1.990*
*173	* 341	* 342	*	437.2	*18.42*	455.60*	20.780*	0.450*	21.230*
*174	* 342	* 349	*	404.8	* 0.00*	404.79*	19.240*	0.000*	19.240*
*175	* 349	* 517	*	401.0	* 0.00*	401.00*	19.060*	0.000*	19.060*
*176	* 517	* 711	*	47.5	* 0.00*	47.55*	2.260*	0.000*	2.260*
*177	* 517	* 712	*	353.5	* 0.00*	353.45*	16.800*	0.000*	16.800*
*178	* 349	* 350	*	3.8	* 0.00*	3.79*	0.180*	0.000*	0.180*
*179	* 350	* 709	*	0.4	* 0.00*	0.42*	0.020*	0.000*	0.020*
*180	* 350	* 710	*	3.4	* 0.00*	3.37*	0.160*	0.000*	0.160*
*181	* 342	* 343	*	32.4	*18.42*	50.82*	1.540*	0.450*	1.990*
*182	* 343	* 716	*	4.8	* 6.96*	11.80*	0.230*	0.170*	0.400*
*183	* 343	* 344	*	27.6	*14.94*	42.50*	1.310*	0.365*	1.675*
*184	* 344	* 717	*	5.9	* 8.60*	14.49*	0.280*	0.210*	0.490*
*185	* 344	* 345	*	21.7	*10.64*	32.31*	1.030*	0.260*	1.290*
*186	* 345	* 715	*	4.6	* 6.14*	10.77*	0.220*	0.150*	0.370*
*187	* 345	* 346	*	17.0	* 7.57*	24.61*	0.810*	0.185*	0.995*
*188	* 346	* 347	*	11.6	* 4.30*	15.87*	0.550*	0.105*	0.655*
*189	* 347	* 714	*	2.1	* 2.46*	4.56*	0.100*	0.060*	0.160*
*190	* 347	* 713	*	9.5	* 6.14*	15.61*	0.450*	0.150*	0.600*
*191	* 346	* 718	*	5.5	* 6.55*	12.02*	0.260*	0.160*	0.420*

Repartitia presiunilor in sistem - magistrala 1

Nr.	Nod	Dist.	Presiune abs[mca]	Presiune rel[mca]	Disp.	Pierd	Pierd		
crt	reteza	[m]	duc	int	duc	int	[mca]	[mca]	[mca]
0	200	0	114.00	40.00	114.00	40.00	74.00	0	0
1	300	2068.0	99.34	28.59	112.34	41.59	70.8	1.66	1.59
2	402	2238.0	95.29		110.29		68.71	3.71	
3	403	2239.0	95.28		110.28		68.70	3.72	
4	271	2652.0	93.86		109.86		68.27	4.14	
5	500	2911.0	92.77	24.78	109.77	41.78	68.0	4.23	1.78
6	501	2967.0	93.75	25.79	109.75	41.79	68.0	4.25	1.79
7	301	3106.0	93.71	25.84	109.71	41.84	67.9	4.29	1.84
8	302	3266.0	94.66	26.88	109.66	41.88	67.8	4.34	1.88
9	502	4345.0	89.43	22.10	109.43	42.10	67.3	4.57	2.10
10	503	5182.0	87.26	20.27	109.26	42.27	67.0	4.74	2.27
11	248	5346.0	86.22	19.30	109.22	42.30	66.9	4.78	2.30
12	247	5509.0	84.19	17.33	109.19	42.33	66.9	4.81	2.33
13	272	5606.0	85.17	18.35	109.17	42.35	66.8	4.83	2.35
14	504	5668.0	85.17	18.35	109.17	42.35	66.8	4.83	2.35
15	340	6226.0	87.04	20.48	109.04	42.48	66.6	4.96	2.48
16	246	6506.0	87.97	21.54	108.97	42.54	66.4	5.03	2.54
17	505	6526.0	87.97	21.54	108.97	42.54	66.4	5.03	2.54
18	506	6738.0	88.92	22.59	108.92	42.59	66.3	5.08	2.59
19	243	7475.0	94.79	28.72	108.79	42.72	66.1	5.21	2.72
20	239	7722.0	94.77	28.74	108.77	42.74	66.0	5.23	2.74
21	507	7757.0	94.76	28.74	108.76	42.74	66.0	5.24	2.74
22	231	8072.0	94.74	28.76	108.74	42.76	66.0	5.26	2.76
23	115	8003.0	96.75	30.75	108.75	42.75	66.0	5.25	2.75
24	42	6945.0	87.89	23.57	107.89	43.57	64.3	6.11	3.57
25	701	6601.0	87.97	21.54	108.97	42.54	66.4	5.03	2.54
26	700	6776.0	87.38	22.11	108.38	43.11	65.3	5.62	3.11
27	84	6439.0	83.97	21.46	106.97	44.46	62.5	7.03	4.46
28	286	6036.0	83.13	16.39	109.13	42.39	66.7	4.87	2.39
29	69	6079.0	83.10	16.42	109.10	42.42	66.7	4.90	2.42
30	287	6478.0	83.10	16.42	109.10	42.42	66.7	4.90	2.42
31	95	6651.0	83.97	17.54	108.97	42.54	66.4	5.03	2.54
32	288	6695.0	85.09	18.43	109.09	42.43	66.7	4.91	2.43
33	96	6719.0	85.08	18.44	109.08	42.44	66.6	4.92	2.44
34	289	7201.0	86.08	19.43	109.08	42.43	66.7	4.92	2.43
35	97	7300.0	84.99	18.52	108.99	42.52	66.5	5.01	2.52
36	94	5529.0	83.99	17.52	108.99	42.52	66.5	5.01	2.52
37	79	5590.0	84.66	18.84	108.66	42.84	65.8	5.34	2.84
38	703	4647.0	87.93	21.58	108.93	42.58	66.3	5.07	2.58

* 39 *	351 *	3615.0 *	77.37 *	12.14 *	108.37 *	43.14 *	65.2 *	5.63 *	3.14 *
* 40 *	352 *	4024.0 *	75.69 *	13.73 *	106.69 *	44.73 *	62.0 *	7.31 *	4.73 *
* 41 *	256 *	3045.0 *	92.75 *	24.80 *	109.75 *	41.80 *	68.0 *	4.25 *	1.80 *
* 42 *	257 *	3285.0 *	92.72 *	24.83 *	109.72 *	41.83 *	67.9 *	4.28 *	1.83 *
* 43 *	258 *	3330.0 *	93.71 *	25.83 *	109.71 *	41.83 *	67.9 *	4.29 *	1.83 *
* 44 *	30 *	3372.0 *	94.71 *	26.83 *	109.71 *	41.83 *	67.9 *	4.29 *	1.83 *
* 45 *	706 *	3322.0 *	93.72 *	25.83 *	109.72 *	41.83 *	67.9 *	4.28 *	1.83 *
* 46 *	232 *	8215.0 *	96.64 *	30.85 *	108.64 *	42.85 *	65.8 *	5.36 *	2.85 *
* 47 *	238 *	8275.0 *	96.64 *	30.86 *	108.64 *	42.86 *	65.8 *	5.36 *	2.86 *
* 48 *	277 *	8445.0 *	96.58 *	30.92 *	108.58 *	42.92 *	65.7 *	5.42 *	2.92 *
* 49 *	58 *	8545.0 *	95.46 *	30.03 *	108.46 *	43.03 *	65.4 *	5.54 *	3.03 *
* 50 *	233 *	8614.0 *	93.40 *	28.09 *	108.40 *	43.09 *	65.3 *	5.60 *	3.09 *
* 51 *	234 *	9145.0 *	93.87 *	29.60 *	107.87 *	43.60 *	64.3 *	6.13 *	3.60 *
* 52 *	59 *	9185.0 *	93.74 *	29.72 *	107.74 *	43.72 *	64.0 *	6.26 *	3.72 *
* 53 *	335 *	9550.0 *	92.60 *	28.86 *	107.60 *	43.86 *	63.7 *	6.40 *	3.86 *
* 54 *	64 *	9800.0 *	92.58 *	28.87 *	107.58 *	43.87 *	63.7 *	6.42 *	3.87 *
* 55 *	336 *	9673.0 *	93.53 *	29.92 *	107.53 *	43.92 *	63.6 *	6.47 *	3.92 *
* 56 *	61 *	9701.0 *	92.53 *	28.92 *	107.53 *	43.92 *	63.6 *	6.47 *	3.92 *
* 57 *	337 *	9767.0 *	92.50 *	28.94 *	107.50 *	43.94 *	63.6 *	6.50 *	3.94 *
* 58 *	62 *	9989.0 *	92.22 *	29.22 *	107.22 *	44.22 *	63.0 *	6.78 *	4.22 *
* 59 *	63 *	10062.0 *	92.28 *	29.16 *	107.28 *	44.16 *	63.1 *	6.72 *	4.16 *
* 60 *	154 *	4758.0 *	98.70 *	34.79 *	108.70 *	44.79 *	63.9 *	5.30 *	4.79 *
* 61 *	515 *	7585.0 *	95.78 *	29.72 *	108.78 *	42.72 *	66.1 *	5.22 *	2.72 *
* 62 *	45 *	7619.0 *	95.78 *	29.72 *	108.78 *	42.72 *	66.1 *	5.22 *	2.72 *
* 63 *	244 *	7615.0 *	94.58 *	28.91 *	108.58 *	42.91 *	65.7 *	5.42 *	2.91 *
* 64 *	44 *	7704.0 *	93.57 *	27.92 *	108.57 *	42.92 *	65.6 *	5.43 *	2.92 *
* 65 *	291 *	7730.0 *	95.46 *	30.03 *	108.46 *	43.03 *	65.4 *	5.54 *	3.03 *
* 66 *	117 *	7821.0 *	95.38 *	30.10 *	108.38 *	43.10 *	65.3 *	5.62 *	3.10 *
* 67 *	152 *	8508.0 *	93.92 *	29.54 *	107.92 *	43.54 *	64.4 *	6.08 *	3.54 *
* 68 *	516 *	8160.0 *	94.14 *	29.33 *	108.14 *	43.33 *	64.8 *	5.86 *	3.33 *
* 69 *	153 *	8240.0 *	93.85 *	29.61 *	107.85 *	43.61 *	64.2 *	6.15 *	3.61 *
* 70 *	245 *	8320.0 *	94.09 *	29.39 *	108.09 *	43.39 *	64.7 *	5.91 *	3.39 *
* 71 *	209 *	4097.0 *	99.30 *	34.25 *	109.30 *	44.25 *	65.1 *	4.70 *	4.25 *
* 72 *	32 *	4347.0 *	93.04 *	28.49 *	109.04 *	44.49 *	64.6 *	4.96 *	4.49 *
* 73 *	210 *	4271.0 *	99.28 *	34.29 *	109.28 *	44.29 *	65.0 *	4.72 *	4.29 *
* 74 *	211 *	4326.0 *	100.27 *	35.30 *	109.27 *	44.30 *	65.0 *	4.73 *	4.30 *
* 75 *	278 *	4356.0 *	100.11 *	35.45 *	109.11 *	44.45 *	64.7 *	4.89 *	4.45 *
* 76 *	221 *	4477.0 *	98.47 *	35.06 *	108.47 *	45.06 *	63.4 *	5.53 *	5.06 *
* 77 *	222 *	4509.0 *	98.30 *	35.23 *	108.30 *	45.23 *	63.1 *	5.70 *	5.23 *
* 78 *	6 *	4547.0 *	98.10 *	35.42 *	108.10 *	45.42 *	62.7 *	5.90 *	5.42 *
* 79 *	212 *	4506.0 *	99.15 *	34.41 *	109.15 *	44.41 *	64.7 *	4.85 *	4.41 *

* 80 *	24 *	4590.0 *	99.10 *	34.47 *	109.10 *	44.47 *	64.6 *	4.90 *	4.47 *
* 81 *	213 *	4586.0 *	99.11 *	34.46 *	109.11 *	44.46 *	64.7 *	4.89 *	4.46 *
* 82 *	218 *	4616.0 *	98.98 *	34.58 *	108.98 *	44.58 *	64.4 *	5.02 *	4.58 *
* 83 *	219 *	4706.0 *	98.60 *	34.94 *	108.60 *	44.94 *	63.7 *	5.40 *	4.94 *
* 84 *	220 *	4820.0 *	98.13 *	35.39 *	108.13 *	45.39 *	62.7 *	5.87 *	5.39 *
* 85 *	4 *	4835.0 *	98.07 *	35.45 *	108.07 *	45.45 *	62.6 *	5.93 *	5.45 *
* 86 *	5 *	4651.0 *	98.96 *	34.60 *	108.96 *	44.60 *	64.4 *	5.04 *	4.60 *
* 87 *	214 *	4645.0 *	98.08 *	33.48 *	109.08 *	44.48 *	64.6 *	4.92 *	4.48 *
* 88 *	215 *	4873.0 *	97.98 *	33.58 *	108.98 *	44.58 *	64.4 *	5.02 *	4.58 *
* 89 *	2 *	4993.0 *	97.91 *	33.65 *	108.91 *	44.65 *	64.3 *	5.09 *	4.65 *
* 90 *	216 *	5080.0 *	97.95 *	33.61 *	108.95 *	44.61 *	64.3 *	5.05 *	4.61 *
* 91 *	1 *	5272.0 *	98.88 *	34.67 *	108.88 *	44.67 *	64.2 *	5.12 *	4.67 *
* 92 *	217 *	5343.0 *	96.86 *	32.69 *	108.86 *	44.69 *	64.2 *	5.14 *	4.69 *
* 93 *	3 *	5355.0 *	91.82 *	27.73 *	108.82 *	44.73 *	64.1 *	5.18 *	4.73 *
* 94 *	8 *	5457.0 *	96.83 *	32.72 *	108.83 *	44.72 *	64.1 *	5.17 *	4.72 *
* 95 *	151 *	8621.0 *	94.08 *	29.40 *	108.08 *	43.40 *	64.7 *	5.92 *	3.40 *
* 96 *	201 *	2259.0 *	95.20 *		110.20 *		68.61 *	3.80 *	
* 97 *	202 *	2289.0 *	95.17 *	27.36 *	110.17 *	42.36 *	67.8 *	3.83 *	2.36 *
* 98 *	203 *	2546.0 *	93.97 *	26.79 *	109.97 *	42.79 *	67.2 *	4.03 *	2.79 *
* 99 *	204 *	2737.0 *	93.82 *	27.12 *	109.82 *	43.12 *	66.7 *	4.18 *	3.12 *
* 100 *	205 *	2982.0 *	93.67 *	27.45 *	109.67 *	43.45 *	66.2 *	4.33 *	3.45 *
* 101 *	206 *	3201.0 *	95.55 *	29.71 *	109.55 *	43.71 *	65.8 *	4.45 *	3.71 *
* 102 *	280 *	3302.0 *	95.51 *	29.80 *	109.51 *	43.80 *	65.7 *	4.49 *	3.80 *
* 103 *	281 *	3817.0 *	95.35 *	30.14 *	109.35 *	44.14 *	65.2 *	4.65 *	4.14 *
* 104 *	208 *	3917.0 *	99.32 *	34.20 *	109.32 *	44.20 *	65.1 *	4.68 *	4.20 *
* 105 *	12 *	3530.0 *	96.28 *	31.01 *	109.28 *	44.01 *	65.3 *	4.72 *	4.01 *
* 106 *	14 *	3463.0 *	99.23 *	35.97 *	108.23 *	44.97 *	63.3 *	5.77 *	4.97 *
* 107 *	249 *	3137.0 *	95.97 *	31.11 *	108.97 *	44.11 *	64.9 *	5.03 *	4.11 *
* 108 *	17 *	3317.0 *	97.17 *	33.88 *	108.17 *	44.88 *	63.3 *	5.83 *	4.88 *
* 109 *	15 *	2784.0 *	93.68 *	27.59 *	109.68 *	43.59 *	66.1 *	4.32 *	3.59 *
* 110 *	11 *	4192.0 *	87.00 *	26.39 *	106.00 *	45.39 *	60.6 *	8.00 *	5.39 *
* 111 *	9 *	3620.0 *	91.35 *	26.15 *	108.35 *	43.15 *	65.2 *	5.65 *	3.15 *
* 112 *	16 *	3165.0 *	93.60 *	25.94 *	109.60 *	41.94 *	67.7 *	4.40 *	1.94 *
* 113 *	283 *	2913.0 *	93.71 *	25.84 *	109.71 *	41.84 *	67.9 *	4.29 *	1.84 *
* 114 *	31 *	3148.0 *	93.35 *	26.18 *	109.35 *	42.18 *	67.2 *	4.65 *	2.18 *
* 115 *	207 *	3312.0 *	95.50 *	29.80 *	109.50 *	43.80 *	65.7 *	4.50 *	3.80 *
* 116 *	13 *	3342.0 *	95.49 *	29.81 *	109.49 *	43.81 *	65.7 *	4.51 *	3.81 *
* 117 *	27 *	3908.0 *	94.30 *	29.18 *	109.30 *	44.18 *	65.1 *	4.70 *	4.18 *
* 118 *	296 *	4098.0 *	100.28 *	35.23 *	109.28 *	44.23 *	65.0 *	4.72 *	4.23 *
* 119 *	10 *	4266.0 *	100.16 *	35.35 *	109.16 *	44.35 *	64.8 *	4.84 *	4.35 *
* 120 *	509 *	4398.0 *	100.25 *	35.26 *	109.25 *	44.26 *	65.0 *	4.75 *	4.26 *
* 121 *	7 *	4556.0 *	100.12 *	35.39 *	109.12 *	44.39 *	64.7 *	4.88 *	4.39 *

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* 122 * 223 * 4608.0 * 99.25 * 34.27 * 109.25 * 44.27 * 65.0 * 4.75 * 4.27 *
*****
* 123 * 510 * 2374.0 * 93.69 * 28.75 * 108.69 * 43.75 * 64.9 * 5.31 * 3.75 *
*****
* 124 * 28 * 2521.0 * 93.49 * 28.93 * 108.49 * 43.93 * 64.6 * 5.51 * 3.93 *
*****
* 125 * 260 * 2469.0 * 92.48 * 29.90 * 107.48 * 44.90 * 62.6 * 6.52 * 4.90 *
*****
* 126 * 262 * 2648.0 * 90.48 * 31.81 * 105.48 * 46.81 * 58.7 * 8.52 * 6.81 *
*****
* 127 * 263 * 2998.0 * 87.64 * 36.48 * 101.64 * 50.48 * 51.2 * 12.36 * 10.48 *
*****
* 128 * 264 * 3148.0 * 85.30 * 36.77 * 100.30 * 51.77 * 48.5 * 13.70 * 11.77 *
*****
* 129 * 265 * 3305.0 * 82.42 * 37.56 * 98.42 * 53.56 * 44.9 * 15.58 * 13.56 *
*****
* 130 * 266 * 3518.0 * 79.87 * 40.00 * 95.87 * 56.00 * 39.9 * 18.13 * 16.00 *
*****
* 131 * 267 * 3594.0 * 78.83 * 39.03 * 95.83 * 56.03 * 39.8 * 18.17 * 16.03 *
*****
* 132 * 20 * 3765.0 * 75.22 * 36.61 * 95.22 * 56.61 * 38.6 * 18.78 * 16.61 *
*****
* 133 * 29 * 3737.0 * 76.69 * 39.12 * 94.69 * 57.12 * 37.6 * 19.31 * 17.12 *
*****
* 134 * 268 * 3752.0 * 72.71 * 37.06 * 93.71 * 58.06 * 35.6 * 20.29 * 18.06 *
*****
* 135 * 341 * 3892.0 * 70.68 * 37.05 * 92.68 * 59.05 * 33.6 * 21.32 * 19.05 *
*****
* 136 * 21 * 3902.0 * 70.68 * 37.05 * 92.68 * 59.05 * 33.6 * 21.32 * 19.05 *
*****
* 137 * 22 * 3912.0 * 73.44 * 38.32 * 93.44 * 58.32 * 35.1 * 20.56 * 18.32 *
*****
* 138 * 19 * 3384.0 * 85.14 * 36.92 * 100.14 * 51.92 * 48.2 * 13.86 * 11.92 *
*****
* 139 * 279 * 2700.0 * 91.76 * 30.59 * 106.76 * 45.59 * 61.2 * 7.24 * 5.59 *
*****
* 140 * 18 * 2780.0 * 90.60 * 29.74 * 106.60 * 45.74 * 60.9 * 7.40 * 5.74 *
*****
* 141 * 303 * 2409.0 * 94.96 * * 109.96 * * 68.37 * 4.04 *
*****
* 142 * 600 * 2083.0 * * 28.60 * * 41.60 * * 1.60 *
*****
* 143 * 271 * 2326.0 * * 25.69 * * 41.69 * * 1.69 *
*****
* 144 * 201 * 2253.0 * * 27.31 * * 42.31 * * 2.31 *
*****
* 145 * 230 * 8269.0 * 93.72 * 27.78 * 108.72 * 42.78 * 65.9 * 5.28 * 2.78 *
*****
* 146 * 229 * 8566.0 * 96.68 * 30.81 * 108.68 * 42.81 * 65.9 * 5.32 * 2.81 *
*****
* 147 * 228 * 9142.0 * 97.62 * 31.88 * 108.62 * 42.88 * 65.7 * 5.38 * 2.88 *
*****
* 148 * 227 * 9414.0 * 98.61 * 32.88 * 108.61 * 42.88 * 65.7 * 5.39 * 2.88 *
*****
* 149 * 40 * 9573.0 * 94.59 * 28.90 * 108.59 * 42.90 * 65.7 * 5.41 * 2.90 *
*****
* 150 * 240 * 9262.0 * 96.61 * 30.89 * 108.61 * 42.89 * 65.7 * 5.39 * 2.89 *
*****
* 151 * 41 * 9358.0 * 96.59 * 30.91 * 108.59 * 42.91 * 65.7 * 5.41 * 2.91 *
*****
* 152 * 241 * 9322.0 * 96.60 * 30.89 * 108.60 * 42.89 * 65.7 * 5.40 * 2.89 *
*****
* 153 * 508 * 9613.0 * 94.60 * 28.90 * 108.60 * 42.90 * 65.7 * 5.40 * 2.90 *
*****
* 154 * 702 * 9652.0 * 93.55 * 27.95 * 108.55 * 42.95 * 65.6 * 5.45 * 2.95 *
*****
* 155 * 276 * 9743.0 * 93.59 * 27.90 * 108.59 * 42.90 * 65.7 * 5.41 * 2.90 *
*****
* 156 * 43 * 9808.0 * 93.58 * 27.91 * 108.58 * 42.91 * 65.7 * 5.42 * 2.91 *
*****
* 157 * 512 * 2581.0 * 92.12 * 30.24 * 107.12 * 45.24 * 61.9 * 6.88 * 5.24 *
*****
* 158 * 704 * 2583.0 * 92.12 * 30.24 * 107.12 * 45.24 * 61.9 * 6.88 * 5.24 *
*****
* 159 * 26 * 2685.0 * 91.97 * 30.39 * 106.97 * 45.39 * 61.6 * 7.03 * 5.39 *
*****
* 160 * 511 * 2494.0 * 92.17 * 30.20 * 107.17 * 45.20 * 62.0 * 6.83 * 5.20 *
*****
* 161 * 261 * 2620.0 * 90.78 * 31.52 * 105.78 * 46.52 * 59.3 * 8.22 * 6.52 *
*****
* 162 * 353 * 3872.0 * 72.48 * 37.28 * 93.48 * 58.28 * 35.2 * 20.52 * 18.28 *
*****

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* 163 * 354 * 3902.0 * 72.45 * 37.31 * 93.45 * 58.31 * 35.1 * 20.55 * 18.31 *
*****
* 164 * 708 * 3930.0 * 73.81 * 39.92 * 92.81 * 58.92 * 33.9 * 21.19 * 18.92 *
*****
* 165 * 707 * 4002.0 * 68.58 * 37.10 * 91.58 * 60.10 * 31.5 * 22.42 * 20.10 *
*****
* 166 * 513 * 3085.0 * 86.61 * 35.51 * 101.61 * 50.51 * 51.1 * 12.39 * 10.51 *
*****
* 167 * 705 * 3116.0 * 85.91 * 36.18 * 100.91 * 51.18 * 49.7 * 13.09 * 11.18 *
*****
* 168 * 284 * 3507.0 * 83.47 * 32.65 * 101.47 * 50.65 * 50.8 * 12.53 * 10.65 *
*****
* 169 * 35 * 3688.0 * 82.35 * 31.76 * 101.35 * 50.76 * 50.6 * 12.65 * 10.76 *
*****
* 170 * 514 * 4016.0 * 81.34 * 30.77 * 101.34 * 50.77 * 50.6 * 12.66 * 10.77 *
*****
* 171 * 285 * 4110.0 * 81.27 * 30.83 * 101.27 * 50.83 * 50.4 * 12.73 * 10.83 *
*****
* 172 * 33 * 4120.0 * 81.24 * 30.87 * 101.24 * 50.87 * 50.4 * 12.76 * 10.87 *
*****
* 173 * 342 * 4088.0 * 56.83 * 28.77 * 89.83 * 61.77 * 28.1 * 24.17 * 21.77 *
*****
* 174 * 349 * 4226.0 * 55.25 * 30.28 * 88.25 * 63.28 * 25.0 * 25.75 * 23.28 *
*****
* 175 * 517 * 4416.0 * 50.11 * 29.32 * 86.11 * 65.32 * 20.8 * 27.89 * 25.32 *
*****
* 176 * 711 * 4431.0 * 49.84 * 29.58 * 85.84 * 65.58 * 20.3 * 28.16 * 25.58 *
*****
* 177 * 712 * 4576.0 * 48.71 * 30.66 * 84.71 * 66.66 * 18.1 * 29.29 * 26.66 *
*****
* 178 * 350 * 4354.0 * 53.25 * 28.28 * 88.25 * 63.28 * 25.0 * 25.75 * 23.28 *
*****
* 179 * 709 * 4364.0 * 53.25 * 28.28 * 88.25 * 63.28 * 25.0 * 25.75 * 23.28 *
*****
* 180 * 710 * 4640.0 * 53.25 * 28.28 * 88.25 * 63.28 * 25.0 * 25.75 * 23.28 *
*****
* 181 * 343 * 4176.0 * 52.02 * 27.50 * 88.02 * 63.50 * 24.5 * 25.98 * 23.50 *
*****
* 182 * 716 * 4178.0 * 51.96 * 27.56 * 87.96 * 63.56 * 24.4 * 26.04 * 23.56 *
*****
* 183 * 344 * 4178.0 * 51.99 * 27.52 * 87.99 * 63.52 * 24.5 * 26.01 * 23.52 *
*****
* 184 * 717 * 4188.0 * 51.52 * 27.98 * 87.52 * 63.98 * 23.5 * 26.48 * 23.98 *
*****
* 185 * 345 * 4248.0 * 52.41 * 29.08 * 87.41 * 64.08 * 23.3 * 26.59 * 24.08 *
*****
* 186 * 715 * 4250.0 * 52.26 * 29.23 * 87.26 * 64.23 * 23.0 * 26.74 * 24.23 *
*****
* 187 * 346 * 4305.0 * 51.14 * 28.34 * 87.14 * 64.34 * 22.8 * 26.86 * 24.34 *
*****
* 188 * 347 * 4375.0 * 50.80 * 28.66 * 86.80 * 64.66 * 22.1 * 27.20 * 24.66 *
*****
* 189 * 714 * 4387.0 * 50.19 * 29.25 * 86.19 * 65.25 * 20.9 * 27.81 * 25.25 *
*****
* 190 * 713 * 4475.0 * 50.34 * 29.10 * 86.34 * 65.10 * 21.2 * 27.66 * 25.10 *
*****
* 191 * 718 * 4392.0 * 48.28 * 31.08 * 84.28 * 67.08 * 17.2 * 29.72 * 27.08 *
*****

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*****
*
*           Date Generale
*****
* Lungime traseu [m]:    33182.0
* Volum apa [m3]       :    12723.5
*****
* Sarcina termica [Gcal/h]
*****
* Total          * Simultan
*****
* Qinc=    102.0 *    102.0
* Qacm=    16.8 *     8.4
*****
* Debit centrala [t/h]
*****
* Ginc=     0.0
* Gacm=     0.0
*****

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ANEXA D

Calculul hidraulic al conductelor de apă fierbinte - vara

Sarcina termica consumatorilor urbani si industriali 1

Nr crt	Denumire consumator	Nr sch	Sarcina termica orara (Gcal/h)						Sch. de rac.	Nec. de pres. [mca]
			Maxima			Medie				
			Qinc	Qacm	Total	Qinc	Qacm	Total		
1	PT1	1	0.000	0.070	0.070	0.000	0.035	0.035	I 1P	10.00
2	PT2	2	0.000	0.220	0.220	0.000	0.110	0.110	I 1P	10.00
3	PT3	3	0.000	0.700	0.700	0.000	0.350	0.350	I 1P	10.00
4	PT4	4	0.000	0.560	0.560	0.000	0.280	0.280	I 1P	10.00
5	PT5	5	0.000	0.130	0.130	0.000	0.065	0.065	I 2S	8.00
6	PT6	6	0.000	0.300	0.300	0.000	0.150	0.150	I 1P	10.00
7	PT7	7	0.000	0.330	0.330	0.000	0.165	0.165	I 2S	8.00
8	PT8	8	0.000	0.150	0.150	0.000	0.075	0.075	I 1P	10.00
9	PT9	9	0.000	0.520	0.520	0.000	0.260	0.260	I 1P	10.00
10	PT10	10	0.000	0.300	0.300	0.000	0.150	0.150	I 2S	8.00
11	PT11	11	0.000	0.550	0.550	0.000	0.275	0.275	I 1P	10.00
12	PT12	12	0.000	0.130	0.130	0.000	0.065	0.065	I 1P	10.00
13	PT13	13	0.000	0.250	0.250	0.000	0.125	0.125	I 2S	8.00
14	PT14	14	0.000	0.620	0.620	0.000	0.310	0.310	I 1P	10.00
15	PT15	15	0.000	0.480	0.480	0.000	0.240	0.240	I 1P	10.00
16	PT16	16	0.000	0.180	0.180	0.000	0.090	0.090	I 1P	10.00
17	PT17	17	0.000	0.280	0.280	0.000	0.140	0.140	I 1P	10.00
18	PT18	18	0.000	0.390	0.390	0.000	0.195	0.195	I 1P	10.00
19	PT19	19	0.000	0.530	0.530	0.000	0.265	0.265	I 2S	8.00
20	PT20	20	0.000	0.320	0.320	0.000	0.160	0.160	I 2S	8.00
21	PT21	21	0.000	0.190	0.190	0.000	0.095	0.095	I 2S	8.00
22	PT22	22	0.000	0.370	0.370	0.000	0.185	0.185	I 2S	8.00
23	PT24	24	0.000	0.110	0.110	0.000	0.055	0.055	I 1P	10.00
24	PT25 (MT1)	713	0.000	0.150	0.150	0.000	0.075	0.075	I 1P	8.00
25	PT25 (MT2)	714	0.000	0.060	0.060	0.000	0.030	0.030	I 1P	8.00
26	PT25 (MT3)	715	0.000	0.150	0.150	0.000	0.075	0.075	I 1P	8.00
27	PT25 (MT4)	716	0.000	0.170	0.170	0.000	0.085	0.085	I 1P	8.00
28	PT25 (MT5)	717	0.000	0.210	0.210	0.000	0.105	0.105	I 1P	8.00
29	PT25 (MT6)	718	0.000	0.160	0.160	0.000	0.080	0.080	I 1P	8.00
30	PT26	26	0.000	0.040	0.040	0.000	0.020	0.020	I 2S	10.00
31	PT27	27	0.000	0.260	0.260	0.000	0.130	0.130	I 2S	8.00
32	PT28	28	0.000	0.110	0.110	0.000	0.055	0.055	I 2S	10.00
33	PT29	29	0.000	0.370	0.370	0.000	0.185	0.185	I 1P	10.00
34	PT30	30	0.000	0.030	0.030	0.000	0.015	0.015	I 1P	10.00
35	PT-Sc.nr.8	706	0.000	0.000	0.000	0.000	0.000	0.000	I 1P	10.00
36	PT31	31	0.000	0.800	0.800	0.000	0.400	0.400	I 2S	10.00
37	PT32	32	0.000	0.170	0.170	0.000	0.085	0.085	I 2S	8.00
38	PT33	33	0.000	0.310	0.310	0.000	0.155	0.155	I 2S	8.00
39	PT35	35	0.000	0.290	0.290	0.000	0.145	0.145	I 2S	8.00
40	PT40	40	0.000	0.160	0.160	0.000	0.080	0.080	I 1P	10.00
41	PT41	41	0.000	0.200	0.200	0.000	0.100	0.100	I 1P	10.00
42	PT42	42	0.000	0.210	0.210	0.000	0.105	0.105	I 2S	8.00
43	PT43	43	0.000	0.180	0.180	0.000	0.090	0.090	I 1P	10.00
44	PT44	44	0.000	0.170	0.170	0.000	0.085	0.085	I 1P	10.00
45	PT45	45	0.000	0.120	0.120	0.000	0.060	0.060	I 1P	10.00
46	PT58	58	0.000	0.080	0.080	0.000	0.040	0.040	I 1P	10.00
47	PT59	59	0.000	0.230	0.230	0.000	0.115	0.115	I 1P	10.00
48	PT61	61	0.000	0.220	0.220	0.000	0.110	0.110	I 1P	10.00
49	PT62	62	0.000	0.300	0.300	0.000	0.150	0.150	I 1P	10.00
50	PT63	63	0.000	0.410	0.410	0.000	0.205	0.205	I 1P	10.00
51	PT64	64	0.000	0.130	0.130	0.000	0.065	0.065	I 1P	10.00
52	PT69	69	0.000	0.270	0.270	0.000	0.135	0.135	I 2S	10.00
53	PT79	79	0.000	0.140	0.140	0.000	0.070	0.070	I 2S	8.00
54	PT84	84	0.000	0.100	0.100	0.000	0.050	0.050	I 2S	8.00
55	PT94	94	0.000	0.060	0.060	0.000	0.030	0.030	I 2S	8.00
56	PT95	95	0.000	0.300	0.300	0.000	0.150	0.150	I 2S	10.00
57	PT96	96	0.000	0.270	0.270	0.000	0.135	0.135	I 2S	10.00
58	PT97	97	0.000	0.350	0.350	0.000	0.175	0.175	I 2S	10.00
59	PT115	115	0.000	0.140	0.140	0.000	0.070	0.070	I 2S	10.00
60	PT117	117	0.000	0.150	0.150	0.000	0.075	0.075	I 2S	10.00
61	PT151	151	0.000	0.080	0.080	0.000	0.040	0.040	I 1P	10.00
62	PT152	152	0.000	0.440	0.440	0.000	0.220	0.220	I 1P	10.00
63	PT153	153	0.000	0.240	0.240	0.000	0.120	0.120	I 1P	10.00
64	PT154	154	0.000	0.250	0.250	0.000	0.125	0.125	I 1P	10.00
65	PTCol. Ferd	700	0.000	0.140	0.140	0.000	0.070	0.070	I 2S	8.00
66	PTLic. Peda	703	0.000	0.120	0.120	0.000	0.060	0.060	I 2S	8.00
67	PTAg.Mediu	701	0.000	0.000	0.000	0.000	0.000	0.000	I 1P	8.00
68	PTAs.130	704	0.000	0.000	0.000	0.000	0.000	0.000	I 1P	8.00
69	PT PEROM	709	0.000	0.000	0.000	0.000	0.000	0.000	I 1P	10.00
70	PT MOTORSTAR	710	0.000	0.000	0.000	0.000	0.000	0.000	I 1P	10.00
71	PT BISERICA	705	0.000	0.040	0.040	0.000	0.020	0.020	I 2S	8.00
72	PT CENTR3	707	0.000	0.260	0.260	0.000	0.130	0.130	I 2S	8.00
73	PT C.LOG.	708	0.000	0.040	0.040	0.000	0.020	0.020	I 2S	8.00
74	PT AEROST-MT1	711	0.000	0.000	0.000	0.000	0.000	0.000	I 1P	8.00
75	PT AEROST-MT2-7	712	0.000	0.000	0.000	0.000	0.000	0.000	I 1P	8.00

D 2/20

* 76 * PT-Sc.Gen.2 * 702 * 0.000 * 0.000 * 0.000 * 0.000 * 0.000 * 0.000 * I 1P * 8.00 *

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TOTAL 0.000 16.760 0.000 8.380

Calculul hidraulic al magistralei 1

Nr.	Tronson	Debit agent	Dn	Lungime [m]	i [mmca/m]	dh [mca]	Viteza agent					
crt	Ni	Ne	Tip	[t/hj]	[mm]	reala	calcul	duc	int	duc	int	[m/s]
1	200	300	*Mag	838.00	*1000	2068.0	*2585.0	*0.077	*0.077	*0.200	*0.198	*0.307
2	300	402	*Mag	838.00	*600	170.0	*212.5	*0.077	*0.077	*0.247	*	*0.861
3	402	403	*Mag	838.00	*600	1.0	*1.3	*0.077	*	*0.001	*	*0.861
4	303	271	*Mag	364.50	*800	243.0	*303.7	*0.077	*	*0.014	*	*0.209
5	271	500	*Mag	324.50	*800	259.0	*323.7	*0.038	*0.037	*0.012	*0.012	*0.186
6	500	501	*Mag	324.50	*800	56.0	*70.0	*0.038	*0.037	*0.003	*0.003	*0.186
7	501	301	*Mag	323.00	*800	139.0	*173.7	*0.037	*0.037	*0.006	*0.006	*0.185
8	301	302	*Mag	314.00	*800	160.0	*200.0	*0.035	*0.035	*0.007	*0.007	*0.180
9	302	502	*Mag	260.50	*800	1079.0	*1348.7	*0.024	*0.024	*0.033	*0.032	*0.149
10	502	503	*Mag	254.50	*800	837.0	*1046.2	*0.023	*0.023	*0.024	*0.024	*0.146
11	503	248	*Mag	254.50	*800	164.0	*205.0	*0.023	*0.023	*0.005	*0.005	*0.146
12	248	247	*Mag	247.50	*800	163.0	*203.7	*0.022	*0.022	*0.004	*0.004	*0.142
13	247	272	*Mag	244.50	*800	97.0	*121.2	*0.021	*0.021	*0.003	*0.003	*0.140
14	272	504	*Mag	185.00	*800	62.0	*77.5	*0.012	*0.012	*0.001	*0.001	*0.106
15	504	340	*Mag	185.00	*700	558.0	*697.5	*0.025	*0.025	*0.017	*0.017	*0.139
16	340	246	*Mag	180.00	*700	280.0	*350.0	*0.024	*0.024	*0.008	*0.008	*0.135
17	246	505	*Mag	173.00	*700	20.0	*25.0	*0.022	*0.022	*0.001	*0.001	*0.130
18	505	506	*Mag	173.00	*700	212.0	*265.0	*0.022	*0.021	*0.006	*0.006	*0.130
19	506	243	*Mag	162.50	*700	737.0	*921.3	*0.019	*0.019	*0.018	*0.017	*0.122
20	243	239	*Mag	102.50	*700	247.0	*308.8	*0.008	*0.008	*0.002	*0.002	*0.077
21	239	507	*Mag	95.50	*700	35.0	*43.8	*0.007	*0.007	*0.000	*0.000	*0.072
22	507	231	*Mag	95.50	*700	315.0	*393.8	*0.007	*0.007	*0.003	*0.003	*0.072
23	231	239	*Mag	7.00	*250	281.0	*365.3	*0.007	*0.007	*0.002	*0.002	*0.036
24	506	42	*Rac	10.50	*125	207.0	*269.1	*0.653	*0.647	*0.176	*0.174	*0.244

26	*	246	*	700	*Rac	*	7.00	*	125	*	270.0	*	351.0	*	0.290	*	0.287	*	0.102	*	0.101	*	0.163	*
27	*	340	*	84	*Rac	*	5.00	*	80	*	213.0	*	276.9	*	1.355	*	1.341	*	0.375	*	0.371	*	0.270	*
28	*	272	*	286	*Mag	*	59.50	*	500	*	430.0	*	537.5	*	0.016	*	0.016	*	0.008	*	0.008	*	0.089	*
29	*	286	*	69	*Rac	*	13.50	*	200	*	43.0	*	55.9	*	0.076	*	0.076	*	0.004	*	0.004	*	0.114	*
30	*	286	*	287	*Mag	*	46.00	*	500	*	442.0	*	552.5	*	0.009	*	0.009	*	0.005	*	0.005	*	0.069	*
31	*	287	*	95	*Rac	*	15.00	*	200	*	173.0	*	224.9	*	0.094	*	0.093	*	0.021	*	0.021	*	0.127	*
32	*	287	*	288	*Mag	*	31.00	*	500	*	217.0	*	271.3	*	0.004	*	0.004	*	0.001	*	0.001	*	0.046	*
33	*	288	*	96	*Rac	*	13.50	*	200	*	24.0	*	31.2	*	0.076	*	0.076	*	0.002	*	0.002	*	0.114	*
34	*	288	*	289	*Mag	*	17.50	*	500	*	506.0	*	632.5	*	0.001	*	0.001	*	0.001	*	0.001	*	0.026	*
35	*	289	*	97	*Rac	*	17.50	*	200	*	99.0	*	128.7	*	0.128	*	0.127	*	0.017	*	0.016	*	0.148	*
36	*	247	*	94	*Rac	*	3.00	*	65	*	20.0	*	26.0	*	1.525	*	1.509	*	0.040	*	0.039	*	0.250	*
37	*	248	*	79	*Rac	*	7.00	*	125	*	244.0	*	317.2	*	0.290	*	0.287	*	0.092	*	0.091	*	0.163	*
38	*	502	*	703	*Rac	*	6.00	*	125	*	302.0	*	392.6	*	0.213	*	0.211	*	0.084	*	0.083	*	0.139	*
39	*	302	*	351	*Ram	*	53.50	*	250	*	349.0	*	453.7	*	0.381	*	0.382	*	0.173	*	0.173	*	0.293	*
40	*	351	*	352	*Rac	*	27.50	*	200	*	409.0	*	531.7	*	0.317	*	0.314	*	0.169	*	0.167	*	0.233	*
41	*	501	*	256	*Ram	*	1.50	*	200	*	78.0	*	101.4	*	0.001	*	0.001	*	0.000	*	0.000	*	0.013	*
42	*	256	*	257	*Rac	*	1.50	*	150	*	240.0	*	312.0	*	0.004	*	0.004	*	0.001	*	0.001	*	0.022	*
43	*	257	*	258	*Rac	*	1.50	*	150	*	45.0	*	58.5	*	0.004	*	0.004	*	0.000	*	0.000	*	0.022	*
44	*	258	*	30	*Rac	*	1.50	*	150	*	42.0	*	54.6	*	0.004	*	0.004	*	0.000	*	0.000	*	0.022	*
46	*	231	*	232	*Mag	*	68.50	*	400	*	143.0	*	178.8	*	0.070	*	0.069	*	0.013	*	0.012	*	0.163	*
47	*	232	*	238	*Rac	*	4.00	*	200	*	60.0	*	78.0	*	0.007	*	0.007	*	0.001	*	0.001	*	0.034	*
48	*	238	*	277	*Rac	*	4.00	*	150	*	170.0	*	221.0	*	0.030	*	0.029	*	0.007	*	0.006	*	0.060	*
49	*	277	*	58	*Rac	*	4.00	*	125	*	100.0	*	130.0	*	0.095	*	0.094	*	0.012	*	0.012	*	0.093	*
50	*	232	*	233	*Mag	*	64.50	*	400	*	399.0	*	498.8	*	0.062	*	0.062	*	0.031	*	0.031	*	0.153	*
51	*	233	*	234	*Mag	*	64.50	*	350	*	531.0	*	663.7	*	0.100	*	0.099	*	0.066	*	0.066	*	0.184	*
52	*	234	*	59	*Rac	*	11.50	*	150	*	40.0	*	52.0	*	0.245	*	0.242	*	0.013	*	0.013	*	0.171	*

* 53 *	234 *	335 *Mag *	53.00 *	350 *	405.0 *	506.3 *	0.067 *	0.067 *	0.034 *	0.034 *	0.151 *
* 54 *	335 *	64 *Rac *	6.50 *	250 *	250.0 *	325.0 *	0.006 *	0.006 *	0.002 *	0.002 *	0.036 *
* 55 *	335 *	336 *Mag *	46.50 *	350 *	123.0 *	153.8 *	0.052 *	0.051 *	0.008 *	0.008 *	0.132 *
* 56 *	336 *	61 *Rac *	11.00 *	250 *	28.0 *	36.4 *	0.016 *	0.016 *	0.001 *	0.001 *	0.060 *
* 57 *	336 *	337 *Mag *	35.50 *	350 *	94.0 *	117.5 *	0.030 *	0.030 *	0.004 *	0.004 *	0.101 *
* 58 *	337 *	62 *Rac *	15.00 *	200 *	222.0 *	288.6 *	0.094 *	0.093 *	0.027 *	0.027 *	0.127 *
* 59 *	337 *	63 *Rac *	20.50 *	250 *	295.0 *	383.5 *	0.057 *	0.056 *	0.022 *	0.021 *	0.113 *
* 60 *	223 *	154 *Rac *	12.50 *	150 *	150.0 *	195.0 *	0.289 *	0.286 *	0.056 *	0.056 *	0.186 *
* 61 *	243 *	515 *Mag *	6.00 *	300 *	110.0 *	137.5 *	0.002 *	0.002 *	0.000 *	0.000 *	0.023 *
* 62 *	515 *	45 *Rac *	6.00 *	250 *	34.0 *	44.2 *	0.005 *	0.005 *	0.000 *	0.000 *	0.033 *
* 63 *	243 *	244 *Mag *	54.00 *	300 *	140.0 *	175.0 *	0.152 *	0.150 *	0.027 *	0.026 *	0.207 *
* 64 *	244 *	44 *Rac *	8.50 *	250 *	89.0 *	115.7 *	0.010 *	0.010 *	0.001 *	0.001 *	0.047 *
* 65 *	244 *	291 *Mag *	45.50 *	300 *	115.0 *	143.8 *	0.108 *	0.107 *	0.016 *	0.015 *	0.174 *
* 66 *	291 *	117 *Rac *	7.50 *	150 *	91.0 *	118.3 *	0.104 *	0.103 *	0.012 *	0.012 *	0.112 *
* 67 *	245 *	152 *Rac *	22.00 *	250 *	188.0 *	244.4 *	0.065 *	0.065 *	0.016 *	0.016 *	0.121 *
* 68 *	291 *	516 *Mag *	38.00 *	300 *	430.0 *	537.5 *	0.075 *	0.074 *	0.040 *	0.040 *	0.145 *
* 69 *	516 *	153 *Rac *	12.00 *	150 *	80.0 *	104.0 *	0.267 *	0.264 *	0.028 *	0.027 *	0.179 *
* 70 *	516 *	245 *Mag *	26.00 *	300 *	160.0 *	200.0 *	0.035 *	0.035 *	0.007 *	0.007 *	0.099 *
* 71 *	208 *	209 *Mag *	120.50 *	600 *	180.0 *	225.0 *	0.024 *	0.024 *	0.005 *	0.012 *	0.124 *
* 72 *	208 *	209 *Mag *	120.50 *	400 *	180.0 *	225.0 *	0.024 *	0.024 *	0.005 *	0.012 *	0.142 *
* 73 *	209 *	210 *Mag *	112.00 *	600 *	174.0 *	217.5 *	0.021 *	0.021 *	0.005 *	0.010 *	0.132 *
* 74 *	210 *	211 *Mag *	112.00 *	600 *	55.0 *	68.8 *	0.021 *	0.021 *	0.001 *	0.003 *	0.115 *
* 75 *	210 *	211 *Mag *	112.00 *	400 *	55.0 *	68.8 *	0.021 *	0.021 *	0.001 *	0.003 *	0.132 *
* 76 *	211 *	218 *Rac *	15.00 *	150 *	30.0 *	39.0 *	0.417 *	0.417 *	0.016 *	0.016 *	0.224 *
* 77 *	278 *	221 *Rac *	15.00 *	150 *	121.0 *	157.3 *	0.417 *	0.417 *	0.066 *	0.065 *	0.224 *
* 78 *	221 *	222 *Rac *	15.00 *	150 *	32.0 *	41.6 *	0.417 *	0.417 *	0.017 *	0.017 *	0.224 *

* 78 *	222 *	6 *Rac *	15.00 *	150 *	38.0 *	49.4 *	0.417 *	0.412 *	0.021 *	0.020 *	0.224 *
* 79 *	211 *	212 *Mag *	97.00 *	400 *	180.0 *	225.0 *	0.141 *	0.139 *	0.032 *	0.031 *	0.231 *
* 80 *	212 *	24 *Rac *	5.50 *	150 *	84.0 *	109.2 *	0.056 *	0.055 *	0.006 *	0.006 *	0.082 *
* 81 *	212 *	213 *Mag *	91.50 *	400 *	80.0 *	100.0 *	0.125 *	0.124 *	0.013 *	0.012 *	0.218 *
* 82 *	213 *	218 *Rac *	34.50 *	200 *	30.0 *	39.0 *	0.499 *	0.494 *	0.019 *	0.019 *	0.292 *
* 83 *	218 *	219 *Rac *	28.00 *	200 *	90.0 *	117.0 *	0.329 *	0.326 *	0.038 *	0.038 *	0.237 *
* 84 *	219 *	220 *Rac *	28.00 *	200 *	114.0 *	148.2 *	0.329 *	0.326 *	0.049 *	0.048 *	0.237 *
* 85 *	220 *	4 *Rac *	28.00 *	200 *	15.0 *	19.5 *	0.329 *	0.326 *	0.006 *	0.006 *	0.237 *
* 86 *	218 *	5 *Rac *	6.50 *	150 *	35.0 *	45.5 *	0.078 *	0.077 *	0.004 *	0.004 *	0.097 *
* 87 *	213 *	214 *Mag *	57.00 *	300 *	59.0 *	73.8 *	0.169 *	0.167 *	0.012 *	0.012 *	0.218 *
* 88 *	214 *	215 *Mag *	57.00 *	300 *	228.0 *	285.0 *	0.169 *	0.167 *	0.048 *	0.048 *	0.218 *
* 89 *	215 *	2 *Rac *	11.00 *	200 *	120.0 *	156.0 *	0.051 *	0.050 *	0.008 *	0.008 *	0.093 *
* 90 *	215 *	216 *Mag *	46.00 *	300 *	207.0 *	258.8 *	0.110 *	0.109 *	0.029 *	0.028 *	0.176 *
* 91 *	216 *	1 *Rac *	3.50 *	150 *	192.0 *	249.6 *	0.023 *	0.022 *	0.006 *	0.006 *	0.052 *
* 92 *	216 *	217 *Ram *	42.50 *	250 *	263.0 *	328.7 *	0.243 *	0.241 *	0.080 *	0.079 *	0.233 *
* 93 *	217 *	3 *Rac *	35.00 *	150 *	12.0 *	15.6 *	2.269 *	2.246 *	0.035 *	0.035 *	0.522 *
* 94 *	217 *	8 *Rac *	7.50 *	200 *	114.0 *	148.2 *	0.024 *	0.023 *	0.003 *	0.003 *	0.064 *
* 95 *	245 *	151 *Rac *	4.00 *	250 *	301.0 *	391.3 *	0.002 *	0.002 *	0.001 *	0.001 *	0.022 *
* 96 *	403 *	201 *Mag *	473.50 *	600 *	20.0 *	25.0 *	0.002 *	0.002 *	0.009 *	0.009 *	0.487 *
* 97 *	201 *	202 *Mag *	265.50 *	600 *	30.0 *	37.5 *	0.117 *	0.261 *	0.004 *	0.010 *	0.273 *
* 201 *	202 *	202 *Mag *	265.50 *	400 *	30.0 *	37.5 *	0.117 *	0.261 *	0.004 *	0.010 *	0.312 *
* 98 *	202 *	203 *Mag *	265.50 *	600 *	257.0 *	321.3 *	0.117 *	0.261 *	0.037 *	0.084 *	0.273 *
* 202 *	203 *	203 *Mag *	265.50 *	400 *	257.0 *	321.3 *	0.117 *	0.261 *	0.037 *	0.084 *	0.312 *
* 99 *	203 *	204 *Mag *	265.50 *	600 *	191.0 *	238.8 *	0.117 *	0.261 *	0.028 *	0.062 *	0.273 *
* 203 *	204 *	204 *Mag *	265.50 *	400 *	191.0 *	238.8 *	0.117 *	0.261 *	0.028 *	0.062 *	0.312 *
* 100 *	204 *	205 *Mag *	241.50 *	600 *	245.0 *	306.3 *	0.096 *	0.216 *	0.030 *	0.066 *	0.248 *
* 204 *	205 *	205 *Mag *	241.50 *	400 *	245.0 *	306.3 *	0.096 *	0.216 *	0.030 *	0.066 *	0.284 *
* 101 *	205 *	206 *Mag *	227.50 *	600 *	219.0 *	273.7 *	0.086 *	0.192 *	0.023 *	0.052 *	0.234 *
* 205 *	206 *	206 *Mag *	227.50 *	400 *	219.0 *	273.7 *	0.086 *	0.192 *	0.023 *	0.052 *	0.268 *

* 102	* 206	* 280 *Mag	* 196.50	* 600	* 101.0	* 126.3	* 0.064	* 0.143	* 0.018	* 0.202
*	* 206	* 280 *Mag	* 196.50	* 400	* 101.0	* 126.3	* 0.064	* 0.143	* 0.018	* 0.231
*	* 207	* 281 *Mag	* 177.50	* 600	* 505.0	* 631.3	* 0.052	* 0.117	* 0.074	* 0.182
*	* 207	* 281 *Mag	* 177.50	* 400	* 505.0	* 631.3	* 0.052	* 0.117	* 0.074	* 0.209
*	* 208	* 208 *Mag	* 164.50	* 600	* 100.0	* 125.0	* 0.045	* 0.100	* 0.013	* 0.169
*	* 281	* 208 *Mag	* 164.50	* 400	* 100.0	* 125.0	* 0.045	* 0.100	* 0.013	* 0.194
*	* 207	* 12 *Rac	* 6.50	* 150	* 218.0	* 283.4	* 0.078	* 0.077	* 0.022	* 0.097
*	* 206	* 14 *Rac	* 31.00	* 200	* 262.0	* 340.6	* 0.403	* 0.399	* 0.137	* 0.263
*	* 205	* 249 *Rac	* 14.00	* 150	* 155.0	* 201.5	* 0.363	* 0.359	* 0.073	* 0.209
*	* 249	* 17 *Rac	* 14.00	* 150	* 180.0	* 234.0	* 0.363	* 0.359	* 0.085	* 0.209
*	* 204	* 15 *Rac	* 24.00	* 200	* 47.0	* 61.1	* 0.242	* 0.845	* 0.015	* 0.203
*	* 204	* 15 *Rac	* 24.00	* 125	* 47.0	* 61.1	* 0.242	* 0.845	* 0.015	* 0.276
*	* 352	* 11 *Rac	* 27.50	* 200	* 168.0	* 218.4	* 0.317	* 0.314	* 0.069	* 0.233
*	* 351	* 9 *Rac	* 26.00	* 200	* 5.0	* 6.5	* 0.284	* 0.281	* 0.002	* 0.220
*	* 301	* 16 *Rac	* 9.00	* 150	* 59.0	* 76.7	* 0.150	* 0.148	* 0.012	* 0.134
*	* 271	* 283 *Mag	* 40.00	* 300	* 261.0	* 326.3	* 0.083	* 0.082	* 0.027	* 0.153
*	* 283	* 31 *Rac	* 40.00	* 250	* 235.0	* 305.5	* 0.216	* 0.213	* 0.066	* 0.220
*	* 280	* 207 *Mag	* 184.00	* 600	* 10.0	* 12.5	* 0.056	* 0.125	* 0.001	* 0.189
*	* 280	* 207 *Mag	* 184.00	* 400	* 10.0	* 12.5	* 0.056	* 0.125	* 0.001	* 0.217
*	* 280	* 13 *Rac	* 12.50	* 200	* 40.0	* 52.0	* 0.066	* 0.065	* 0.003	* 0.106
*	* 281	* 27 *Rac	* 13.00	* 200	* 91.0	* 118.3	* 0.071	* 0.070	* 0.008	* 0.110
*	* 208	* 296 *Mag	* 44.00	* 400	* 181.0	* 226.3	* 0.029	* 0.029	* 0.007	* 0.105
*	* 296	* 10 *Rac	* 15.00	* 200	* 168.0	* 218.4	* 0.094	* 0.093	* 0.021	* 0.127
*	* 296	* 509 *Mag	* 29.00	* 400	* 300.0	* 375.0	* 0.013	* 0.012	* 0.005	* 0.069
*	* 509	* 7 *Rac	* 16.50	* 200	* 158.0	* 205.4	* 0.114	* 0.113	* 0.023	* 0.140
*	* 509	* 223 *Mag	* 12.50	* 400	* 210.0	* 262.5	* 0.002	* 0.002	* 0.001	* 0.030
*	* 201	* 510 *Mag	* 208.00	* 400	* 115.0	* 143.8	* 0.647	* 0.641	* 0.093	* 0.495
*	* 510	* 28 *Rac	* 5.50	* 125	* 147.0	* 191.1	* 0.179	* 0.177	* 0.034	* 0.128
*	* 510	* 260 *Mag	* 202.50	* 400	* 95.0	* 118.8	* 0.614	* 0.607	* 0.073	* 0.482

* 126 *	261 *	262 *Mag *	181.00 *	400 *	28.0 *	35.0 *	0.490 *	0.485 *	0.017 *	0.017 *	0.430 *
* 127 *	262 *	263 *Mag *	181.00 *	400 *	350.0 *	437.5 *	0.490 *	0.485 *	0.214 *	0.212 *	0.430 *
* 128 *	263 *	264 *Mag *	149.00 *	400 *	150.0 *	187.5 *	0.332 *	0.329 *	0.062 *	0.062 *	0.354 *
* 129 *	264 *	265 *Mag *	122.50 *	350 *	157.0 *	196.2 *	0.360 *	0.356 *	0.071 *	0.070 *	0.349 *
* 130 *	265 *	266 *Mag *	122.50 *	350 *	213.0 *	266.2 *	0.360 *	0.356 *	0.096 *	0.095 *	0.349 *
* 131 *	266 *	267 *Mag *	34.50 *	300 *	76.0 *	95.0 *	0.062 *	0.061 *	0.006 *	0.006 *	0.132 *
* 132 *	267 *	20 *Rac *	16.00 *	150 *	171.0 *	222.3 *	0.474 *	0.469 *	0.105 *	0.104 *	0.239 *
* 133 *	267 *	29 *Rac *	18.50 *	150 *	143.0 *	185.9 *	0.634 *	0.627 *	0.118 *	0.117 *	0.276 *
* 134 *	266 *	268 *Mag *	88.00 *	350 *	234.0 *	304.2 *	0.186 *	0.184 *	0.057 *	0.056 *	0.251 *
* 135 *	268 *	341 *Mag *	54.50 *	350 *	140.0 *	182.0 *	0.071 *	0.071 *	0.013 *	0.013 *	0.155 *
* 136 *	341 *	21 *Rac *	9.50 *	200 *	10.0 *	13.0 *	0.038 *	0.037 *	0.000 *	0.000 *	0.080 *
* 137 *	354 *	22 *Rac *	18.50 *	200 *	10.0 *	13.0 *	0.144 *	0.142 *	0.002 *	0.002 *	0.157 *
* 138 *	264 *	19 *Rac *	26.50 *	250 *	236.0 *	306.8 *	0.095 *	0.094 *	0.029 *	0.029 *	0.146 *
* 139 *	511 *	279 *Rac *	19.50 *	200 *	206.0 *	267.8 *	0.160 *	0.158 *	0.043 *	0.042 *	0.165 *
* 140 *	279 *	18 *Rac *	19.50 *	200 *	80.0 *	104.0 *	0.160 *	0.158 *	0.017 *	0.016 *	0.165 *
* 141 *	403 *	303 *Mag *	364.50 *	600 *	170.0 *	212.5 *	0.160 *	0.160 *	0.047 *	0.047 *	0.375 *
* 142 *	300 *	600 *Mag *	838.0 *	1000 *	15.0 *	18.8 *	0.077 *	0.077 *	0.601 *	0.601 *	0.304 *
* 143 *	600 *	271 *Mag *	364.5 *	800 *	243.0 *	303.7 *	0.047 *	0.047 *	0.014 *	0.014 *	0.207 *
* 144 *	600 *	201 *Mag *	473.5 *	600 *	170.0 *	212.5 *	0.367 *	0.367 *	0.078 *	0.078 *	0.482 *
* 145 *	231 *	230 *Mag *	27.00 *	400 *	197.0 *	246.3 *	0.011 *	0.011 *	0.003 *	0.003 *	0.064 *
* 146 *	230 *	229 *Mag *	27.00 *	400 *	297.0 *	371.3 *	0.011 *	0.011 *	0.004 *	0.004 *	0.064 *
* 147 *	229 *	228 *Mag *	27.00 *	400 *	576.0 *	720.0 *	0.011 *	0.011 *	0.008 *	0.008 *	0.064 *
* 148 *	228 *	227 *Mag *	8.00 *	400 *	272.0 *	340.0 *	0.001 *	0.001 *	0.000 *	0.000 *	0.019 *
* 149 *	227 *	40 *Rac *	8.00 *	250 *	159.0 *	206.7 *	0.009 *	0.009 *	0.002 *	0.002 *	0.044 *
* 150 *	228 *	240 *Mag *	19.00 *	350 *	120.0 *	150.0 *	0.009 *	0.009 *	0.001 *	0.001 *	0.054 *
* 151 *	240 *	41 *Rac *	10.00 *	250 *	96.0 *	124.8 *	0.013 *	0.013 *	0.002 *	0.002 *	0.055 *
* 152 *	240 *	241 *Mag *	9.00 *	350 *	60.0 *	75.0 *	0.002 *	0.002 *	0.000 *	0.000 *	0.026 *


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* 153 * 241 * 508 *Mag * 9.00 * 350 * 291.0 * 363.8 * 0.002 * 0.002 * 0.001 * 0.001 * 0.001 * 0.026 *
* 155 * 508 * 276 *Mag * 9.00 * 350 * 130.0 * 162.5 * 0.002 * 0.002 * 0.002 * 0.000 * 0.000 * 0.026 *
* 156 * 276 * 43 *Rac * 9.00 * 250 * 65.0 * 84.5 * 0.011 * 0.011 * 0.011 * 0.001 * 0.001 * 0.049 *
* 157 * 260 * 512 *Ram * 2.00 * 80 * 112.0 * 140.0 * 0.217 * 0.217 * 0.215 * 0.030 * 0.030 * 0.108 *
* 159 * 512 * 26 *Rac * 2.00 * 80 * 104.0 * 135.2 * 0.217 * 0.217 * 0.215 * 0.029 * 0.029 * 0.108 *
* 160 * 260 * 511 *Mag * 200.50 * 400 * 25.0 * 31.3 * 0.602 * 0.602 * 0.595 * 0.019 * 0.019 * 0.477 *
* 161 * 511 * 261 *Mag * 181.00 * 400 * 126.0 * 157.5 * 0.490 * 0.490 * 0.485 * 0.077 * 0.076 * 0.430 *
* 162 * 268 * 353 *Ram * 33.50 * 200 * 120.0 * 156.0 * 0.471 * 0.471 * 0.466 * 0.073 * 0.073 * 0.284 *
* 163 * 353 * 354 *Ram * 20.50 * 200 * 30.0 * 39.0 * 0.176 * 0.176 * 0.174 * 0.007 * 0.007 * 0.174 *
* 164 * 354 * 708 *Rac * 2.00 * 40 * 28.0 * 36.4 * 7.363 * 7.287 * 0.268 * 0.265 * 0.413 *
* 165 * 353 * 707 *Rac * 13.00 * 80 * 130.0 * 169.0 * 9.162 * 9.067 * 1.548 * 1.532 * 0.702 *
* 166 * 263 * 513 *Mag * 32.00 * 300 * 87.0 * 113.1 * 0.053 * 0.053 * 0.053 * 0.006 * 0.006 * 0.122 *
* 167 * 513 * 705 *Rac * 2.00 * 40 * 31.0 * 40.3 * 7.363 * 7.287 * 0.297 * 0.294 * 0.413 *
* 168 * 513 * 284 *Mag * 30.00 * 300 * 422.0 * 548.6 * 0.047 * 0.047 * 0.046 * 0.026 * 0.025 * 0.115 *
* 169 * 284 * 35 *Rac * 14.50 * 200 * 181.0 * 235.3 * 0.088 * 0.088 * 0.087 * 0.021 * 0.021 * 0.123 *
* 170 * 284 * 514 *Ram * 15.50 * 250 * 509.0 * 661.7 * 0.032 * 0.032 * 0.032 * 0.021 * 0.021 * 0.085 *
* 171 * 514 * 285 *Ram * 15.50 * 200 * 94.0 * 122.2 * 0.101 * 0.101 * 0.100 * 0.012 * 0.012 * 0.131 *
* 172 * 285 * 33 *Rac * 15.50 * 150 * 10.0 * 13.0 * 0.445 * 0.445 * 0.440 * 0.006 * 0.006 * 0.231 *
* 173 * 341 * 342 *Mag * 45.00 * 300 * 196.0 * 254.8 * 0.105 * 0.105 * 0.104 * 0.027 * 0.027 * 0.172 *
* 181 * 342 * 343 *Ram * 45.00 * 125 * 88.0 * 114.4 * 12.003 * 11.878 * 1.373 * 1.359 * 1.045 *
* 182 * 343 * 716 *Rac * 8.50 * 65 * 2.0 * 2.6 * 12.243 * 12.116 * 0.032 * 0.032 * 0.708 *
* 183 * 343 * 344 *Ram * 36.50 * 125 * 2.0 * 2.6 * 7.897 * 7.815 * 0.021 * 0.020 * 0.848 *
* 184 * 344 * 717 *Rac * 10.50 * 65 * 10.0 * 13.0 * 18.682 * 18.488 * 0.243 * 0.240 * 0.975 *
* 185 * 344 * 345 *Ram * 26.00 * 125 * 70.0 * 91.0 * 4.007 * 3.965 * 0.365 * 0.361 * 0.604 *
* 186 * 345 * 715 *Rac * 7.50 * 50 * 2.0 * 2.6 * 27.601 * 27.314 * 0.072 * 0.071 * 0.937 *
* 187 * 345 * 346 *Ram * 18.50 * 125 * 57.0 * 74.1 * 2.029 * 2.008 * 0.150 * 0.149 * 0.430 *
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D 10/20

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* 188 * 346 * 347 *Ram * 10.50 * 100 * 70.0 * 91.0 * 1.553 * 1.537* 0.141 * 0.140 * 0.339 *
*****
* 189 * 347 * 714 *Rac * 3.00 * 40 * 12.0 * 15.6 * 16.568 * 16.396* 0.298 * 0.256 * 0.620 *
*****
* 190 * 347 * 713 *Rac * 7.50 * 100 * 100.0 * 130.0 * 0.792 * 0.784* 0.103 * 0.102 * 0.242 *
*****
* 191 * 346 * 718 *Rac * 8.00 * 65 * 87.0 * 113.1 * 10.845 * 10.732* 1.227 * 1.214 * 0.666 *
*****
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AV

01170

Repartitia in retea a debitelor de caldura si agent termic 1

Nr. Tronson		Debit [t/h]			Sarcina termica [Gcal/h]			
crt	Ni	Ne	inc	acm	total	inc	acm	total
* 1 *	200	300	0.0	*838.00*	838.00*	0.000*	16.760*	16.760*
* 2 *	300	402	0.0	*838.00*	838.00*	0.000*	16.760*	16.760*
* 3 *	402	403	0.0	*838.00*	838.00*	0.000*	16.760*	16.760*
* 4 *	303	271	0.0	*364.50*	364.50*	0.000*	7.290*	7.290*
* 5 *	271	500	0.0	*324.50*	324.50*	0.000*	6.490*	6.490*
* 6 *	500	501	0.0	*324.50*	324.50*	0.000*	6.490*	6.490*
* 7 *	501	301	0.0	*323.00*	323.00*	0.000*	6.460*	6.460*
* 8 *	301	302	0.0	*314.00*	314.00*	0.000*	6.280*	6.280*
* 9 *	302	502	0.0	*260.50*	260.50*	0.000*	5.210*	5.210*
* 10 *	502	503	0.0	*254.50*	254.50*	0.000*	5.090*	5.090*
* 11 *	503	248	0.0	*254.50*	254.50*	0.000*	5.090*	5.090*
* 12 *	248	247	0.0	*247.50*	247.50*	0.000*	4.950*	4.950*
* 13 *	247	272	0.0	*244.50*	244.50*	0.000*	4.890*	4.890*
* 14 *	272	504	0.0	*185.00*	185.00*	0.000*	3.700*	3.700*
* 15 *	504	340	0.0	*185.00*	185.00*	0.000*	3.700*	3.700*
* 16 *	340	246	0.0	*180.00*	180.00*	0.000*	3.600*	3.600*
* 17 *	246	505	0.0	*173.00*	173.00*	0.000*	3.460*	3.460*
* 18 *	505	506	0.0	*173.00*	173.00*	0.000*	3.460*	3.460*
* 19 *	506	243	0.0	*162.50*	162.50*	0.000*	3.250*	3.250*
* 20 *	243	239	0.0	*102.50*	102.50*	0.000*	2.050*	2.050*
* 21 *	239	507	0.0	*95.50*	95.50*	0.000*	1.910*	1.910*
* 22 *	507	231	0.0	*95.50*	95.50*	0.000*	1.910*	1.910*
* 23 *	239	115	0.0	* 7.00*	7.00*	0.000*	0.140*	0.140*
* 24 *	506	42	0.0	*10.50*	10.50*	0.000*	0.210*	0.210*
* 26 *	246	700	0.0	* 7.00*	7.00*	0.000*	0.140*	0.140*
* 27 *	340	84	0.0	* 5.00*	5.00*	0.000*	0.100*	0.100*
* 28 *	272	286	0.0	*59.50*	59.50*	0.000*	1.190*	1.190*
* 29 *	286	69	0.0	*13.50*	13.50*	0.000*	0.270*	0.270*
* 30 *	286	287	0.0	*46.00*	46.00*	0.000*	0.920*	0.920*
* 31 *	287	95	0.0	*15.00*	15.00*	0.000*	0.300*	0.300*
* 32 *	287	288	0.0	*31.00*	31.00*	0.000*	0.620*	0.620*
* 33 *	288	96	0.0	*13.50*	13.50*	0.000*	0.270*	0.270*
* 34 *	288	289	0.0	*17.50*	17.50*	0.000*	0.350*	0.350*
* 35 *	289	97	0.0	*17.50*	17.50*	0.000*	0.350*	0.350*
* 36 *	247	94	0.0	* 3.00*	3.00*	0.000*	0.060*	0.060*
* 37 *	248	79	0.0	* 7.00*	7.00*	0.000*	0.140*	0.140*
* 38 *	502	703	0.0	* 6.00*	6.00*	0.000*	0.120*	0.120*
* 39 *	302	351	0.0	*53.50*	53.50*	0.000*	1.070*	1.070*
* 40 *	351	352	0.0	*27.50*	27.50*	0.000*	0.550*	0.550*

* 41 * 501 * 256 *	0.0 * 1.50*	1.50*	0.000*	0.030*	0.030*
* 42 * 256 * 257 *	0.0 * 1.50*	1.50*	0.000*	0.030*	0.030*
* 43 * 257 * 258 *	0.0 * 1.50*	1.50*	0.000*	0.030*	0.030*
* 44 * 258 * 30 *	0.0 * 1.50*	1.50*	0.000*	0.030*	0.030*
* 46 * 231 * 232 *	0.0 * 68.50*	68.50*	0.000*	1.370*	1.370*
* 47 * 232 * 238 *	0.0 * 4.00*	4.00*	0.000*	0.080*	0.080*
* 48 * 238 * 277 *	0.0 * 4.00*	4.00*	0.000*	0.080*	0.080*
* 49 * 277 * 58 *	0.0 * 4.00*	4.00*	0.000*	0.080*	0.080*
* 50 * 232 * 233 *	0.0 * 64.50*	64.50*	0.000*	1.290*	1.290*
* 51 * 233 * 234 *	0.0 * 64.50*	64.50*	0.000*	1.290*	1.290*
* 52 * 234 * 59 *	0.0 * 11.50*	11.50*	0.000*	0.230*	0.230*
* 53 * 234 * 335 *	0.0 * 53.00*	53.00*	0.000*	1.060*	1.060*
* 54 * 335 * 64 *	0.0 * 6.50*	6.50*	0.000*	0.130*	0.130*
* 55 * 335 * 336 *	0.0 * 46.50*	46.50*	0.000*	0.930*	0.930*
* 56 * 336 * 61 *	0.0 * 11.00*	11.00*	0.000*	0.220*	0.220*
* 57 * 336 * 337 *	0.0 * 35.50*	35.50*	0.000*	0.710*	0.710*
* 58 * 337 * 62 *	0.0 * 15.00*	15.00*	0.000*	0.300*	0.300*
* 59 * 337 * 63 *	0.0 * 20.50*	20.50*	0.000*	0.410*	0.410*
* 60 * 223 * 154 *	0.0 * 12.50*	12.50*	0.000*	0.250*	0.250*
* 61 * 243 * 515 *	0.0 * 6.00*	6.00*	0.000*	0.120*	0.120*
* 62 * 515 * 45 *	0.0 * 6.00*	6.00*	0.000*	0.120*	0.120*
* 63 * 243 * 244 *	0.0 * 54.00*	54.00*	0.000*	1.080*	1.080*
* 64 * 244 * 44 *	0.0 * 8.50*	8.50*	0.000*	0.170*	0.170*
* 65 * 244 * 291 *	0.0 * 45.50*	45.50*	0.000*	0.910*	0.910*
* 66 * 291 * 117 *	0.0 * 7.50*	7.50*	0.000*	0.150*	0.150*
* 67 * 245 * 152 *	0.0 * 22.00*	22.00*	0.000*	0.440*	0.440*
* 68 * 291 * 516 *	0.0 * 38.00*	38.00*	0.000*	0.760*	0.760*
* 69 * 516 * 153 *	0.0 * 12.00*	12.00*	0.000*	0.240*	0.240*
* 70 * 516 * 245 *	0.0 * 26.00*	26.00*	0.000*	0.520*	0.520*
* 71 * 208 * 209 *	0.0 * 120.50*	120.50*	0.000*	2.410*	2.410*
* 72 * 209 * 32 *	0.0 * 8.50*	8.50*	0.000*	0.170*	0.170*
* 73 * 209 * 210 *	0.0 * 112.00*	112.00*	0.000*	2.240*	2.240*
* 74 * 210 * 211 *	0.0 * 112.00*	112.00*	0.000*	2.240*	2.240*
* 75 * 211 * 278 *	0.0 * 15.00*	15.00*	0.000*	0.300*	0.300*
* 76 * 278 * 221 *	0.0 * 15.00*	15.00*	0.000*	0.300*	0.300*
* 77 * 221 * 222 *	0.0 * 15.00*	15.00*	0.000*	0.300*	0.300*
* 78 * 222 * 6 *	0.0 * 15.00*	15.00*	0.000*	0.300*	0.300*
* 79 * 211 * 212 *	0.0 * 97.00*	97.00*	0.000*	1.940*	1.940*
* 80 * 212 * 24 *	0.0 * 5.50*	5.50*	0.000*	0.110*	0.110*
* 81 * 212 * 213 *	0.0 * 91.50*	91.50*	0.000*	1.830*	1.830*
* 82 * 213 * 218 *	0.0 * 34.50*	34.50*	0.000*	0.690*	0.690*

* 83 * 218 * 219 *	0.0	*28.00*	28.00*	0.000*	0.560*	0.560*
* 84 * 219 * 220 *	0.0	*28.00*	28.00*	0.000*	0.560*	0.560*
* 85 * 220 * 4 *	0.0	*28.00*	28.00*	0.000*	0.560*	0.560*
* 86 * 218 * 5 *	0.0	* 6.50*	6.50*	0.000*	0.130*	0.130*
* 87 * 213 * 214 *	0.0	*57.00*	57.00*	0.000*	1.140*	1.140*
* 88 * 214 * 215 *	0.0	*57.00*	57.00*	0.000*	1.140*	1.140*
* 89 * 215 * 2 *	0.0	*11.00*	11.00*	0.000*	0.220*	0.220*
* 90 * 215 * 216 *	0.0	*46.00*	46.00*	0.000*	0.920*	0.920*
* 91 * 216 * 1 *	0.0	* 3.50*	3.50*	0.000*	0.070*	0.070*
* 92 * 216 * 217 *	0.0	*42.50*	42.50*	0.000*	0.850*	0.850*
* 93 * 217 * 3 *	0.0	*35.00*	35.00*	0.000*	0.700*	0.700*
* 94 * 217 * 8 *	0.0	* 7.50*	7.50*	0.000*	0.150*	0.150*
* 95 * 245 * 151 *	0.0	* 4.00*	4.00*	0.000*	0.080*	0.080*
* 96 * 403 * 201 *	0.0	*473.50*	473.50*	0.000*	9.470*	9.470*
* 97 * 201 * 202 *	0.0	*265.50*	265.50*	0.000*	5.310*	5.310*
* 98 * 202 * 203 *	0.0	*265.50*	265.50*	0.000*	5.310*	5.310*
* 99 * 203 * 204 *	0.0	*265.50*	265.50*	0.000*	5.310*	5.310*
*100 * 204 * 205 *	0.0	*241.50*	241.50*	0.000*	4.830*	4.830*
*101 * 205 * 206 *	0.0	*227.50*	227.50*	0.000*	4.550*	4.550*
*102 * 206 * 280 *	0.0	*196.50*	196.50*	0.000*	3.930*	3.930*
*103 * 207 * 281 *	0.0	*177.50*	177.50*	0.000*	3.550*	3.550*
*104 * 281 * 208 *	0.0	*164.50*	164.50*	0.000*	3.290*	3.290*
*105 * 207 * 12 *	0.0	* 6.50*	6.50*	0.000*	0.130*	0.130*
*106 * 206 * 14 *	0.0	*31.00*	31.00*	0.000*	0.620*	0.620*
*107 * 205 * 249 *	0.0	*14.00*	14.00*	0.000*	0.280*	0.280*
*108 * 249 * 17 *	0.0	*14.00*	14.00*	0.000*	0.280*	0.280*
*109 * 204 * 15 *	0.0	*24.00*	24.00*	0.000*	0.480*	0.480*
*110 * 352 * 11 *	0.0	*27.50*	27.50*	0.000*	0.550*	0.550*
*111 * 351 * 9 *	0.0	*26.00*	26.00*	0.000*	0.520*	0.520*
*112 * 301 * 16 *	0.0	* 9.00*	9.00*	0.000*	0.180*	0.180*
*113 * 271 * 283 *	0.0	*40.00*	40.00*	0.000*	0.800*	0.800*
*114 * 283 * 31 *	0.0	*40.00*	40.00*	0.000*	0.800*	0.800*
*115 * 280 * 207 *	0.0	*184.00*	184.00*	0.000*	3.680*	3.680*
*116 * 280 * 13 *	0.0	*12.50*	12.50*	0.000*	0.250*	0.250*
*117 * 281 * 27 *	0.0	*13.00*	13.00*	0.000*	0.260*	0.260*
*118 * 208 * 296 *	0.0	*44.00*	44.00*	0.000*	0.880*	0.880*
*119 * 296 * 10 *	0.0	*15.00*	15.00*	0.000*	0.300*	0.300*
*120 * 296 * 509 *	0.0	*29.00*	29.00*	0.000*	0.580*	0.580*
*121 * 509 * 7 *	0.0	*16.50*	16.50*	0.000*	0.330*	0.330*
*122 * 509 * 223 *	0.0	*12.50*	12.50*	0.000*	0.250*	0.250*
*123 * 201 * 510 *	0.0	*208.00*	208.00*	0.000*	4.160*	4.160*
*124 * 510 * 28 *	0.0	* 5.50*	5.50*	0.000*	0.110*	0.110*

*125	* 519	* 260	*	0.0	*202.50*	202.50*	0.000*	4.050*	4.050*
*126	* 261	* 262	*	0.0	*181.00*	181.00*	0.000*	3.620*	3.620*
*127	* 262	* 263	*	0.0	*181.00*	181.00*	0.000*	3.620*	3.620*
*128	* 263	* 264	*	0.0	*149.00*	149.00*	0.000*	2.980*	2.980*
*129	* 264	* 265	*	0.0	*122.50*	122.50*	0.000*	2.450*	2.450*
*130	* 265	* 266	*	0.0	*122.50*	122.50*	0.000*	2.450*	2.450*
*131	* 266	* 267	*	0.0	*34.50*	34.50*	0.000*	0.690*	0.690*
*132	* 267	* 20	*	0.0	*16.00*	16.00*	0.000*	0.320*	0.320*
*133	* 267	* 29	*	0.0	*18.50*	18.50*	0.000*	0.370*	0.370*
*134	* 266	* 268	*	0.0	*88.00*	88.00*	0.000*	1.760*	1.760*
*135	* 268	* 341	*	0.0	*54.50*	54.50*	0.000*	1.090*	1.090*
*136	* 341	* 21	*	0.0	* 9.50*	9.50*	0.000*	0.190*	0.190*
*137	* 354	* 22	*	0.0	*18.50*	18.50*	0.000*	0.370*	0.370*
*138	* 264	* 19	*	0.0	*26.50*	26.50*	0.000*	0.530*	0.530*
*139	* 511	* 279	*	0.0	*19.50*	19.50*	0.000*	0.390*	0.390*
*140	* 279	* 18	*	0.0	*19.50*	19.50*	0.000*	0.390*	0.390*
*141	* 403	* 303	*	0.0	*364.50*	364.50*	0.000*	7.290*	7.290*
*142	* 300	* 600	*	0.0	*838.00*	838.00*	0.000*	16.760*	16.760*
*143	* 600	* 271	*	0.0	*364.50*	364.50*	0.000*	7.290*	7.290*
*144	* 600	* 201	*	0.0	*473.50*	473.50*	0.000*	9.470*	9.470*
*145	* 231	* 230	*	0.0	*27.00*	27.00*	0.000*	0.540*	0.540*
*146	* 230	* 229	*	0.0	*27.00*	27.00*	0.000*	0.540*	0.540*
*147	* 229	* 228	*	0.0	*27.00*	27.00*	0.000*	0.540*	0.540*
*148	* 228	* 227	*	0.0	* 8.00*	8.00*	0.000*	0.160*	0.160*
*149	* 227	* 40	*	0.0	* 8.00*	8.00*	0.000*	0.160*	0.160*
*150	* 228	* 240	*	0.0	*19.00*	19.00*	0.000*	0.380*	0.380*
*151	* 240	* 41	*	0.0	*10.00*	10.00*	0.000*	0.200*	0.200*
*152	* 240	* 241	*	0.0	* 9.00*	9.00*	0.000*	0.180*	0.180*
*153	* 241	* 508	*	0.0	* 9.00*	9.00*	0.000*	0.180*	0.180*
*155	* 508	* 276	*	0.0	* 9.00*	9.00*	0.000*	0.180*	0.180*
*156	* 276	* 43	*	0.0	* 9.00*	9.00*	0.000*	0.180*	0.180*
*157	* 260	* 512	*	0.0	* 2.00*	2.00*	0.000*	0.040*	0.040*
*159	* 512	* 26	*	0.0	* 2.00*	2.00*	0.000*	0.040*	0.040*
*160	* 260	* 511	*	0.0	*200.50*	200.50*	0.000*	4.010*	4.010*
*161	* 511	* 261	*	0.0	*181.00*	181.00*	0.000*	3.620*	3.620*
*162	* 268	* 353	*	0.0	*33.50*	33.50*	0.000*	0.670*	0.670*
*163	* 353	* 354	*	0.0	*20.50*	20.50*	0.000*	0.410*	0.410*
*164	* 354	* 708	*	0.0	* 2.00*	2.00*	0.000*	0.040*	0.040*
*165	* 353	* 707	*	0.0	*13.00*	13.00*	0.000*	0.260*	0.260*
*166	* 263	* 513	*	0.0	*32.00*	32.00*	0.000*	0.640*	0.640*
*167	* 513	* 705	*	0.0	* 2.00*	2.00*	0.000*	0.040*	0.040*

DB/20

*168	* 513	* 284	*	0.0	*30.00*	30.00*	0.000*	0.600*	0.600*
*169	* 284	* 35	*	0.0	*14.50*	14.50*	0.000*	0.290*	0.290*
*170	* 284	* 514	*	0.0	*15.50*	15.50*	0.000*	0.310*	0.310*
*171	* 514	* 285	*	0.0	*15.50*	15.50*	0.000*	0.310*	0.310*
*172	* 285	* 33	*	0.0	*15.50*	15.50*	0.000*	0.310*	0.310*
*173	* 341	* 342	*	0.0	*45.00*	45.00*	0.000*	0.900*	0.900*
*181	* 342	* 343	*	0.0	*45.00*	45.00*	0.000*	0.900*	0.900*
*182	* 343	* 716	*	0.0	* 8.50*	8.50*	0.000*	0.170*	0.170*
*183	* 343	* 344	*	0.0	*36.50*	36.50*	0.000*	0.730*	0.730*
*184	* 344	* 717	*	0.0	*10.50*	10.50*	0.000*	0.210*	0.210*
*185	* 344	* 345	*	0.0	*26.00*	26.00*	0.000*	0.520*	0.520*
*186	* 345	* 715	*	0.0	* 7.50*	7.50*	0.000*	0.150*	0.150*
*187	* 345	* 346	*	0.0	*18.50*	18.50*	0.000*	0.370*	0.370*
*188	* 346	* 347	*	0.0	*10.50*	10.50*	0.000*	0.210*	0.210*
*189	* 347	* 714	*	0.0	* 3.00*	3.00*	0.000*	0.060*	0.060*
*190	* 347	* 713	*	0.0	* 7.50*	7.50*	0.000*	0.150*	0.150*
*191	* 346	* 718	*	0.0	* 8.00*	8.00*	0.000*	0.160*	0.160*

Repartitia presiunilor in sistem - magistraia 1

* Nr. *	* Mod *	* Dist. *	* Presiune abs[mca] *	* Presiune rei[mca] *	* Disp. *	* Pierd *	* Pierd *
* crt *	* retea *	* [m] *	* duc *	* int *	* duc *	* int *	* pres d' pres i' *
							[mca] * [mca] *
* 0 *	200 *	0 *	109.00 *	40.00 *	109.00 *	40.00 *	69.00 * 0 *
* 1 *	300 *	2068.0 *	95.80 *	27.20 *	108.80 *	40.20 *	68.6 * 0.20 *
* 2 *	402 *	2238.0 *	93.55 *		108.55 *		68.36 * 0.45 *
* 3 *	403 *	2239.0 *	93.55 *		108.55 *		68.35 * 0.45 *
* 4 *	271 *	2652.0 *	92.49 *		108.49 *		68.29 * 0.51 *
* 5 *	500 *	2911.0 *	91.48 *	23.23 *	108.48 *	40.23 *	68.3 * 0.52 * 0.23 *
* 6 *	501 *	2967.0 *	92.48 *	24.23 *	108.48 *	40.23 *	68.2 * 0.52 * 0.23 *
* 7 *	301 *	3106.0 *	92.47 *	24.23 *	108.47 *	40.23 *	68.2 * 0.53 * 0.23 *
* 8 *	302 *	3266.0 *	93.46 *	25.24 *	108.46 *	40.24 *	68.2 * 0.54 * 0.24 *
* 9 *	502 *	4345.0 *	88.43 *	20.27 *	108.43 *	40.27 *	68.2 * 0.57 * 0.27 *
* 10 *	503 *	5182.0 *	86.41 *	18.30 *	108.41 *	40.30 *	68.1 * 0.59 * 0.30 *
* 11 *	248 *	5346.0 *	85.40 *	17.30 *	108.40 *	40.30 *	68.1 * 0.60 * 0.30 *
* 12 *	247 *	5509.0 *	83.40 *	15.31 *	108.40 *	40.31 *	68.1 * 0.60 * 0.31 *
* 13 *	272 *	5606.0 *	84.39 *	16.31 *	108.39 *	40.31 *	68.1 * 0.61 * 0.31 *
* 14 *	504 *	5668.0 *	84.39 *	16.31 *	108.39 *	40.31 *	68.1 * 0.61 * 0.31 *
* 15 *	340 *	6226.0 *	86.38 *	18.33 *	108.38 *	40.33 *	68.0 * 0.62 * 0.33 *
* 16 *	246 *	6506.0 *	87.37 *	19.34 *	108.37 *	40.34 *	68.0 * 0.63 * 0.34 *
* 17 *	505 *	6526.0 *	87.37 *	19.34 *	108.37 *	40.34 *	68.0 * 0.63 * 0.34 *
* 18 *	506 *	6738.0 *	88.36 *	20.34 *	108.36 *	40.34 *	68.0 * 0.64 * 0.34 *
* 19 *	243 *	7475.0 *	94.34 *	26.36 *	108.34 *	40.36 *	68.0 * 0.66 * 0.36 *
* 20 *	239 *	7722.0 *	94.34 *	26.36 *	108.34 *	40.36 *	68.0 * 0.66 * 0.36 *
* 21 *	507 *	7757.0 *	94.34 *	26.36 *	108.34 *	40.36 *	68.0 * 0.66 * 0.36 *
* 22 *	231 *	8072.0 *	94.34 *	26.36 *	108.34 *	40.36 *	68.0 * 0.66 * 0.36 *
* 23 *	115 *	8003.0 *	96.34 *	28.36 *	108.34 *	40.36 *	68.0 * 0.66 * 0.36 *
* 24 *	42 *	6945.0 *	88.18 *	20.52 *	108.18 *	40.52 *	67.7 * 0.82 * 0.52 *
* 26 *	700 *	6776.0 *	87.27 *	19.44 *	108.27 *	40.44 *	67.8 * 0.73 * 0.44 *
* 27 *	84 *	6439.0 *	85.00 *	17.70 *	108.00 *	40.70 *	67.3 * 1.00 * 0.70 *
* 28 *	286 *	6036.0 *	82.39 *	14.32 *	108.39 *	40.32 *	68.1 * 0.61 * 0.32 *
* 29 *	69 *	6079.0 *	82.38 *	14.32 *	108.38 *	40.32 *	68.1 * 0.62 * 0.32 *
* 30 *	287 *	6478.0 *	82.38 *	14.32 *	108.38 *	40.32 *	68.1 * 0.62 * 0.32 *
* 31 *	95 *	6651.0 *	83.36 *	15.34 *	108.36 *	40.34 *	68.0 * 0.64 * 0.34 *
* 32 *	288 *	6695.0 *	84.38 *	16.32 *	108.38 *	40.32 *	68.1 * 0.62 * 0.32 *
* 33 *	96 *	6719.0 *	84.38 *	16.33 *	108.38 *	40.33 *	68.0 * 0.62 * 0.33 *
* 34 *	289 *	7201.0 *	85.38 *	17.33 *	108.38 *	40.33 *	68.1 * 0.62 * 0.33 *
* 35 *	97 *	7300.0 *	84.36 *	16.34 *	108.36 *	40.34 *	68.0 * 0.64 * 0.34 *
* 36 *	94 *	5529.0 *	83.36 *	15.35 *	108.36 *	40.35 *	68.0 * 0.64 * 0.35 *
* 37 *	79 *	5590.0 *	84.31 *	16.39 *	108.31 *	40.39 *	67.9 * 0.69 * 0.39 *
* 38 *	703 *	4647.0 *	87.35 *	19.36 *	108.35 *	40.36 *	68.0 * 0.65 * 0.36 *
* 39 *	351 *	3615.0 *	77.29 *	9.41 *	108.29 *	40.41 *	67.9 * 0.71 * 0.41 *

40	352	4024.0	77.12	9.58	108.12	40.58	67.5	0.88	0.58
41	256	3045.0	91.48	23.23	108.48	40.23	68.2	0.52	0.23
42	257	3285.0	91.47	23.23	108.47	40.23	68.2	0.53	0.23
43	258	3330.0	92.47	24.23	108.47	40.23	68.2	0.53	0.23
44	30	3372.0	93.47	25.23	108.47	40.23	68.2	0.53	0.23
46	232	8215.0	96.33	28.38	108.33	40.38	67.9	0.67	0.38
47	238	8275.0	96.32	28.38	108.32	40.38	67.9	0.68	0.38
48	277	8445.0	96.32	28.38	108.32	40.38	67.9	0.68	0.38
49	58	8545.0	95.31	27.40	108.31	40.40	67.9	0.69	0.40
50	233	8614.0	93.29	25.41	108.29	40.41	67.9	0.71	0.41
51	234	9145.0	94.23	26.47	108.23	40.47	67.8	0.77	0.47
52	59	9185.0	94.22	26.49	108.22	40.49	67.7	0.78	0.49
53	335	9550.0	93.19	25.51	108.19	40.51	67.7	0.81	0.51
54	64	9800.0	93.19	25.51	108.19	40.51	67.7	0.81	0.51
55	336	9673.0	94.19	26.52	108.19	40.52	67.7	0.81	0.52
56	61	9701.0	93.19	25.52	108.19	40.52	67.7	0.81	0.52
57	337	9767.0	93.18	25.52	108.18	40.52	67.7	0.82	0.52
58	62	9989.0	93.16	25.55	108.16	40.55	67.6	0.84	0.55
59	63	10062.0	93.16	25.54	108.16	40.54	67.6	0.84	0.54
60	154	4758.0	98.30	30.73	108.30	40.73	67.6	0.70	0.73
61	515	7585.0	95.34	27.36	108.34	40.36	68.0	0.66	0.36
62	45	7619.0	95.34	27.36	108.34	40.36	68.0	0.66	0.36
63	244	7615.0	94.32	26.39	108.32	40.39	67.9	0.68	0.39
64	44	7704.0	93.32	25.39	108.32	40.39	67.9	0.68	0.39
65	291	7730.0	95.30	27.40	108.30	40.40	67.9	0.70	0.40
66	117	7821.0	95.29	27.41	108.29	40.41	67.9	0.71	0.41
67	152	8508.0	94.24	26.46	108.24	40.46	67.8	0.76	0.46
68	516	8160.0	94.26	26.44	108.26	40.44	67.8	0.74	0.44
69	153	8240.0	94.23	26.47	108.23	40.47	67.8	0.77	0.47
70	245	8320.0	94.25	26.45	108.25	40.45	67.8	0.75	0.45
71	209	4097.0	98.37	30.67	108.37	40.67	67.7	0.63	0.67
72	32	4347.0	92.32	24.71	108.32	40.71	67.6	0.68	0.71
73	210	4271.0	98.36	30.68	108.36	40.68	67.7	0.64	0.68
74	211	4326.0	99.36	31.68	108.36	40.68	67.7	0.64	0.68
75	278	4356.0	99.34	31.70	108.34	40.70	67.6	0.66	0.70
76	221	4477.0	98.28	30.76	108.28	40.76	67.5	0.72	0.76
77	222	4509.0	98.26	30.78	108.26	40.78	67.5	0.74	0.78
78	6	4547.0	98.24	30.80	108.24	40.80	67.4	0.76	0.80
79	212	4506.0	98.33	30.71	108.33	40.71	67.6	0.67	0.71
80	24	4590.0	98.32	30.72	108.32	40.72	67.6	0.68	0.72
81	213	4586.0	98.32	30.73	108.32	40.73	67.6	0.68	0.73

* 82 *	218 *	4616.0 *	98.30 *	30.75 *	108.30 *	40.75 *	67.6 *	0.70 *	0.75 *
* 83 *	219 *	4706.0 *	98.26 *	30.78 *	108.26 *	40.78 *	67.5 *	0.74 *	0.78 *
* 84 *	220 *	4820.0 *	98.21 *	30.83 *	108.21 *	40.83 *	67.4 *	0.79 *	0.83 *
* 85 *	4 *	4835.0 *	98.20 *	30.84 *	108.20 *	40.84 *	67.4 *	0.80 *	0.84 *
* 86 *	5 *	4651.0 *	98.29 *	30.75 *	108.29 *	40.75 *	67.5 *	0.71 *	0.75 *
* 87 *	214 *	4645.0 *	97.30 *	29.74 *	108.30 *	40.74 *	67.6 *	0.70 *	0.74 *
* 88 *	215 *	4873.0 *	97.26 *	29.79 *	108.26 *	40.79 *	67.5 *	0.74 *	0.79 *
* 89 *	2 *	4993.0 *	97.25 *	29.79 *	108.25 *	40.79 *	67.5 *	0.75 *	0.79 *
* 90 *	216 *	5080.0 *	97.23 *	29.82 *	108.23 *	40.82 *	67.4 *	0.77 *	0.82 *
* 91 *	1 *	5272.0 *	98.22 *	30.82 *	108.22 *	40.82 *	67.4 *	0.78 *	0.82 *
* 92 *	217 *	5343.0 *	96.15 *	28.89 *	108.15 *	40.89 *	67.3 *	0.85 *	0.89 *
* 93 *	3 *	5355.0 *	91.11 *	23.93 *	108.11 *	40.93 *	67.2 *	0.89 *	0.93 *
* 94 *	8 *	5457.0 *	96.14 *	28.90 *	108.14 *	40.90 *	67.2 *	0.86 *	0.90 *
* 95 *	151 *	8621.0 *	94.25 *	26.45 *	108.25 *	40.45 *	67.8 *	0.75 *	0.45 *
* 96 *	201 *	2259.0 *	93.54 *		108.54 *		68.34 *	0.46 *	
* 97 *	202 *	2289.0 *	93.54 *	25.29 *	108.54 *	40.29 *	68.3 *	0.46 *	0.29 *
* 98 *	203 *	2546.0 *	92.50 *	24.37 *	108.50 *	40.37 *	68.1 *	0.50 *	0.37 *
* 99 *	204 *	2737.0 *	92.47 *	24.43 *	108.47 *	40.43 *	68.0 *	0.53 *	0.43 *
* 100 *	205 *	2982.0 *	92.44 *	24.50 *	108.44 *	40.50 *	67.9 *	0.56 *	0.50 *
* 101 *	206 *	3201.0 *	94.42 *	26.55 *	108.42 *	40.55 *	67.9 *	0.58 *	0.55 *
* 102 *	280 *	3302.0 *	94.41 *	26.57 *	108.41 *	40.57 *	67.8 *	0.59 *	0.57 *
* 103 *	281 *	3817.0 *	94.38 *	26.65 *	108.38 *	40.65 *	67.7 *	0.62 *	0.65 *
* 104 *	208 *	3917.0 *	98.37 *	30.66 *	108.37 *	40.66 *	67.7 *	0.63 *	0.66 *
* 105 *	12 *	3530.0 *	95.39 *	27.59 *	108.39 *	40.59 *	67.8 *	0.61 *	0.59 *
* 106 *	14 *	3463.0 *	99.28 *	31.69 *	108.28 *	40.69 *	67.6 *	0.72 *	0.69 *
* 107 *	249 *	3137.0 *	95.37 *	27.57 *	108.37 *	40.57 *	67.8 *	0.63 *	0.57 *
* 108 *	17 *	3317.0 *	97.29 *	29.66 *	108.29 *	40.66 *	67.6 *	0.71 *	0.66 *
* 109 *	15 *	2784.0 *	92.46 *	24.48 *	108.46 *	40.48 *	68.0 *	0.54 *	0.48 *
* 110 *	11 *	4192.0 *	89.05 *	21.65 *	108.05 *	40.65 *	67.4 *	0.95 *	0.65 *
* 111 *	9 *	3620.0 *	91.29 *	23.42 *	108.29 *	40.42 *	67.9 *	0.71 *	0.42 *
* 112 *	16 *	3165.0 *	92.46 *	24.25 *	108.46 *	40.25 *	68.2 *	0.54 *	0.25 *
* 113 *	283 *	2913.0 *	92.46 *	24.24 *	108.46 *	40.24 *	68.2 *	0.54 *	0.24 *
* 114 *	31 *	3148.0 *	92.40 *	24.31 *	108.40 *	40.31 *	68.1 *	0.60 *	0.31 *
* 115 *	207 *	3312.0 *	94.41 *	26.57 *	108.41 *	40.57 *	67.8 *	0.59 *	0.57 *
* 116 *	13 *	3342.0 *	94.41 *	26.57 *	108.41 *	40.57 *	67.8 *	0.59 *	0.57 *
* 117 *	27 *	3908.0 *	93.37 *	25.65 *	108.37 *	40.65 *	67.7 *	0.63 *	0.65 *
* 118 *	296 *	4098.0 *	99.37 *	31.66 *	108.37 *	40.66 *	67.7 *	0.63 *	0.66 *
* 119 *	10 *	4266.0 *	99.35 *	31.68 *	108.35 *	40.68 *	67.7 *	0.65 *	0.68 *
* 120 *	509 *	4398.0 *	99.36 *	31.67 *	108.36 *	40.67 *	67.7 *	0.64 *	0.67 *
* 121 *	7 *	4556.0 *	99.34 *	31.69 *	108.34 *	40.69 *	67.6 *	0.66 *	0.69 *
* 122 *	223 *	4608.0 *	98.36 *	30.67 *	108.36 *	40.67 *	67.7 *	0.64 *	0.67 *
* 123 *	510 *	2374.0 *	93.45 *	25.37 *	108.45 *	40.37 *	68.1 *	0.55 *	0.37 *

* 124 *	28	* 2921.0 *	93.42 *	25.40 *	108.42 *	40.40 *	68.0 *	0.58 *	0.40 *
* 125 *	260	* 2469.0 *	93.38 *	25.44 *	108.38 *	40.44 *	67.9 *	0.62 *	0.44 *
* 126 *	262	* 2648.0 *	93.26 *	25.55 *	108.26 *	40.55 *	67.7 *	0.74 *	0.55 *
* 127 *	263	* 2998.0 *	94.05 *	26.77 *	108.05 *	40.77 *	67.3 *	0.95 *	0.77 *
* 128 *	264	* 3148.0 *	92.99 *	25.83 *	107.99 *	40.83 *	67.2 *	1.01 *	0.83 *
* 129 *	265	* 3305.0 *	91.92 *	24.90 *	107.92 *	40.90 *	67.0 *	1.08 *	0.90 *
* 130 *	266	* 3518.0 *	91.82 *	24.99 *	107.82 *	40.99 *	66.8 *	1.18 *	0.99 *
* 131 *	267	* 3594.0 *	90.81 *	24.00 *	107.81 *	41.00 *	66.8 *	1.19 *	1.00 *
* 132 *	20	* 3765.0 *	87.71 *	21.10 *	107.71 *	41.10 *	66.6 *	1.29 *	1.10 *
* 133 *	29	* 3737.0 *	89.70 *	23.11 *	107.70 *	41.11 *	66.6 *	1.30 *	1.11 *
* 134 *	268	* 3752.0 *	86.76 *	20.05 *	107.76 *	41.05 *	66.7 *	1.24 *	1.05 *
* 135 *	341	* 3892.0 *	85.75 *	19.06 *	107.75 *	41.06 *	66.7 *	1.25 *	1.06 *
* 136 *	21	* 3902.0 *	85.75 *	19.06 *	107.75 *	41.06 *	66.7 *	1.25 *	1.06 *
* 137 *	22	* 3912.0 *	87.68 *	21.13 *	107.68 *	41.13 *	66.6 *	1.32 *	1.13 *
* 138 *	19	* 3384.0 *	92.96 *	25.86 *	107.96 *	40.86 *	67.1 *	1.04 *	0.86 *
* 139 *	279	* 2700.0 *	93.31 *	25.50 *	108.31 *	40.50 *	67.8 *	0.69 *	0.50 *
* 140 *	18	* 2780.0 *	92.30 *	24.52 *	108.30 *	40.52 *	67.8 *	0.70 *	0.52 *
* 141 *	303	* 2409.0 *	93.51 *		108.51 *		68.31 *	0.49 *	
* 142 *	600	* 2083.0 *		27.20 *		40.20 *			0.20 *
* 143 *	271	* 2326.0 *		24.21 *		40.21 *			0.21 *
* 144 *	201	* 2253.0 *		25.28 *		40.28 *			0.28 *
* 145 *	230	* 8269.0 *	93.34 *	25.37 *	108.34 *	40.37 *	68.0 *	0.66 *	0.37 *
* 146 *	229	* 8566.0 *	96.33 *	28.37 *	108.33 *	40.37 *	68.0 *	0.67 *	0.37 *
* 147 *	228	* 9142.0 *	97.32 *	29.38 *	108.32 *	40.38 *	67.9 *	0.68 *	0.38 *
* 148 *	227	* 9414.0 *	98.32 *	30.38 *	108.32 *	40.38 *	67.9 *	0.68 *	0.38 *
* 149 *	40	* 9573.0 *	94.32 *	26.38 *	108.32 *	40.38 *	67.9 *	0.68 *	0.38 *
* 150 *	240	* 9262.0 *	96.32 *	28.38 *	108.32 *	40.38 *	67.9 *	0.68 *	0.38 *
* 151 *	41	* 9358.0 *	96.32 *	28.38 *	108.32 *	40.38 *	67.9 *	0.68 *	0.38 *
* 152 *	241	* 9322.0 *	96.32 *	28.38 *	108.32 *	40.38 *	67.9 *	0.68 *	0.38 *
* 153 *	508	* 9613.0 *	94.32 *	26.38 *	108.32 *	40.38 *	67.9 *	0.68 *	0.38 *
* 155 *	276	* 9743.0 *	93.32 *	25.38 *	108.32 *	40.38 *	67.9 *	0.68 *	0.38 *
* 156 *	43	* 9808.0 *	93.32 *	25.38 *	108.32 *	40.38 *	67.9 *	0.68 *	0.38 *
* 157 *	512	* 2581.0 *	93.35 *	25.47 *	108.35 *	40.47 *	67.9 *	0.65 *	0.47 *
* 159 *	26	* 2685.0 *	93.32 *	25.50 *	108.32 *	40.50 *	67.8 *	0.68 *	0.50 *
* 160 *	511	* 2494.0 *	93.36 *	25.46 *	108.36 *	40.46 *	67.9 *	0.64 *	0.46 *
* 161 *	261	* 2620.0 *	93.28 *	25.54 *	108.28 *	40.54 *	67.7 *	0.72 *	0.54 *
* 162 *	353	* 3872.0 *	86.69 *	20.12 *	107.69 *	41.12 *	66.6 *	1.31 *	1.12 *
* 163 *	354	* 3902.0 *	86.68 *	20.13 *	107.68 *	41.13 *	66.6 *	1.32 *	1.13 *
* 164 *	708	* 3930.0 *	88.42 *	22.39 *	107.42 *	41.39 *	66.0 *	1.58 *	1.39 *
* 165 *	707	* 4002.0 *	83.14 *	19.65 *	106.14 *	42.65 *	63.5 *	2.86 *	2.65 *
* 166 *	513	* 3085.0 *	93.04 *	25.77 *	108.04 *	40.77 *	67.3 *	0.96 *	0.77 *

* 157 *	705	* 3118.0 *	92.75	*	26.97	*	107.75	*	41.07	*	66.7	*	1.25	*	1.07	*
* 168 *	284	* 3507.0 *	90.02	*	22.80	*	108.02	*	40.80	*	67.2	*	0.98	*	0.80	*
* 169 *	35	* 3688.0 *	89.00	*	21.82	*	108.00	*	40.82	*	67.2	*	1.00	*	0.82	*
* 170 *	514	* 4016.0 *	88.00	*	20.82	*	108.00	*	40.82	*	67.2	*	1.00	*	0.82	*
* 171 *	285	* 4110.0 *	87.98	*	20.83	*	107.98	*	40.83	*	67.2	*	1.02	*	0.83	*
* 172 *	33	* 4120.0 *	87.98	*	20.84	*	107.98	*	40.84	*	67.1	*	1.02	*	0.84	*
* 173 *	342	* 4088.0 *	74.72	*	8.09	*	107.72	*	41.09	*	66.6	*	1.28	*	1.09	*
* 181 *	343	* 4176.0 *	70.35	*	6.45	*	106.35	*	42.45	*	63.9	*	2.65	*	2.45	*
* 182 *	716	* 4178.0 *	70.32	*	6.48	*	106.32	*	42.48	*	63.8	*	2.68	*	2.48	*
* 183 *	344	* 4178.0 *	70.33	*	6.47	*	106.33	*	42.47	*	63.9	*	2.67	*	2.47	*
* 184 *	717	* 4188.0 *	70.09	*	6.71	*	106.09	*	42.71	*	63.4	*	2.91	*	2.71	*
* 185 *	345	* 4248.0 *	70.97	*	7.83	*	105.97	*	42.83	*	63.1	*	3.03	*	2.83	*
* 186 *	715	* 4250.0 *	70.89	*	7.90	*	105.89	*	42.90	*	63.0	*	3.11	*	2.90	*
* 187 *	346	* 4305.0 *	69.82	*	6.98	*	105.82	*	42.98	*	62.8	*	3.18	*	2.98	*
* 188 *	347	* 4375.0 *	69.67	*	7.12	*	105.67	*	43.12	*	62.6	*	3.33	*	3.12	*
* 189 *	714	* 4387.0 *	69.42	*	7.37	*	105.42	*	43.37	*	62.0	*	3.58	*	3.37	*
* 190 *	713	* 4475.0 *	69.57	*	7.22	*	105.57	*	43.22	*	62.4	*	3.43	*	3.22	*
* 191 *	718	* 4392.0 *	68.59	*	8.19	*	104.59	*	44.19	*	60.4	*	4.41	*	4.19	*

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*
*****
* Lungime traseu [m]:      32102.0
* Volum apa [m3]       :   12590.7
*
*****
* Sarcina termica [Gcal/h]
*
*****
* Total          * Simultan
*
*****
* Qinc=          0.0      * 0.0
* Qacm=          16.8     * 8.4
*
*****
* Debit centrala [t/h]
*
*****
* Ginc=          0.0
* Gacm=          0.0
*
*****

```

ANEXA E

Lista cuprinzând principalele cantități de materiale

ANEXA E

LISTĂ CUPRIZÂND PRINCIPALELE CANTITĂȚI DE MATERIALE

 Obiectul 1. Racord de termoficare la S.C. AEROSTAR S.A. Bacău
 PARTEA TERMOMECANICĂ

Denumire material	Lungime/UM	Greutate totală (tone)
Conducte preizolate și accesorii - Sistem primar		
<i>Conducte de termoficare</i>		
<ul style="list-style-type: none"> • Țeavă trasă din oțel cu DN 300/450, DN125/225, SR EN 10216-2+A2:2008, material P235GH, preizolată cu spumă poliuretanică și protejată cu țeavă de polietilenă dură și având înglobate în termoizolație fire de semnalizare a avariilor 	350 m 15 m	20,5 0,25
<ul style="list-style-type: none"> • Ansamblu de vane preizolate prevăzut cu robinet de secționare și robinete de golire și aerisire tip ROS, Pn 25 având: - DN 300/DN 50 	4buc	1,6
<ul style="list-style-type: none"> • Robinet de închidere cu sferă preizolat, tip ROS, Pn 25, având: - DN 125 	2buc	0,15

ANEXA E
CANTITĂȚI DE LUCRĂRI
PARTEA DE CONSTRUCȚII

Nr. crt.	Lucrări	U.M.	Cantități
1.	Săpături	mc	1555
2.	Umpluturi	mc	1518
3.	Betoane	mc	90
4.	Pavaje	mp	471
5.	Nisip	mc	504

SPECIFICAȚII DE MATERIALE
PARTEA DE CONSTRUCȚII

Nr. crt.	Materiale	U.M.	Cantități
1.	Ciment	tone	19,8
2.	Oțel beton OB37	tone	0,86
3.	Oțel beton PC52	tone	1,1
4.	Laminate	tone	0,48
5.	Betoane	mc	33
6.	Nisip	mc	176

ANEXA E
LISTĂ CUPRIZÂND PRINCIPALELE CANTITĂȚI DE MATERIALE

**Obiectul 2. Mărirea capacității de transport pe tronsonul
nod 264 (racord spre PT 19) – nod 341 (racord spre PT 21)**

PARTEA TERMOMECHANICĂ

Denumire material	Lungime/UM	Greutate totală (tone)
Conducte preizolate și accesorii - Sistem primar		
<i>Conducte de termoficare</i>		
<ul style="list-style-type: none"> • Țeavă trasă din oțel cu DN 350/500, SR EN 10216-2+A2:2008, material P235GH, preizolată cu spumă poliuretanică și protejată cu tablă tip SPIRO și având înglobate în termoizolație fire de semnalizare a avariilor 	160 m	10,6
<ul style="list-style-type: none"> • Țeavă trasă din oțel cu DN 350/500, SR EN 10216-2+A2:2008, material P235GH, preizolată cu spumă poliuretanică și protejată cu țeavă de polietilenă dură și având înglobate în termoizolație fire de semnalizare a avariilor 	590 m	39,4
<ul style="list-style-type: none"> • Ansamblu de vane preizolate prevăzut cu robinet de secționare și robinete de golire și aerisire tip ROS, Pn 25 având: - DN 350/DN 50 	2 buc	0,9
<ul style="list-style-type: none"> • Robinet de închidere cu sertar pană, Pn 25, având: - DN 200 	2buc	0,42

ANEXA E
CANTITĂȚI DE LUCRĂRI
PARTEA DE CONSTRUCȚII

Nr. crt.	Lucrări	U.M.	Cantități
1.	Săpături	mc	2537
2.	Umpluturi	mc	2478
3.	Betoane	mc	148
4.	Pavaje	mp	767
5.	Nisip	mc	826
6.	Demolări	mc	65

SPECIFICAȚII DE MATERIALE
PARTEA DE CONSTRUCȚII

Nr. crt.	Materiale	U.M.	Cantități
1.	Ciment	tone	89
2.	Oțel beton OB37	tone	3,5
3.	Oțel beton PC52	tone	5,5
4.	Laminate	tone	1,6
5.	Betoane	mc	148
6.	Nisip	mc	826

ANEXA E
LISTĂ CUPRIZÂND PRINCIPALELE CANTITĂȚI DE MATERIALE

**Obiectul 3. Mărirea capacității de transport pe tronsonul
nod 341 (racord spre PT 21) - nod 349 (racord spre PT PEROM)**

PARTEA TERMOMECHANICĂ

Denumire material	Lungime/UM	Greutate totală (tone)
Conducte preizolate și accesorii - Sistem primar		
<i>Conducte de termoficare</i>		
<ul style="list-style-type: none"> • Țeavă trasă din oțel cu DN 300/450, SR EN 10216-2+A2:2008, material P235GH, preizolată cu spumă poliuretanică și protejată cu țeavă de polietilenă dură și având înglobate în termoizolație fire de semnalizare a avariilor 	350 m	20,5
<ul style="list-style-type: none"> • Robinet de secționare preizolat, tip ROS, Pn 25 având: - DN 300 	4 buc	1,6

ANEXA E
CANTITĂȚI DE LUCRĂRI
PARTEA DE CONSTRUCȚII

Nr. crt.	Lucrări	U.M.	Cantități
1.	Săpături	mc	1505
2.	Umpluturi	mc	1470
3.	Betoane	mc	88
4.	Pavaje	mp	455
5.	Nisip	mc	490
6.	Demolări	mc	37

SPECIFICAȚII DE MATERIALE
PARTEA DE CONSTRUCȚII

Nr. crt.	Materiale	U.M.	Cantități
1.	Ciment	tone	53
2.	Oțel beton OB37	tone	1,8
3.	Oțel beton PC52	tone	3,15
4.	Laminate	tone	0,95
5.	Betoane	mc	88
6.	Nisip	mc	490

ANEXA F

Fluxul de venituri și cheltuieli

Premise de calcul	1111.00 mii Euro
Investitia	
Pret transport	6.49 Euro/Gcal
Rata de actualizare	5%

Fluxul de venituri si cheltuieli

Anul	UM	Executie					Exploatare				
		2010	2011	2012	2013	2014	2015	2016	2017		
Energie termica livrata	Gcal/an	0.00	0.00	0.00	39904.52	39904.52	39904.52	39904.52	39904.52		
Venituri anuale	mii Euro	0.00	0.00	0.00	259.08	259.08	259.08	259.08	259.08		
-din transport energie termica	mii Euro	0.00	0.00	0.00	259.08	259.08	259.08	259.08	259.08		
Cheltuieli anuale	mii Euro	0.00	0.00	0.00	111.79	111.79	111.79	111.79	111.79		
Cheltuieli variabile, din care:	mii Euro	0.00	0.00	0.00	95.31	95.31	95.31	95.31	95.31		
- cheltuieli producere energie termica	mii Euro	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
- cheltuieli cu energia electrica	mii Euro	0.00	0.00	0.00	42.93	42.93	42.93	42.93	42.93		
- alte cheltuieli variabile	mii Euro	0.00	0.00	0.00	52.38	52.38	52.38	52.38	52.38		
Cheltuieli fixe, din care:	mii Euro	0.00	0.00	0.00	16.47	16.47	16.47	16.47	16.47		
- cheltuieli cu personalul	mii Euro	0.00	0.00	0.00	4.61	4.61	4.61	4.61	4.61		
- cheltuieli de intretinere si reparatii	mii Euro	0.00	0.00	0.00	9.83	9.83	9.83	9.83	9.83		
- alte cheltuieli fixe	mii Euro	0.00	0.00	0.00	2.04	2.04	2.04	2.04	2.04		
Investitie	mii Euro	6.30	350.00	754.70	0.00	0.00	0.00	0.00	0.00		

REZULTATE

Valoarea investitiei	1111.00 mii euro
Venitul Net Actualizat	7.12 mii euro
Rata Interna de Rentabilitate	5.14%
Indice de Profitabilitate	1.004

Fluxul de venituri si cheltuieli

Anul	UM	An					Total	Total actualizat
		2018	2019	2020	2021	2022		
Energie termica livrata	Gcal/an	39904.52	39904.52	39904.52	39904.52	39904.52		
Venituri anuale	mii Euro	259.08	259.08	259.08	259.08	259.08	1728.17	
-din transport energia termica	mii Euro	259.08	259.08	259.08	259.08	259.08	1728.17	
Cheltuieli anuale	mii Euro	111.79	111.79	111.79	111.79	111.79	745.65	
Cheltuieli variabile, din care:	mii Euro	95.31	95.31	95.31	95.31	95.31	635.76	
- cheltuieli producere energie termica	mii Euro	0.00	0.00	0.00	0.00	0.00	0.00	
- cheltuieli cu energia electrica	mii Euro	42.93	42.93	42.93	42.93	42.93	286.35	
- alte cheltuieli vanabile	mii Euro	52.38	52.38	52.38	52.38	52.38	349.41	
Cheltuieli fixe, din care:	mii Euro	16.47	16.47	16.47	16.47	16.47	109.89	
- cheltuieli cu personalul	mii Euro	4.61	4.61	4.61	4.61	4.61	30.76	
- cheltuieli de intretinere si reparatii	mii Euro	9.83	9.83	9.83	9.83	9.83	65.54	
- alte cheltuieli fixe	mii Euro	2.04	2.04	2.04	2.04	2.04	13.60	
Investitii	mii Euro	0.00	0.00	0.00	0.00	0.00	975.40	

ANEXA G

Graficul de eşalonare a investiției

ANEXA G

Grafic de eşalonare a investiției

Nr.crt	Activitate	Anul I			Anul II												Anul III											
		11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
1	Elaborare avizare, aprobare SF, aprobarea investiției	x	x	x																								
2	Licitație +elaborare Proiect tehnic				x	x	x																					
3	Licitarea și adjudecarea investiției								x																			
4	Lucrări de: -achiziții, - lucrări de execuție, -probe, PIF												x															
Durata totală de realizare a investiției, din care:		26 luni																										
-durata de execuție		16 luni																										
Eşalonarea investiției (Mii EURO fără TVA)																												
Total investiție 1111		6,3																										350
Lucrări C+M 826,6		0																										240
																											<u>754,7</u>	
																											622,6	

PRINCIPALII INDICATORI TEHNICO-ECONOMICI
a obiectivului de investitie , faza Studiu de Fezabilitate „Racordare la SACET a S.C.
Aerostar S.A. Bacau”

1. Valoarea totala a investitiei (inclusiv, TVA)

Denumire obiectiv	Valoare totala (mii lei)	Valoare C+M (mii lei)
„Racordare la SACET a S.C. Aerostar S.A. Bacau”	5 849,5	4 563,7

2. Durata de realizare a lucrarilor 26 luni.

3. Suprafata construita Ac=2 270mp.


PRESEDINTE DE SEDINTA
ZAHARIA SVETLANA GABRIELA

CONTRASEMNEAZA,
SECRETARUL MUNICIPIULUI BACAU
NICOLAE-OVIDIU POPOVICI

