

- MARTE - Marte GAS
- MG001 - Modulo statico/flusso termico stazionario v. 1
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DATI GENERALI -----

Numero di nodi		38
Numero di rami		43
Numero di cabine di salto		0
Nome del gas		propane
Peso molecolare	(kg/kmole)	44.0940
Fattore di compressibilita'	(-)	0.9820
Viscosita' dinamica	(cP)	0.0081
Temperatura media di flusso	(°C)	11.0000
Pressione atmosf. a quota zero	(mBar Ass.)	1013.2500
Peso Molecolare dell'aria	(kg/kmole)	28.9700
Temperatura dell'aria	(°C)	11.0000
Precisione finale sulle portate	(Smc/h)	0.0027

TABELLA DEI MATERIALI -----

Nome	Tipo	Area (m2)	Diametro int.(mm)	Scabrez. (micron)	Spessore (mm)	Lunghezza (m)
PES5 75	Circolare	0.003	61.200	10.000	0.000	2234.55
Lunghezza totale (m)						2234.55

RIASSUNTO PER CONDOTTO -----

Gruppo	Lungh. gruppo
PES5 75	2234.5546
Lungh. totale:	2234.5546

DATI DEI NODI -----

Nodo	Quota s.l.m. (m)	Pressione (mBar)	Portata (Smc/h)
1	0.00	0.00	0.00
10	0.00	0.00	0.00
11	0.00	0.00	0.00
13	0.00	0.00	0.00
14	0.00	0.00	0.00
15	0.00	0.00	0.00
16	0.00	0.00	0.00
17	0.00	0.00	0.00
18	0.00	0.00	0.00
19	0.00	0.00	0.00
2	0.00	0.00	0.00
20	0.00	0.00	0.00
21	0.00	0.00	0.00
22	0.00	0.00	0.00
23	0.00	0.00	0.00

24	0.00	0.00	0.00
25	0.00	0.00	0.00
26	0.00	0.00	0.00
27	0.00	0.00	0.00
28	0.00	0.00	0.00
29	0.00	0.00	0.00
3	0.00	0.00	0.00
30	0.00	0.00	0.00
31	0.00	0.00	0.00
32	0.00	0.00	0.00
33	0.00	0.00	0.00
34	0.00	0.00	0.00
35	0.00	0.00	0.00
36	0.00	500.00	0.00
37	0.00	0.00	0.00
38	0.00	0.00	0.00
39	0.00	0.00	0.00
4	0.00	0.00	0.00
5	0.00	0.00	0.00
6	0.00	0.00	0.00
7	0.00	0.00	0.00
8	0.00	0.00	0.00
9	0.00	0.00	0.00

DATI DEI RAMI -----

Ramo	Nodo iniziale	Nodo finale	Materiale	Lunghezza (m)	Portata (Smc/h)
1	1	2	PES5 75	29.40	0.26
10	16	17	PES5 75	34.25	0.31
11	18	19	PES5 75	64.35	0.58
12	20	18	PES5 75	15.13	0.14
13	21	20	PES5 75	85.34	0.76
14	22	21	PES5 75	83.39	0.75
15	20	22	PES5 75	71.93	0.64
16	23	24	PES5 75	74.88	0.67
17	25	23	PES5 75	45.50	0.41
18	20	25	PES5 75	16.92	0.15
19	26	22	PES5 75	18.08	0.16
2	3	1	PES5 75	24.51	0.22
20	27	26	PES5 75	55.56	0.50
21	28	27	PES5 75	32.69	0.29
22	29	28	PES5 75	69.14	0.62
23	25	29	PES5 75	86.76	0.78
24	17	27	PES5 75	42.37	0.38
25	14	16	PES5 75	40.99	0.37
26	30	8	PES5 75	65.50	0.59
27	17	30	PES5 75	56.27	0.50
28	31	29	PES5 75	15.19	0.14
29	30	31	PES5 75	120.10	1.08
3	4	5	PES5 75	54.89	0.49
30	32	10	PES5 75	63.08	0.56
33	31	33	PES5 75	62.09	0.56
34	33	34	PES5 75	36.06	0.32
35	35	34	PES5 75	23.67	0.21
36	24	35	PES5 75	50.28	0.45
37	5	36	PES5 75	61.02	0.55
38	37	5	PES5 75	66.78	0.60
39	35	37	PES5 75	36.50	0.33
4	6	7	PES5 75	86.44	0.77
40	35	3	PES5 75	49.49	0.44
41	3	38	PES5 75	57.10	0.51

42	7	4	PES5 75	65.82	0.59
43	4	32	PES5 75	47.39	0.42
44	39	11	PES5 75	26.65	0.24
45	33	13	PES5 75	23.04	0.21
46	13	7	PES5 75	76.95	0.69
5	8	9	PES5 75	71.78	0.64
6	10	6	PES5 75	40.92	0.37
8	13	11	PES5 75	40.22	0.36
9	14	15	PES5 75	46.16	0.41

RISULTATI DEI NODI -----

Nodo	Pressione (mBar)	Portata entr. (Smc/h)
1	499.23	0.00
10	499.33	-0.00
11	499.24	0.00
13	499.24	0.00
14	499.12	0.00
15	499.12	0.00
16	499.12	-0.00
17	499.12	0.00
18	499.13	0.00
19	499.13	0.00
2	499.23	0.00
20	499.13	0.00
21	499.13	0.00
22	499.13	-0.00
23	499.16	0.00
24	499.20	0.00
25	499.14	0.00
26	499.12	0.00
27	499.12	0.00
28	499.13	0.00
29	499.14	0.00
3	499.23	-0.00
30	499.12	0.00
31	499.15	0.00
32	499.35	0.00
33	499.22	-0.00
34	499.23	0.00
35	499.24	0.00
36	500.00	20.00
37	499.32	0.00
38	499.23	0.00
39	499.24	0.00
4	499.37	0.00
5	499.48	0.00
6	499.32	0.00
7	499.31	-0.00
8	499.12	-0.00
9	499.12	0.00

RISULTATI DEI RAMI -----

Ramo	Portate di ramo (Smc/h)			Pressione min. (mBar)	Velocita' max in modulo (m/s)
	Ingresso	Uscita	Distrib.		
1	0.26	-0.00	0.26	499.2322	0.0161
10	-0.78	-1.09	0.31	499.1196	0.0666
11	0.58	-0.00	0.58	499.1290	0.0353

12	0.71	0.58	0.14	499.1297	0.0436
13	-0.57	-1.33	0.76	499.1261	0.0814
14	0.18	-0.57	0.75	499.1253	0.0346
15	1.49	0.85	0.64	499.1254	0.0913
16	-3.88	-4.55	0.67	499.1580	0.2786
17	-3.47	-3.88	0.41	499.1375	0.2375
18	-3.53	-3.68	0.15	499.1302	0.2255
19	-0.50	-0.66	0.16	499.1250	0.0407
2	0.48	0.26	0.22	499.2324	0.0296
20	-0.01	-0.50	0.50	499.1244	0.0308
21	1.76	1.46	0.29	499.1244	0.1076
22	2.38	1.76	0.62	499.1280	0.1455
23	-0.21	-0.99	0.78	499.1375	0.0605
24	-1.09	-1.47	0.38	499.1211	0.0900
25	-0.41	-0.78	0.37	499.1186	0.0478
26	1.23	0.64	0.59	499.1187	0.0753
27	0.00	-0.50	0.50	499.1211	0.0306
28	3.50	3.36	0.14	499.1397	0.2144
29	-1.73	-2.80	1.08	499.1217	0.1718
3	-8.84	-9.33	0.49	499.3662	0.5713
30	3.00	2.44	0.56	499.3322	0.1838
33	-6.30	-6.86	0.56	499.1458	0.4201
34	-2.23	-2.56	0.32	499.2222	0.1566
35	2.77	2.56	0.21	499.2301	0.1696
36	-4.55	-5.00	0.45	499.2007	0.3061
37	-19.45	-20.00	0.55	499.4846	1.2243
38	-9.53	-10.13	0.60	499.3192	0.6202
39	-9.20	-9.53	0.33	499.2362	0.5836
4	2.07	1.30	0.77	499.3138	0.1268
40	1.44	0.99	0.44	499.2327	0.0880
41	0.51	-0.00	0.51	499.2321	0.0313
42	-4.82	-5.41	0.59	499.3138	0.3315
43	3.42	3.00	0.42	499.3492	0.2097
44	0.00	-0.24	0.24	499.2374	0.0146
45	-4.63	-4.83	0.21	499.2222	0.2960
46	-5.43	-6.12	0.69	499.2382	0.3748
5	0.64	-0.00	0.64	499.1177	0.0394
6	2.44	2.07	0.37	499.3242	0.1492
8	0.60	0.24	0.36	499.2375	0.0367
9	0.41	-0.00	0.41	499.1182	0.0253