

TABLA PARA CÁLCULO DE DIÁMETROS DE CAÑERÍAS POR THERMOFUSIÓN

Gas Natural



Caudales en m³ de gas por hora para diferentes diámetros y longitudes

Densidad: 0,65

De: Diámetro externo en mm.

Di: Diámetro interno en mm.

Caída de presión: 10 mm

Longitud tubería (m)	de 20,00 di 13,24	de 25,00 di 18,19	de 32,00 di 24,94	de 40,00 di 33,00	de 50,00 di 42,80	de 63,00 di 54,84	de 75,00 di 63,00	de 90,00 di 74,00	de 110,00 di 94,00	Longitud tubería (m)	de 20,00 di 13,24	de 25,00 di 18,19	de 32,00 di 24,94	de 40,00 di 33,00	de 50,00 di 42,80	de 63,00 di 54,84	de 75,00 di 63,00	de 90,00 di 74,00	de 110,00 di 94,00
1	5,594	12,377	27,244	54,867	105,108	195,331	276,299	413,150	751,360	55	0,754	1,669	3,674	7,398	14,173	26,338	37,256	55,709	101,313
2	3,956	8,752	19,264	38,797	74,323	138,120	195,373	292,141	531,292	60	0,722	1,598	3,517	7,083	13,569	25,217	35,670	53,337	97,000
3	3,230	7,146	15,729	31,678	60,684	112,775	159,521	238,532	433,798	65	0,694	1,535	3,379	6,805	13,037	24,228	34,271	51,245	93,195
4	2,797	6,188	13,622	27,434	52,554	97,666	138,150	206,575	375,680	70	0,669	1,479	3,256	6,558	12,563	23,347	33,024	49,381	89,805
5	2,502	5,535	12,184	24,537	47,006	87,355	123,565	184,766	336,018	75	0,646	1,429	3,146	6,336	12,137	22,555	31,904	47,706	86,760
6	2,284	5,053	11,122	22,399	42,910	79,744	112,799	168,668	306,741	80	0,625	1,384	3,046	6,134	11,751	21,839	30,891	46,192	84,005
7	2,114	4,678	10,297	20,738	39,727	73,828	104,431	156,156	283,987	85	0,607	1,342	2,955	5,951	11,401	21,187	29,969	44,812	81,496
8	1,978	4,376	9,632	19,399	37,161	69,060	97,687	146,071	265,646	90	0,590	1,305	2,872	5,784	11,079	20,590	29,124	43,550	79,200
9	1,865	4,126	9,081	18,289	35,036	65,110	92,100	137,717	250,453	95	0,574	1,270	2,795	5,629	10,784	20,041	28,348	42,388	77,088
10	1,769	3,914	8,615	17,351	33,238	61,769	87,373	130,649	237,601	100	0,559	1,238	2,724	5,487	10,511	19,533	27,630	41,315	75,136
12	1,615	3,573	7,865	15,839	30,342	56,387	79,761	119,266	216,899	105	0,546	1,208	2,659	5,354	10,258	19,062	26,964	40,319	73,325
14	1,495	3,308	7,281	14,664	28,091	52,204	73,844	110,419	200,809	110	0,533	1,180	2,598	5,231	10,022	18,624	26,344	39,392	71,639
16	1,399	3,094	6,811	13,717	26,277	48,833	69,075	103,287	187,840	115	0,522	1,154	2,541	5,116	9,801	18,215	25,765	38,526	70,065
18	1,319	2,917	6,421	12,932	24,774	46,040	65,124	97,380	177,097	120	0,511	1,130	2,487	5,009	9,595	17,831	25,223	37,715	68,589
20	1,251	2,768	6,092	12,269	23,503	43,677	61,782	92,383	168,009	125	0,500	1,107	2,437	4,907	9,401	17,471	24,713	36,953	67,204
22	1,193	2,639	5,808	11,698	22,409	41,645	58,907	88,084	160,190	130	0,491	1,086	2,389	4,812	9,219	17,132	24,233	36,236	65,899
24	1,142	2,526	5,561	11,200	21,455	39,872	56,399	84,334	153,371	135	0,481	1,065	2,345	4,722	9,046	16,811	23,780	35,558	64,667
26	1,097	2,427	5,343	10,760	20,613	38,308	54,187	81,025	147,354	140	0,473	1,046	2,303	4,637	8,883	16,509	23,352	34,918	63,501
28	1,057	2,339	5,149	10,369	19,864	36,914	52,216	78,078	141,994	145	0,465	1,028	2,262	4,556	8,729	16,221	22,945	34,310	62,397
30	1,021	2,260	4,974	10,017	19,190	35,662	50,445	75,431	137,179	150	0,457	1,011	2,224	4,480	8,582	15,949	22,560	33,734	61,348
32	0,989	2,188	4,816	9,699	18,581	34,530	48,843	73,035	132,823	155	0,449	0,994	2,188	4,407	8,443	15,689	22,193	33,185	60,351
34	0,959	2,123	4,672	9,410	18,026	33,499	47,385	70,855	128,857	160	0,442	0,978	2,154	4,338	8,310	15,442	21,843	32,662	59,400
36	0,932	2,063	4,541	9,145	17,518	32,555	46,050	68,858	125,227	165	0,436	0,964	2,121	4,271	8,183	15,207	21,510	32,164	58,493
38	0,908	2,008	4,420	8,901	17,051	31,687	44,822	67,022	121,887	170	0,429	0,949	2,090	4,208	8,061	14,981	21,191	31,687	57,627
40	0,885	1,957	4,308	8,675	16,619	30,885	43,687	65,325	118,800	175	0,423	0,936	2,059	4,148	7,945	14,766	20,886	31,231	56,797
42	0,863	1,910	4,204	8,466	16,219	30,140	42,634	63,750	115,937	180	0,417	0,923	2,031	4,090	7,834	14,559	20,594	30,794	56,003
44	0,843	1,866	4,107	8,272	15,846	29,447	41,654	62,285	113,272	185	0,411	0,910	2,003	4,034	7,728	14,361	20,314	30,375	55,241
46	0,825	1,825	4,017	8,090	15,497	28,800	40,738	60,916	110,782	190	0,406	0,898	1,976	3,980	7,625	14,171	20,045	29,973	54,509
48	0,807	1,786	3,932	7,919	15,171	28,194	39,880	59,633	108,449	195	0,401	0,886	1,951	3,929	7,527	13,988	19,786	29,586	53,806
50	0,791	1,750	3,853	7,759	14,865	27,624	39,075	58,428	106,258	200	0,396	0,875	1,926	3,880	7,432	13,812	19,537	29,214	53,129

Tabla N°4

TABLA PARA CÁLCULO DE DIÁMETROS DE CAÑERÍAS POR THERMOFUSIÓN

Gas Propano Gaseoso



Caudales en m³ de gas por hora para diferentes diámetros y longitudes

Densidad: 1,52

De: Diámetro externo en mm.

Di: Diámetro interno en mm.

Caída de presión: 10 mm

Longitud tubería (m)	de 20,00 di 13,24	de 25,00 di 18,19	de 32,00 di 24,94	de 40,00 di 33,00	de 50,00 di 42,80	de 63,00 di 54,84	de 75,00 di 63,00	de 90,00 di 74,00	de 110,00 di 94,00	Longitud tubería (m)	de 20,00 di 13,24	de 25,00 di 18,19	de 32,00 di 24,94	de 40,00 di 33,00	de 50,00 di 42,80	de 63,00 di 54,84	de 75,00 di 63,00	de 90,00 di 74,00	de 110,00 di 94,00
1	3,658	8,094	17,816	35,880	68,734	127,734	180,682	270,173	491,341	55	0,493	1,091	2,402	4,838	9,268	17,224	24,363	36,430	66,252
2	2,587	5,723	12,598	25,371	48,602	90,322	127,761	191,041	347,430	60	0,472	1,045	2,300	4,632	8,874	16,490	23,326	34,879	63,432
3	2,112	4,673	10,286	20,715	39,684	73,747	104,317	155,985	283,676	65	0,454	1,004	2,210	4,450	8,525	15,843	22,411	33,511	60,943
4	1,829	4,047	8,908	17,940	34,367	63,867	90,341	135,087	245,670	70	0,437	0,967	2,129	4,288	8,215	15,267	21,596	32,292	58,726
5	1,636	3,620	7,967	16,046	30,739	57,124	80,803	120,825	219,734	75	0,422	0,935	2,057	4,143	7,937	14,749	21,443	32,064	58,311
6	1,494	3,304	7,273	14,648	28,061	52,147	73,763	110,298	200,589	80	0,409	0,905	1,992	4,011	7,685	14,281	20,201	30,206	54,934
7	1,383	3,059	6,734	13,561	25,979	48,279	68,291	102,116	185,709	85	0,397	0,878	1,932	3,892	7,455	13,855	19,598	29,304	53,293
8	1,293	2,862	6,299	12,685	24,301	45,161	63,881	95,521	173,715	90	0,386	0,853	1,878	3,782	7,245	13,464	19,046	28,479	51,792
9	1,219	2,698	5,939	11,960	22,911	42,578	60,227	90,058	163,780	95	0,375	0,830	1,828	3,681	7,052	13,105	18,538	27,719	50,411
10	1,157	2,559	5,634	11,346	21,736	40,393	57,137	85,436	155,376	100	0,366	0,809	1,782	3,588	6,873	12,773	18,068	27,017	49,134
12	1,056	2,336	5,143	10,358	19,842	36,874	52,158	77,992	141,838	105	0,357	0,790	1,739	3,501	6,708	12,466	17,633	26,366	47,950
14	0,978	2,163	4,761	9,589	18,370	34,138	48,289	72,207	131,316	110	0,349	0,772	1,699	3,421	6,554	12,179	17,227	25,760	46,848
16	0,915	2,023	4,454	8,970	17,184	31,934	45,170	67,543	122,835	115	0,341	0,755	1,661	3,346	6,409	11,911	16,849	25,194	45,818
18	0,862	1,908	4,199	8,457	16,201	30,107	42,587	63,680	115,810	120	0,334	0,739	1,626	3,275	6,275	11,660	16,494	24,663	44,853
20	0,818	1,810	3,984	8,023	15,369	28,562	40,402	60,413	109,867	125	0,327	0,724	1,593	3,209	6,148	11,425	16,161	24,165	43,947
22	0,780	1,726	3,798	7,650	14,654	27,233	38,522	57,601	104,754	130	0,321	0,710	1,563	3,147	6,028	11,203	15,847	23,696	43,093
24	0,747	1,652	3,637	7,324	14,030	26,074	36,882	55,149	100,295	135	0,315	0,697	1,533	3,088	5,916	10,994	15,551	23,253	42,288
26	0,717	1,587	3,494	7,037	13,480	25,051	35,435	52,985	96,360	140	0,309	0,684	1,506	3,032	5,809	10,796	15,270	22,834	41,526
28	0,691	1,530	3,367	6,781	12,990	24,139	34,146	51,058	92,855	145	0,304	0,672	1,480	2,980	5,708	10,608	15,005	22,437	40,804
30	0,668	1,478	3,253	6,551	12,549	23,321	32,988	49,327	89,706	150	0,299	0,661	1,455	2,930	5,612	10,429	14,753	22,060	40,118
32	0,647	1,431	3,149	6,343	12,151	22,580	31,940	47,760	86,858	155	0,294	0,650	1,431	2,882	5,521	10,260	14,513	21,701	39,465
34	0,627	1,388	3,055	6,153	11,788	21,906	30,987	46,334	84,264	160	0,289	0,640	1,408	2,837	5,434	10,098	14,284	21,359	38,844
36	0,610	1,349	2,969	5,980	11,456	21,289	30,114	45,029	81,890	165	0,285	0,630	1,387	2,793	5,351	9,944	14,066	21,033	38,251
38	0,593	1,313	2,890	5,820	11,150	20,721	29,310	43,828	79,706	170	0,281	0,621	1,366	2,752	5,272	9,797	13,858	20,721	37,684
40	0,578	1,280	2,817	5,673	10,868	20,197	28,568	42,718	77,688	175	0,277	0,612	1,347	2,712	5,196	9,656	13,658	20,423	37,142
42	0,564	1,249	2,749	5,536	10,606	19,710	27,880	41,689	75,816	180	0,273	0,603	1,328	2,674	5,123	9,521	13,467	20,138	36,622
44	0,552	1,220	2,686	5,409	10,362	19,257	27,239	40,730	74,072	185	0,269	0,595	1,310	2,638	5,053	9,391	13,284	19,864	36,124
46	0,539	1,193	2,627	5,290	10,134	18,833	26,640	39,835	72,444	190	0,265	0,587	1,292	2,603	4,987	9,267	13,108	19,600	35,646
48	0,528	1,168	2,571	5,179	9,921	18,437	26,079	38,996	70,919	195	0,262	0,580	1,276	2,569	4,922	9,147	12,939	19,348	35,186
50	0,517	1,145	2,520	5,074	9,720	18,064	25,552	38,208	69,486	200	0,259	0,572	1,260	2,537	4,860	9,032	12,776	19,104	34,743

Tabla N°5