

# HIGH PRESSURE TUBING

Up to 60.000 psi / 4.136 bar

For waterjet cutting, production lines, hydraulic and pneumatic testing, automotive and aerospace sectors.

# HIGH PRESSURE SEAMLESS RIGID TUBING

Interfluid distributes seamless, cold-drawn high pressure tubing with high yield and tensile strength up to 60.000 psi (4.136 bar) from  $\frac{1}{4}$ " up to 1" O.D.

Tubing is used in a various range of applications, not only for high pressure but also for aggressive (corrosive) medium. Main applications are waterjet cutting, production lines, hydraulic and pneumatic testing. Tubing is suitable for liquids and gases.

Standard materials are 316L (ISO 6892-1) and typical special materials (Nitronic 50, Hastelloy, Inconel, Duplex, Superduplex, Monel and others) are available upon request.

Tubing is provided in random lengths of 5-7 metres (16,4-23 ft), it can be supplied to customer length as required and it can also be coiled (only ¼"). In addition to standard tubing Interfluid can supply coned and threaded nipples.

Tubing can also be custom branded.

#### Mechanical properties for 316L conforming ISO 6892-1

RATING SERVICE		YIELD POINT TENSILE STRENGT		ELONGATION	HARDNESS	
PSI	BAR	N/MM <sup>2</sup>	N/MM²	MIN. %	MIN. HRB	
10.000	689	≥ 517	≥ 724	≥ 22	≥ 95	
20.000	1.378	≥ 517	≥ 724	≥ 22	≥ 95	
30.000	2.068	≥ 689	≥ 758	≥ 18	≥ 95	
40.000	2.757	≥ 689	≥ 758	≥ 18	≥ 95	
60.000	4.136	≥ 689	≥ 758	≥ 18	≥ 95	

### Recommended bend radius for Medium & High Pressure Tubing (316L)

20.000 PSI (1.380 BAR)						
SIZE (INCH)	MR (MIN)					
	INCHES (MM)					
1/4" x 0,111	1,25 (32)					
3/8" x 0,208	1,75 (44)					
9/16" x 0,318	2,62 (67)					
3/4" x 0,444	3,5 (89)					
1" x 0,567	4,62 (117)					

60.000 PSI (4.140 BAR)						
SIZE (INCH)	MR (MIN)					
	INCHES (MM)					
1/4" x 0,085	1,25 (32)					
3/8" x 0,130	1,75 (44)					
9/16 " x 0,193	2,62 (67)					

## Standard tubing sizes

CODE	SIZE	TUBE OD	TUBE ID	WALL THICKNESS	WEIGHT	RATI SER\		DIAMETER TOLERANCE OUTSIDE INSIDE		IDE	
	INCH	MM	MM	MM	KG/M	PSI	BAR	INCH	MM	INCH	MM
TU.05.60.04.316	1/4"	6,35	2.1	2,09	0,223	60.000	4.136	0,248/0,243	6,299/6,172	0,079/0,083	2,007/2,108
TU.05.20.04.316	1/4"	6,35	2.8	1,77	0,203	20.000	1.378	0,248/0,243	6,299/6,172	0,104/0,109	2,642/2,769
TU.05.60.06.316	3/8"	9,53	3.2	3,11	0,500	60.000	4.136	0,370/0,365	9,398/9,271	0,121/0,125	3,073/3,175
TU.05.20.06.316	3/8"	9,53	5.2	2,12	0,393	20.000	1.378	0,370/0,365	9,398/9,271	0,198/0,203	5,029/5,156
TU.05.60.09.316	9/16"	14,28	4.8	4,7	1,127	60.000	4.136	0,557/0,552	14,148/14,021	0,182/0,187	4,623/4,750
TU.05.40.09.316	9/16"	14,28	6.5	3,9	1,013	40.000	2.757	0,557/0,552	14,148/14,021	0,245/0,250	6,223/6,350
TU.05.20.09.316	9/16"	14,28	7.8	3,11	0,870	20.000	1.378	0,557/0,552	14,148/14,021	0,307/0,312	7,798/7,925
TU.05.10.09.316	9/16"	14,28	9.28	2.50	1,124	10.000	689	0,557/0,552	14,148/14,021	0,354/0,359	8,992/9,119
TU.05.20.12.316	3/4"	19,05	11.1	3,91	1,483	20.000	1.378	0,745/0,740	18,923/18,796	0,432/0,437	10,973/11,100
TU.05.20.16.316	1"	25,4	14.3	5,5	2,740	20.000	1.378	0,995/0,990	25,273/25,146	0,557/0,562	14,148/14,275

### Main features

- Tubing 20.000 psi also available to ASTM A370, ISO 6892-1 and NACE specifications
- Operating temperature range from -252°C to +649°C
- External surface finish: bright finish, free from lamps/flaws/fissures
- Bore surface finish: minimum 100 RMS = 2,3 Ra  $\mu$ m = 92 AARH
- Available also to NACE specifications
- Standard non-destructive test: Eddy current ASTM A450/E426
- Rating from 10.000-60.000 psi (689-4.136 bar)





#### HPT is made in Italy

With a wide experience as a distributor of high pressure products, Interfluid knows well how much quality counts in the tubing market. This is why we developed a partnership with a specialized Italian supplier of cold drawing stainless steel tubes and joined forces to create HPT. Our high pressure tubing is the result of our shared knowledge on the parameters required to obtain top quality tubing suitable for the most critical high pressure applications and fields, such as Waterjet, Oil&Gas and Hydrogen.

Our tubing undergoes strict quality controls such as dimensional control, eddy current testing, metallographic examinations, technological testing, intergranular corrosion. According to customer specifications, we perform lab tests, corrosion tests, pressure tests, quality assurance.

Interfluid uses only raw material suppliers that work under EN ISO 9001 conditions and has a specific assessment for materials for applications covered by Directive 97/23/EC on pressure equipment and comply with Annex I, section 4.3, for acceptance of type 3.1 material certificates EN 10204:2004.

Quality is our priority, and we care for every single detail.

Our careful packaging ensures the integrity of the tubes during transportation.

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