

Tubificio di Terni



CARATTERISTICHE TECNICHE
TECHNICAL FEATURES



Arvedi





STANDARD RIFERIMENTI TECNICI E CERTIFICAZIONI

TECHNICAL REFERENCES STANDARDS AND CERTIFICATIONS

ISO 9001: Quality System Standards

ISO 14001 Environmental System Standards

OH SAS 18001 Safety system standards

IATF 16949: SQ automotive sector standards

EN 10204: Test certificates for stainless steel products

EN 10088: Chemical composition standards for stainless steel

EN 10028-7: Flat products made of steel for pressure purpose, stainless Steels

EN 10095: Chemical composition and Mechanical properties standards for stainless steel

EN ISO 1127: Dimensional standards and tolerances

STANDARD DI PRODUZIONE

MANUFACTURING STANDARDS

EN 10296-2

EN 10217-7

AD 2000 - Merkblatt W0

ASTM: A554, A791, A450

NFA: 49647

EN 10217-7

STANDARD CONTROLLI QUALITÀ

QUALITY CHECK STANDARDS

EN 10002, 10246

ASTM A426

EN ISO 6892-1, 8492, 8493, 10893

TOLLERANZE GENERALI GENERAL TOLERANCES



TOLLERANZE DIMENSIONALI PER TUBI TONDI A LUNGHEZZE COMMERCIALI DIMENSIONAL TOLERANCES FOR ROUND COMMERCIAL-LENGTH TUBES

	GUARANTEED VALUES	TYPICAL VALUES	NOTES
Thickness	+/- 10% with min $\pm 0,2$	+1 / - 7%	
Diameter	+/- 0,75% with $\pm 0,3$	+ 0,10 / - 0,20 mm	
Length	- 0 / + 50 mm	- 0 / + 50 mm	
Internal bead	- 0 / +10% max 0,20 mm	max 0,10 mm	
Linearity	2,0 mm/m	1,0 mm/m	

TOLLERANZE DIMENSIONALI PER TUBI TONDI TAGLIATI A MISURA DIMENSIONAL TOLERANCES FOR FIX-LENGTH TUBES

	GUARANTEED VALUES	TYPICAL VALUES	NOTES
Length	- 0 / + 1 mm	0,50 mm	upon request +/- 0,5 mm
Ovality on the cut	0,60 mm	0,30 - 0,40 mm	$D_{max} - D_{min}$ (*) at 1 D from cut end

TOLLERANZE DIMENSIONALI PER TUBI DECORATIVI DIMENSIONAL TOLERANCES FOR ORNAMENTAL TUBES

Thickness	$\pm 10\%$
Dimensions base and height	$\pm 0,50\%$
Length	- 0 + 50 mm
Thickness of the weld bead	- 0 / +10% of the thickness; max 0,20 mm
Linearity	$\leq 2,0$ mm per meter
Torsion	$\leq 2,0$ mm for the first meter then 0,5 mm for the following
Radius of the corners	1,2 x T +/- 20% (thickness $\leq 2,0$ mm) 2,0 x T +/- 20% (thickness $> 2,0$ mm)
Burr	max 1,0 mm per thickness $\geq 2,5$ mm max 0,2 mm per thickness $< 2,5$ mm

T = Spessore - Thickness

PRESTAZIONI PERFORMANCES

Ferritici - Ferritic Grades

PROPRIETÀ MECCANICHE DEI TUBI MECHANICAL PROPERTIES OF THE TUBES				
		REFERENCE NORMS	GUARANTEED	TYPICAL
AISI 409 LI W 1.4512	Rp02 (MPa)	> 210	> 205	330
	Rm (MPa)	> 380	400 ÷ 500	420
	A5 (%)	> 25	> 30	36 ÷ 38
AISI 441 W 1.4509 AISI 439 W 1.4510 et al.	Rp02 (MPa)	> 230	> 300	380
	Rm (MPa)	> 420	> 450	490
	A5 (%)	> 20	> 28	32 ÷ 34
W 1.4003	Rp02 (MPa)	> 280	> 300	350
	Rm (MPa)	> 450	> 450	480
	A5 (%)	> 20	> 20	22

TEST TECNOLOGICI SU TUBI MARMITTA TECHNOLOGICAL TESTS ON THE EXHAUST SYSTEM TUBE				AISI 409 LI / W 1.4512
	REFERENCE NORMS	GUARANTEED	TYPICAL	
Flattening test	2xT + 16 mm	2xT + 16 mm	2xT	
Cone expansion	30%	30%	30%	
Radial expansion	-	20%	30%	

Austenitici - Austenitic Grades

PROPRIETÀ MECCANICHE DEI TUBI TONDI MECHANICAL PROPERTIES OF THE ROUND TUBES			
	REFERENCE NORMS	GUARANTEED	TYPICAL
Rp02 (MPa)	> 200	> 300	400
Rm (MPa)	> 500	> 550	600
A5 (%)	> 40	> 40	50 ÷ 55
Hv 5	< 220	< 220	< 220

TEST TECNOLOGICI SU TUBI MARMITTA TECHNOLOGICAL TESTS ON THE EXHAUST SYSTEM TUBE			
	REFERENCE NORMS	GUARANTEED	TYPICAL
Flattening test	2xT + 16 mm	2xT	2xT
Cone expansion	40%	40%	50%
Radial expansion	-	30%	33 - 35%

T = Spessore - Thickness