












## APPLICABLE STANDARD FOR UNSPECIFIED PRODUCT CRITERIA

CRITERIA	Symb	CHARACTERISTICS AND TOLERANCES	INSPECTION
Material		Tube and parts are manufactured from blanks meeting the usual material specification	Check of supplier's certificate
Process		Tubes are cold drawn from welded strip or seamless blanks	
Tolerances on ID and OD	∅	0,2 → 0,5 : ± 15 μ      0,5 → 1 : ± 25 μ      1 → 5 : ± 50 μ 5 → 10 : ± 1 %      > 10 : ± 0,10 mm	MIL STD 105 E or NFX 06 022
Length, external dimensions		< 10 mm : ± 0,20      > 10 mm : ± 2 % Tubes are delivered in random lengths from 2 to 6 m.	
Circularity		Within OD tolerances	
Surface		Free of large drawmarks sensitive to touch . Isolated defects inspected by naked eye are acceptable	
Cleaning		Tubing is immersed in chlorinated solvent. Parts receive a rough cleaning.	
Other dimensions		In absence of instructions regarding the inspection plan, the SPECIFIED dimensions are inspected as follows →	
Wall		± 10 %	
Concentricity		Within wall tolerances or : wall max - wall min ≤ 0,2 x nominal wall	MIL STD 105 E or NFX 06 022
Squareness		≤ 0,10 x OD	AQL : 2,5
Parallelism		M - m ≤ 0,20 x OD	Level : S2
Other geometrical criteria		In absence of instructions regarding the inspection plan, the SPECIFIED dimensions are inspected as follows →	Inspection : standard Sampling : double
Burrs Extremities		<u>Parts</u> : non detachable burrs admitted when within part tolerances <u>Tubes</u> : When delivered in fabrication length, extremities are cut by grinding and not deburred.	Inspection of 5 samples per lot accept : A = 0 Reject : R = 1
Finish		OD : Ra ≤ 1,6      ID : Ra ≤ 3,2	
Straightness		Maximum deformation ≤ 0,5 % of total length	
Temper	Hv	As drawn	
Other criteria		In absence of instructions regarding the inspection plan, other SPECIFIED criteria requiring a special or destructive test are inspected as follows →	
Quantity		Tolerance on delivered quantity : ± 10 %	
OTHER UNSPECIFIED CRITERIA ARE NOT INSPECTED FOR			
Lots, identification, tracability, documentation		The quality assurance system applicable to all products meets or exceeds the ISO 9001 standard. It is described in Minitubes quality handbook ( French language )	

The above prescriptions apply **ONLY WHEN NO SPECIFICATION** is explicitly given in the customer's product documentation. Designed to meet implicit requirements, these prescriptions can be significantly under our best possibilities. Our sales team is available to discuss YOUR REQUIREMENTS to best serve YOUR NEEDS.

# minitubes