

Steel Tubes For Precision – Welded Cold Sized Tubes

DEK Reference ID:									
DSM 1.1.13									
Material Name EN:									
1.0308									
Steel Group:									
Non alloy quality steels: Steels with average C < 0,12 % or Rm < 400 MPa.									
Characteristics:									
Fully killed steel (FF).									
Chemical Composition (subset C, Si, Mn, Cr, Ni):									
C (%) - Min	C (%) - Max	Si (%) - Min	Si (%) - Max	Mn (%) - Min	Mn (%) - Max	P (%) - Min	P (%) - Max	S (%) - Min	S (%) - Max
-	0.17	-	0.35	-	1.20	-	0.025	-	0.025
Properties: CR1:									
Density (g/cm ³)	Young's modulus (GPa)	Yield Stress YS Min MPa	Yield Stress YS Max MPa	Tensile Strength TS Min MPa	Tensile Strength TS Max MPa	Elongation A (%)			
7.84	190	-	384	-	480	7			
Temper Types:		Preferred Temper Types are in:							
CR1	Normally not heat treated, but suitable for final annealing								
CR2	Not intended for heat treatment after welding and sizing.								
+A	After welding and sizing the tubes are annealed in a controlled atmosphere.								
+N	After welding and sizing the tubes are normalized in a controlled atmosphere.								
Note:	The temper condition must appear on the drawing:- DSM 1.1.13_CR1								
Material Safety Data Sheet:									
  Material Safety Data Sheet For Carb									
Approved Standards:									
Material Number	Country	Steel Name	Product	Standard's Name	Edition				
1.0308	EU	E235	Tube, welded	DIN EN 10296-1	2004-02				
1.0308	EU	E235	Tube, seamless	DIN EN 10297-1	2003-06				
1.0308	EU	E235	Tube, cold drawn seamless	DIN EN 10305-1	2016-08				
1.0308	EU	E235	Tube, cold drawn welded	DIN EN 10305-2	2016-08				
1.0308	EU	E235	Tube, welded and cold sized	DIN EN 10305-3	2016-08				
1.0308	EU	E235	Tube, cold drawn seamless	DIN EN 10305-4	2016-08				
1.0308	EU	E235	Hollow section, square and rectangular	DIN EN 10305-5	2016-08				
1.0308	EU	E235	Tube, cold drawn welded	DIN EN 10305-6	2016-08				
1.0308	ISO	Grade R37	Tube, precision steel tube, seamless	ISO 3304	1985-11				
1.0308	ISO	Grade R37	Tube, precision steel tube, welded	ISO 3305	1985-11				
1.0308	JP	STKM12A	Tube for machine structural purposes	JIS G 3445	2021-02				
1.0308	JP	STB340	Tube, boiler and heat exchanger tube	JIS G 3461	2019-11				

Issue	01	02	03	04	05	06	07	08
Date	31/08/21							

Approved Standards For:					
Material Number	Country	Steel Name	Product	Standard's Name	Edition
1.0308	JP	STAM340G	Tube, electric resistance welded	JIS G 3472	2018-02
1.0308	US	Grade A type E	Tube, electric resistance welded	ASTM A53/ M	2020-07
1.0308	US	Grade A type S	Pipe, seamless	ASTM A53/ M	2020-07
1.0308	US	Grade A	Pipe, welded and seamless, cold formed	ASTM A500/ M	2021-01
1.0308	US	Grade A	Pipe, seamless	ASTM A523/ M	2021-03
1.0308	US	Grade A	Pipe, electric resistance welded	ASTM A523/ M	2021-03

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