

Material Title: DSM 1.2.12

Teamcenter Reference ID:								
Mat-001404/01								
Material Name EN:								
1.4016								
Material Group:								
Steel M-001 Stainless Steel								
Characteristics:								
Machinable, Suitable For Cold Forming, Resistant To Corrosion, Suitable For Polishing, Weldable, Suitable For Cold Upsetting, Resistance To Intergranular Corrosion In The Delivery Condition, Suitable For Cold Extrusion, Ferritic								
Applications:								
Construction Of Equipments, Constructions Of Apparatus, Automotive Engineering, Building Industry, Cutlery, White Goods, Springs, Tableware, Canteen Kitchens, Household Appliances, Interior Design, Mechanical Engineering, Dairy Equipements, Food-Processing Techniques, Press Plates, Tubes, Tubes For Mechanical Engineering, Tubes For The Conveyance Of Aqueous Liquids, Rail Vehicles, Steel Chimneys, Washing Machines, Drums Of Washing Machines, Stainless Steel								
Chemical Composition:								
Si_min [%]	Si_max [%]	Fe_min [%]	Fe_max [%]	Mn_min [%]	Mn_max [%]	C_min [%]	C_max [%]	P_min [%]
0	1	80	80	0	1	0	0.08	0
P_max [%]	S_min [%]	S_max [%]	Cr_min [%]	Cr_max [%]				
0.04	0	0.03	16	18				
Properties:								
Typical Density (g/cm3)		Typical Young's modulus (MPa)		Yield Stress Min (MPa)		Tensile Strength Min (MPa)		Min Elongation (%)
7.65		196000		260		450		20
Shear Modulus (GPa)		Poissons Ratio		Typical Specific Heat Capacity (J/kg°C)		Typical Thermal Conductivity (W/(mK))		Typical Thermal Expansion (10 ⁻⁶ /K)
83		0.29		450		19.60		9.90
Material Safety Data Sheet:								
No Hazardous Element Declared Rohs Quality SC1								
Approved Standards:								
Material Number	Country	Material Name	Product			Standard's Name		Edition
1.4016	EU	X6Cr17	Stainless Steel, List			DIN EN 10088-1		2014-12
1.4016	EU	X6Cr17	Strip And Sheet / Plate			DIN EN 10088-2		2014-12
1.4016	EU	X6Cr17	Bar, Rod, Section, General			DIN EN 10088-3		2014-12
1.4016	EU	X6Cr17	Sheet/Plate And Strip For Constr. Purposes			DIN EN 10088-4		2010-01
1.4016	EU	X6Cr17	Bar, Rod, Section For Constr. Purposes			DIN EN 10088-5		2009-07
1.4016	EU	X6Cr17	Strip For Springs			DIN EN 10151		2003-02

Issue	01	02	03	04	05	06	07
Date	26/10/2023						

Material Number	Country	Material Name	Product	Standard's Name	Edition
1.4016	EU	X6Cr17	Open Die Forging	DIN EN 10250-4	2022-08
1.4016	EU	X6Cr17	Rod, Bar And Wire	DIN EN 10263-5	2018-02
1.4016	EU	X6Cr17	Tube, Welded	DIN EN 10296-2	2006-02
1.4016	EU	X6Cr17	Tube, Seamless	DIN EN 10297-2	2006-02
1.4016	ISO	X6Cr17	Bright Product	ISO 683-18	2014-09
1.4016	ISO	X6Cr17E	Steel For Screws, Stainless, Steel Grade F1	DIN EN ISO 3506-1	2020-08
1.4016	ISO	X6Cr17E	Cold Heading Steel	ISO 4954	2022-06
1.4016	ISO	X6Cr17	Steel, Heat Resisting, Ferritic	ISO 4955	2016-05
1.4016	ISO	X6Cr17	Strip For Springs	ISO 6931-2	2005-04
1.4016	ISO	X6Cr17	Steel, Stainless	ISO 15510	2014-05
1.4016	ISO	X6Cr17	Flat Product, Stainless	ISO 16143-1	2014-05
1.4016	ISO	X6Cr17	Semi-Finished Product, Bar, Rod, Section	ISO 16143-2	2014-05
1.4016	ISO	X6Cr17	Wire	ISO 16143-3	2014-05
1.4016	CN	10Cr17	Bar, Stainless	GB/T 1220	2007-01
1.4016	CN	10Cr17	Bar, Heat Resistant, Stainless	GB/T 1221	2007-01
1.4016	CN	10Cr17	Sheet And Strip, Cold Rolled, Stainless	GB/T 3280	2015-09
1.4016	CN	10Cr17	Bar, Cold Finished	GB/T 4226	2009-01
1.4016	CN	ML104r17	Wire For Cold Heading, Stainless	GB/T 4232	2019-06
1.4016	CN	10Cr17	Sheet And Strip, Hot Rolled, Stainless	GB/T 4237	2015-09
1.4016	CN	10Cr17	Plate, Hot Rolled, Heat Resistant	GB/T 4238	2007-01
1.4016	CN	1Cr17	Sheet And Strip, Cold Rolled, Stainless	GB/T 4239	1991-01
1.4016	CN	10Cr17	Wire	GB/T 4240	2019-06
1.4016	CN	1Cr17	Wire Rods, Stainless	GB/T 4356	2016-12
1.4016	CN	1Cr17	Tube, Welded, Stainless	GB/T 12770	2012-11
1.4016	CN	1Cr17	Tube, Tube For Boiler, Seamless	GB 13296	2013-09
1.4016	CN	1Cr17	Tube, Seamless, Stainless	GB/T 14975	2012-01
1.4016	CN	1Cr17	Pipe, Seamless, Stainless	GB/T 14976	2012-01
1.4016	CN	10Cr17	Steel, Stainless And Heat Resisting	GB/T 20878	2007-01
1.4016	JP	SUS430TKA	Pipe For Machine And Structural Purpose	JIS G 3446	2022-05
1.4016	JP	SUS430TKC	Pipe For Machine And Structural Purpose	JIS G 3446	2022-05
1.4016	JP	SUS430TP	Tube, Stainless, For Ordinary Piping	JIS G 3459	2022-05
1.4016	JP	SUS430TB	Tube, Tube For Boiler, Stainless	JIS G 3463	2019-11
1.4016	JP	SUS430	Bar, Stainless	JIS G 4303	2021-03
1.4016	JP	SUS430	Sheet/Plate And Strip, Hot Rolled, Stainless	JIS G 4304	2021-03
1.4016	JP	SUS430	Sheet/Plate And Strip, Cold Rolled, Stainless	JIS G 4305	2021-03
1.4016	JP	SUS430	Wire, Wire Rod, Stainless	JIS G 4308	2022-10
1.4016	JP	SUS430	Wire, Stainless	JIS G 4309	2022-10
1.4016	JP	SUS430	Wire, For Cold Heading	JIS G 4315	2022-10
1.4016	JP	SUSY430	Wire Rod For Welding, Stainless	JIS G 4316	1991-11
1.4016	JP	SUS430	Sections, Hot Formed	JIS G 4317	2018-08
1.4016	JP	SUS430	Bar, Stainless	JIS G 4318	2020-10
1.4016	US	Grade F 430	Flange, Fitting, Valve, Forged Or Rolled	ASTM A182/A182M	2023-05
1.4016	US	Type 430	Plate / Sheet And Strip, Stainless	ASTM A240/A240M	2023-03
1.4016	US	Grade TP430	Tube, Seamless And Welded, Stainless	ASTM A268/A268M	2022-05
1.4016	US	Type 430	Bar And Shape, Stainless	ASTM A276/A276M	2017-03
1.4016	US	Type 430	Billet And Bar For Forging	ASTM A314	2019-02
1.4016	US	Type 430	Forging, Stainless	ASTM A473	2023-03
1.4016	US	Type 430	Bar And Shape, Stainless	ASTM A479/A479M	2023-03
1.4016	US	Type 430	Wire And Wire Rod, Stainless	ASTM A793	1996-10
1.4016	US	Grade MT430	Tube, Seamless, Stainless	ASTM A511/A511M	2021-11
1.4016	US	Grade MT-430	Tube, Welded, Stainless	ASTM A554	2021-03
1.4016	US	Type 430	Wire, Stainless	ASTM A580/A580M	2023-05

Material Number	Country	Material Name	Product	Standard's Name	Edition
1.4016	US	Grade CR430	Piping Fitting, Stainless	ASTM A815/A815M	2023-05
1.4016	US	Grade WP430	Piping Fitting, Stainless	ASTM A815/A815M	2023-05
1.4016	US	Type 430	Chromium Steel, Ferritic	ASTM A595/A595M	2022-09
1.4016	US	Type 430	Bolts, Hex Cap Screws, Studs	ASTM F593	2022-11
1.4016	US	Type 430	Nuts	ASTM F594	2022-11
1.4016	US	Type 430	Bolts, Screws, Studs, Metric	ASTM F738	1990-02
1.4016	US	AISI 430	Wrought Steel, Stainless	SAE J 405	2018-01