

MATERIAL DATA SHEET **ASMP**T

Medium Carbon Martensitic Stainless Steel

Weymouth Reference ID:													
DSM 1.4.3													
Material Name EN:													
EN 10088 X30Cr13 (1.4028)													
Material Group:													
Metals Ferrous													
Characteristics:													
Martensitic stainless steel designed for hardening and tempering. Commonly as a spring or tool steel. Hardened and tempered to 48-51 HRC. machinable, resistant to corrosion, suitable for polishing, weldable, suitable for quenching and tempering, martensitic, magnetic, resistance to organic acids - High Strength - Outstanding hardenability													
Chemical Composition:													
Si min [%]	Si max [%]	Fe min [%]	Fe Max [%]	Mn min [%]	Mn max [%]	C min [%]	C max [%]	P min [%]	P max [%]	S min [%]	S max [%]	Cr min [%]	Cr max [%]
0	1	83	83	0	1.5	0.26	0.35	0	0.04	0	0.03	12	14
Properties:													
Density (g/cm3)		Young's modulus (GPA)		Yield Stress YS Min MPa		HRC Hardness		Tensile Strength TS Min MPA		Tensile Strength TS Max MPA		Elongation A (%)	
7.7		222		600		47-52		800		1000		>10%	
Material Safety Data Sheet:													
 Stainless Steels Safety Data Sheet.pdf													
Approved Standards:													
Material Number	Country	Product							Standard's Name			Edition	
1.4028	EU	X30Cr13							DIN EN 10088-1			2014-12	
1.4028	Germany	X30Cr13							DIN EN 10222			2017-06	
1.4028	UK	420S45							BS 970			1977-06	
1.4028	USA	Steel Bar.							ASTM A276/A276M			2017-03	
1.4028	Japan	Stainless steel bars.							JIS G 4303			2021-03	
1.4028	Japan	Hot-rolled stainless-steel plate, sheet and strip.							JIS G 4304			2021-03	
1.4028	Japan	Cold-rolled stainless-steel plate, sheet and strip.							JIS G 4305			2021-03	
1.4028	Japan	Stainless steel wires.							JIS G 4309			2022-10	
1.4028	Japan	Cold finished stainless-steel bars.							JIS G 4318			2020-10	
1.4028	Japan	Stainless steel wire rods.							JIS G 4308			2022-10	
1.4028	China	3Cr13							GB/T 1120			2007-05	

Issue	01	02	03	04	05	06	07	08
Date	30/06/2023							