

Classifications

EN 14700	DIN 8555
T Z Fe7	UP 5-GF-50-CT

Characteristics

Special Iron-Chromium-Cobalt-Molybdenum alloy designed to resist metal-to-metal wear, fatigue, oxidation, cavitation and corrosion at high temperature. The typical hardness can be achieved in the first layer.

Microstructure:	Martensite + 15 % ferrite (in first layer)
Machinability:	Good with metallic carbide tipped tools
Oxy-acetylene cutting:	Cannot be flame cut
Deposit thickness:	Depends upon application and procedure used
Welding flux:	Record SA, Record SR

Field of use

Continuous casting driving rollers, dies, mandrels, blanking punches, forming and punching tools, forging dies, swaging dies, pump elements.

Typical analysis in %

C	Mn	Si	Cr	Mo	Co	Fe
0.12	0.2	0.5	15.0	2.3	13.5	balance

Typical mechanical properties

Hardness as welded: 47 HRC

Recommended welding parameters

Wire diameter [mm]	Amperage [A]	Voltage [V]	Stick-Out [mm]	Flux-Rate [kg per kg wire]	Travel Speed [cm/min]
2.4	275 – 450	28 – 30	30 – 35	1.1	35 – 45
3.2	325 – 500	28 – 32	30 – 35	1.1	40 – 50