

Classifications

DIN 8555

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 und 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