

Classifications

DIN 8555

UP 6-GF-45-GT

Characteristics

Martensitic alloy giving a very good resistance to metal-to-metal and low stress abrasive wear at high temperature. The deposit is crack-free, heat treatable and forgeable.

Microstructure: Martensite

Machinability: Good with Tungsten carbides or cubic Boron Nitride tipped tools

Oxy-acetylene cutting: Flame cut is difficult

Deposit thickness: Depends upon application and procedure used

Welding flux: Record SA, Record SR

Field of use

Steel mill rollers, blast furnace bells (seat area), dredger-buckets cylinders.

Typical analysis in %

C	Mn	Si	Cr	Mo	W	Fe
0.18	1.5	0.4	5.6	1.7	1.5	balance

Typical mechanical properties

Hardness as welded: 44 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
2.8	300 – 400	28 – 30	30 – 35	1.1	35 – 45
3.2	325 – 500	28 – 32	30 – 35	1.1	40 – 50