

SK A45-S

high-alloyed steels

Classifications

SAW cored wire

DIN 8555

UP 10-GF-65-GT

Characteristics

Chromium-Niobium-Molybdenum alloy with addition of Tungsten and Vanadium designed to resist high stress grinding abrasion with low impact and solid erosion at service temperatures up to 650 °C. The deposits will readily show stress relief cracks.

Microstructure: Complex carbides and Nb nodular carbides in an austenitic matrix

Machinability: Grinding only

Oxy-acetylene cutting: Cannot be flame cut

Deposit thickness: 8 to 12 mm in 2 or 3 layers

Welding flux: Record SA, Record SR

Field of use

Wear plates, sinter finger crushers, exhaust fan blades in pellet plants, perlite crushers, bucket teeth and lips on bucketwheel excavators, Boiler fan blades, burden area in blast furnace bells, etc.

Typical analysis in %

C	Mn	Si	Cr	Mo	Nb	W	V	Fe
5.1	0.2	0.6	21.5	5.4	5.7	1.9	0.95	balance

Typical mechanical properties

Hardness as welded: 64 HRC

Form of delivery and recommended welding parameters

Wire diameter [mm]	Amperage [A]	Voltage [V]	Stick-out [mm]	Flux-Rate [kg per kg wire]	Travel Speed [cm/min]
3.2	325 – 380	26 – 32	30 – 35	1.1	35 – 45