

## Classifications

DIN 8555

UP 5-GF-45-C

## Characteristics

Alloy depositing a ferritic-martensitic steel with addition of Nitrogen designed to enhance the resistance to thermal fatigue and intragranular corrosion by reducing the formation of carbides at grain boundaries.

Microstructure: Martensite + 10 % Ferrite

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 SK

## Field of use

Continuous casting rollers.

## Typical analysis in %

C	Mn	Si	Cr	Ni	Mo	Nb	V	N	Fe
0.04	1.2	0.4	13.5	3.3	1.3	0.1	0.15	0.06	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