

# SHF 604

Submerged Arc Welding Flux - Unalloyed & Low Alloyed Steels

### Standards

EN ISO 14174	S A AB 1
TS EN ISO 14174	S A AB 1

### Properties and Applications

Agglomerated and unalloyed (neutral) submerged arc welding flux used for hardfacing purposes. Suitable for hardfacing of continuous casting rolls, table rolls, pinch rolls, drums, wheels and rails in combination with specially designed hardfacing flux cored wires. Possible to use both in alternative and direct currents in stringer bead and oscillation technique. Provides smooth weld bead without porosity and has a very easy slag removal.

**Typical Applications:** Hardfacing of continuous casting, table, pinch rollers, crane and train wheels, rails and drums.



### Typical Chemical Values of Weld Metal

Welding Wire	Type of Analysis	C	Si	Mn	Cr	Ni	Mo	V	Nb
FCS 415	Weld Deposit	0.08	0.70	1.00	13.00	2.70	1.00	0.25	0.20
FCS 416	Weld Deposit	0.12	0.80	1.10	13.00	3.00	1.00	0.25	0.25
FCS 420	Weld Deposit	0.20	0.70	1.40	13.00	0.30			0.30
FCS 421	Weld Deposit	0.25	0.80	1.30	13.00	0.35			0.30
FCS 430	Weld Deposit	0.03	0.70	1.30	17.00				

### Typical Mechanical Values of Weld Metal

Test Condition	Welding Wire	Hardness (HB)	Hardness (HRC)
As welded	FCS 415		42
As welded	FCS 416		47
As welded	FCS 420		50
As welded	FCS 421		53
As welded	FCS 430	200	

### Application Information

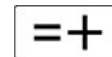
#### Welding Positions



PA PB

#### Welding Parameters & Efficiency

#### Polarity:



### Packaging Information

Product Code	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
408060AGM2	25 kg	25.60	1	25.60	Craft Bag

### Storage & Re-Drying Information

During transportation and storage, it should be ensured that the packaging is not damaged or torn. It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets. It has to be dried at 350°C for 2 hours.