

1.4718

**Comparable specifications**

**DIN 8555** - MSG 6-GZ-60-GP  
**EN 14700** - S Fe 8  
**Werkstoff nr.:** 1.4718

**EN 10090** - X45CrSi8 (EVM11)

**Description and applications\***

\* *Illustrative, not-exhaustive list*

High alloy solid wire (typically bronze- or copper-coated) for hard-facing, overlay of all C-Mn steels and even suited for the overlay of cast iron (over buffer layer). This alloy deposits a martensitic structured weld-metal with a hardness of about 54-58 HRC (indicative, as hardness is dictated by many factors, including dilution, hardness of base metal, etc.), characterized by excellent abrasion resistance to moderate impact and high toughness.

Weld metal has a Cr-Si structure and, if not tempered, it can only be machined by grinding.

Its usage allows to extend the operating life of many wearing parts.

Mostly used with semiautomatic and automatic procedures. A cushion layer deposited with basic-coated electrode or basic flux cored wire is essential only with hard-to-weld steels.

Most common applications of this alloy includes:

- components that are subject to high abrasion, like bucket lips, screws, conveyors, drilling tools, shear blades, sand dredgers;
- hard-facing wheels, rolling mill rollers tracks, sliding rollers;
- hammers of cylindrical crushers and pneumatic hammers;
- cold cutting, drilling and forming tools;
- etc.

**Weldable base materials\***

\* *Illustrative, not-exhaustive list*

Carbon-Manganese steels, Cast iron, etc.

**All-weld metal mech. properties\***

\* *For reference only values*

**Hardness:** > 54 HRC

**Chemical composition\***

\* *For reference only values*

C	Mn	Si	S	P	Ni	Cr
0.40	max	2.70	max	max	max	8.00
0.50	0.60	3.30	0.030	0.040	0.50	10.00

**Standard packaging data\***

Welding process	Product type	Ø mm (inches)	Packing type	Weight kg (lbs)	Length mm (inches)
GMAW **	filler wire	0.80 - 1.20 (0.030 - 0.047)	spools BS300 / D300	15 (33)	n.a.
GTAW **	filler rod	1.60 - 4.00 (1/16 - 5/32)	cardboard boxes / tubes	5 (11)	1000 (39.4)

\* *Other sizes and packing types are available upon request*

\*\* *GMAW: gas metal arc welding; GTAW: gas tungsten arc welding.*

**Marking**

Each filler rod for GTAW welding is durably marked with an identification traceable to the unique product type. Welding filler materials wound on spools or in coils are durably marked on the coil or spool with an identification traceable to the unique product type. The outside of each unit package is suitably labelled with at minimum the following data: grade, diameter, heat, lot no., classifications.

Customized labels are available upon request.

**Lot classification**

All our productions fulfil the **Class S3** requirements acc. to EN ISO 14344.