

Characteristics and field of use

PLASweld™ FerroV15 for plasma arc surfacing is suitable due to its high hardness for hardfacings on machine parts and tools that are exposed to high abrasion in combination with light impact loads.

The weld metal can be machined by grinding and with carbide tools.

PLASweld™ FerroV15 was developed as a powder with a spherical grain shape for hardfacings; finely divided carbides bring good fatigue strength and hot wear resistance.

Surfacings are possible on cold work steels, low or high alloyed steels and the corresponding cast steel types. Typical applications are cutting and punching tools, pressing tools and forming dies.

Chemical composition of powder blend (approx. values in weight %)

C	Si	Mn	Cr	Mo	V	Fe
4.4	1.2	1.1	13.1	1.1	15.2	balance

Properties

Specific weight: 7.2 g/cm³
Hardness of pure weld metal: 58 – 64 HRC

Welding instruction

Preheating and interpass temperature should be adjusted to the base metal. To obtain the best weld metal properties, it is necessary to optimize the main and pilot arc, plasma gas, welding speed and distance, weave width and powder flow.

Availability

-180 + 63 µm in 5 kg powder containers

Further packaging size and grain size ranges on demand.