

Classification

EN 14700

P Z Fe3

Characteristics and field of use

PLASweld™ Ferro44 for laser surfacing was especially developed for tough and crack resistant build-ups on high-strength nodular iron.

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

C	Si	Mn	Cr	Mo	Co	Fe
0.2	0.5	0.3	15	2.5	15	balance

Properties

The deposit is machinable by grinding or with tungsten carbide tools.

The alloy is work hardening, corrosion-, creep- and thermal shock-resistant.

Specific weight: 8.0 g/cm³
 Hardness of pure weld metal deposit: approx. 44 HRC
 Work hardened: approx. 58 HRC

Welding instruction

Preheating and interpass temperature (if necessary) have to be adjusted to the base metal to minimize cracking. To obtain the desired metal properties, it is necessary to optimize laser output, flow rate control of powder and powder gas, type and quantity of shielding gases, welding strategy, welding speed and weld distance.

Availability

-125 + 38 µm in 5 kg powder containers

Further packaging size and grain size ranges on demand.