

## Classification

EN 14700

P Z Fe12

## Characteristics and field of use

PLASweld™ Stainless18 is a gas-atomized metallic powder of the type 316 L designed for laser and plasma arc surfacing. It shows good corrosion resistance and is also suitable for chlorine-containing media due to the addition of Mo.

As a powder with a spherical grain shape, PLASweld™ Stainless18 is well suited for the cladding of running and sealing surfaces on acid, gas, water and steam fittings at operational temperatures up to 400°C. Typical application fields are corrosion-resistant surfacings in the chemical industry, textile and cellulose industry, beverage production and buffer layers for hard-surfacings.

## Typical analysis in %

C	Si	Mn	Cr	Ni	Mo	Fe
< 0.03	0.8	0.1	17.0	12.5	2.5	balance

## Properties

Specific weight: 7.8 g/cm<sup>3</sup>

Hardness of pure weld metal deposit: 160 - 200 HV

## 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.

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

-150 + 50 µm in 5 kg powder containers

Further packaging size and grain size ranges on demand.