

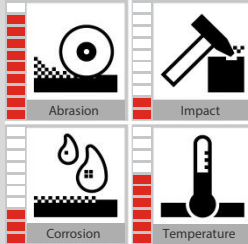
VAUTID Ultra 301

Filled Welding Rod

Hardfacing material for extreme abrasion

VAUTID®

VAUTID Material characteristics



Specification	Filled Welding Rod DIN EN 14700 T Fe20 g
Material type Alloy components	Ferritic base material with embedded tungsten carbides (W2C) with a grain size of 0-20.7 μm. C – Fe – W2C – WC
Weld deposit characteristics	The weld metal consists of a tough steel matrix, which is metallurgically perfectly bonded to the embedded carbide grains. This structure of the weld metal ensures that tungsten carbides cannot break out of the layer under operational abrasion stress. Resistance to impact is moderate
Weld deposit properties	Hardness of the matrix ca. 650 HV10* Tungstencarbide: ca. 2000 HV10* (DIN 325254)
Recommended applications	Core drilling tips, roller bore tips, deep well drilling tools, agitator blade webs, sand separators, plough blades, clay grinding disks, strippers. Well suited for the hardfacing of edges
Standard sizes	Diameters: 3,25 / 4,0 / 5,0 / 6,0 mm Standard length: 350 mm Packing: 5 kg packages

* subject to common industrial fluctuations

Welding instructions:

VAUTID-Ultra 301 is usually welded with an oxygen-acetylene flame end, slight excess of acetylene in the flame. The base material should be cleaned by grinding. After grinding local preheating to 300°C is required.

Thermal spraying of NiCrB-powder prevents oxidation of the hardfaced surface.

TIG technique for welding is feasible, but it should be hardfaced with little current and short arc.

Welding position (EN ISO 6947): PA

This data sheet corresponds to the present state of production (October 2016) and can be changed anytime