

Weld Studs

Weldable carbide

DABOTEK offers tungsten carbide weld studs for use in mining, cold milling, forestry and road maintenance.

A unique gradient between tungsten carbide and steel eliminates the need for traditional brazing; making direct welding possible. This leads to a simpler manufacturing process, longer lasting components and reduced costs.

Applications

- » Wear protection studs

Specifications

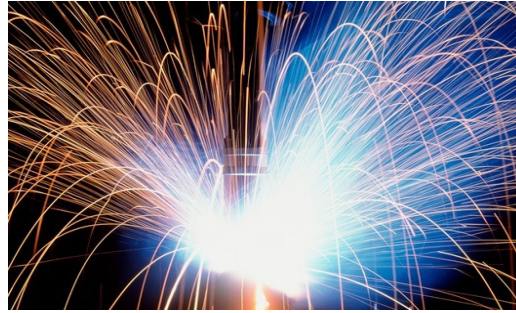
- » Available in various grades of tungsten carbide and steel
- » Drawn Arc (DA) studs



Key features

Hardness not effected by heat

The material properties of tungsten carbide is not effected by heat. This is an important factor when welding wear resistant components to maintain performance.

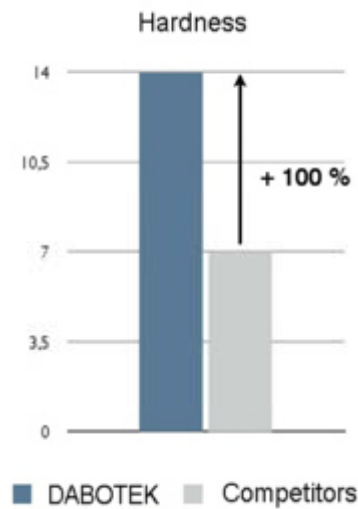


Longer Lasting Wear Protection

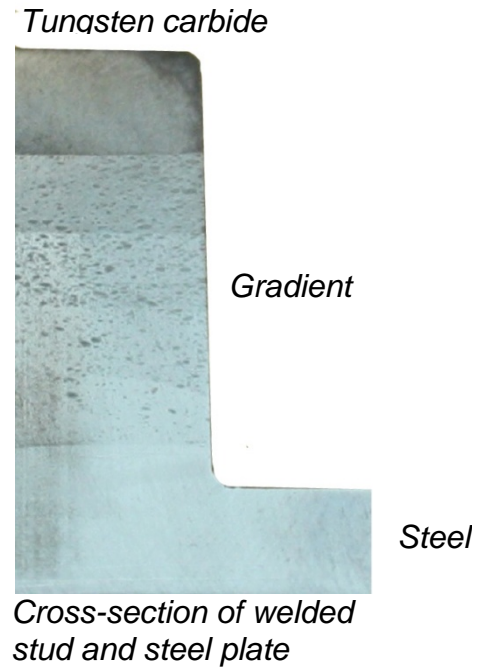
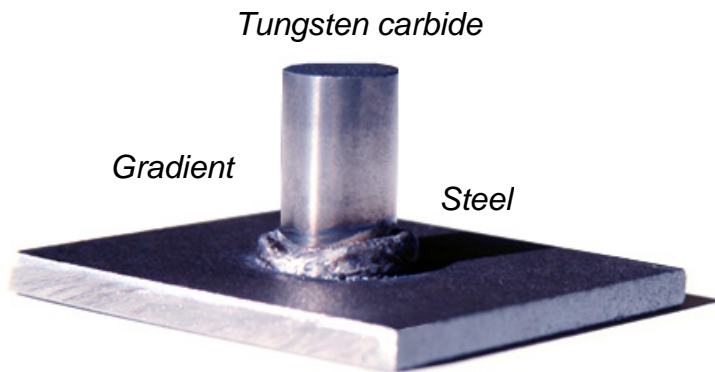
Due to the simplified mounting of weldable tungsten carbide, the material can be used in a wider variety of applications. This had previously not been possible due to limitations of brazing. Changing from steel wear parts to DABOTEK tungsten carbide gradient components means less machinery standstill and increased productivity due to longer lasting wear protection.

2 times harder than steel

Hardened steel has a hardness of 7 GPa (Vickers, corresponds to 60 HRC). Tungsten carbide is 100% harder, reaching 13-14 GPa. The hardness of a material is a crucial material property for wear resistance.

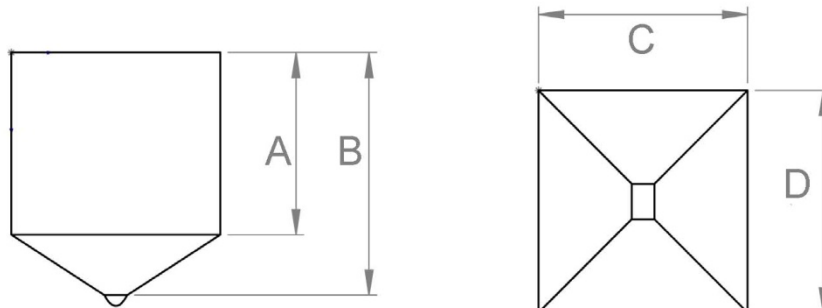


Mechanical properties



Property	Dabotek Wear Studs	Steel Wear studs
Material	Tungsten carbide/steel gradient	Hardened steel
Hardness HV ₁₀ (GPa)	13-14	7

Dimensions



Art. Nr.	Material	A	B	C	D
DIAWS101	Tungsten carbide	12	16	10	10
DIAWS102	Tungsten carbide	16	20	10	10
DIAWS121	Tungsten carbide	12	16	12	12
DIAWS122	Tungsten carbide	16	20	12	12
DIAWS141	Tungsten carbide	12	16	14	14
DIAWS142	Tungsten carbide	16	20	14	14
DIAWS181	Tungsten carbide	12	16	18	18
DIAWS182	Tungsten carbide	16	20	18	18
DIAWS201	Tungsten carbide	12	16	20	20
DIAWS202	Tungsten carbide	16	20	20	20

*dimensions I mm.