

**UTP A 5519 Co**

anti-wear

**Classifications**

solid wire

EN 14700

DIN 8555

S Ni2

MSG 23-GZ-250-CKTZ

**Characteristics and field of use**

UTP A 5519 Co is used for surfacings on forging tools which are subject to extreme thermal shock, compression, impact and abrasion, such as forging saddles, exposed areas on dies, hot-shearing blades and impact extrusion mandrels.

The special NiCrCoMoTiAl weld deposit is heat-resistant and resistant against oxidation, scale and thermal shocks. Age hardening increases the hardness of the weld overlay. Machining is possible with tungsten carbide tools.

Hardness of the pure weld deposit:

As welded: approx. 250 HB

After age-hardening

4 h at 850 °C + 16 h at 760 °C : approx. 380 HB

After work-hardening : approx. 400 HB

**Typical analysis in %**

C	Cr	Mo	Co	Ti	Al	Fe	Ni
0.03	20.0	4.5	14.0	3.0	1.5	< 2.0	balance

**Welding instructions**

Clean welding area to a bright metallic finish. Typical preheating temperature for hot work tool steels is between 300 – 400 °C. Minimise dilution by welding with low heat input. Stringer bead technique is recommended. For thick weld deposits on forging saddles, build-up should be done with UTP A 6222 Mo, final layers with UTP A 5519 Co.

**Form of delivery and recommended welding parameters**

Wire diameter [mm]	Current type	Shielding gas (EN ISO 14175)	
1.2	DC (+)	R 1	Z-ArHeHC-30/2/0.05

