

WEARmig Tool NiCrCo (UTP A 5519 Co)

Solid wire on NiCrCoMoTiAl base for surfacings on hot-working tools subject to extreme thermal load, age-hardenable

Classifications							
EN 14700				DIN 8555			
S Ni2				MSG 23-GZ-250-CKTZ			
Characteristics and field of use							
<p>WEARmig Tool NiCrCo 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.</p> <p>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.</p> <p>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</p>							
Typical analysis in wt%							
C	Cr	Mo	Co	Ti	Al	Fe	Ni
0.03	20.0	4.5	14.0	3.0	1.5	< 2.0	balance
Welding instruction							
<p>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 WEARmig Tool NiCrCo.</p>							
Wire diameter [mm]		Current type			Shielding gas (EN ISO 14175)		
1.2		DC (+)			R 1		Z-ArHeHC-30/2/0.05