

Classifications		
EN 14700	DIN 8555	Material-No.
S Z Fe3	MSG 3-GZ-45-T	Special alloy

Characteristics and field of use											
<p>UTP A 73 G 3 is, due to the excellent hot wear resistance and toughness, used for highly stressed hot working tools, which are simultaneously subject to high mechanical, thermal and abrasive loads, such as e.g. forging dies for hammers and presses, forging dies, Al-die cast moulds, plastic moulds, hot-shear blades and for filling engravings by using cheaper base metals.</p> <p>Machining is possible with tungstene carbide tools.</p> <p>Hardness of the pure weld deposit:</p> <table border="0"> <tr> <td>untreated</td> <td>42 – 46 HRC</td> </tr> <tr> <td>soft-annealed 780° C</td> <td>approx. 230 HB</td> </tr> <tr> <td>hardened 1030° C/oil</td> <td>approx. 48 HRC</td> </tr> <tr> <td>tempered 600° C</td> <td>approx. 45 HRC</td> </tr> <tr> <td>1 layer on non-alloy steel</td> <td>approx. 35 HRC</td> </tr> </table>		untreated	42 – 46 HRC	soft-annealed 780° C	approx. 230 HB	hardened 1030° C/oil	approx. 48 HRC	tempered 600° C	approx. 45 HRC	1 layer on non-alloy steel	approx. 35 HRC
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Typical analysis in %						
C	Si	Mn	Cr	Mo	Ti	Fe
0.25	0.5	0.7	5.0	4.0	0.6	balance

Welding instruction
<p>Machine welding area to metallic bright. Cracks in the base material have to be gouged out completely. Preheating temperature of 400 °C on tools should be maintained. Stress relief/annealing is recommended at 550 °C.</p>

Approvals
TÜV (No. 06741)

Wire diameter [mm]	Current type	Shielding gas (EN ISO 14175)			
0.8	DC (+)	M 12	M 13	M 21	C 1
1.0	DC (+)	M 12	M 13	M 21	C 1
1.6	DC (+)	M 12	M 13	M 21	C 1