

Classifications

EN 14700	DIN 8555
S Z Fe3	MSG 3-GZ-45-T

Characteristics and typical fields of application

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.

Machining is possible with tungsten carbide tools.

Typical analysis

	C	Si	Mn	Cr	Mo	Ti	Fe
wt.-%	0.25	0.5	0.7	5.0	4.0	0.6	bal.

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Hardness
unbehandelt / as welded	42 - 46
weichgeglüht / soft-annealed 780° C	230
gehärtet / hardened 1030°C / Öl / Oil	48
angelassen / annealed 600° C	45
1. Lage / Layer unleg. Stahl / unal. steel	35
u untreated, as-welded	

Operating data

Polarity	DC +	Dimension mm
Shielding gas (EN ISO 14175)	M12, M13, M21, C1	0.8 1.0 1.2 1.6

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.

Approvals

TÜV (06741)