

Standards:

DIN 8555 : W/MSG 3-GZ-40-T

EN 14700 : S Z Fe3

UTPA 73 G 4

Copper coated wire for tough and wear resistant surfacings on hot working tools

Application field

UTP A 73 G 4 is, due to its excellent hot wear resistance and toughness, used for buildups on hot working tools and structural parts subject to impact, compression and abrasion at elevated temperatures, such as forging dies, die cast moulds, plastic moulds, guides, recipients, continuous casting rolls. Hot wear resistant claddings can be made on non-alloy or low-alloy base materials, such as e. g. boiler tubes in coal burning power stations. The deposit is machinable with cutting tools.

Welding properties and special properties of the weld metal

UTP A 73 G4 has very good welding properties, good weld buildup and an even flow of the weld pool.

Hardness of the pure weld deposit:

untreated 38 - 42 HRC soft-annealed 800° C approx. 230 HB hardened 1030° C/oil approx. 48 HRC tempered 550° C approx. 42 HRC l layer on non-alloy steel approx. 30 HRC

Weld metal analysis in %

С	Si	Mn	Cr	Мо	Fe
0,1	0,4	0,6	6,5	3,3	balance

Welding instruction

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, if necessary, at 550° C. Preheating on non- and low-alloy materials is generally not required.

Welding procedure and availability

Ø	Current type	Shielding gas EN ISO 14175					Availability	
(mm)							Spools	Rods
()		11	M 12	M 13	M 21	СІ	EN ISO 544	EN ISO 544
1,0	DC (+)		x	x	×	×	×	
1,2	DC (+)		x	x	x	X	×	
1,2 *	DC (-)	х						×
1,6	DC (+)		x	×	x	x	×	
1,6	DC (-)	x						×
2,0	DC (-)	x						×
2,4	DC (-)	х						×
3,2	DC (-)	х						×

^{*} available on request

Approval

TÜV (No. 06742)