WEARmig Tool 40

solid wire

Classifications	
EN 14700	DIN 8555
S Z Fe3	MSG 3-GZ-40-T

Characteristics and field of use

WEARmig Tool 40 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.

WEARmig Tool 40 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
1 layer on non-alloy steel	approx. 30 HRC

Typical analysis in %

C	Si	Mn	Cr	Mo	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/annealing is recommended at 550 °C. Preheating on non- and low-alloy materials is generally not required.

Approvals

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