

Classifications

EN 14700	DIN 8555
E Z Fe3	E 3-UM-50-CTZ

Characteristics and typical fields of application

WEARstick Tool 50 Co is suited for heat resistant buildups on hot working steels particularly exposed to metallic gliding wear and elevated thermal shock stress, such as diecast moulds for brass, aluminium and magnesium, hot-pressed mandrils, trimming tools, hot-shear blades, extruding tools, forging dies and hot flow pressing tools for steel. Due to the excellent metal-to-metal gliding properties, also suitable for buildups on guiding and gliding surfaces. Tempering resistant up to 650 °C, scaleresisting up to 900 °C, it can be nitrided and is stainless.

WEARstick Tool 50 Co has excellent welding properties, a homogeneous, finely rippled seam and a self-lifting slag, good bead appearance.

Hardness of the pure weld deposit:

untreated: 48 – 52 HRC

soft annealed 850 – 900 °C: approx. 35 HRC

hardened 1000 – 1150 °C / air: 48 – 52 HRC

tempered 700 °C: approx. 40 HRC

Typical analysis

	C	Si	Mn	Cr	Ni	Mo	Co	Fe
wt.-%	0.2	0.5	0.2	11.5	1.0	4.5	12.5	bal.

Operating data

	Polarity	DC + / AC	Dimension mm	Current A
	Redrying	300°C / 2h	2.5 × 250 *	60 – 90
			3.2 × 350*	80 – 120
			4.0 × 350*	120 – 160

* available on request

Welding instructions

Clean welding area to metallic bright. Preheating temperature depends on the welding application (150 – 400 °C). On low-alloy steels at least 3 – 4 layers should be applied.

Approvals

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