

## DURWELD NiCoMo

Electrodes MMA [SMAW]

Hardfacing and repairing

<b>CLASSIFICATION:</b>	<b>APPROVALS:</b>	<b>APPLICATION:</b>
DIN 8555 : E4-UM-350-CKPSTZ W.Nr. : 1.6356		Hardfacing and repairing

- Electrode with an alloyed core and a special basic coating.
- Dedicated to the repair of dies and punches, especially those exposed to a huge impact.
- Recommended especially for H13 type martensitic steels and martensitic maraging steels.
- The deposit is very easily machined mechanically.
- Can be heat treated if higher hardness is required. A further increase in hardness can be obtained by the nitration process.
- The weld deposit significantly increases the hardness of the welded edge of cold cutting tools and blades.

### Recommendations:

- In many cases, it can be used without the need to preheat the base material.
- When hardfacing high carbon steels, it is recommended to preheat and apply the buffer layer using the INOX R312 electrode.
- It is recommended to use small electrode diameters, which allows to limit the influence of heat on the base material in order to avoid loss of hardness of the overlay.
- Hardening of the deposit can be achieved by annealing for 4 hours at 480°C and subsequent slow cooling (50°C/1h).



### Application

Hardfacing of dies, stamping tools, metal working tools, die casting tools.

### Typical chemical composition %

C	Si	Ni	Mo	Co	Ti
0,03	0,30	18,00	4,00	12,00	+

### Typical mechanical properties

<b>Hardness</b>	app. 350 HB (as welded) / 55 HRC (annealed 480°C / 4h) /
<b>Coating type</b>	basic
<b>Welding current</b>	
<b>Welding positions</b>	
<b>Redrying</b>	350°C / 1 h

### Welding parameters and packing

∅	Length [mm]	Welding current [A]
2,5	300 /	50-70
3,2	350 /	70-100
4,0	350 /	90-120

**METALWELD-FIPROM POLSKA spółka z o.o.**

ul. Mikołajczyka 57, 41-200 Sosnowiec

+48 (32) 297 75 50 - 51

+48 (32) 297 75 88

[export@metalweld.pl](mailto:export@metalweld.pl)