

TECHNICAL DATA

DELORO™ 40 ALLOY

DELORO™ NICKEL-BASED ALLOYS exhibit excellent corrosion, abrasion, and wear-resistance (up to 600°C), and have a wide melting range allowing them especially to be applied by the spray & fuse and powder welding processes.

DELORO™ 40 is a versatile hardfacing alloy with good wear and abrasion resistance and with acceptable impact resistance. Deloro™ 40 is machinable and produces hard dense corrosion resistant coatings with superior fusing characteristics. Good corrosion resistance and hot hardness up to approximately 400°C. Many often used to protect glass forming plungers.

NOMINAL CHEMICAL COMPOSITION (MASS%)

ALLOY	Ni	Cr	C	Si	B	Fe	Others
Deloro™ 40	Bal.	7,5	0,2	3,0	2,0	2,5	-

PHYSICAL PROPERTIES

ALLOY	Hardness	Density	Melting Range
Deloro™ 40	30 - 42 HRC*	~ 8,14 g/cm ³	960 – 1100 °C

*Based on the chemical composition, whereas small variation within the allowed range has a remarkable impact on the hardness.

Thermal Expansion Coefficient (micron / m-degC)

100°C	200°C	300°C	400°C	500°C	600°C	700°C	800°C
10.64	11.81	12.33	12.91	13.41	13.90	14.35	14.67

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PRODUCT FORMS

Consumables for Cladding / Hardfacing					
Rods	TIG-Welding		Oxy-Acetylene Welding		
Cored Wire	MIG Welding		Submerged Arc Welding		
Powder	PTA Cladding	Laser Cladding	HVOF	Powder Welding	Spray & Fuse

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