



**MANUFACTURERS OF A DIVERSE RANGE OF
ADVANCED WELDING CONSUMABLES**

**SECTION
8**

WI-0304 DS100A NSK-385 Rev. 1, Date 01.04.2013

NSK-385	FOR WELDING FULLY AUSTENITIC STEELS CONTAINING A NOMINAL 20Cr-25Ni-5Mo and 2Cu WHEN GOOD CORROSION RESISTANCE IS SPECIFIED				DATA SHEET NO. 100A							
	SPECIFICATION	AWS A5.4		BS EN ISO 3581-A								
CLASSIFICATION	E385-17		E 20 25 5 Cu N L									
PRODUCT DESCRIPTION	<p>A balanced rutile alumina-silicate flux coating on a core wire of matching analysis which combine ease of use with the deposition of weld metal of exceptionally smooth appearance.</p> <p>The flux is concentrically extruded onto a fully alloyed core wire and bound by a blend of silicates that assures both coating strength and resistance to subsequent moisture absorption.</p>											
WELDING FEATURES OF THE ELECTRODE	<p>Suitable for use on all welding set including low voltage welding set. The arc is exceptionally smooth, the slag normally detaching & the weld appearance excellent.</p> <p align="center">UNCONTROLLED</p>											
APPLICATIONS AND MATERIALS TO BE WELDED	<p>This electrode ensures good resistance to corrosion against sulphuric, phosphoric and other organic and inorganic acids. When welding ASTM N08904, BS1449,904513 and BS1504-364 C11.</p> <p>Proprietary alloys include Uddleholm 904L, Sandvik 2RK65, Cronifer 1925LC(UDM), 254 SLX (Avesta), Uranus B6 and B6M. Can also be used to weld copper free variants of above and lower alloyed variants such as 317L, 317LN, 317LM.</p> <p>Applications include pipes and process vessels, pumps and valves used in fertiler plants.</p>											
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	Nb	Cu	N
	MIN	-	1.0	-	-	-	19.5	24	4.2	-	1.2	
	MAX	0.03	2.5	0.9	0.02	0.03	21.5	26	5.2	0.5	2.0	
	TYPICAL	0.02	1.6	0.4	0.01	0.02	21.0	25	5.0	0.1	1.3	0.08
WELD METAL PROPERTIES (ALL WELD METAL)	<u>PROPERTY</u>	<u>UNITS</u>	<u>MINIMUM</u>	<u>TYPICAL</u>	<u>OTHERS</u>							
	Tensile strength	N/mm ²	520	630	H.V. 190~200							
	0.2% Proof stress	N/mm ²		420								
	Elongation on 4d	%	30	38								
	Reduction of Area (RA)	%	-	52								
Impact energy -196°C	J	-	60									
WELDING AMPERAGE AC or DC+	Ø (mm)	2.6		3.2	4.0							
	MIN	60		75	100							
	MAX	90		120	155							
OTHER DATA	Electrodes that have become damp should be re-dried at 150°C for 1 hour.											
RELATED PRODUCTS	Please contact our Technical Department for detail.											