



UNIWELD IND. DE ELETRODOS LTDA

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COMERCIAL DESIGNATION: **ESSEN CN 31 HC Kb**

PATTERN: A.W.S. E 310 H₁₅

Alloy Elements Included	C	Si	Mn	Cr	Ni
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APPLICATION FIELD	Special electrode indicated against corrosion wastages and it is resistant to working temperatures up to 1150°C. Specially indicated for welding and filling up in laminated cylinders, rails and support in high oven and turbines. Pelton, Kaplan, Francis.				
TECHICAL CHARACTERISTICS	In fused steel with thickness up to 20mm, it is recommended a pre-heating approximatedly 200°C, the deposit has structure austenitica. Ideal for junctions of manganese steel. DIN: ----- AISI: A 296- A 362- 351 - CRAU CK 20 A 297- A 362- ACI N° HK				
MECHANICAL PROPRIETIES	Traction Resistance: 70-75 N/mm Elasticity Limit: 30-35 N/mm ² Extension L = 5 d.%: 20% Resilience Kpm/cm ² : D.V.M. 62-89J Brinel Hardness: 200				
OPERATIONAL CHARACTERISTICS	For C.A or C.C. +				
	Welding Position: P.V.S.				
	Ø In m/m e em	2,00x300mm	2,50x350mm	3,25x350mm	4,00x350mm
Amperage	45-55 A	50-80 A	80-110 A	110-150 A	
Package	4 kg	5 kg	5 kg	5 kg	
WELDING TECHNIQUES	Clean the area to be welded, determine the electrode's diameter in accordance with the part, adjust the amperage, keep the arch short, use stainless brush to clean and to restart the welding process.				



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COMERCIAL DESIGNATION: **HM 35**

PATTERN: AWS E 7018

Chemical Analysis Typical from Deposit:	C	Si	Mn	P	S				
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APPLICATION FIELD	Special Basic Electrode of low hydrogen for unions of high responsibility and steel welding with low or no alloy. Recommended for big constructions like bridges, structures, boilers, special steel for building construction, union welding in high steel solicitation and hard welding or steel with high carbon composition, generally utilized in naval construction, railways, chemical industries, automobilistics, maintenance in general and also for union or filling up the fused iron where the hardness is an important factor.				
TECHNICAL CHARACTERISTICS	Medium covered electrode containing iron powder for welding and steel union, low and no alloy and easily fusion, scoria lightly floating, no intervenience in welding, out of position, exceptionally tenacious the fatigue is of high mechanical resistance.				
INDICATED TO BASIS METALS	Steel for Construction: St 33 - St 52 - St 37T - St 52T Steel for Pipelines - St4538 Steel for Boilers: HI-H18 - 17Mn4 - ST44KT - ST47KT				
MECHANICAL PROPRIETIES	Traction Resistance: 54-55 Kp/mm ² Elasticity Limit: 43-48 Kp/mm ² Extension L = 5 d %: 28-34 Resilience Kpm/cm ² : DVM 18-23				
OPERATIONAL CHARACTERISTICS	For C.A/C.C.+				
	Welding Position: Welded in all positions				
	Ø em mm	2,50x350mm	3,25x350mm	4,00x450mm	5,00x450mm
Amperage	65-90A	100-130A	140-120A	180-220A	
Package	15 kg	15 kg	25 kg	25 kg	
WELDING TECHNIQUES	The cleanness of the area is indispensable and essential for the arch lenght to be always kept short, not to overload the electrode with an excessive amperage, weld only with well dried electrode, prepare the junctions following the patterns, thickness up to 350mm must be chamfered.				