

# Avesta P7 AC/DC

Basic stick electrode high-alloyed, chemical resistant

## **Classifications**

AWS A5.4

E 29 9 R

# Characteristics and typical fields of application

Avesta P7 is a high-alloy Cr-Ni electrode with approx. 40% ferrite offering high tensile strength and excellent resistance to cracking. The chemical composition corresponds to AWS A5.4 E312.

Avesta P7 is primarily intended for welding dissimilar joints between stainless steel, tool steel, spring steel and 14% Mn-steel, as well as other difficult-to-weld combinations.

#### **Corrosion resistance:**

Very good corrosion resistance in wet sulphuric environments, such as in sulphate digesters used by the pulp and paper industry.

## **Base materials**

Specially designed for difficult-to-weld steels such as Mn-steels, tool steels and high temperature grades.

Typical analysis of all-weld metal (wt%)								
	С	Si	Mn	Cr	Ni			
wt-%	0.09	0.8	0.8	29.0	9.5			

## Mechanical properties of all-weld metal

Heat- treat- ment	Yield strength R <sub>e</sub> N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation $(L_0=5d_0)$	Impact work ISO-V KV J		Hardness	
	MPa	MPa	%	+20 °C	-40°C	HB	
u	620	810	20	25	-	270	

u untreated, as-welded

#### **Operating data**

Polarity: Electrode identification:	<b>ø (mm)</b> 2.5 3.25 4.0 5.0	L mm	Amps A 50 - 80 80 - 120 100 - 160 160 - 220
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#### Approvals

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