



# PRODUCT SPECIFICATION

SPECIAL WELDING MATERIALS

Page: 1 of 1  
Date: 8/26/2013  
Product: ER120S-1

**NAME OF PRODUCT** ER120S-1

**Classifications:** AWS A5.28 ER120S-1

## TYPICAL MACHANICAL PROPERTIES

<b>Rm</b> ( N/mm <sup>2</sup> ) 980	<b>Rs</b> ( N/mm <sup>2</sup> ) 900	<b>Al% 5d</b> 19	<b>Kv + 20°C</b> J 160	<b>Kv - 50°C</b> J 100			
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## CHEMICAL COMPOSITION ( average )

<b>C %</b> 0.08	<b>Si %</b> 0.55	<b>Mn %</b> 1.75	<b>P %</b> <0.010	<b>S %</b> <0.010	<b>Cu %</b> <0.25	<b>Cr %</b> 0.55	<b>Ni %</b> 2.50	<b>Mo %</b> 0.55	<b>Al %</b> <0.10	<b>V %</b> <0.030	<b>Zr+Ti%</b> <0.15			
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## WELDING PROCESS

Shielding Gas                      MAG M21 ( 80%Ar + 20% CO<sub>2</sub> ) ; Argon ; CO<sub>2</sub> (C1)  
Pre Heating                         232°C  
Post Welding                        as-welded

*Tollerance according to EN ISO 544*

## DIMENSIONS

<b>MIG</b>	<b>0.035</b>	<b>0.045</b>												
<b>TIG</b>	1/16	3/32	1/8											

## APPLICATION

Fine-grained middle alloyed steels with high yield strength and austempering steels  
Lifting and handling machines, bridges, tanks, transport, shipbuilding, railway sector, mining industry, frames etc.