
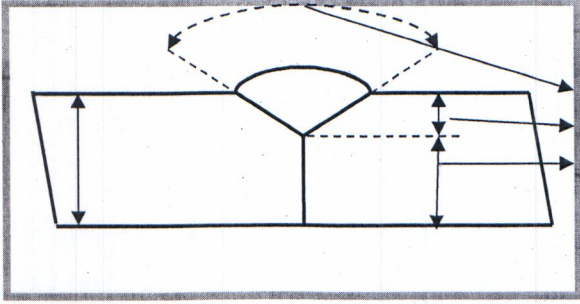
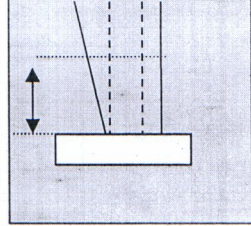
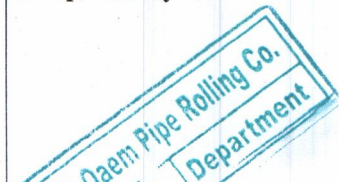
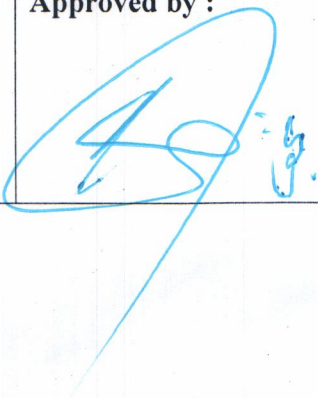
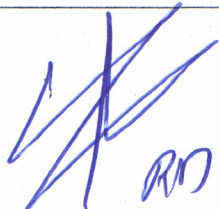


<b>F-PR-01</b> REV:01 DEY:93 Page: 1 OF 4	<b>Welding procedure specification</b> <b>As per ASME section (IX)</b>		نورده قلم 																							
Place Of Production: Qom Qaem Pipe Rolling Production Standard: AWWA C200-17 Date: 02/02/26		Welding process : SAW Station: Inside Welding Type: Auto	WPS NO:2061 PQR NO:P-2061																							
Customer : آرون آب Inspector : شرکت بازرسی پیاب گستران لیان																										
<b>BASE METAL</b>																										
Material spec: Din 17100 Wall thickness: 6 mm Grade: ST 37-2		P-NO:1	Pipe Diameter Range: 600 – 700 mm																							
<b>JOINT</b>	Joint Design : <b>Butt Joint, Single -V-Groove</b>																									
Weld Position:  <b>ROTATE (1G)</b>	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <b>Fig.:1</b>  </div> <div> <math>\alpha = 60^\circ (\pm 5^\circ)</math>  <math>A = 2.0 \pm 1 \text{ mm}</math>  <math>B = 4.0 \pm 2 \text{ mm}</math>  <math>\text{Root} = 0-2 \text{ mm}</math> </div> </div>																									
	<b>SAW INSIDE WELDING</b>																									
<b>FILLER METAL</b>	Wire type: Ama 50-12 AWS NO.(Class):A5.17 EM12		F-NO: 6 A-NO: 1 Wire dia.(mm)1:Ø 4 Wire dia.(mm)2: ---																							
Flux Type: SF-873 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Welding Parameter</th> <th style="width: 40%;">W 1</th> <th style="width: 40%;">W 2</th> </tr> </thead> <tbody> <tr> <td>Ampere OR WFS</td> <td style="text-align: center;">75±10</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Voltage (V)</td> <td style="text-align: center;">28±2</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Polarity</td> <td style="text-align: center;">DC+</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Stick Out (mm)</td> <td style="text-align: center;">26±2</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Angle</td> <td style="text-align: center;">0±2</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Spacing (mm)</td> <td colspan="2" style="text-align: center;">17</td> </tr> <tr> <td>Travel Speed (Cm/min)</td> <td colspan="2" style="text-align: center;">130±10</td> </tr> </tbody> </table>		Welding Parameter	W 1	W 2	Ampere OR WFS	75±10	-	Voltage (V)	28±2	-	Polarity	DC+	-	Stick Out (mm)	26±2	-	Angle	0±2	-	Spacing (mm)	17		Travel Speed (Cm/min)	130±10		<div style="text-align: center;"> <b>Fig.: 2</b>   </div> <div style="text-align: center; margin-top: 10px;">         Pipe flow ←       </div>
Welding Parameter	W 1	W 2																								
Ampere OR WFS	75±10	-																								
Voltage (V)	28±2	-																								
Polarity	DC+	-																								
Stick Out (mm)	26±2	-																								
Angle	0±2	-																								
Spacing (mm)	17																									
Travel Speed (Cm/min)	130±10																									
Prepared by :  		Approved by :  																								
Authorized by :  																										

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## Welding specification As per ASME section (IX)

نورد لوله  
قائم قم



### SAW OUTSIDE WELDING

Filler  
Metal

Wire Type: Ama 50-12  
AWS NO: A5.17 EM12

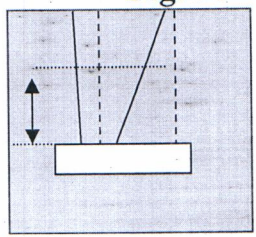
F-NO:6  
A-NO: 1

Wire dia. (mm)1: Ø 4  
Wire dia. (mm)2: ---

Flux/Wire Class: AWS/ASME F7A4-EM12 **procedure**

Welding Parameter	W 1	W 2
Ampere OR WFS	80±10	-
Voltage (V)	28±2	-
Polarity	DC+	-
Stick Out (mm)	26±2	-
Angle	0±2	-
Spacing (mm)	17	
Travel Speed(Cm/min)	130±10	

Fig. : 3



→ Pipe flow

PRE H.: NR

P.W.H.: NR

GROOVE CLENGING TYPE: Milling

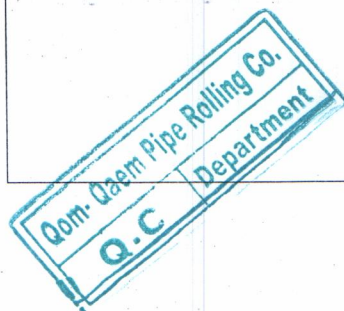
STRING OR WEAVE : STRING

### REMARK:

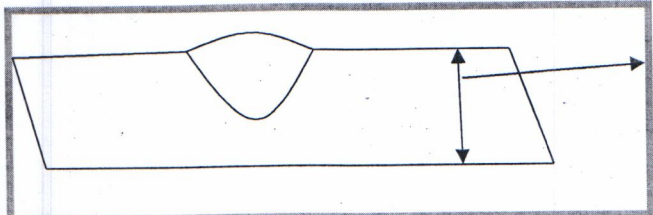
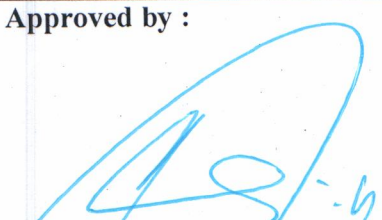

Prepared by :


Approved by :

Authorized by :





<b>F-PR-01</b> REV:01 DEY:93 Page: 3 OF 4	<h2 style="margin: 0;">Welding procedure specification</h2> <h3 style="margin: 0;">As per ASME section (IX)</h3>	نورد لوله قائم قم <div style="float: right; border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin-top: 5px;"> <span style="font-size: 24px; font-weight: bold;">Q</span> </div>	
Place Of Production: Qom Qaem Pipe Rolling <b>Production Standard: AWWA C200-12</b> <b>Date: 02/02/26</b>	Welding process: <b>SMAW</b> Station: Repair Shop Type: Manual	<b>WPS NO:3061</b> <b>PQR NO:P-3061</b>	
Customer : آرون آب شرکت بازرسی پیاب گستران لیان			
<b>Welders Name :</b> Reza Ashiri , mohammad shakori			
Material spec: Din 17100 Wall thickness: 6 mm Grade: ST 37-2	P-NO: 1	Pipe Diameter Range: 600-700 mm	
<b>JOINT</b>	<b>Joint Design : Butt Joint , Single-V-Groove,ID&amp;OD</b>		
Weld Position:  <b>ROTATE (1G)</b>	<b>Fig. : 4</b>  <div style="position: absolute; right: 0; top: 50%; transform: translateY(-50%);"> <b>T= 6 mm</b>  <b><math>\alpha = 30^\circ (\pm 10^\circ)</math></b> </div>		
<b>Groove Cleaning type: Manual Grinding</b> <b>String or Weave Bead: As Repair Needed</b> <b>PRE H.:NR</b> <b>P. W. H: NR</b>			
<b>FILLER METAL</b>	Electrode: type: E 7018- AMA 1230F AWS NO.(Class):A5.1	F-NO:4    A-NO: 1	
<b>Welding Parameter</b>			
Ampere OR WFS	95-145	140-185	190-230
Voltage (V)	20-27	20-27	20-27
Polarity	DC+	DC+	DC+
$\emptyset$ E	3.2	4	5
Speed: As Repair Size			
<b>Prepared by :</b>  <div style="border: 1px solid black; padding: 5px; transform: rotate(-30deg); display: inline-block;">             Qom Qaem Pipe Rolling Co.              Department  <b>Q.C</b> </div>	<b>Approved by :</b>  	<b>Authorized by :</b>  	

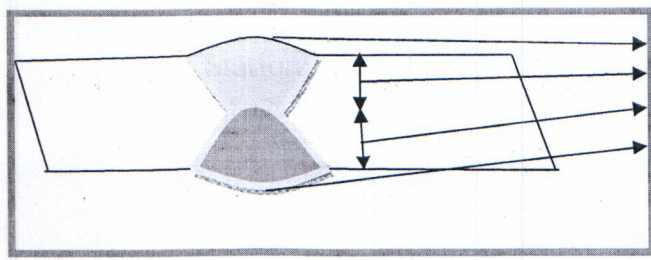
<b>F-PR-01</b> REV:01 DEY:93 Page: 4 OF 4	<b>Welding procedure specification</b> <b>As per ASME section (IX)</b>	نورد لوله قائم قم 
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Place Of Production: Qom Qaem Pipe Rolling <b>Production Standard: AWWA C200-12</b> <b>Date: 02/02/26</b>	Welding process : <b>SAW</b> Station: Skelp Welding Type: Auto	<b>WPS NO:1061</b> <b>PQR NO:P-1061</b>
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Customer : آرون آب  
Inspector : شرکت بازرسی پیاب گستران لیان

### BASE METAL

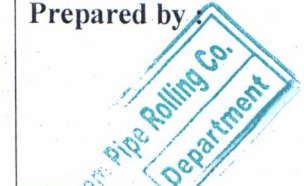
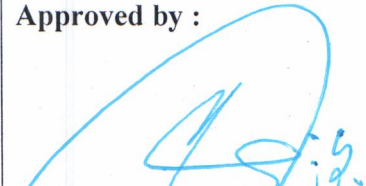

Material spec: Din 17100 Wall thickness: 6 mm Grade: ST 37-2	P-NO:1	Pipe Diameter Range: 600-700 mm
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<b>JOINT</b>	Joint Design : <b>Butt Joint, Double-V-Groove</b>
Weld Position:  <b>Flat (1G)</b>	<b>Fig. : 5</b> 

### SKELP WELDING (INSIDE & OUTSIDE) & Repair Welding

FILLER METAL		Wire type: Ama 50-12 AWS NO.(Class):A5.17 EM12		F-NO:6 A-NO: 1		Wire dia. (mm): Ø 3.2	
Weld Pass	Process	Filler Metal		Current		Vlt age	Speed cm/min
		Class	Dia. (mm)	Type Polar	Ampere OR WFS		
1 (ID)	S.A.W	(EM12)	3.2	DC+	500±50	30±2	55±10
2 (OD)	S.A.W	(EM12)	3.2	DC+	500±50	30±2	55±10

Groove Cleaning type: Manual Grinding  
PRE H. & P.W.H. : NR  
String or Weave Bead: String

Prepared by : 	Approved by : 	Authorized by : 
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