WELDING PROCEDURE SPECIFICATION

WeldEngineering HQ - Rua da Prata 80

WPS ISO 15614-1

Schweißanweisung
Specifica di procedimento di saldatura
Спецификация процедуры сварки
دليل عملية اللحام

BASIC INFORMATION

PQR no:	PQR 15614-1	**STANDARD:**	ISO 15614-1	**PRODUCT TYPE:**	Pipe
WELD TYPE:	BW - Butt Joint	**WELDING PROCESSES:**	**Root:** 141	**Fill:** 138	**Cap:** 138

BASE MATERIAL DETAILS

BASE MATERIALS:	SA 240 Type 316LN D, t7.5 - 30 & SA 240 Type 316LN D, t7.5 - 30	**W. THICKNESS (mm)**	0 - 30	**DIAMETER (mm):**	≥ 40
GROUP:	8.1 - 8.1	**WELDING POSITIONS:**	**Root:** PA, PC, PF	**Fill:** PA, PC, PF	**Cap:** PA, PC, PF

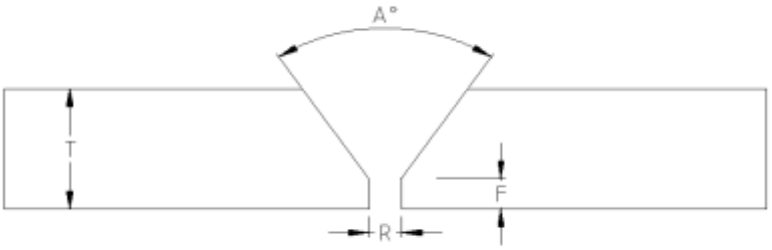
FILLER MATERIAL DETAILS

	Root	Fill	Cap		Root	Fill	Cap
SPECIFICATION	ISO 636-A	ISO 17632-A	ISO 17632-A	**SHIELDING**	Gas I1 - ISO 14175	Gas I1 - ISO 14175	Gas I1 - ISO 14175
CLASSIFICATION	W 46 A W3Si1	T46 6 M M 1 H10	T46 6 M M 1 H10	**FLOW RATE (l/min)**	13	13	13
COMMERCIAL NAME				**COMMERCIAL NAME**			
GROUP	FM1	FM1	FM1	**BACKING & FLOW RATE (l/min)**	**Root**	**Fill**	**Cap**
DIAMETER (mm)	1.2	1.2	1.2				

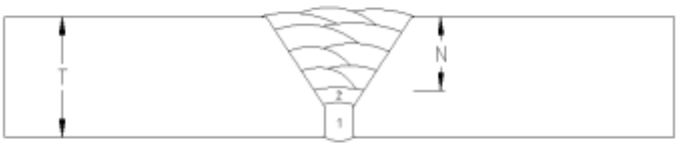
JOINT DETAILS

PREPARATION METHODS:	Machining	**THROAT (mm)**	0 - 30	**WELD DETAILS:**	Multi layer + Single side, no backing

GROOVE DESIGN



WELD LAYER CONFIGURATION



WELDING PARAMETER

PASS #	PROCESS	FILLER METAL	Ø (mm)	CURRENT (A)	VOLTAGE (V)	POLARITY	WIRE FEED (m/min)	TRAVEL SPEED	TRANSF. MODE	HEAT INPUT (kJ/mm)
1	141	W 46 A W3Si1	1.2	60 - 80	20 - 25	DC+	/	300 - 350	/	0.12 - 0.24
2	138	T46 6 M M 1 H10	1.2	150 - 180	24 - 28	DC+	/	250 - 350	Pulsed-spray	0.49 - 0.97
3	138	T46 6 M M 1 H10	1.2	150 - 160	24 - 25	DC+	/	200 - 250	Pulsed-spray	0.69 - 0.96
/	/			/	/	/	/	/	/	/
/	/			/	/	/	/	/	/	/
/	/			/	/	/	/	/	/	/

ADDITIONAL DETAILS

ELECTR. TYPE AND #	**Root**	**Fill**	**Cap**	**OSCILLATION**			
	-	-	-				
STICK OUT (mm)	**Root**	**Fill**	**Cap**	**WEAVING**	**Root**	**Fill**	**Cap**
DETAILS OF BACK GOUGING:				**TORCH ANGLE (°)**			

THERMAL PARAMETERS

PREHEAT TEMPERATURE (°C):		**INTERPASS TEMPERATURE (°C):**	0 - 150	**POSTHEAT TEMPERATURE (°C):**	
POST WELD HEAT TREATMENT	**TIME (h):**	**TEMPERATURE (°C):**		**METHOD:**	**HEAT/COOL RATE (°C/h):**

ADDITIONAL INFORMATION

NOTES: This WPS is just an Example

REVISION	WRITTEN BY	VERIFIED BY	APPROVED BY	CLIENT APPROVAL	STATUS
0	**Hans Schweißmann** DATE: 26.02.2024	**Günter Gutmann** DATE: 27.02.2024	**Viktor Chefknecht** DATE: 28.02.2024	DATE:	