

# Documentation of Welding Procedure Test



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witnessed by GL Surveyor (Name, date, signature, stamp)

# 1. WPS (Welding Procedure Specification)


 Preliminary status

 Final status

## General information

WPS No. / Rev No.:	/	Date of test weld:			
Company name:		Department:		Place:	
Welding process (EN ISO 4063):	111 - SMAW	Number of electrodes:		Joint type: Plate	Butt weld
Welding position (ISO /ASME):	PA - 1G	Method of preparation:		Gouging / grinding:	
Backing:	without	Tungsten electrode Ø:	[mm]	Welding layer:	Single-layer
Preheating temp.:	[°C]	Interpass temp.:	[°C]	PWHT:	

## Material specification

Base material 1:	GL-A	Base material 2:	GL-A
Material thickness [mm]:		Material thickness [mm]:	
Outside diameter [mm]:		Outside diameter [mm]:	

## Welding consumables

Filler metal		Gas	Flux		GL grade
Manufacturer	Brand name		Manufacturer	Brand name	

## Joint preparation (sketch) and welding details

Joint design	Welding sequences

Run	Process	Ø filler metal [mm]	Current [A]	Voltage [V]	Type of current / polarity	Wire feed speed [m/min]	Travel speed [cm/min]	Heat input [kJ/cm]
	111 - SMAW		-	-			-	-
			-	-			-	-
			-	-			-	-
			-	-			-	-
			-	-			-	-

## Further information

Shop primer			Other:
Manufacturer	Brand name	Dry film thickness	
		[µm]	

Place/Date

Welding Supervisor (Name and Signature)

# 2. Welding Data Sheet



### General information

WPS No. / Rev No.:	/	Date of test weld:	
Welding position:	PA - 1G	Preheating temp.:	[°C]
PWHT:			

### Joint preparation (sketch) and welding details

Joint design	Welding sequences

Run	Welding Process	Ø filler metal [mm]	Current [A]	Voltage [V]	Type of current / polarity	Wire feed speed [m/min]	Travel speed [cm/min]	Heat input [kJ/cm]
1	111 - SMAW							
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
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20								

Base material heat No.:		Name of welder / operator:	
Welding consumable lot No.:			

### Further information

Welding Supervisor (Name, date, Signature)

Test witnessed by GL Surveyor (Name, date, signature, stamp)

# 3. WPQR (Welding Procedure Qualification Record)



### General information

WPS No. / Rev No.:	/	Date of test weld:	
WPQR No.:		Date of laboratory test:	
Welding process::	111 - SMAW	Base material:	GL-A
		Welding position:	PA - 1G

### Non-destructive testing

Test Method	Results	Test report No.	Test Method	Results	Test report No.
Visual inspection:			Radiographic test:		
Ultrasonic test:			Magnetic particle test:		
Dye penetrate test:					

### Destructive testing

Tensile test		Test report No.:	
Specified YS min. [N/mm <sup>2</sup> ]:		Specified TS min. [N/mm <sup>2</sup> ]:	

No.:	Dimension	Area [mm <sup>2</sup> ]	Test load Fr [N]	YS [N/mm <sup>2</sup> ]	Break load Fm [N]	TS [N/mm <sup>2</sup> ]	Elongation [%]	R.A. [%]	Location / Character of fracture

### Bend test

Bend test			Test report No.:		
Specified degree [°]:			Mandrel diameter. [mm]:		
Type	Dimension (W x T)	Result	Type	Dimension (W x T)	Result

### Notched bar impact test

Notched bar impact test				Test report No.:	
Test temperature[°C]:				Minimum requirement [J]:	
Notch location	Result 1 [J]	Result 2 [J]	Result 3 [J]	Average [J]	
Weld metal				6	
Fusion line				6	
Fusion line + 2 mm				0	
Fusion line + 5 mm				0	
Fusion line + 10 mm				0	
Weld metal (Root)				0	

### Hardness tests HV 10

Hardness tests HV 10				Test report No.:				
Sketch "Double Click: Image in \\Forms with Makro\Z449DE"	Points	1	2	3	4	5	6	
	WM	A						
		B						
	HAZ	A						
		B						
	BM	A						
		B						

Test Method	Results	Test report No.	Test Method	Results	Test report No.
Macro photo			Fracture Test		
Micro photo					

Test Laboratory (Name, date, signature, stamp)

Lab test witnessed by GL Surveyor (Name, date, signature, stamp)

The latest edition of the General Terms and Conditions of Germanischer Lloyd is applicable. German law applies.

## 2.1. Further Welding Data Sheet

WPS No. / Rev No.:		/			Date of test weld:			
Run	Welding Process	Ø filler metal [mm]	Current [A]	Voltage [V]	Type of current / polarity	Wire feed speed [m/min]	Travel speed [cm/min]	Heat input [kJ/cm]
21	111 - SMAW							
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Welding Supervisor (Name, date, Signature)

Test witnessed by GL Surveyor (Name, date, signature, stamp)