

WELDING PROCEDURE QUALIFICATION RECORD (WPQR)

Welding procedure qualification – Test certificate

Manufacturer's WPQR No:	135/136/1.3/BW	Examiner or examining body:	DNV
Manufacturer:	Cermar sp. z o.o.	Reference No:	None
Address:	Cukrowa 10H 71-004 Szczecin		
Code/Testing Standard	PN-EN ISO 15614-1:2005 DNV-OS-C401		
Date of Welding	17.04.2009		

Range of qualification	
Welding process	135/136
Type of joint and weld:	BW
Parent material group(s) and sub group(s):	MW450K / 1.3 (1.5217K)
Parent material Thickness:	12 mm
Weld metal thickness:	12 mm
Throat thickness [mm]:	None
Single run/Multi run:	135-Single run / 136 Multi run
Outside pipe diameter [mm]:	φ178
Filler material designation:	135 - EN 440: G463M G4Si1 136 - EN 758: T462PC1H5
Filler material make:	OK AUTROD 12.64 - ESAB FLUXOFIL 19HD - OERLIKON
Filler material size:	φ1,2 mm
Designation of shielding gas/Flux:	EN 440: (M21 ; 80%Ar+20%CO ₂ -135) (C1 ; 100%CO ₂ -136)
Designation of backing gas:	None
Type of welding current and polarity:	DC / +
Mode of metal transfer:	Globular / Spray transfer
Heat input:	0,81-1,90 [kJ/mm]
Welding position:	H-L045
Preheat temperature:	100-150°C
Interpass temperature:	205°C
Post-Heating:	None
Post-Weld-Heat-Treatmens:	None
Other information	None

Certified that test welds prepared, welded and tested satisfactorily in accordance with the requirements of the code/testing standard indicated above.

Szczecin 29.04.2009

Location

Date of issue

DNV

Examiner or examining body
Name, date and signature

mgr inż. Marcin Jachura
SPAWALNIK
WELDING ENGINEER
PL-IWE-00113/2007



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