



# Product Datasheet

## Knuckle Boom Crane OC2809

RIG/PLANT		
ADDITIONAL CODE	SDRL CODE D01	TOTAL PGS 4
REMARKS		
MAIN TAG NUMBER		DISCIPLINE
CLIENT PO NUMBER		
CLIENT DOCUMENT NUMBER		

REFERENCE <b>G1431</b>	REFERENCE DESCRIPTION	
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	DOCUMENT NUMBER	REV



**REVISION HISTORY**

0	01.06.2012	Issued for Approval	INB	SIHL	INB
<b>Rev</b>	<b>Date (dd.mm.yyyy)</b>	<b>Reason for issue</b>	<b>Prepared</b>	<b>Checked</b>	<b>Approved</b>

**CHANGE DESCRIPTION**

**Revision**      **Change description**  
**0**

Tag:	Pipehandling Crane																		
Unit:	Pipehandling Crane																		
Location Area:	Pipedeck	Project No:	G1431																
Size:	PC2809K-(10-15)-(35-25)	Machine No:	G1431-2613																
Manufacturer:	National Oilwell Varco	General Arrangement																	
Supplier:	National Oilwell Varco	Drawing:	G1431-C2809P-G0001																
<b>DESIGN DATA</b>																			
1.																			
2.	Service	Horizontal Pipe Handling																	
3.	Cabin position.	Right side																	
4.	Design code / standard	ABS "Main Class 2011" FEM "Rules for the Design of Hoisting Appliances", API 2C "Spec. for Offs. Pedestal Mounted Crane, 2004 NR 10, NR13.																	
5.	Classification according to FEM	Crane: A3/U3/Q2 Mechanism, Luffing: M5/T4/L3 Slewing: M4/T4/L2																	
6.	Specification	Ref. Technical Description G1431-Z-SA-001																	
7.	Crane design criteria, loads etc.	Ref. Reaction Forces G1431-N-RD-001																	
8.	Area classification	Crane: Safe area (Pedestal, King w/Cabin, Main Boom) Jib tip : Ex-zone 2, IIA, T3 Atex.																	
9.	Temperature																		
	- Design Service Temperature (T <sub>D</sub> )	- 10°C																	
	- Ambient temperature (T <sub>A</sub> )	- 10°C to + 45°C																	
10.	Wind speed, stowed position	60 m/sec.																	
11.	Max working radius	m	36																
12.	Min working radius	m	6																
13.	Luffing speed, main boom	sec	Min to Max angle: 80 Max to Min angle: 90																
14.	Luffing speed, knuckle boom	sec	Min to Max angle: 70 Max to Min angle: 60																
15.	Slewing	rpm	0,7 (360dgr unlimited)																
16.	Weight excl. pedestal adapter	kg	59600																
17.	Weight(wet) incl. pedestal adapter	kg	64000																
18.	Equipment size ( L x W x H)	mm	~25300 x ~6500 x ~7100 (with cylinders fully retracted)																
19.	Hydraulic oil reservoir	~2000 Liters. Integrated in crane king structure.																	
20.	Lifting Capacities tubulars	Ref. Data Sheet for Gripper Yoke: G1432-Z-DS-001																	
<b>LIFTING DATA</b>																			
22.	<b>SWL and Working Radius:</b>																		
	<table border="1"> <thead> <tr> <th>Type of lift</th> <th>Max SWL (T)</th> <th>Min working radius. (m)</th> <th>Max working radius. (m)</th> </tr> </thead> <tbody> <tr> <td>Pipehandling w/ Yoke. Load in Grippers.</td> <td>3,5</td> <td>6.0</td> <td>35</td> </tr> <tr> <td>General Handling w/ Yoke Load in centre hook</td> <td>7.0</td> <td>6.0</td> <td>35</td> </tr> <tr> <td>General Handling. Load in Hook Adapter</td> <td>15,0</td> <td>15.0</td> <td>25</td> </tr> </tbody> </table>			Type of lift	Max SWL (T)	Min working radius. (m)	Max working radius. (m)	Pipehandling w/ Yoke. Load in Grippers.	3,5	6.0	35	General Handling w/ Yoke Load in centre hook	7.0	6.0	35	General Handling. Load in Hook Adapter	15,0	15.0	25
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	The DAF is set to 1.4 independent of significant wave height.																		
<b>INTERFACE / POWER SUPPLY</b>																			
24.	Power supply el.motor, external supplied	265 kW S6-40%, 480 V AC, 3 ph, 60 Hz																	
25.	Aux. power supply, external supplied	8kW (S1) 230VAC/60Hz/3ph Crane control system is 24 V DC, supplied from 230 C AC, aux supply.																	
26.	El-motor heater power supply.	Part of motor starter system, ref.pkt.45																	

27.	Slew Bearing	Size and Type Module Bolt no./size/quality Bolt tensioning method	2809 mm Ball bearing M18 72 / M39 / 10.9 Hydraulic Tension
28.	Slew Gear		3 pcs planetary gear boxes.
29.	<b>HYDRAULIC DESCRIPTION</b>		
30.	Hydraulic system.		Hydraulic pumps: 1pcs main pump + circulation pump. Hydraulic motors: 3 pcs slewing motors. Hydraulic cylinders: 2 pcs main boom, 1 pcs knuckle boom. Hydraulic valves: Main Control Valve inside crane king. Control and safety valves in crane king, and on cylinders. Oil cooler: 1 pcs outside crane king. Oil volume 2000 l
31.	Pipes, Fittings and Hoses		GS Hydro / Parker Hanifin.
32.	<b>SURFACE PROTECTION</b>		
33.	Sandblasting, paint spec. & color code		In accordance to NOV procedure HL/A-04A Technical specification for Fabrication. Color on top layer : Yellow RAL 1006
34.	<b>INSPECTION AND TESTING</b>		
35.	Function test		Included
36.	Load test		Included
37.	<b>CABIN DRAWING REFERENCES</b>		
38.	Crane Cabin		G1431-A8001
39.	Operators Chair		
40.	<b>LUBRICATION/HYDRAULIC FLUID</b>		
41.	Lubrication		Ref. Lubrication Chart G1431-L0001 for lubrication type and intervals.
42.	Gear Oil Type		Gear Unit: ISO VG 150 Brake Unit: ISO VG 32
43.	Hydr. Oil Type		NOV Standard Mineral Oil (Rando HDZ 46) Not included.
44.	<b>STARTER EQUIPMENT FOR MAIN ELECTRIC MOTOR.</b>		
45.	Soft starter for main electric motor. According to KFELS specifications for motors > 150 kW. Mounting in lower part of pedestal.		
46.	<b>GENERAL INFORMATION.</b>		
47.	ABS	Design code / According to ABS 3 <sup>rd</sup> Part Certification Certificates.	Included
48.	Chain Sling SWL 15T	For general handling	Included
49.	Flood Light		Included
50.	Boom Tip Camera. (Ex. Proof)		Included
51.	Soft Starter		Included
52.	Air condition in Cabin		Included
53.	Gripper Yoke 20''	F1432-D1167-G0001	Included