rotork Gears

GEARBOX TYPE PERFORMANCE CERTIFICATE

IW RANGE: IP68 sealing

IP68 TEST RECORD

TEST NO	T 1265	PASS / FAIL	Pass
GEARBOX SIZE	IW 6 / IR 1	TEST ENGINEER	H Block
GEARBOX RATIO	140:1	DATE	1 April 2010
GEARBOX RATING	9274 Nm	INPUT SPEED	Hand wound
WORM WHEEL MATERIAL	SNG 700-2	WORM SHAFT MATERIAL	Standard
THRUST BEARING TYPE	Romania	LUBRICATION	CL 2X (Lightly lubricated only)

PURPOSE OF TEST To confirm that an range IW gearbox to latest standard build stays leak free when operating 15 meters under water.

SPECIAL REQUIREMENTS The IW6 gearbox is placed inside a hyperbaric test chamber, which is pressurised to 1.5 bar (21.75 Psi) for 72 hours (3 days). The gearbox is loaded onto both stop bolts at full rated output torque of 9274 Nm for 3 cycles at this pressure each day. Input torque required is 211 Nm.

EQUIPMENT USED IP 68 Hyperbaric test rig TR 169.
Norbar SL3 torque wrench.

RESULTS OF TEST Test started on the 29th. March at 1 pm and finished on the 1st April 2010. No water entered the gearbox cavities during testing.

CONCLUSION This test verifies that the IW range of gearboxes is sealed to IP68 at a depth of 15m for a duration of 72 hours.

Signed

Steve Watkins
R+D Engineering Manager

11 June 2010