

## Roto Jet Pumps



ROH 3x2 S-484

General Pump Options

Roto-Jet General Pump Options

Steel/CA6NM Pump (ASTM - A216/A487)

17-4 PH Pitot Tube

Tungsten Carbide Coated Pitot Tube

Viton O-rings

API Pump Configuration

Direct drive pump design

Seal assembly

Mechanical Seals

Double Stationary Pusher Carbon Seal - Tungsten Carbide Mating Ring

Seal manufacturer - WSP Standard

Stainless steel seal hub/seal plate

Seal flush

plan Plan 53A seal flush

Rotor Assembly

Rotor Assembly

CA6NM rotor and rotor cover (ASTM - A487)

Inpro seals

Drive and Rotor End Inpro Seals

Manifold

Manifold Configuration

Steel Flanged Manifold (ASTM - A216)

600 LB x 1500 LB RF Flanges

Bearing Housing

Bearing Housing

Cast Iron Bearing Housing

Constant Level Oiler - WSP Standard

Steel Rotor Case

Bronze Oiler Rings

Driver

Motors

200 KW, Horizontal Motor

2 Pole, 60 Hz

TEFC, Ex d Zone 1 and 2, Groups IIA and IIB, T4

460 V

355ML

Baseplate & Drives

Baseplate Configuration

Gear drive base for Milwaukee gearbox

Base design

API steel base design

Couplings - WSP Standard

Milwaukee gearbox 1.5333 ratio

Accessories

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Steel 2" Valve & Gauge Package

Protective Coatings

Paint manufacturer & type

WSP 3 Coat Epoxy Paint

Testing & Documentation

Testing and Inspection

NACE Certs and Foundry Material Certs - Manifold

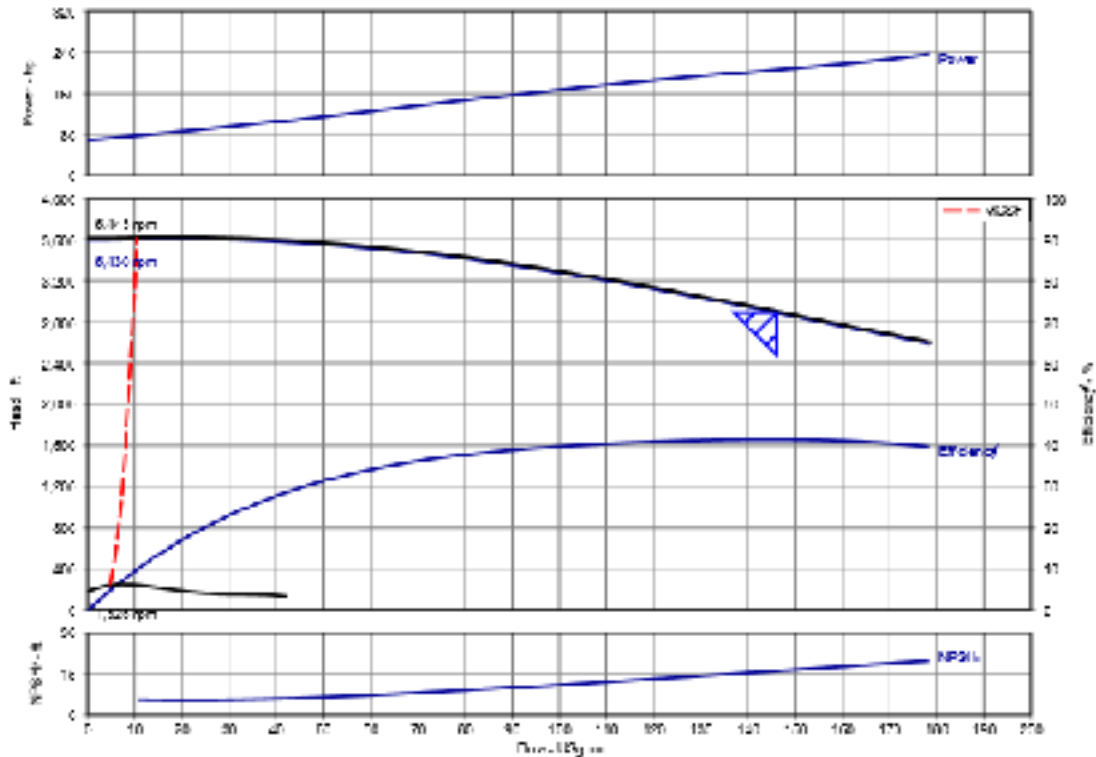
NACE Certs and Foundry Material Certs - Rotor

NACE Certs and Foundry Material Certs - Rotor Cover

## Pump Performance Datasheet

Customer	: Dulen Pump, Inc.	Quote number	: 02917002
Customer reference	: Transfer Pump	Size	: ROH 3.2 S 181
Item number	: 001	Stages	: 1
Service	: Oil	Rated on curve number	: P7100-S1
Quantity	: 4	Date last saved	: 13 May 2015 5:03 PM

Operating Conditions		Liquid	
Flow, rated	: 146.0 USgpm	Liquid type	: User defined
Differential head / pressure, rated (designated)	: 2,870.0 ft	Additional liquid description	: Oil
Differential head / pressure, rated (actual)	: 2,809.0 ft	Solids diameter, max	: 0.00 in
Suction pressure, rated / max	: 0.00 / 0.00 psig	Solids concentration, by volume	: 0.00 %
NPSH available, rated	: N/A	Temperature, max	: 100.0 deg F
Frequency	: 60 Hz	Fluid density, rated / max	: 0.800 / 0.800 SG
Performance		Viscosity, rated	: 50.00 cP
Speed, rated	: 1,400 rpm	Vapor pressure, rated	: 1.00 psi a
Speed, maximum	: 5,413 rpm	Material	
Speed, minimum	: 1,325 rpm	Material selected	: Standard
Efficiency	: 41.55 %	Pressure Data	
NPSH required / margin required (imp. cys flow) / S. (imp. cys flow)	: 16.14 / 3.00 ft : 3 / 155 Metric units	Maximum working pressure	: 1,249.4 psig
MCSI	: 10.40 USgpm	Maximum allowable working pressure	: 2,650.0 psig
Head maximum, rated speed	: 2,809.0 ft	Maximum allowable suction pressure	: 300.0 psig
Head rise to shutoff	: 29.15 %	Hydrostatic test pressure	: 4,025.0 psig
Flow, best eff. point (BEP)	: 141.0 USgpm	Driver & Power Data	
Flow ratio (rated / BEP)	: 101.09 %	Driver sizing specification	: Maximum power
Speed ratio (rated / max)	: 99.75 %	Margin over specification	: 0.00 %
Head ratio (rated speed / max speed)	: 99.50 %	Service factor	: 1.15
Cq/Ch/Ce/Cs [ANSI/HI 9.6.7-2010]	: 0.92 / 0.93 / 0.71 / 1.00	Power, hydraulic	: 85.74 hp
Selection status	: Acceptable	Power, rated	: 206 hp
		Power, maximum, rated speed	: 235 hp
		Minimum recommended motor rating	: 250 hp / 105 kW



Construction Datasheet								
Customer		: Durlen Pump, Inc.			Quote Number		: 297/502	
Project		: Transfer Pump			Model / File		: RCH 3x2 5-484	
Item number		: 001			Stages		: 1	
Service		: OIL			Pump speed		: 5,400 rpm	
Quantity of pumps		: 4			Date last saved		: 13 May 2015 5:03 PM	
Construction					Driver Information			
Nozzle	Size	Rating (ANSI)	Face	Pos'n	Manufacturer			: LPI Choice
Suction	3 in	500 lbs.	RI	Left	Power			: 200 kW / 270 hp
Discharge	2 in	1500 lbs.	RI	Right	Service factor			: 1.00
Pump Drive Type		: Direct drive			Speed			: 3,600 rpm
Pump Orientation		: Horizontal			Motor efficiency			: -
Ueanna Type (Kad/Thr)		: Dual/Ual			Orientation / Mounting			: Horizontal/Foot
Reading / Lubrication		: Oil - constant level oiler			Unver type			: Electric
Rotation (view from shaft end)		: -			Frame size			: 355M
					Enclosure			: TFFD
Materials					Hazardous area class			: Ex d
Manifold		: Steel (ASTM - A216)			Explosion rating			: Zone IIA, IIB
Rotor Assembly		: C618M (ASTM - A187)			Volls / Phase / Hz			: 480 / 3 / 60
Pick-Up Tube		: 1/4 P11			Insulation			: 4
Flasomer		: Vtron			Temperature Rise			: -
Shaft		: 4140 carbon steel			Motor mounted by			: RPI
Baseplate, Connection and Guard					Seal, Gland and Piping			
Baseplate Type		: Gear drive			Seal Arrangement		: Double	
Baseplate Material		: Fabricated steel			Seal Size		: N/A	
Orientation		: Horizontal			Manufacturer		: RPI Choice	
Connection Type		: Direct drive			Seal Hub / Seal Plate Matl		: Stainless Steel	
Guard		: Fiberglass/Ethylene			Seal Face Matl		: Carbon seal - tungsten carbide rubbing ring	
Weights (Approx.)					Throat Dishing			: N/A
Uareshaft pump		: 1,200.0 lb			Seal Flush Plan		: Plan 53	
Baseplate		: TRD			Seal Flush Construction		: -	
Driver		: 4,035 lb						
Gearbox		: 425.0 lb						
Total weight		: 1000						