



REGOMS PRODUCT DATASHEET

ZONE 2 TWIN 50 BBL BATCH MIXER

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FOR ILLUSTRATION PURPOSE ONLY

The **Zone 2 Twin 50bbl Batch Mixer** is a self-contained, high-performance offshore mixing solution, designed for hazardous Zone 2 environments. It is built into a rugged offshore skid with top lifting points and lower lift/drag points for versatile handling. The system is engineered for efficient mud mixing and circulation operations, ensuring reliable performance in demanding offshore conditions.

GENERAL DESCRIPTION

- Twin 50-barrel batch mixer tanks built into a single piece standard skid with offshore crash frame and top lift. Please note the skid is not DNV certified, but if required we can load test to DNV 2.7.1 Standard).
- The twin 5 x 6 centrifugal mixing and circulating pump can be used on either of the individual 50-barrel tanks. Agitators are industry standard "Poclain" driven with a 'DANFOSS' closed loop hydraulic system of pumps and motors.
- The unit is fitted with a full offshore crash frame inclusive of top lifting points and lower lift or drag points for land and truck operations.
- Zone II Detroit Diesel In line 6 Cylinder diesel power of 238hp with hydraulic pumps and motors provide adequate power for all mixing operations.
- Engine monitoring and control is also incorporated in to the power pack control panel.
- Mixing is through a 3 x 1 1/2-inch venturi type mud mixing nozzle with mixing hopper or option of direct 5-inch bulk hose inlet (not included).
- Overall size:
L7.32 (25') x W2.44 (8') x H 2.55 (10') with handrails folded down.
L8.23 (27') x W2.44 (8') x H 3.46 (11' 4") in operational mode.
- Weight: 11.6 tones

DIESEL POWERED ZONE II PACKAGE

Detroit Diesel In-line 6Cyl rated for 238bhp at 2100 RPM or 175 hp at 1800 RPM - continuous duty. Engine with following specification:

- **Air Inlet System** - Air Cleaner, Emergency Shut Down Flapper
- **Cooling System** – Thermostat and housing, full open temp = 92°C, outlet regulated. Jacket water pump, gear driven, centrifugal, radiator and blower fan.
- **Exhaust system** – exhaust manifolds, dry cooled.
- **Exhaust elbows** – dry and loose supply one each 5-inch spark arrestor exhaust muffler.
- **Flywheel & Housing** – SAE 1 standard rotation
- **Fuel System** – Fuel Filter Primary and secondary, Rh with service indicators, fuel transfer pump, fuel priming pump. Flexible fuel lines.
- **Instrumentation** - panel with engine controls, oil pressure gauge, fuel pressure gauge, water temperature gauge and service meter.

- **Lube System** – Crankcase breather, oil filter in valve cover and dip stick, oil filter
- **Starting System** – IR air starter with air relay

COUPLED TO A 'DURST' MODEL 4PD08 FOUR HYDRAULIC PUMP DRIVE

- Maximum rating of 540 KW (725 HP) & 2065 Nm (1523 lb/ft) Torque @ 2500 RPM
- Fitted with an SAE-1 Engine Housing Adapter and 14" Fixed Steel Drive Plate
- 0.813:1 ratio (increaser)
- 4 x SAE-C (45 deg offset) Pump Mount Pads and 1 ¼" 14T adapter sleeve

PYROBAN ZONE II KIT

Specification detail for a Pyroban Zone 2 flame protection kit for a Detroit Diesel 6-71N with side mounted cleanable gas cooler.

- 1 off Stainless steel air intake flame trap suitable for gas group IIA and designed to fit between the engine intake housing and the roots blower supplied with gasket and fastener kit.
- 1 off Pneumatic cylinder for automatic actuation of the Detroit Diesel air-intake shut down flaps. To be used in conjunction with an Amot or similar shutdown control system.
- 1 off Pyroban "Cleancap" exhaust gas main cooler complete with exhaust gas outlet box, fixing studs, nuts and gaskets.
- 1 off Exhaust Flametraps plate type—All stainless-steel construction, designed in accordance with the recommended dimensions.
- 1 off Flanged dry exhaust flexible for fitting between spark arrestor and exhaust gas cooler.
- 1 off Flametrap Dummy elements
- 1 off Single stainless steel spark arrestor, Inlet flange suitable for mating with item 5.
- 1 off Crank case breather flametraps complete with housing.
- 1 off Airbox drain breather flametraps complete with housing.

ENGINE PROTECTIVE SHUT DOWN SYSTEMS (SAFETY KIT):

Pneumatic shutdown system, designed to give automatic shutdown of both intake air and fuel in the event of:

- Engine overspeed
- High exhaust gas temperature

CONTROL ENCLOSURE COMPRISING OF:

- 1 set - A stainless steel enclosure with hinged door and heavy-duty latch.
- Amot eye ball indicators on, engine overspeed, low engine oil pressure, high exhaust temperature and high engine water coolant.
- Instrumentation: Exhaust temp gauge, coolant temp gauge both all in stainless glycerin filled with 10-meter-long armored protected capillary. Gas back pressure gauge, lube oil pressure gauge, air pressure gauge, all in stainless casing.

HYDRAULIC PUMP DRIVE

'DURST' Model 4PD08 Four Hydraulic Pump Drive

- Maximum rating of 540 KW (725 HP) & 2065 Nm (1523 lb./ft) Torque @ 2500 RPM
- Fitted with an SAE-1 Engine Housing Adapter and 14" Fixed Steel Drive Plate
- 0.813:1 ratio (increaser)
- 4 x SAE-C (45 deg offset) Pump Mount Pads and 1 1/4" 14T adapter sleeve

HYDRAULIC PUMPS AND MOTORS: CLOSED LOOP SYSTEM

- 2 each - Poclain Low Speed Motors MS-11 (55 rpm) for agitators
- 2 each - 'Danfoss' axial piston pump 90L075HS (55cc/rev) hydraulic control for agitators
- 2 each - 'Danfoss' axial piston motor 90M075, fixed volume for C-Pumps
- 2 each - 'Danfoss' axial piston pump 90L055HS (75cc/rev) hydraulic control for C-Pumps
- 4 each - Hydraulic joystick, friction control, Bondioli
- 4 each - Charge pump filter, D062-196, Argo-Hytos
- 1 each - To tank return filter, MPF400
- 1 each - 100 gallon Stainless Steel Hydraulic Storage Tank

PUMP ASSEMBLY & ACCESSORIES:

1 each	Serva RA 56 Centrifugal Pump CCW Rotation
1 each	Serva RA 56 Centrifugal Pump CW Rotation
1 each	Mixing jet and Hopper with option of direct bulk supply

CONTROL VALVES

Tyco Keystone Butterfly valves - all manual system for simplicity of operation

OTHER COMPONENTS

- BV certified 20 Gallon Air receiver with Safety Valve and Pressure Gauge for Operating air of 120psi
- Oil lube tank for Centrifugal pump with regulated air supply. Operating pressure +/- 5 psi

- Ingersoll Rand Air starter and starting system

NOTES

The unit will be operationally tested and adjusted for optimum performance of all components. During the test, all operating systems will be monitored for proper functioning. Any abnormal operations are corrected and retested to ensure the units proper functioning. (Water as test medium only)

To request for quotation and detailed pricing, please contact our sales team:

REGOMS Engineering (M) Sdn. Bhd.

No. 10-1, Jalan 13/48A, The Boulevard
Shop Office Sentul Raya, Sentul Selatan,
51000 KL. WP.

Malaysia

Tel: +603 2858 2600

Email: sales1@regoms.com

REGOMS Australia Pty Ltd.

Level 1, 16, McDougall Street,
PO Box 1279, MILTON QLD 4064

Australia

M: +614 0008 4977

F: +617 3198 2401

E: sri@regoms.com

<https://www.regoms.com>

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