



240 BARREL GEL HYDRATION

SPECIFICATION: PS-GH240

THE ULTIMATE MIXER FOR THE MOST CHALLENGING JOB



**YOU'RE IN THE BUSINESS OF
OIL+GAS RECOVERY.**

WE'RE IN THE BUSINESS OF ENSURING THAT HAPPENS.

The advanced design capable of mixing gelled fluid at a maximum rate of 120 bpm. The hydration tank is divided into 4 compartments to allow operating the unit at lower rates matching the job rate. The unit is rated for well service operations in ambient conditions of 10°F (-12°C) to 120°F (46°C).

Equipment designed by PowerServe Oilfield Equipment.



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UNIT DIMENSIONS

LENGTH:	48' (overall) 41' - 5" (kingpin to bogey)
WIDTH:	8' - 6"
HEIGHT:	13' - 0" (mounted on 52" high fifth wheel)

ENGINE

OPTION 1

MODEL: QSX15	Cummins
ASPIRATION:	Turbocharged + Aftercooled
CERTIFICATION:	U.S. EPA Tier 4I
RATED OUTPUT POWER:	600 BHP @ 2,100 rpm

ENGINE

OPTION 2

MODEL: C15	Caterpillar
ASPIRATION:	Turbocharged + Aftercooled
CERTIFICATION:	U.S. EPA Tier 4I
RATED OUTPUT POWER:	580 BHP @ 2,100 rpm

GEARBOX

MODEL: 4PD11D 2	Durst 150 lb-ft torque
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SUCTION PUMP

MODEL: 612L20-B/S2	Gorman Rupp
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RECIRCULATION PUMP

MODEL: 610M20-B	Gorman Rupp
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LIQUID ADDITIVE SYSTEM

Liquid additive chemicals are metered into the slurry at different points in the process. Onboard tanks are used to store additives. Chemical transfer pumps are used to fill the onboard tanks for fluid sources external to the unit. The liquid additive pumps meter the chemicals into the process piping at precise ratios.

- Up to 2 550 gallon stainless steel tanks
- Up to 4 liquid additive pumps, Roper, or Waukesha pumps standard
- Other pump makers and models available upon request

HYDRATION TANK

The hydration tank is subdivided tank into 3 equal compartments. Each compartment will be 102 inches wide x 96 inches long x 108 inches tall yielding a volume of approximately 109 bbl each. Two transverse baffles are installed in each tank compartment approximately 24 inches apart to create the tortuous flow path. Fluid can be routed through a third, two thirds, or the entire volume depending upon required hydration time and flow rate. This is done by opening/closing the appropriate discharge valves

- Compartment Inlets: 14" flanged/Victaulic with butterfly valve
- Discharge Outlet:
 - 8" Victaulic bottom sump outlet on first compartment
 - 12" Victaulic bottom sump outlets on second and last compartment
- Construction: 1/4" carbon steel, corrugated

HYDRAULIC TANK

CAPACITY:	100 gallon
CONSTRUCTION:	Steel custom fabrication
MANIFOLDS:	Return manifold, case drain manifold
FILTRATION:	Parker Modulfo in-tank filters mounted on return and case drain manifolds
SIGHT GAUGE:	Visual sight glass with temperature gauge

CONTROLS

The control cabin will be mounted behind the hydration tank on the upper level platform. The controls will consist of a gauge panel, universal engine control enclosure, and processor based control system with custom software. Controls will be powered from a 24 volt alternator/battery system on the deck engine. High quality polyurethane jacketed cables with molded end connectors and twisted pairs to be used on all sensor applications.

- Custom aluminum control cab
- Electrical components/systems only in control house (no hydraulics or pneumatics in cab)
- Kick-out emergency window

INSTRUMENTATION

VISCOMETER

pH SENSORS

CLEAN FLOW METER

LA FLOW METERS

TUB LEVEL