

# WOMA Offshore TWIN 250m UHP



## Twin Ultra High Pressure Offshore Services Pump Unit

250 M P16 DNV 2.9 / T3, Zone II, ATEX Certified,  
Mounted in a BVQI & NATA Lifting Frame

- **WOMA Designed TWIN 250m UHP** specifically for use in the Offshore Oil & Gas industry.
- Main Drive—**Caterpillar 3406 DITA** with Turbine Starter.
- **Twin WOMA** Pumps producing 20 L/M @ 2800 Bar each.
- Flame Protection **Pyroban** Kit Zone 2 T3.
- Full **ATEX Certification** for use hazardous areas, Zone II Group 2A diesel.
- Fully Certified **NATA Accredited** Offshore Lifting Frame complete with Acoustic protection.
- Complete **AMOT** Air Over-ride controls with **Norgren** fittings Certified to AS/NZS 1271-1997.

### Technical specification:

**Pump Type TWIN WOMA 250M – P16**

**Nominal Flow Q = 20 litres per minute per pump**

**Operating Pressure P = 2800 Bar / 40,600 psi**

**Single / Double gun independent operation**

**Pumping Medium water NPSH 3-8 Bar**

**Water Temperature Max. 45 Deg. Celsius**

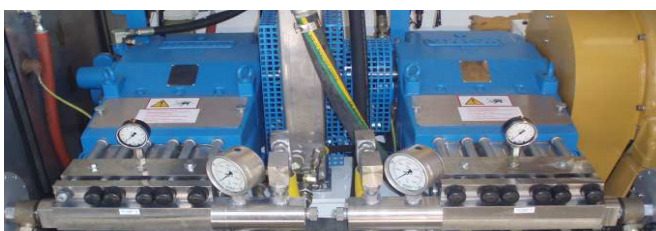
**Requested Drive P = 99 kW per pump**

**Driving Speed N = 1800 RPM**

**Crankshaft Speed = 398 RPM**

**Gear Ratio I = 4.52:1**

Pressure regulator— as spill valve and in function as 2/2-way valve continuously adjustable, pneumatically operated.



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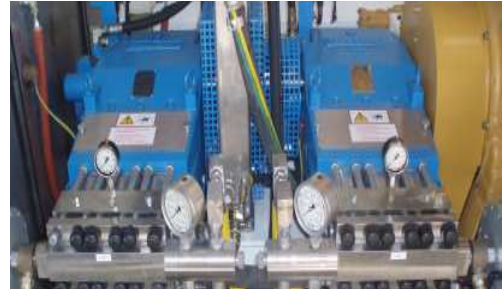
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### Consisting of:

#### **TWO (2) OF HP PUMP TYPE WOMA 250M P16**

Nominal Flow Rate	Q = 20 Litres/ Minute
Operating Pressure Maximum	p = 2,800 Bar / 40,600 PSI
NPSH	3-8 BAR
Pumping Medium	Water
Water Temperature Maximum	45° Celsius
Requested Drive	P = 99 kW
Driving Speed	n = 1800 rpm
Internal Gear Ratio	i = 4.52



### Materials:

Pump Head	Stainless Steel
Conversion Set	Stainless Steel
Gear oil cooling device	
Plungers	Tungsten Carbide

### Pressurised water control through:

Pressure regulator as spill valve and in function as 2/2-way valve continuously adjustable, pneumatically operated.  
Check valve, pneumatically operated. Function: Closing of consumer line at pressure less pump work

### Transmission by:

Flexible coupling

### Drive:

Diesel Engine, Brand:	CATERPILLAR
Type:	3406
Cooling:	Water
Engine Output:	P = 273 KW (A rated)
Engine Speed:	n = 1800 rpm



### Engine complete with:

Air inlet system	
Exhaust system	
Starter	Pneumatic

### Control and monitoring system with:

Control panel for automatic safety shut down in case of critical operation conditions:	
Temp. max.	Diesel engine
Oil pressure min.	Diesel engine
Oil pressure min.	HP-pump
NPSH min.	HP-pump

Note all the above is controlled by non electrical means to comply to offshore specs.



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### Booster Pump

Prime Pump runs off vee belt drives from front of engine to ensure main pumps are feed with correct quantity and pressure of water at all times

### Filter Housing

Pump fitted with 5 micron cartridge type filter

### Base frame made of light steel sections

With integrated fuel tank, sufficient for 12 hours full load operation.

### Header tank made of stainless steel

Volume approximately 80 litres. Tank complete with level control.

### Further equipment:

Air dryer  
Full lift safety valve for Z pump  
Rupture Disc for M pump  
Pressure gauges  
Pressure connections  
Connecting flange  
Low pressure water fittings and hoses kit  
Standard tool kit  
Documentation 1 fold

### Further equipment to comply to Offshore Specs

Air Start system with anti spark gear  
Certified anti static belts  
Engine speed control pneumatic  
Lifting Frame certified with slings to offshore specs  
Pyroban system fully installed, which includes, exhaust gases below 200 deg C, engine air strange, engine over speed control, etc  
Certified Air Tank  
All major components fully earthed including soundproofing.  
Control valve fit so oil/gas platform can shut down machine at any time remotely.  
Custom built radiator to built to cool exhaust gases and engine.  
Emergency shut downs – Pneumatic

