

HYDRAULIC POWER UNITS

DESIGN PHILOSOPHY

SITES manufacture hydraulic power units (HPUs).

Whether the application is an offshore platform, work barge, offshore loading terminal and pumping station.

SINGLE SOURCE RESPONSIBILITY FROM DESIGN THROUGH START-UP

We design, build and test every major component of the system in an ISO 9001 environment, including accumulators, reservoirs, pressure vessel and hydraulic controls.

SERVICE EXPERIENCE

SITES HPUs are made with field proven components and technology to satisfy even the most stringent application.

CUSTOM ENGINEERING

Every HPU is engineered to fit your application's specific requirements. We recognize that reliable performance depends on every link in the system.



APPLICATION

Hydraulically powered valve actuators are the primary application for SITES HPUs.

SITES offers complete hydraulic system designed to operate any number of valves from a single control center.

Hydraulic power is ideal for application requiring valve modulation, regulation or on/off service.

And, with accumulator backup, SITES hydraulic power units provide the perfect solution for fail-safe and emergency shutdown applications.

HPUs are designed to provide sufficient pressure and volume to stroke valves singly or unison, depending on customer needs.

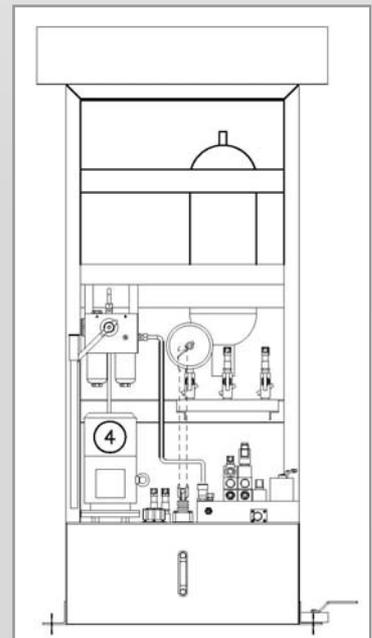
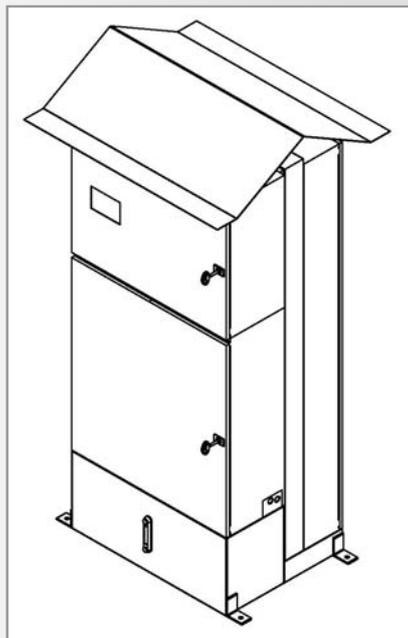
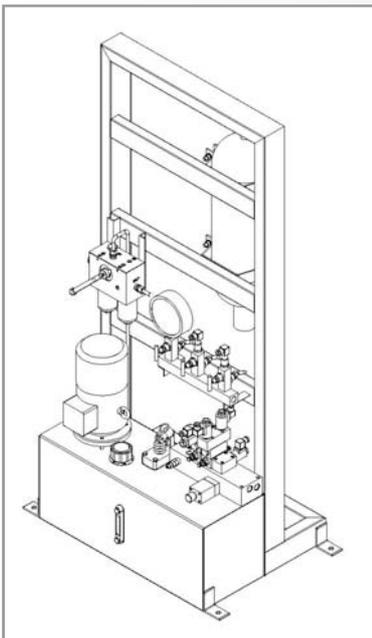
Satellite accumulators are available for fail-safe application.



FEATURES

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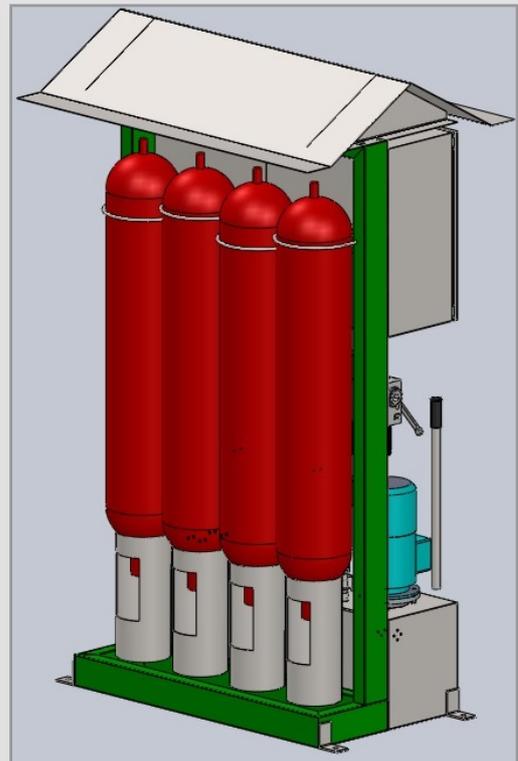
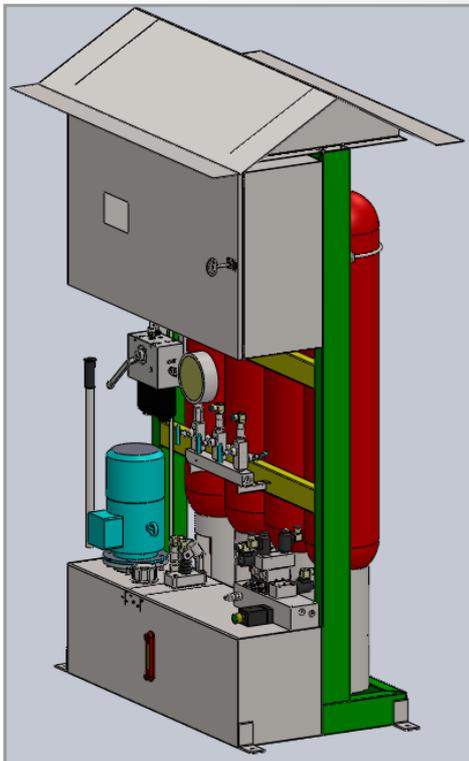
- ⇒ All pressure vessels and accumulators are manufactured, inspected and certified (“U” stamped) to ASME section VIII or according to Pressure Equipmente Directive (PED) for EU Market
- ⇒ The HPU reservoir is closed to the atmosphere preventing ingress of moisture and contaminants wich is critical when using biodegradable fluids.
- ⇒ System manufactured in accordance with EN 982.
- ⇒ Manuals and documentation prepared in accordance with the Machinery Directive 2006/42/EC



CAPABILITIES

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- ⇒ HPU from 20 liters capacity to 8000 liters capacity
- ⇒ Operating pressures up to 200 bar with standard components
- ⇒ Biodegradable hydraulic fluids or petroleum based fluids
- ⇒ Electrical classifications NEMA 4, 4X, 7, 9 or comparable CENELEC standards
- ⇒ Offshore trim with high performance coating system where required
- ⇒ PLC or relay based control logic
- ⇒ Energy sources:
 - Electric motors
 - Pneumatic driven hydraulic pumps
 - Gasoline or diesel fuel engines



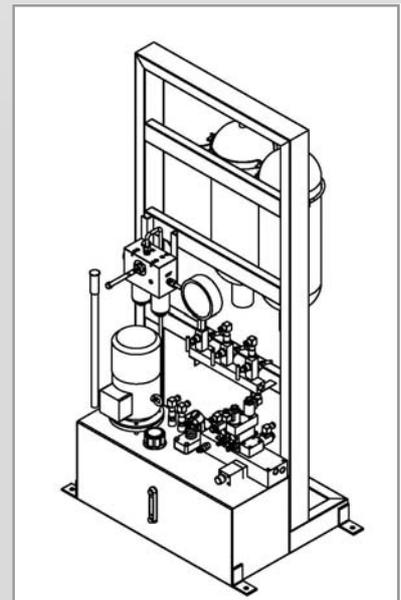
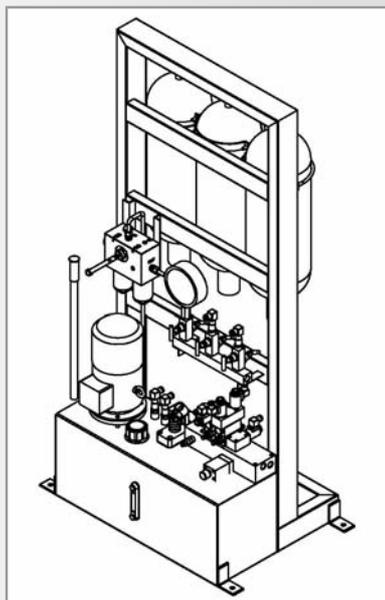
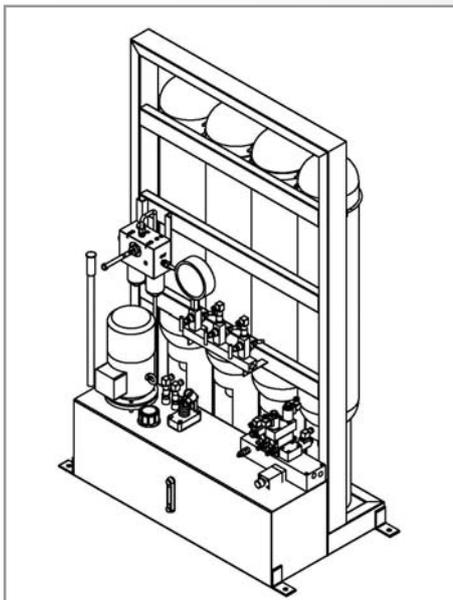
ELECTRIC MOTOR POWERED HPU

Electric motor driven system are composed of six basic components:

- 1) Electric Motor
- 2) Hydraulic pump
- 3) Reservoir tank
- 4) Pressure vessel
- 5) Thermal volume motor control

In the event of an electrical power failure, pressurized fluid is retained in the system.

The accumulator capacity can be sized to provide fail-safe power to any number of valves.



PNEUMATIC POWERED HPU

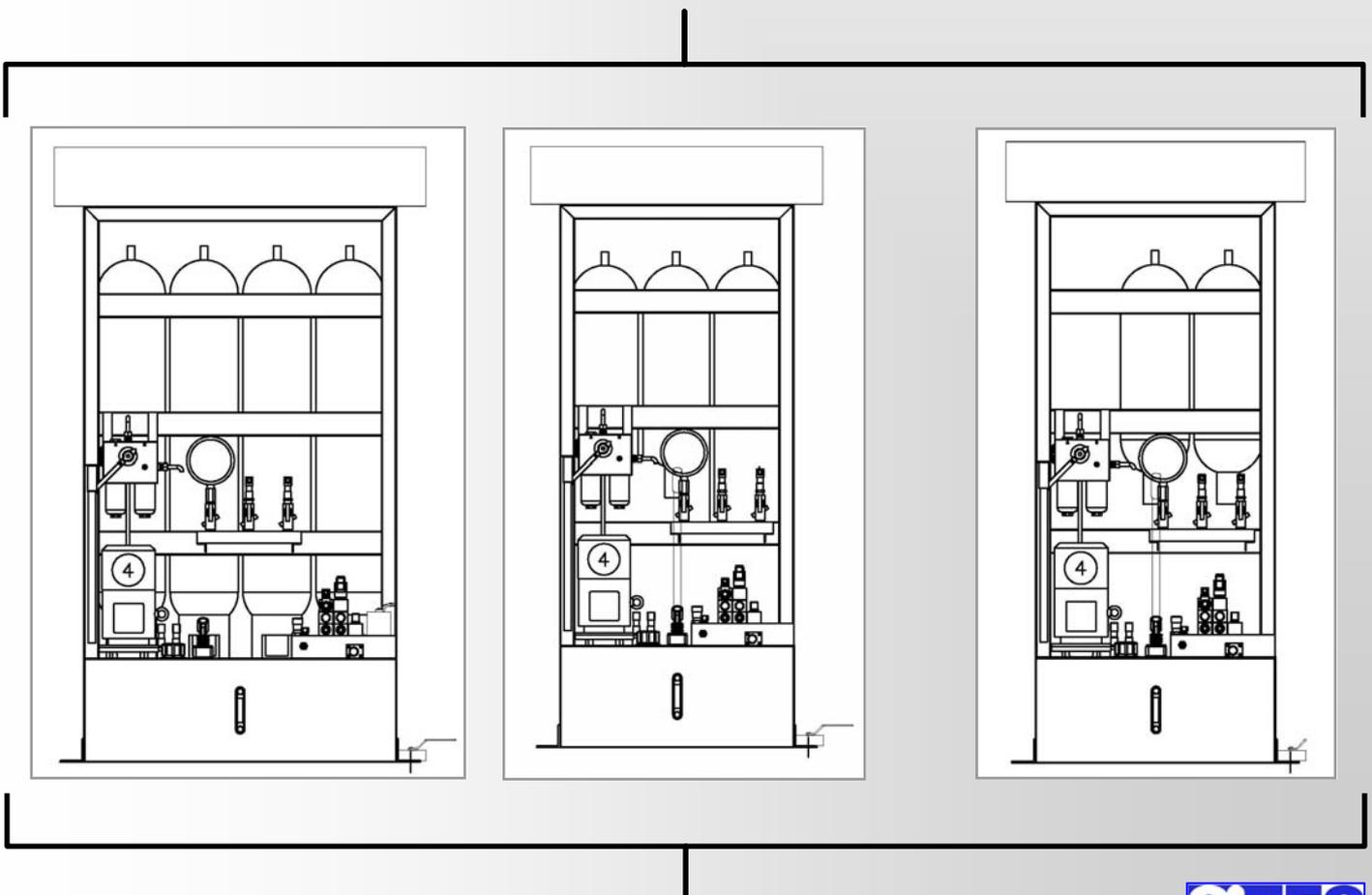
The pneumatic powered HPU is designed for use with sour gas, sweet gas, or instrument air at pressures ranging from 4 bar to 200 bar.

The system converts pneumatic pressure into stored hydraulic power by means of a pneumatic driven hydraulic pump.

The system is totally self-contained and requires no electrical power, pressure switches or motor starters.

Pneumatic powered HPUs are used frequently on offshore platforms.

The advantage is that actuators sizes can be reduced significantly because low pressure pneumatic power source has been converted to high pressure hydraulic power.



CERTIFICATE OF APPROVAL

This is to certify that the Quality Management System of:

SITES S.r.l.
Via Trento, 82
22070 Fenegrò (Como) – Italia

has been approved by Lloyd's Register Quality Assurance to the following Quality Management System Standards:

ISO 9001:2008

The Quality Management System is applicable to:

Engineering, manufacturing, assembly and assistance of gas, air, oil and gas treatment plants for petrochemical and energy companies.

This certificate is valid only in association with the certificate schedule bearing the same number on which the locations applicable to this approval are listed.

Approval Certificate
No: LRC 6009580/QMS/UE/N

Original Approval: 2nd June 2010

Current Certificate: 14th June 2016

Certificate Expiry: 14th September 2018


Issued by: Lloyd's Register Quality Assurance Italy Srl
for and on behalf of Lloyd's Register Quality Assurance Limited



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This document is subject to the provision below
Via Cadorna, 69 20090 Vimodrone (MI)

For and on behalf of 1 Trinity Park, Bickenhill Lane, Birmingham, B37 7ES, - United Kingdom.

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CERTIFICATE SCHEDULE

SITES S.r.l.
Via Trento, 82
22070 Fenegrò (Como) – Italia

Locations

Via Trento, 82
22070 Fenegrò (Como) – Italia

Via Milano, 74 b
22070 Bregnano (Como) - Italia

Activities

Engineering, project management, manufacturing and assembly and assistance of electrical panels, control and power panels for petrochemical and energy companies. Prefabrication of steel structures.

Engineering, project management, manufacturing and assembly of gas, air, oil and gas equipment for petrochemical and energy companies. Technical assistance activities.

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