



GPPS

Global Process & Pipeline Services Ltd

CASE STUDY

GLOBAL PROCESS & PIPELINE SERVICES LIMITED

Global Process & Pipeline Services Limited (GPPSL) required an **offshore-ready flushing unit** capable of delivering exceptionally **high flow rates at low pressure**. Learn how Flowplant engineered its largest flushing unit to date, a progressive cavity pump system with integrated heating and filtration, providing GPPSL with a reliable, compliant solution for hot oil flushing in demanding oil and gas environments.

CASE STUDY



Global Process & Pipeline Services Limited, a specialist in Nigeria's oil and gas sector, required an offshore-certified flushing unit capable of delivering high flow at low pressure for hot oil flushing operations.



BACKGROUND

GPPSL, based in Nigeria, provides specialist services to the offshore oil and gas industry. Their operations required a hot oil flushing unit to clean subsea umbilicals and pipework to strict cleanliness standards. Unlike conventional flushing applications, this project **demanded 15 times the flow of a typical flushing unit, while maintaining a very low operating pressure.**

To meet these requirements, the unit also had to be designed and certified for offshore use, incorporating integrated heating and high-quality filtration to ensure performance and compliance.

CUSTOMER REQUIREMENTS

- **Flow & Pressure:** Maximum flow of 660 l/min at up to 24 bar.
- **Certification:** Fully compliant offshore crashframe (DNV 2.7-1).
- **System Design:** Integrated stainless steel fluid tank with heating.
- **Performance:** Consistent flushing results to meet strict particle count standards.

The combination of high flow, low pressure, and offshore compliance made this project one of the most technically demanding flushing systems Flowplant has delivered.

“Flowplant delivered a system that meets our flow and cleanliness standards while being fully compliant for offshore use. It’s a robust, high-quality solution we can rely on for future projects.”

Chris Onyemaizu

Global Process & Pipeline Services Limited

Get in touch today on sales@flowplant.com or call 01722 325424 today.



Flowplant designed and manufactured a hot oil flushing unit that met GPPSL's requirements by combining proven engineering with tailored innovations:

PROGRESSIVE CAVITY PUMP

driven by an industrial diesel engine.

STAINLESS STEEL CRASHFRAME

built and certified to DNV 2.7-1 standards for offshore safety.

3500-4000 LITRE STAINLESS STEEL TANK

with an integrated 110 kW electric heater to raise flushing oil to 90°C.

HIGH-PERFORMANCE FILTRATION SYSTEM

to achieve required cleanliness levels.

FULL FACTORY ACCEPTANCE TEST (FAT)

carried out at Flowplant, witnessed by GPPSL representatives.



Enhanced Reliability | Optimised Performance |
Operational Confidence | Customised |
Durability & Longevity | Trusted Partnership

Speak to our team today on sales@flowplant.com
or call 01722 325424 today.

IMPLEMENTATION PROCESS

- **Scoping:** Detailed specification developed from GPPSL's technical brief.
- **Design:** Collaborative engineering with milestone reviews and customer approvals.
- **Build:** In-house manufacturing and assembly at Flowplant's facility.
- **Testing:** FAT successfully completed with customer.
- **Delivery:** Unit signed off and prepared for offshore deployment.



RESULTS & BENEFITS

- ✓ FLOWPLANT'S **LARGEST FLUSHING UNIT TO DATE**, SHOWCASING OUR CAPACITY FOR LARGE-SCALE CUSTOM PROJECTS.
- ✓ **OFFSHORE-CERTIFIED** DESIGN ENSURES SAFE, RELIABLE USE IN CHALLENGING ENVIRONMENTS.
- ✓ **HIGH-FLOW, LOW-PRESSURE PERFORMANCE** ENABLES EFFICIENT CLEANING OF LARGE-BORE SYSTEMS.
- ✓ **INTEGRATED HEATING AND FILTRATION** ENSURE COMPLIANCE WITH CLEANLINESS STANDARDS.
- ✓ THE PROJECT REINFORCES FLOWPLANT'S REPUTATION AS A TRUSTED PARTNER FOR **BESPOKE ENGINEERING SOLUTIONS** IN THE OIL AND GAS SECTOR.

TECHNICAL SPECIFICATIONS

UNIT TYPE	HOT OIL FLUSHING UNIT
APPLICATION	Offshore pipe and subsea umbilical flushing
FLOW & PRESSURE	660 l/min at 24 bar max
PUMP	Positive displacement progressive cavity pump
DRIVE	Industrial diesel engine
TANK	3500–4000 litre stainless steel, 110 kW heater (to 90°C)
FILTRATION	High-quality particle removal system
FRAME	Stainless steel crashframe, DNV 2.7-1 certified
DIMENSIONS	4200mm (L) x 2000mm (W) x 2160mm (H)



Scan the QR to find out more
about our custom engineering.

Got any questions? Give our team a
call on 01722 325424.

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