



USA DEBUSK OFFSHORE SOLUTIONS

Specialized Technologies to Improve Maintenance & Operations

- Vapor Blast Surface Preparation
- Nitro-Lift Nitroger



Offshore oil and gas operations present unique risks and challenges for protecting people and the environment. USA DeBusk meets these demanding requirements with stringent safety programs and processes, intensive training, and innovative systems and equipment.

Highlights of our best-in-class health, safety, and environmental program include:

- Best-in-class training and Mentoring/SSE
- "Stop Work Obligation" process intrinsic to all work
- Senior leadership engagement, with Safety Scorecards documenting in-person site safety audits
- · Comprehensive auditing process
- Advanced HSE Management System; allinclusive data availability for customers
- Extensive statistical analyses with trending data
- Engineering/technology investments for risk reduction
- Commitment to automation
- · Site-specific safety plans

SMART SAFETY BADGING

Each company badge includes a QR code that provides mobile, cloud-based, on-demand access to safety information via mobile devices. Scanning a badge allows users to view the employee's current training record, company phone directory, safety professional contact list, water cut cards, company handbooks, and much more.

HSE MANAGEMENT SYSTEM

Our EHS Management System is an all-inclusive source of safety information. Accessible from any mobile device, it includes standard operating procedures, training classes, incident reports, SDS, safety meeting sign-in sheets, recognition program, and unlimited report options.

SAFETY ORGANIZATIONS

USA DeBusk is an active member of safety organizations, such as the Houston Business Roundtable, the National Association of Reciprocal Safety Councils, and Water Jet Technology Association, as well as a participant in auditor compliance groups.





TECHNOLOGIES TO TRANSFORM OPERATIONS

USA DeBusk offers proven specialty technologies to improve the safety, speed, and cost-effectiveness of daily maintenance and operations activities. Each offers unique advantages to address the rugged conditions, extreme space limitations, and demanding environmental requirements of offshore oil and gas production.

VAPOR BLAST

To meet continuing needs for surface preparation. inspection, repairs, and coating, USA DeBusk offers Vapor Blast, an innovative low-pressure water/abrasive vapor technology that is safe, dust-free, effective, and versatile.

COATING SERVICES

Integrated surface preparation and a full scope of coating techniques streamline project timelines and ensure superior-quality work.

NITROGEN SERVICES

On-site nitrogen generation (membrane) to ensure a ready supply of nitrogen gas for well services, purging, pigging, inerting, pressure testing, leak testing, and other routine activities. We also offer specialized nitrogen-based services for hydrate remediation and artificial lift.

VAPOR BLASTING & COATING



Advantages

- 100% dust free, meets silica exposure limits
- Environmentally safe media not toxic to aquatic life
- Small footprint; highly mobile
- Faster, more efficient than other methods
- Reduces volumes and costs of abrasive media
- · Achieves 3.5 or better profile
- One-pass polishing for IRIS and Eddy inspections
- Only light PPE required
- Limited containment requirements, reduces interruption to other contractor trades
- Fast, economical cleanup
- Efficient integration with coating services

VAPOR BLAST

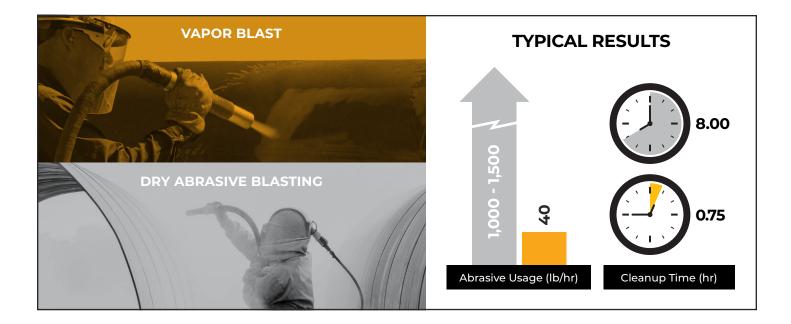
Vapor Blast is a patented^{*}, highly efficient cleaning and finishing process to prepare surfaces for recoating or to polish weld seams or other critical areas for inspection. Combining the effectiveness of both abrasive blasting and water washing, Vapor Blast yields equal or better results in a process that is safer, faster, more economical, and more practical than dry (sand) blasting, brushing, needle gunning, and grinding.

With Vapor Blast, abrasive media are mixed with water, direct-injected under hydraulic pressure into an airstream, and discharged through a hose and nozzle. A control system allows fine-tuning of flow rates and abrasive concentrations for optimum results. Atomized particles conveyed at low pressure produce controlled, uniform scrubbing action, even on hard-to-reach surfaces. A rust inhibitor can be added to the vapor stream to mitigate flash rust or corrosion in offshore environments.

CAPABILITIES

- Removes resins, rusts, chlorides, coatings, oils, stains, epoxy, mill scale and other contaminants, as well as scratches and grinding marks
- · Achieves 3.5 or better profile for paints and coatings
- Performs one-pass polishing for IRIS and Eddy inspections
- Cleans weld areas prior to API inspections
- Removes CUI (Corrosion Under Insulation)
- Allows simultaneous cleaning and rust inhibitor application
- Extended reach, effectively cleaning up to 225 ft (even vertical) from the pumping unit

*US Patent No. 11,933,556 B1



PRODUCTIVITY & EFFICIENCY

On average, Vapor Blast uses approximately 40 lb of media per hour, while sandblasting uses between 1000-1,500 lb of media per hour. Reduced media requirements save space, reduces consumables costs, and substantially reduces cleanup time and waste volume. With no dust cloud, Vapor Blasting can be performed within 10 ft of other work without interference.

A Vapor Blast project occupies a small footprint and has limited containment requirements. It also allows extended access repositioning equipment. Hoses can be run up to 225 ft from the pumping unit (horizontal and vertical).

SAFETY & ENVIRONMENTAL

The environmentally safe abrasives used in Vapor Blast are the only media to pass the Fish and Shrimp Kill Test. They contain no detectable silica (<0.1%). Unlike dry blasting, Vapor Blast produces no dust, complies with OSHA permissible airborne silica exposure levels, and prevents any hot sparks from static electricity. With no dust cloud and only light PPE required for outside surface prep work, Vapor Blast improves safety and visibility for workers in crowded offshore platforms.



INTEGRATED COATING SERVICES

USA DeBusk provides integrated, singlesource Vapor Blast surface preparation and coating services for offshore projects. Application methods include airless spray coating, plural component spray coating, brush, and roller painting. Our NACEcertified technicians and state-of the-art equipment enable us to efficiently handle projects of any scope.

Our coating teams can include Level 2 and 3 NACE-certified inspectors with expert knowledge to assist with coating specifications, non-destructive inspections, assessments, and recommendations. We can develop maintenance coatings plans prioritized by severity, as well as detailed, long-term corrosion mitigation programs to keep assets in peak condition.







Nitrogen is a valuable resource offshore as an efficient, inert, and non-corrosive medium for a wide range of applications. Nitro-Lift offers on-site nitrogen generation (membrane) to ensure an on-demand supply of nitrogen gas for well services, purging, pigging, inerting, blanketing, pressure testing, leak testing, and other routine activities on offshore installations.

Nitro-Lift has more than a decade of experience conducting offshore operations for nitrogen pressure testing in new platform commissioning, purging lines for safe repair and maintenance, and pressurizing stabilizer cans, as well as offshore vessel and barge purging.

PATENTED EQUIPMENT

Nitro-Lift brings a distinct competitive advantage for offshore operations with our patented Recirc Nitrogen Units and patented Dry-Pak Nitrogen Membrane Units.

These components address common offshore issues regarding lack of space on platforms and insufficient gas to produce wells and power the platform. Each unit has a 30% smaller footprint than other options, conserving space on crowded platforms.



Advantages

- Best-in-class safety
- Experience in offshore applications
- Patented Recirc & Dry-Pac units
- Conserves space with 30%
 smaller footprint
- N2 artificial lift uses less energy
- Nitrogen remediation of gas hydrates
- Highly qualified project planners, management, and field crews

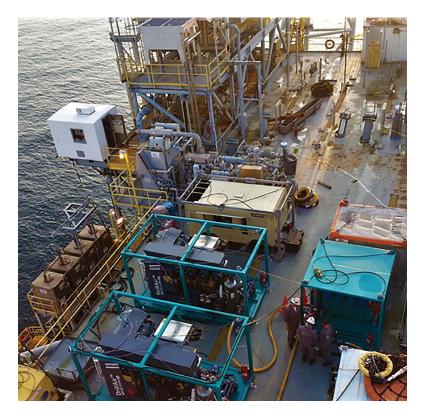


N2 ARTIFICIAL LIFTING

Nitrogen lifting is used to increase the production of wells that are declining due to diminishing gas for gas lifting. It is also used to increase oil and gas production as part of enhanced oil recovery techniques.

Nitro-Lift developed a process for lifting wells that uses less horsepower, making the procedure a low-cost method with a good return on investment.

The process was first demonstrated in 2012, successfully lifting a dead well with nitrogen and turning a well that was slated for plugging and abandonment back into a successful producer.



HYDRATE REMEDIATION

Gas hydrates can form blockages in subsurface flowlines and pipelines. Nitro-Lift conducts offshore operations for hydrate remediation, restoring flow and increasing safety.





MULTI-SERVICE VALUE

Vapor Blast and nitrogen capabilities can be combined with each other and with other USA DeBusk services to increase efficiency and reduce costs. Contact us today to learn more about how our advanced technologies can increase safety and savings for you.



ADVANCED TECHNOLOGIES FOR SAFETY & SAVINGS

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