

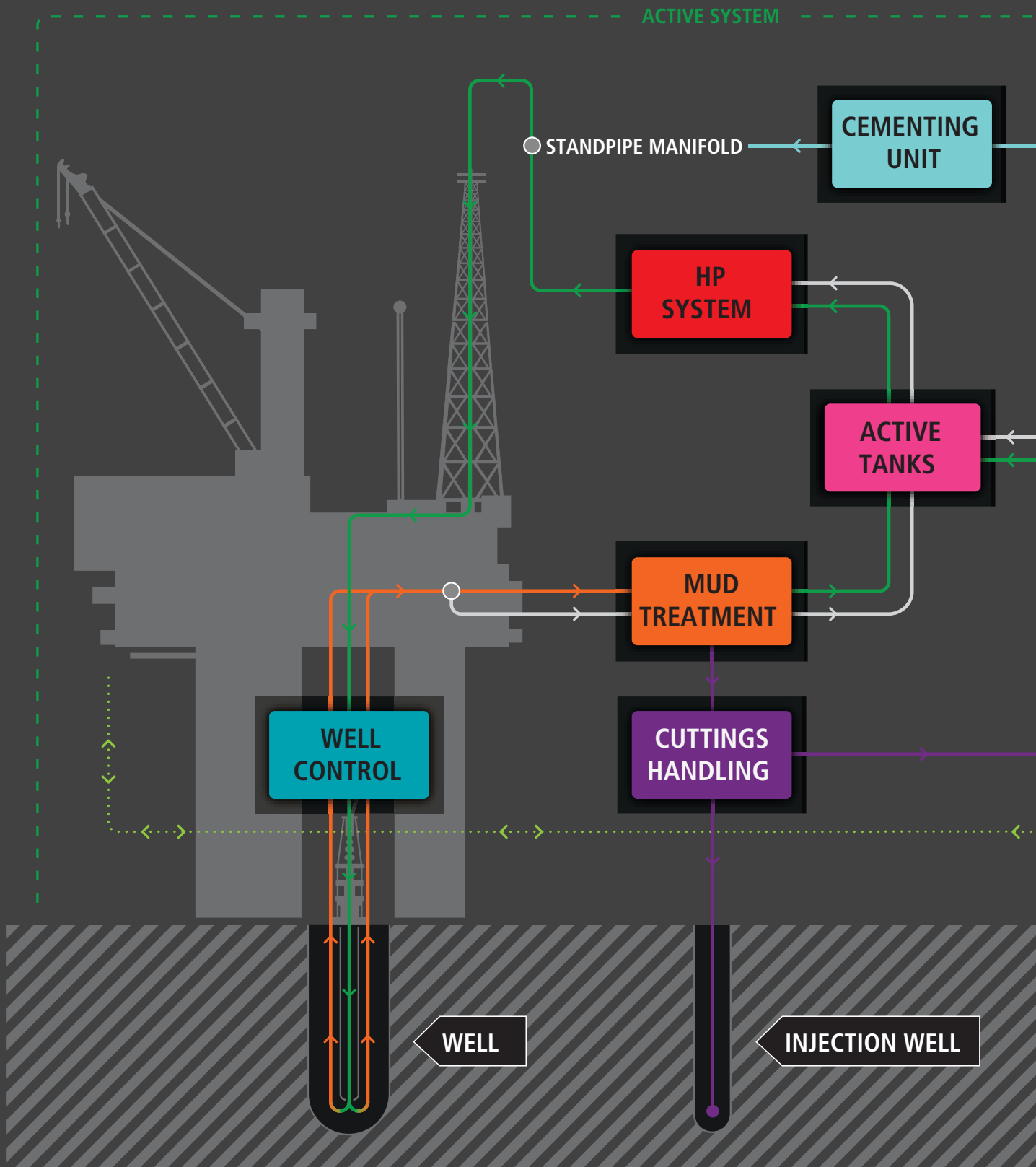
Total Drilling Fluid Solutions

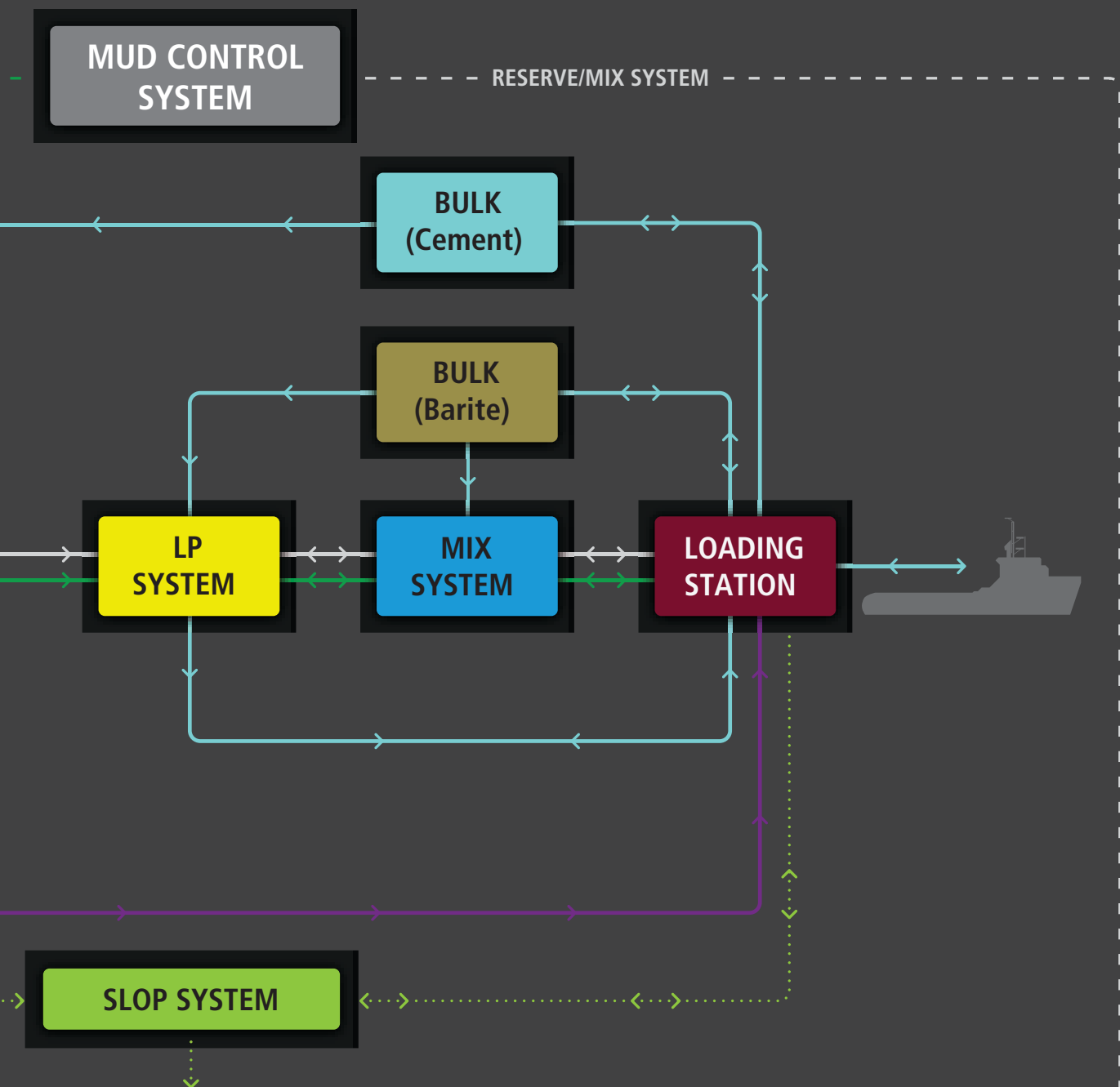
Innovative Advanced Solutions

SOLUTIONS



Cameron offers a comprehensive range of complete drilling fluid packages and standalone equipment. Our products are designed to streamline many essential, yet time-consuming operation and maintenance procedures, improve operator safety and productivity and reduce costly system downtime.



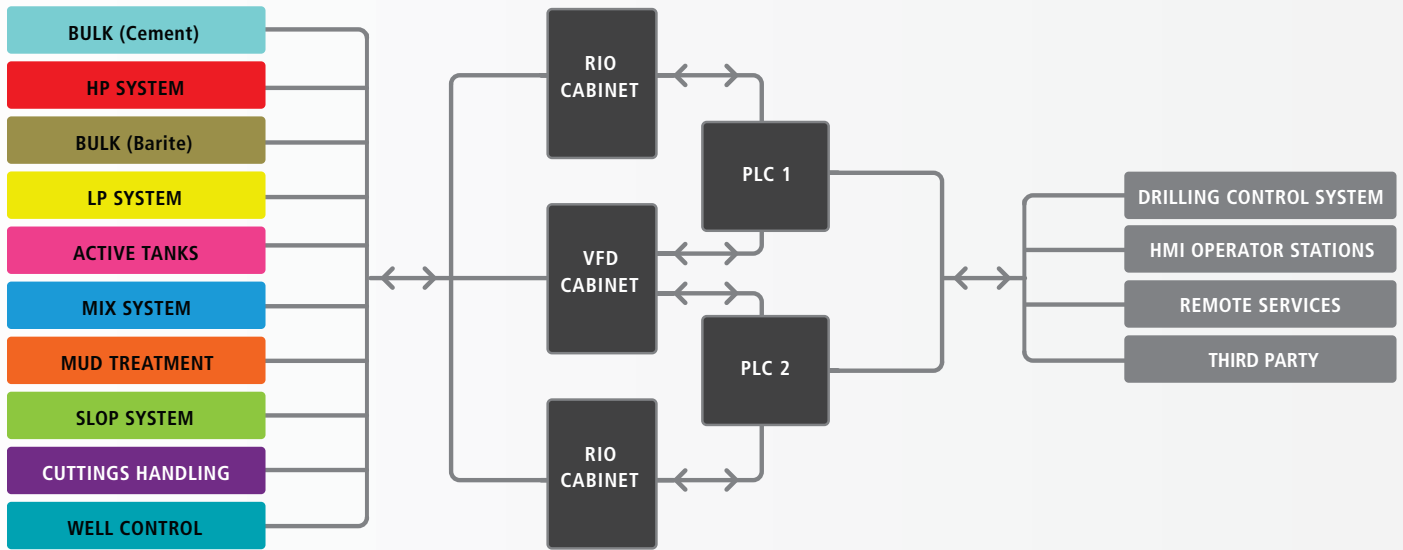


FROM WELL (Mud)	CUTTINGS
MUD SYSTEM 1	SLOPS
MUD SYSTEM 2	BULK SYSTEM

MUD CONTROL SYSTEM



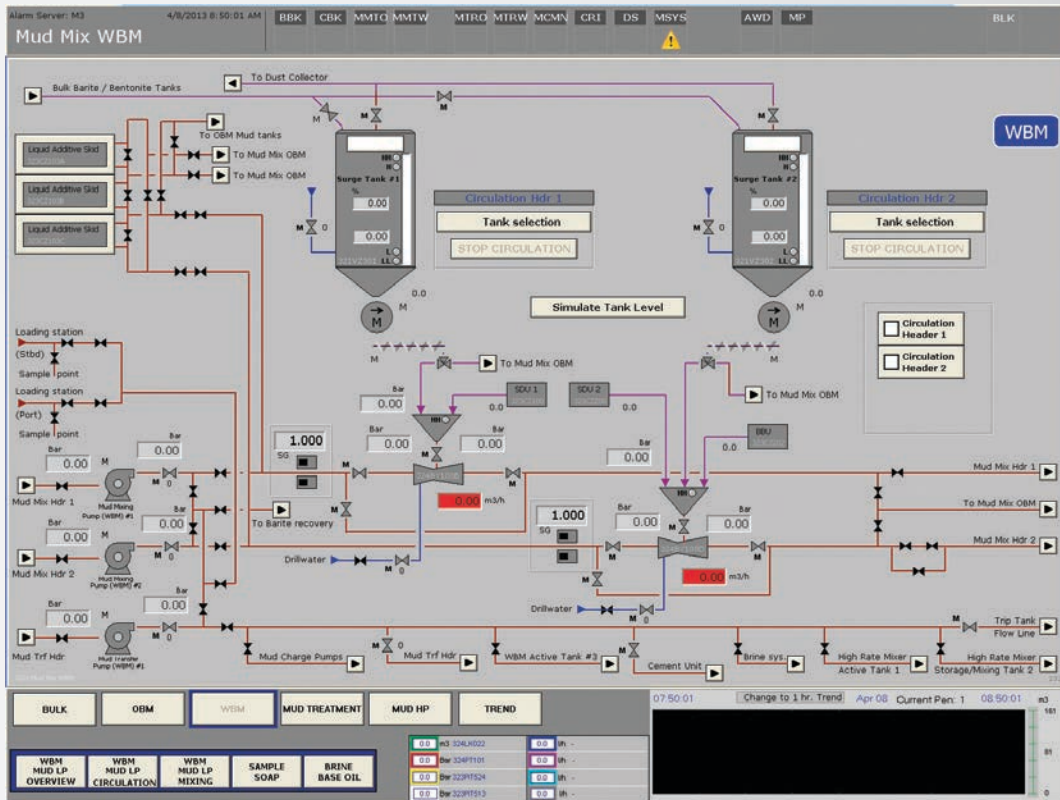
Cameron’s Mud Control System (MCS) is a custom-designed control system for drilling fluids systems and processes. Offering increased product automation and system integration, the MCS provides operators with more information and advanced control capabilities, making their jobs safer and more effective. Its purpose-designed software also enables closer monitoring and better reporting abilities that can reduce equipment downtime and improve system/production planning. Cameron’s MCS hardware and software is engineered to ensure a flexible control system that can be upgraded as operational needs change.



Real-time monitoring and logical control of drilling fluids equipment and complete systems from local and remote locations.



User interface and control panel engineered for optimal overview and ergonomic safety.



Complete Control Cabins

- Tailored to installation area layout
- Integrated control system equipment for hands-off mixing, dosing and transfer operations
- Noise- and vibration-insulated housing
- Complete with windows, lights and HVAC



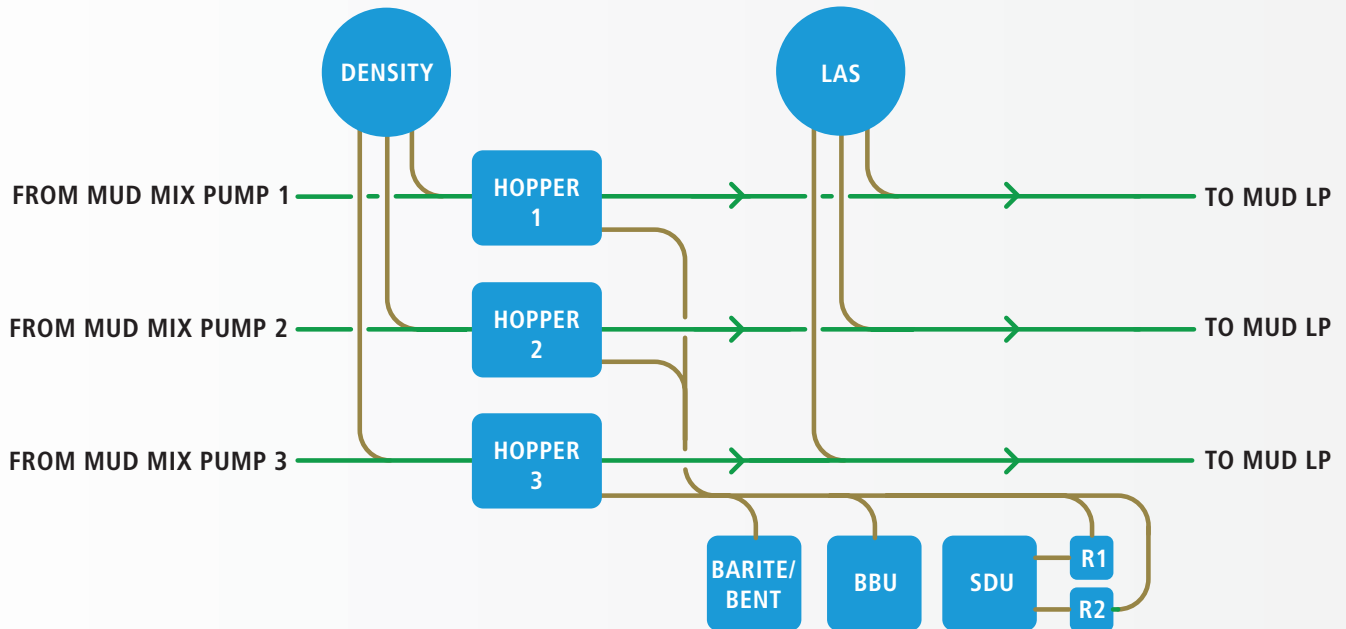
Field Instrumentation

- A range of field instrumentation packages are available to enhance and support the control experience
- Level indicators, pressure transmitters, density transmitters with precise degree of measurement/indication

MUD MIXING SYSTEM



Cameron’s mud mixing and additive equipment makes drilling fluid mixing operations smarter, safer and more accurate. With our proven technology, hands-on experience and innovative thinking, Cameron has engineered a product portfolio that improves drilling fluid system operations from both production and operator standpoints. Whether you need a full system design or standalone equipment, Cameron has mud mixing and additive solutions that help improve your operations.





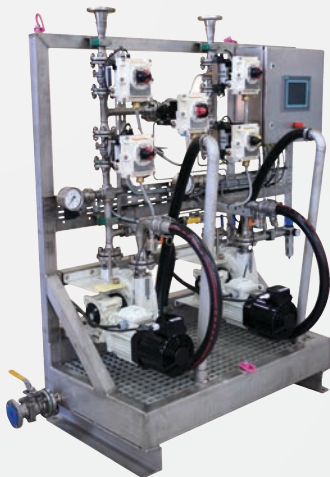
Sack Dosing Unit (SDU)

- Standalone unit with integrated control system
- Market's most compact footprint
- Dust-free in operation
- Integrated waste compactor
- Can be assembled on a skid for easy installation
- Accompanied with a vacuum lifter and electro-hydraulic lifting table



Big Bag Unit (BBU)

- Cuts and doses big bags up to one ton
- Removable discharge hopper designed to prevent wastage and material clogging
- Integrated dust filter and vibration unit
- Automatic dosing screw conveyor to hopper
- Weight control system



Liquid Additive Skid (LAS)

- Easy and accurate/reliable dosing of liquid chemicals
- Compact footprint
- VFD-controlled hose pumps
- Easy cleaning and maintenance
- Integrated control system with local control panel for real-time monitoring and control



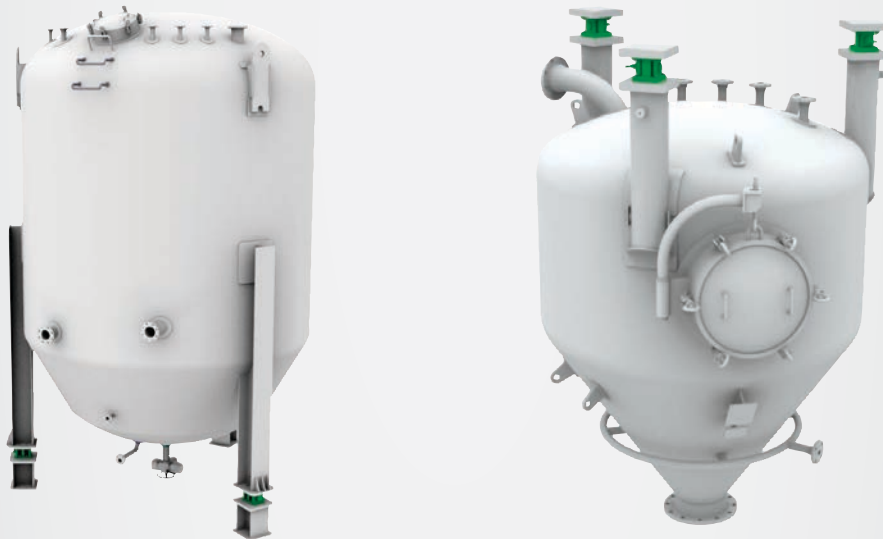
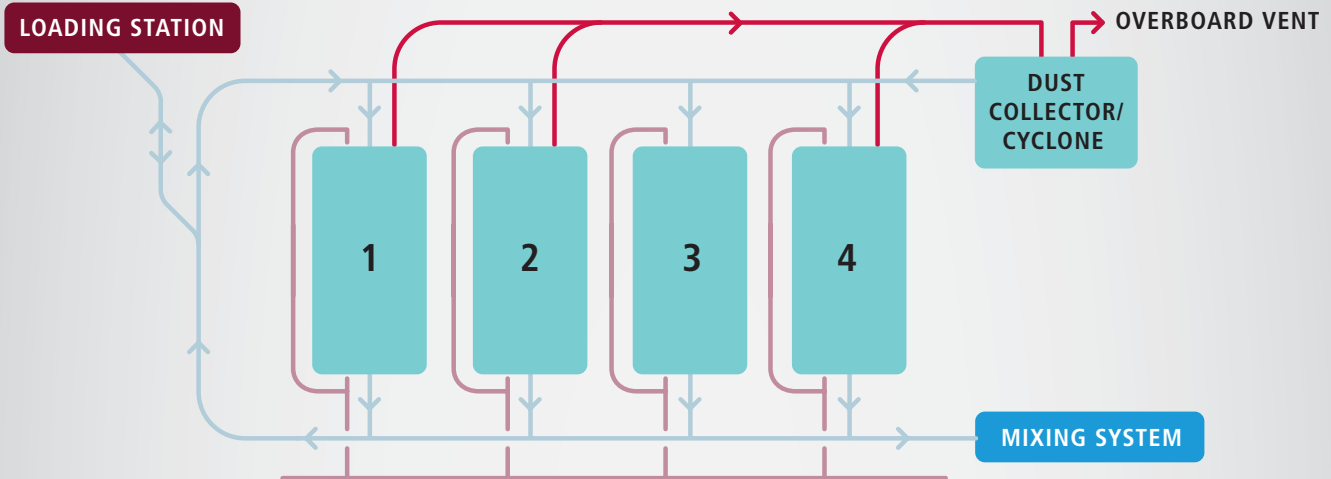
Mixing Hopper

- Skid-mounted for ease of installation
- Venturi-type mud mixer
- Low-maintenance requirements
- Suitable for powder and liquid mixing
- Direct discharge into mixing lines

BULK STORAGE & TRANSFER SYSTEM



Cameron's bulk storage and transfer system is a complete solution for bulk barite, bentonite and cement storage. Each system is custom-engineered to meet your production requirements and offers efficiency-enhancing options such as full instrumentation packages, remote valves, product automation and remote system control capabilities.



Bulk Mud/Cement Storage and Surge Tanks

- Tank design minimizes potential wastage, clogging and maintenance downtime
- Three-legged or skirt-support design provides superior stability
- Aeration panels in cone and base ensure optimal flow during pressurization and discharge processes and minimize the amount of material left in the tank after emptying
- Full instrumentation package
- Remote, real-time monitoring and control capabilities for repetitive tasks
- Meets ASME standards
- ABS/DNV certification



Dust Cyclone and Collector Unit

- Reclaims and recycles costly powder dust into the bulk storage system
- Automatic filling, separation and discharge
- Proven effective operation in any climate condition
- Single cyclone-type separator delivers ongoing high operational efficiency



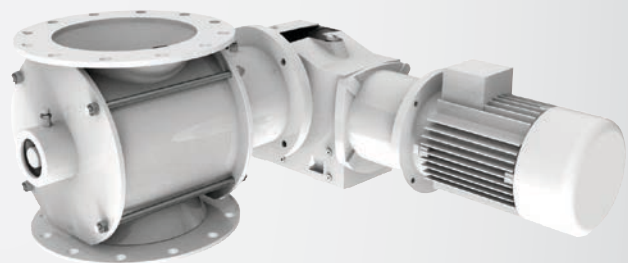
Loading Stations

- Self-supporting frame with internal piping, couplings and lifting legs
- Hydraulic-driven reels
- Loading hoses
- Portable remote control



Cement Discharge Valve

- Optimizes the fluidization process within the silo tank
- Provides high levels of precision, easier control and better results during bulk cement transfer
- Low maintenance
- Electrically-actuated control valve



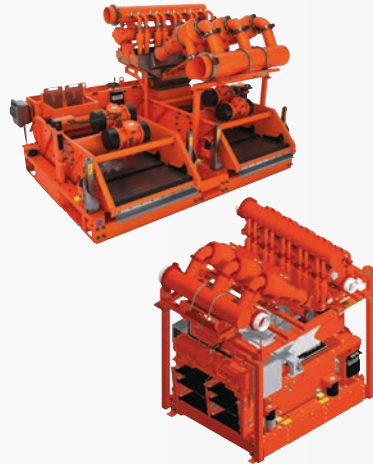
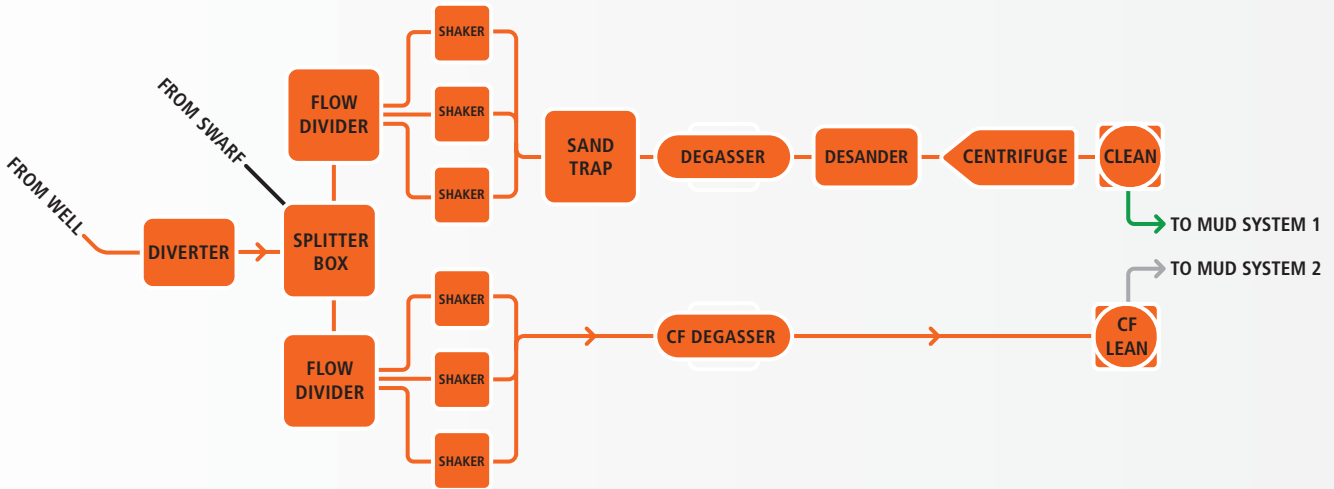
Cell Feeder

- Enables automatic dosing of bulk material from surge tank into mixing hoppers
- Improves dosing accuracy
- VFD-controlled

MUD TREATMENT SYSTEM



Together with M-I SWACO, a Schlumberger company, we are able to provide our customers with custom-engineered and industry-proven cuttings, solids and treatment equipment. M-I SWACO is one of the world's leading manufacturers and suppliers of mud treatment systems.



Shale Shakers

- Single/dual/triple deck
- Single/dual motion
- Small footprint
- Modular platform
- Deck adjustment
- Maximized fluid distribution on screen area
- Ventilation hood with front hood available

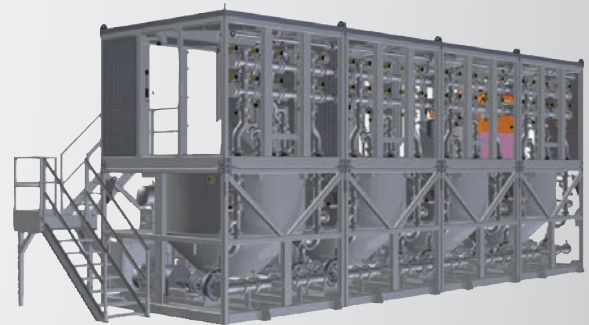
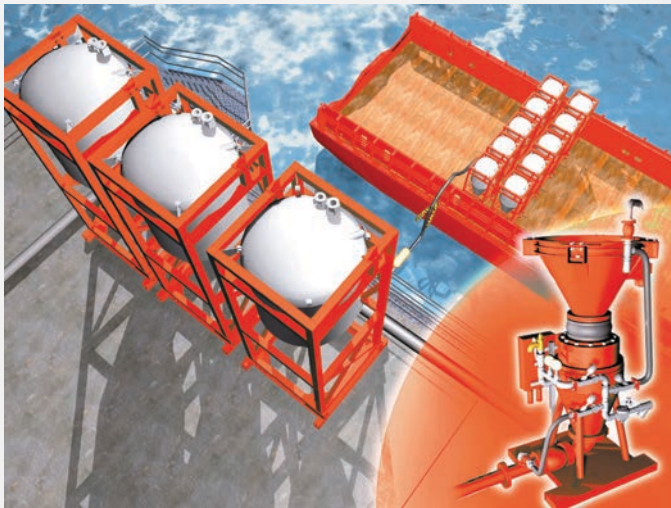
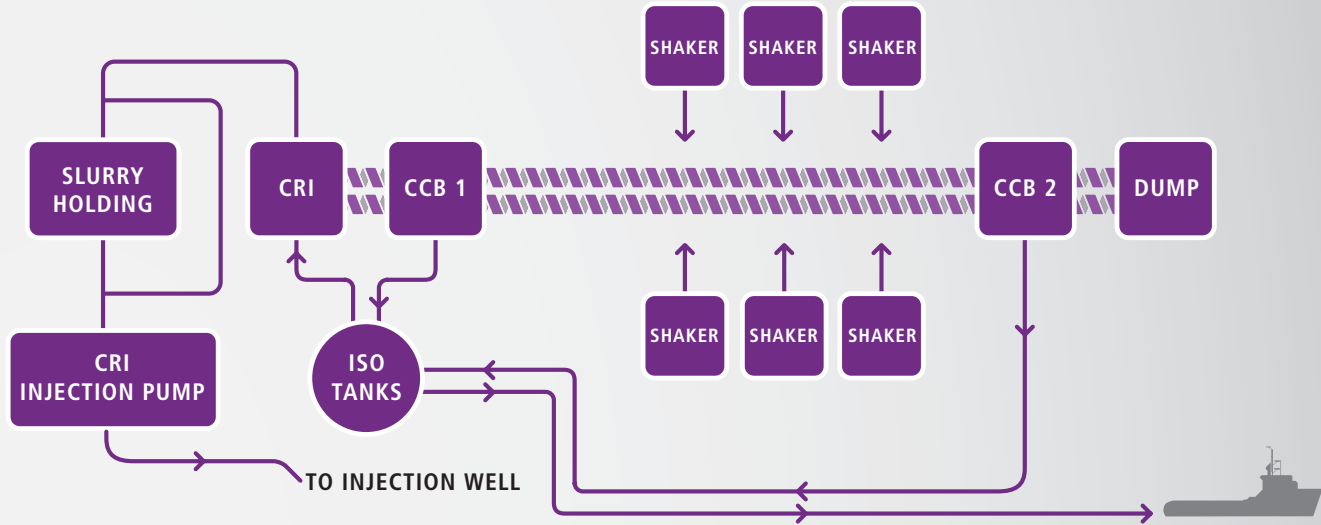
Mud Cleaners

- Field-proven cone design
- 12" desander cones, 4" desilter cones
- High-processing rate
- Slant-mount or vertical-mount
- Ventilation hoods available
- Replaceable, wear-resistant, polyurethane hydrocyclones comes with quick-release stainless steel clamps for simplified changeout
- Can be fitted on single/dual/triple deck shale shakers

Degasser

- Centrifugal and vacuum degassers
- Small footprint and compact design
- High-capacity and high-efficiency
- Robust design with minimal maintenance
- Remote operation available

CUTTINGS HANDLING SYSTEM



CLEAN CUT

- Pneumatic conveyance of drill cuttings, collected from rig solids control equipment
- Contain and convey drill cuttings on-site and transfer to processing site if required
- Fully enclosed and protected environment
- 99.80% equipment uptime with more than 1100 well sections/1.6 MMbbl of cuttings/116,000 operating hours
- Provide excellent and flexible buffer capacity on-site

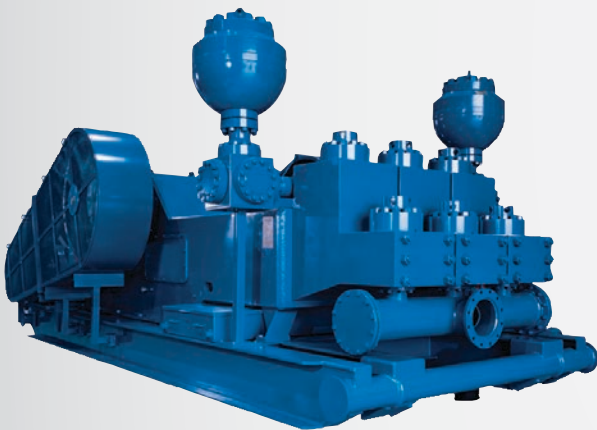
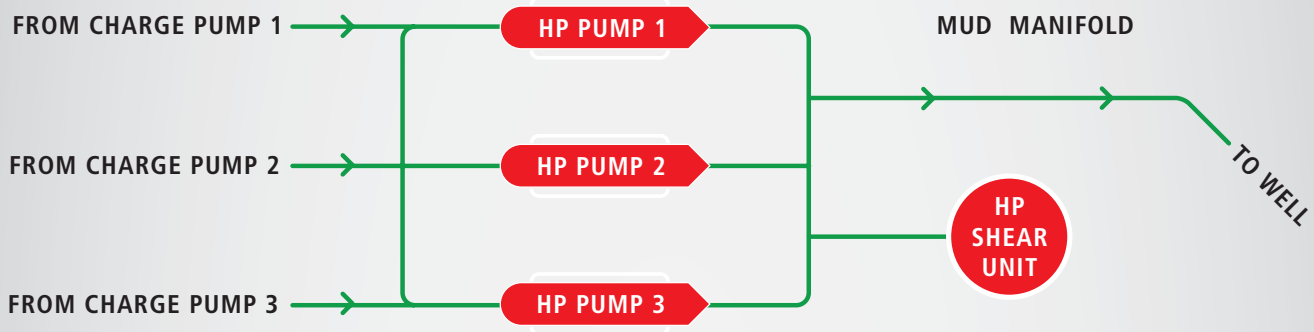
Waste Injection Units (CRI)

- High-capacity units
- Crush drill cuttings and blend with base fluid (typically seawater) into predefined slurry
- Automated or manual processes
- Remote operation and monitoring
- Available with mill
- Classification of slurry

HIGH-PRESSURE SYSTEM



Cameron offers a range of integrated pump packages, including top- or rear-mount AC- or DC- electric drives, controls, manifolds, piping and accessories for onshore and offshore applications. All equipment is designed and manufactured in accordance with specific project requirements, with local and remote control available.



High-Pressure Pumps

- High-discharge flow rates
- Impressive power-to-weight ratios
- One-piece, forged and fabricated alloy-steel crankshaft for smooth operation and enhanced longevity
- High-performance steel connecting rods
- Forged alloy-steel pinions and gears
- Triple-redundant power-end lubrication
- Installed on a heavy-duty oilfield skid for added strength and durability



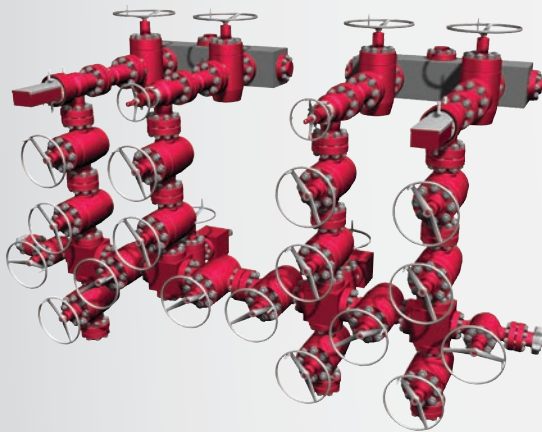
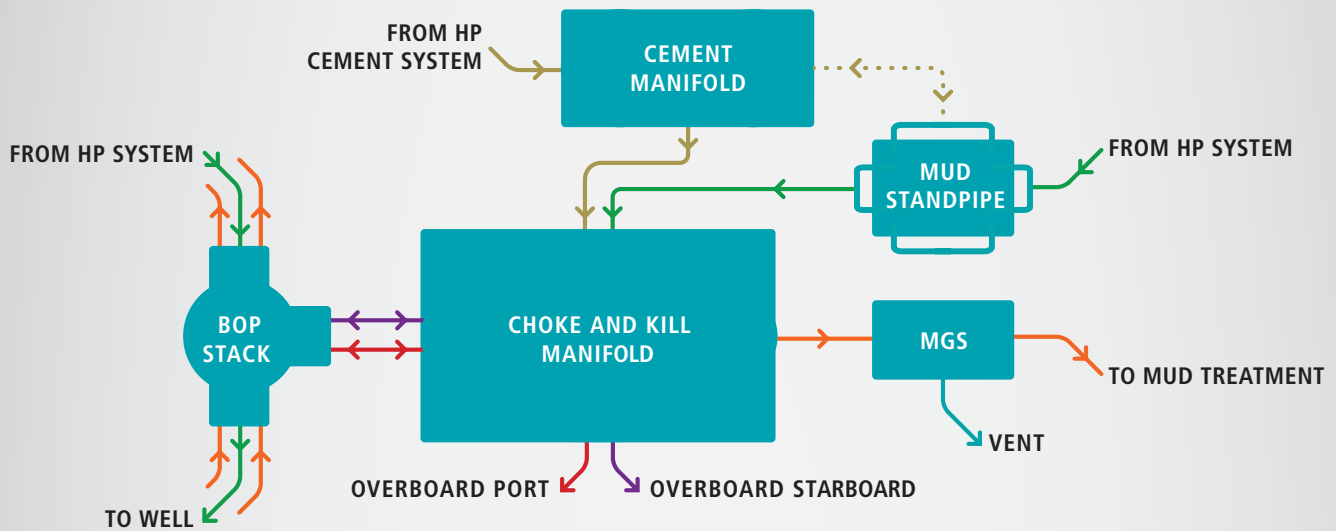
High-Pressure Shear Unit

- Effective shearing of drilling fluid
- Pressure up to 10,000 psi
- Easy installation
- Straight or angle top connection

WELL CONTROL SYSTEM

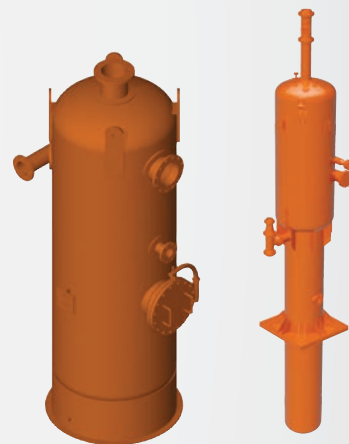


Cameron offers a wide range of well and pressure control solutions to fit most applications. Our extensive experience and understanding of global characteristics combined with our metallurgical expertise serves as a valuable asset during your field development planning and execution.



High-Pressure Manifolds

- Choke and kill/mud standpipe and cement manifolds
- Customized to project requirements
- Local and remote monitoring and control
- Designed to relevant ASME, API, NACE and ISO standards



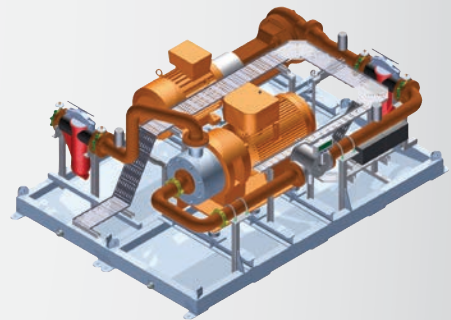
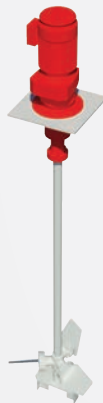
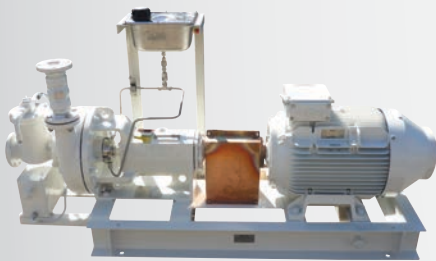
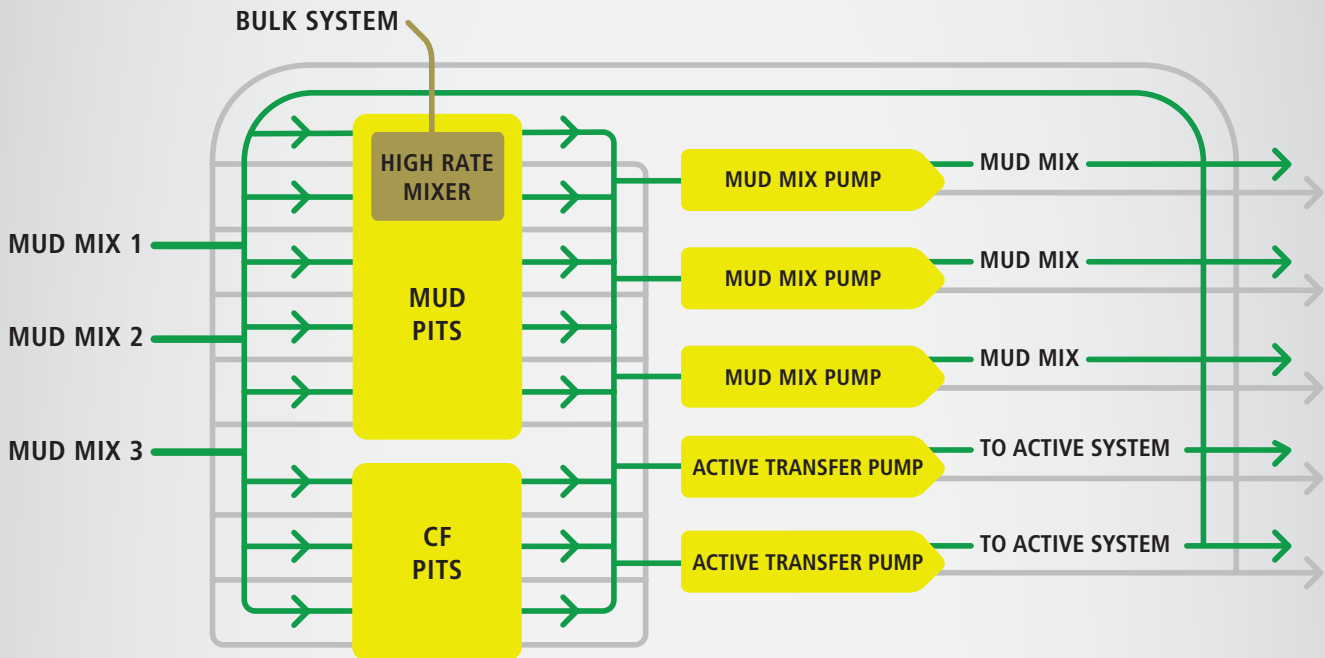
Mud Gas Separator (MGS)

- Separate gas from drilling fluid
- Install downstream well control choke
- Install in flow line if high-gas concentrations
- Excellent for underbalanced drilling
- Range of configurations/capacities available
- Custom design with capacity calculations

LOW-PRESSURE SYSTEM



Cameron's experienced team of engineers works with you to assess, calculate and design your low-pressure mud system or equipment. We work with some of the world's leading suppliers of LP equipment to offer low-pressure pump packages and agitating units to suit every operation.



Low-Pressure Pumps

- DNV-type certified
- Semi-open special impellers
- High-quality bearings and mechanical seals
- Concentric casing design with heavier frames

Agitating Equipment

- Shaft type or submersible high-performance agitators
- Durable design
- Minimal energy consumption
- Minimal maintenance
- Space-saving and easy installation
- Functions according to ATEX and CE directive

Low-Pressure Shear Unit

- Mud shearing without use of rig mud pumps
- No contamination of HP manifold
- Manual or automatic operation
- Remote operation and monitoring
- Small and flexible footprint

TANK CLEANING SYSTEM



Cameron offers a range of tank washing solutions to fit most needs and budgets. From simple standalone tank cleaning units to fully-automated system solutions, we can help you design a tank washing system that will meet your specific requirements.



Tank Washing Equipment

- Streamlines process of mud pit cleaning and reduces personnel exposure to hazardous chemicals
- Designed for robust and reliable operation
- Constructed from highly corrosion-resistant materials
- Custom-engineered

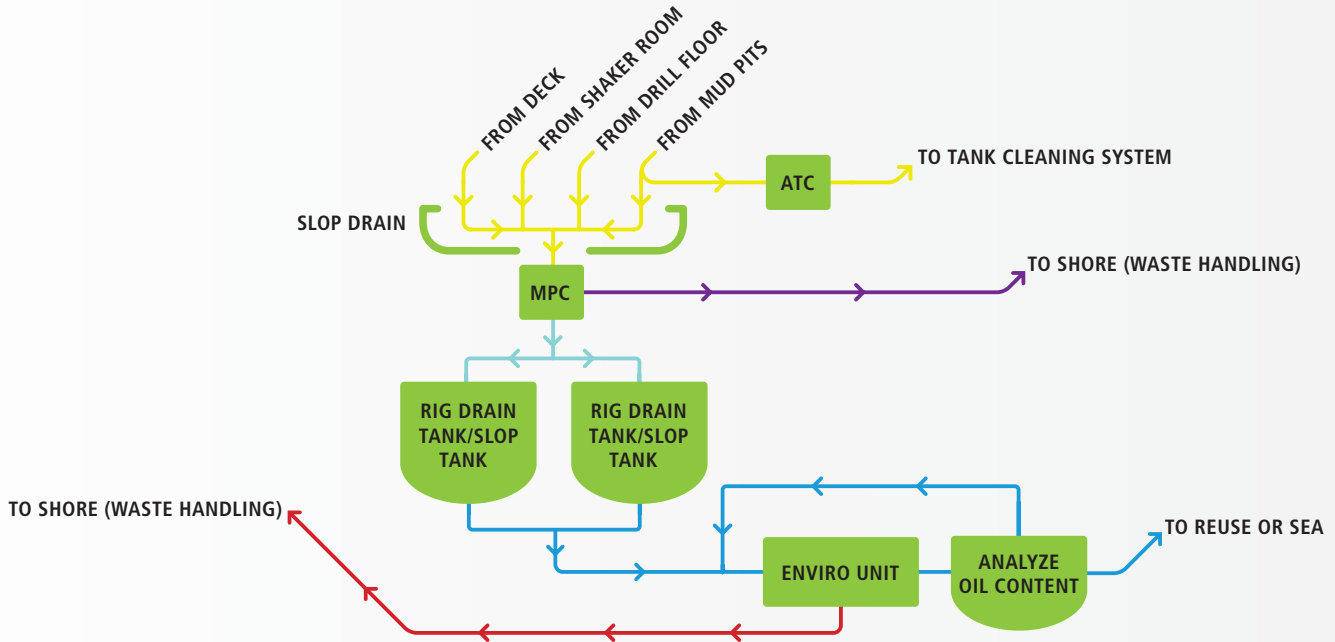


AUTOMATIC TANK CLEANING (ATC)

- Feed pumps for tank cleaning units in pits
- Slop pump to return dirty wash water
- Closed loop system
- Rinsing and reusing wash water
- Minimize waste generation and water usage
- Minimize cleaning time
- Minimize personnel need and exposure

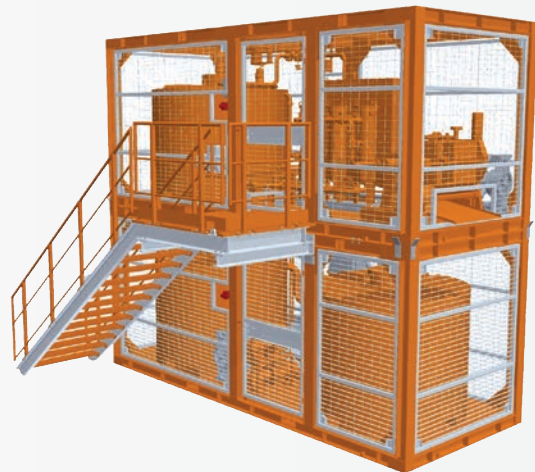
SLOP HANDLING SOLUTIONS

Together with M-I SWACO, a Schlumberger company, we are able to provide our customers with advanced and unprecedented slop handling solutions.



MULTIPHASE CLARIFIER

- Rig drain collection and processing
- Segregation to rinse dominating water phase
- Output dense phase, oily phase and water
- Dense phase and oil for potential reuse
- Improved purification rate for water phase



ENVIROUNIT

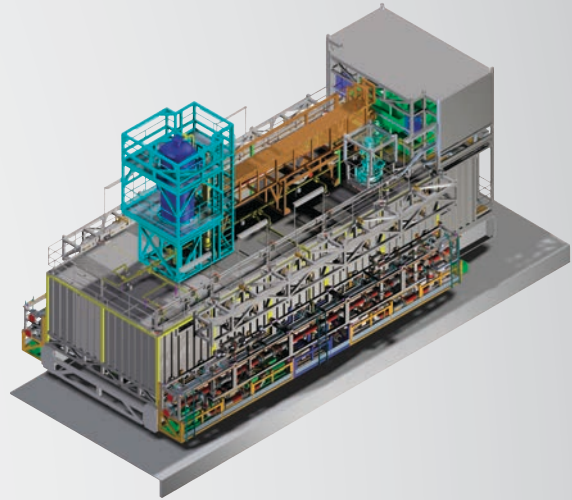
- Process drilling slops on site
- Purify water for discharge if permitted
- Increase reuse of components on site
- Minimize waste shipped for processing
- Robust design

MUD MODULES



Cameron delivers a new generation of mud modules that are more compact, efficient and reliable.

- Reduce, and where possible, prevent human exposure to dangerous materials
- Develop a more efficient treatment and mixing system for drilling fluids
- Improve mud logistics, pre-mix and cuttings handling
- Employ technology and equipment that minimize the industry footprint on local and global environments
- Maximize available installation area

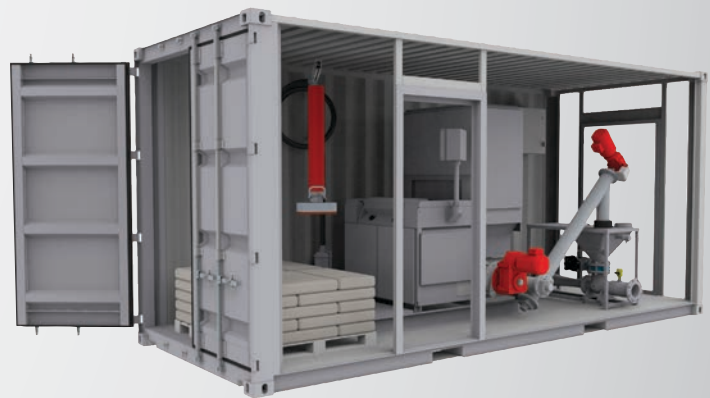


CONTAINERIZED SOLUTIONS



A range of flexible containerized solutions are offered at Cameron for a variety of applications anytime and anywhere.

- Streamline and optimize transport and installation procedures
- Standalone system/plug-and-play
- Customized solutions
- Compact designs
- Factory tested



CAMSERV AFTERMARKET SERVICES



With Cameron's CAMSERV™ Aftermarket Services, you have a world of resources at your command – around the clock and around the globe. Dedicated to optimizing your operations and reducing your total cost of ownership, we have the most locations worldwide, staffed with qualified people who are accessible 24/7, so you are never without service when you need it. What's more, our integrated systems and advanced processes enable us to provide faster turnaround. And, as the OEM, we know our products better than anyone and know how to best service them.

COMPREHENSIVE SERVICES EXPERTLY DELIVERED



As the market leader in aftermarket services, we provide flexible solutions through five main areas that lower the total cost of ownership of your equipment:

PARTS:

Immediate delivery of genuine OEM replacement parts for many Cameron products.

FIELD SERVICES:

Field service technicians are available around the world 24/7 to provide a wide variety of services that range from field repairs to preventive maintenance, technical support and training.



REPAIRS:

Service centers offer a full range of equipment repair services, including disassembly, inspection, reassembly, testing and parts replacement.

REMANUFACTURING:

Provides remanufacturing of oilfield equipment to return products to first-class, fit-for-function or working condition performance standards.



ASSET MANAGEMENT:

Provides a range of asset management services, including storage/warehousing, utilization, brokering, buy-back and exchange.

GLOBAL COVERAGE



Cameron operates around the world from more than 300 locations that reach virtually all of the world's oil and gas operating basins. Our global network of sales, service and strategically located in-house manufacturing centers means customers benefit from faster ordering times, quicker deliveries and easier access to Cameron professionals, no matter where your operations are located. Count on Cameron to be there, anywhere we are needed.

WORLDWIDE SUPPORT AND SERVICE INFRASTRUCTURE



OEM EXPERTISE



TECHNOLOGY LEADERSHIP



GLOBAL ACCESSIBILITY

4601 Westway Park Blvd.
Houston, TX 77041
USA
Tel 713 939 2211

6401 W. Sam Houston Pkwy. N.
Houston, TX 77041
USA
Tel 713 983 4700

Andøyfaret 3
N-4623 Kristiansand S.
Norway
Tel 47 380 00 570

Learn more about Cameron's drilling fluid solutions at:
www.c-a-m.com or email drilling@c-a-m.com



HSE Policy Statement

At Cameron, we are committed ethically, financially and personally to a working environment where no one gets hurt and nothing gets harmed.