

# SOLUTIONS

FOR SHALE WELLS



**BUILT FOR SHALE**  
MADE IN AMERICA  
ENGINEERED FOR SUCCESS



# YOUR WELL YOUR GOALS OUR SOLUTIONS

Developing shale and tight oil wells  
requires more than simple products—  
it requires trusted partners  
who understand the challenges you face.

## PROVEN VALUE IN SHALE ENVIRONMENTS

Shale wells are pushing equipment harder than ever - extreme rotational torque, longer laterals, and higher rotational and pressure-cycle fatigue loads. Vallourec delivers integrated, data-driven OCTG solutions built specifically for these demands. Every recommendation is tailored to your well design to help reduce risk, accelerate drilling, and optimize cost performance. And with every product in our shale portfolio designed, manufactured, and tested in the U.S., you gain the performance you need with the local support you trust.

### Engineered for Today's Shale Challenges

- Handles extreme rotational torque
- Proven in extended-reach laterals
- Enhanced resistance to rotational and cyclic fatigue

### Value You Can Count On

- Optimized reliability and cost efficiency
- Lower production cost per foot and minimized running time
- Well integrity assurance through fit-for-purpose validation
- Engineered and built in the U.S., trusted worldwide

Our local shale experts are ready to support your next well.

## VAM<sup>®</sup> CONNECTIONS

### PERFORMANCE UNDER PRESSURE

#### GAS APPLICATIONS

- **VAM<sup>®</sup> XTRA**  
Extreme torque for extended laterals
- **VAM<sup>®</sup> EDGE SF+**  
Reliable full-string performance under load
- **VAM<sup>®</sup> HTTC**  
Maximum torque performance with gas-tight sealability

#### LIQUID APPLICATIONS

- **VAM<sup>®</sup> SPRINT TC**  
Fast make-up for rotational operations
- **VAM<sup>®</sup> SPRINT SF**  
High-torque solution for tight clearances
- **DWC/C-XT**  
Smooth handling in unconventional wells

# GAS CONNECTIONS

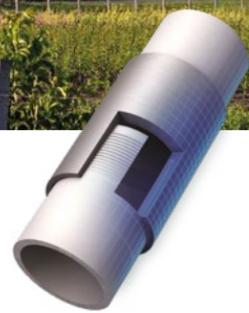
## HIGH TORQUE, RELIABLE SEALING

Vallourec's gas connections are built for the toughest conditions, providing exceptional torque, certified gas-tightness, and easy running.

# LIQUID CONNECTIONS

## SMOOTH RUNNING, RELIABLE PERFORMANCE

Vallourec's liquid connections are engineered for smooth make-up, high tension, and extreme torque capacity, supporting wells with extended laterals and tight clearances.



### VAM XTRA

#### PROVEN PERFORMANCE FOR SHALE GAS

VAM® XTRA is a premium threaded and coupled connection engineered for extreme high-torque shale gas applications. Featuring VAM®'s industry-proven hooked thread, it has been validated to meet the unique challenges of shale, delivering consistent and reliable performance where it matters most.

### VAM EDGE SF+

#### RELIABILITY FOR EXTREME LONG LATERALS

VAM® EDGE SF+ is a gas-tight premium connection engineered with a tapered two-step thread design for deep stabbing and minimal cross-threading risk. With exceptional tension and torque capacity, it ensures reliable performance for full-string production casing in demanding Shale wells and extended horizontals.

### VAM HTTC

#### EXTENDED REACH WITH THE HIGHEST TORQUE AND GAS SEALABILITY

VAM® HTTC is an advanced premium connection, unrivaled on the market, offering the highest operational torque with API 5C5 CAL IV validated gas sealability.

### VAM SPRINT-TC

#### HIGH ROTATIONAL TORQUE

VAM® SPRINT-TC is the capstone of the SPRINT series, offering a semi-premium threaded & coupled connection designed for extended reach laterals and high-rotation operations in shale wells. It delivers 100% pipe body ratings, extreme operational torque, and low hoop stress, while requiring less than 5 turns to make-up. A slim coupling option is available to meet specific operational needs.

### VAM SPRINT-SF

#### EXTREME CLEARANCE, HIGH TORQUE AND TENSION

VAM® SPRINT-SF is a semi-premium, high-torque connection built for extreme shale applications. Its semi-flush design, combined with a high-tension rating and ultra-high torque capacity, makes it ideal for running a full string as production casing in wells with extended horizontal sections and tight clearances.

### DWC/C-XT

#### EXPERTISE RE-ENGINEERED FOR UNCONVENTIONAL WELLS

DWC/C-XT is a semi-premium threaded and coupled connection that combines extreme torque with buttress-compatible performance. Designed for extended laterals and unconventional wells, it provides smooth handling and cost-efficient operation, building on over 30 years of trusted DWC/C expertise.

# ENGINEERING BACKED BY TESTING



## TESTING YOU CAN TRUST

In shale operations, every connection plays a critical role. Yet no industry standard specifically targets the demanding loads encountered in these wells. That's why Vallourec developed its own testing protocol to give you confidence before the pipe ever reaches your rig.

Our proprietary VAM® Shale Protocol goes beyond ISO 13679 and API RP 5SF requirements, replicating the real-world stresses of torque, tension, bending, fatigue, and pressure. By testing under representative downhole conditions, we ensure our connections are qualified for the challenges they will face in the field—supporting well integrity and long-term reliability.

## TESTED FOR PURPOSE WITH OUR VAM® SHALE PROTOCOL



### INSTALLATION

#### FATIGUE TESTING SIMULATING ROTATION AT INSTALLATION

- Fatigue testing under extreme dogleg severities (up to 30°/100ft)
- Drift maintained after max operational torque and fatigue



### FRACTURING

#### PRESSURE AND TENSION CYCLING TO SIMULATE FRAC OPERATIONS

- Post Fatigue samples subjected to more than 100 maximum internal pressure & tension cycles



### PRODUCTION INTEGRITY

#### SEALABILITY TESTING FOLLOWING API 5SF AND API 5C5: 2017

- Post fatigue and frac samples subjected to production cycles with elevated temperatures (up to 350°F), bending (30°/100ft), and maximum operational torque
- Additional gas sealability testing on premium and semi-premium connections

# U.S. EXPERTISE AT EVERY STEP

## 100% MADE IN AMERICA

We use 100% recycled scrap, melted, rolled, and heat-treated in our Ohio mill to ensure full traceability and strict quality control. Final finishing and threading take place in Ohio, Houston or Oklahoma, allowing for faster delivery and local support.

- **Shorter lead times** to keep rigs turning
- **Local experts** for troubleshooting, training, and field support
- **Supply security** with no geopolitical risk, tariffs, or customs
- **Full regulatory compliance** with all U.S. standards
- **Community support** through local jobs, strengthening U.S. energy independence

## END-TO-END TECHNICAL SUPPORT

We don't just deliver pipe - we deliver a partnership. Vallourec is at your side to support your goals, adapt to fast-moving well programs, and solve problems proactively:

- **Engineering services** for well design, material selection, corrosion testing, and torque & drag analysis
- **Customizable solutions** for grades, connections, and accessories
- **Onsite or remote** operational support and troubleshooting
- **Agile logistics and scalable support** to flex with activity and cost needs
- **Complimentary training** on steelmaking, tubulars, and connections



## SMART RUN COMPLETE: EVERYTHING. CONNECTED.

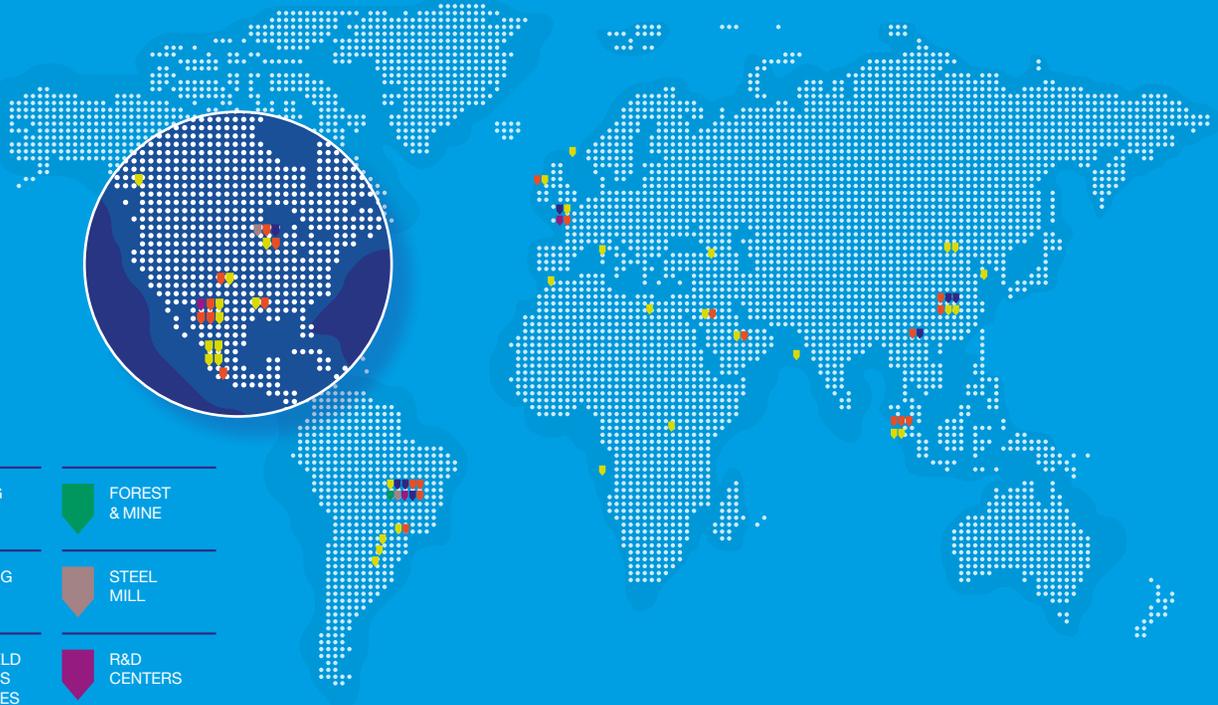
**Delivering speed, efficiency, and confidence to onshore operations.**

Smart Run Complete streamlines casing operations with a lean, integrated service model that saves time and minimizes risk. With VAM® Certified Representatives on site, you gain expert assurance to execute drilling plans efficiently and securely while reducing personnel at the wellsite without sacrificing performance. By placing the mill directly alongside the operator, Smart Run Complete enables faster decisions, stronger integrity, and a smarter way to run casing.

### Smart Run Complete Includes:

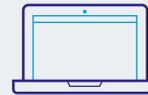
- Rig-Ready Pipe
- Digital Tally & Pipe Traceability
- VAM® Field Service Thread Reps
- Torque Turn
- Casing Running Tools
- Torque & Drag Modeling & Monitoring

# YOUR PARTNER, SETTING THE PACE FOR INNOVATION AND PERFORMANCE EVOLUTION



## NEED MORE INFORMATION?

Information is available online on [solutions.vallourec.com](http://solutions.vallourec.com) or by scanning the following QR code.



[solutions.vallourec.com](http://solutions.vallourec.com)



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