

# NOV 20K Subsea BOP System: Revolutionizing the Industry





**“This is a historic moment for the offshore oil and gas industry.”**

“The introduction of our 20K BOP marks a new era in the exploration and development of high-pressure formations. We are proud of our role in enabling our industry to continually push beyond traditional limitations through technological innovation.”

- NOV Rig Technologies President  
Joe Rovig



## System transforms subsea pressure control, addressing demands of higher pressure, higher temperature in ultra-deepwater.

Built to address an unprecedented drilling application and reach the deepest, untapped oil reserves, NOV's 20,000-psi (20K) blowout preventer (BOP) revolutionizes subsea pressure control and sets the new standard for drilling equipment capabilities, safety, and reliability.

"This is a historic moment for the offshore oil and gas industry," said NOV Rig Technologies President Joe Rovig. "The introduction of our 20K BOP marks a new era in the exploration and development of high-pressure formations. We are proud of our role in enabling our industry to continually push beyond traditional limitations through technological innovation."

From the topside to the seafloor, we're setting the bar on drilling technology standards to enable reliable solutions for your subsea control equipment taking your well-plan to new depths. We're creating technology for tomorrow that can work with equipment



**20K Subsea BOP packaged where equipment has maintenance access to line up with platform access in the moonpool.**



**“This makes us the first oilfield equipment manufacturer to successfully design, engineer, and deliver such a monumental package.”**

you are operating today—delivering ease of maintenance and service with drilling equipment that's accessible and reliable. The 20K lower stack features 108 ROV panels, a panel-mounted EHBS system, the ability to close and operate functions with flying leads x 2, and equipment packaged in such a manner that maintenance access lines up with the moonpool platform. With a focus on safety, we go beyond API requirements for subsea technology—performing more cycles and applying more tests to prove our robust equipment exceeds your standards.

The new NOV 20K BOP is built to handle your toughest drilling operations. It is controlled by the new RCX control pods electronics system. Government regulations require more subsea equipment attention and testing for the subsea well control system. The testing regiments demand robust and reliable subsea equipment. Reducing stack pulls reduces the rising cost, inefficiency, and non-productive time. Due to these new requirements, our Aftermarket Service and Support teams created training courses developed for customers, readied spare seal, and spare part kits, and created new assembly tool kits.

NOV recently delivered two 20K BOP stacks, the first of their kind and only two built in the world. This makes us the first oilfield equipment manufacturer to successfully design, engineer, and deliver such a monumental package. Our 20K BOP stack is designed to optimize uptime and reduce unplanned stack pulls, reaffirming the company's commitment to technical authority, engineering excellence, and safety.

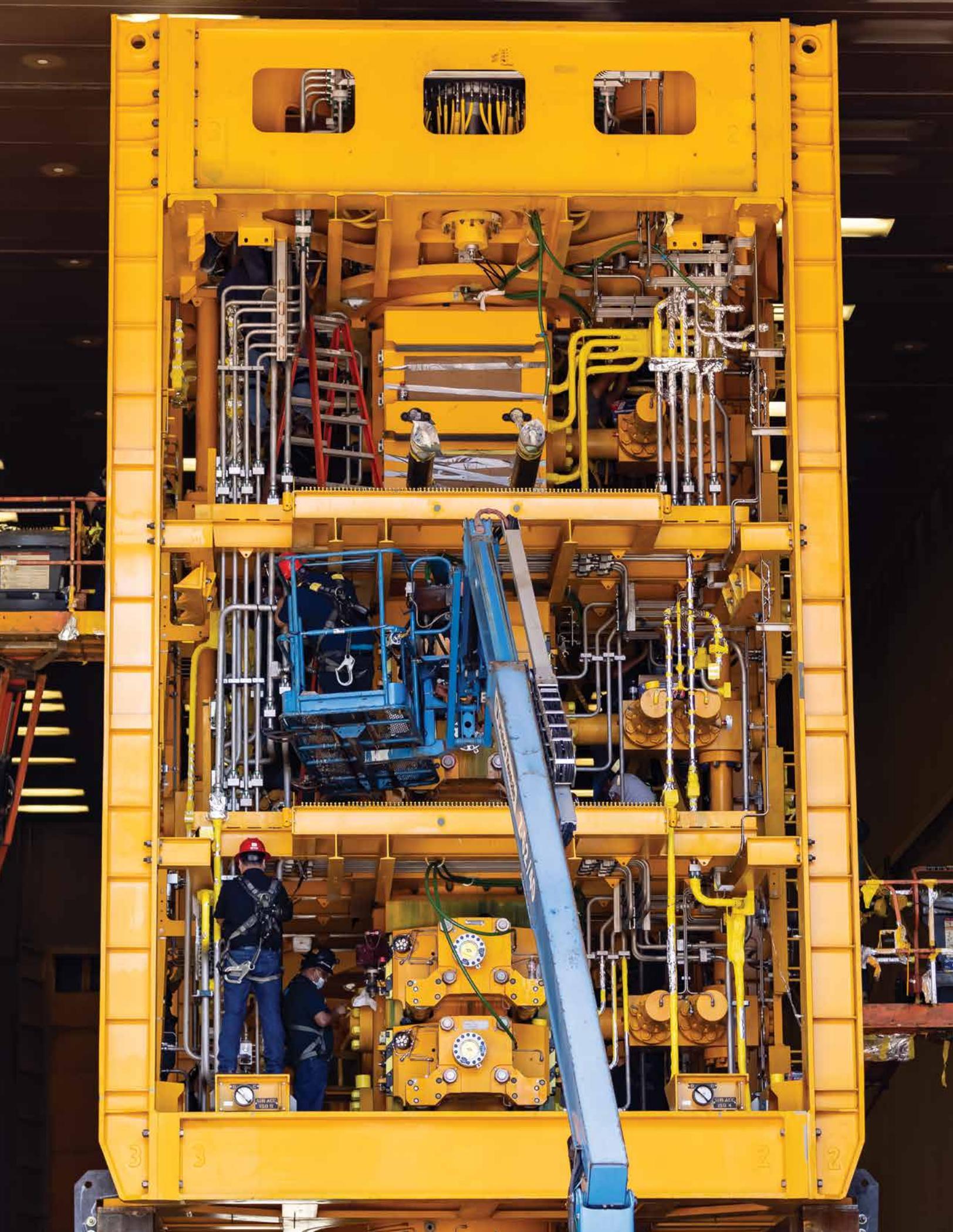
The delivery of this equipment and technology package is the culmination of years of extensive work by our Rig Technologies segment, as well as their coordination and collaboration with our customer and subsea experts. This marks a significant advancement for the offshore industry, as it seeks to drill the world's most challenging reservoirs safely and efficiently.

The 20K BOP stack is built for use in extremely high-pressure reservoirs and can be used in ultra-deepwater applications.

As the industry makes this unprecedented step change into the 20K market, NOV was the first with the knowledge, ambition, and drive to get the job done with the largest BOP stacks ever built.



Learn more:  
[www.nov.com/20k](http://www.nov.com/20k)



# The Products

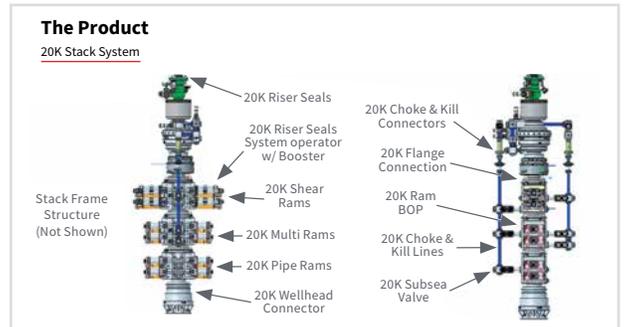
## Lower stack

- All Hard Piping, Just under 4 miles of pipe and tubing all CAR.
- 108 ROV Panels
- Panel Mounted EHBS System
- Ability to close and operate functions with flying leads x 2 on lower stack
- Packaged where Equipment has maintenance access to line up with platform access in the Moonpool.
- Listened to Subsea Experts on functionality and equipment operation.



## Products Developed for the 20K BOP Stack

- New Ram BOP
- New Boltless Configuration
- New Multi Ram 4-1/2" -7-5/8"
- New Shear Ram
- New Pipe Ram
- New Booster Operator 5K 21.625" x 21.625"
- New Booster Operator Locking System
- New H4 Profile 20K Wellhead Connector
- New DXe Profile 20K Wellhead Connector
- New Dual Block Failsafe Subsea 20K Valve
- New Choke and Kill Lines for Riser and BOP Stack
- New Riser Seals for C&K lines (Qualified to 16C)
- New Choke and Kill Stab
- New Choke and Kill Stab Seals (Qualified to 16C)
- New Load Monitoring System Plus Multiple FEA for Systems
- New Kick Outs Riser Adapter 20K
- New HFGN 20K Cartridges
- New Termination Joint for 20K and 20K HFGN Cartridges
- New 20K 18-3/4" Flange
- New 20K Flex Loops and 20K Swivel Flange
- New Material Testing and Fatigue Reports for 20K Items
- 1A-1G BSEE Reporting all new for NOV



NOV Inc. has produced this brochure for general information only, and it is not intended for design purposes. Although every effort has been made to maintain the accuracy and reliability of its contents, NOV Inc. in no way assumes responsibility for liability for any loss, damage or injury resulting from the use of information and data herein. All applications for the material described are at the user's risk and are the user's responsibility.

© 2022 NOV Inc. All rights reserved.  
JIRA 16648

**Corporate Headquarters**  
7909 Parkwood Circle Drive  
Houston, Texas 77036  
USA

**Rig Technologies Headquarters**  
10353 Richmond Avenue  
Houston, Texas 77042  
USA