



SMART FLUID ENDS 7500 PSI UPGRADE

DRIVING DOWN OPERATIONAL COSTS ON MUD PUMPS
OFFERING A COMPLETE FLEET SOLUTION
BEST SOLUTION FOR A 7500 PSI PUMP UPGRADE



UNIQUE FEATURES

- 3-pieced L-Shape Fluid End (one adaptable Carrier Module and two identical Valve Modules)
- Multi-Purpose Valve Module enables Spare Parts Stock Cost reduction due to identical suction and discharge module
- Carrier Module is suitable to every Mud Pump Brand and Type while the Valve Modules remains identical
- Increased operational flexibility with identical Spare parts over different brands
- Even higher advantages in case of a rig fleet renewal of Fluid Ends and upgrade to 7500 PSI
- Changing a Valve Module is possible in less than 30 minutes
- A wide range of Valve Covers Systems is available
- Less handling weight

PRODUCT DESCRIPTION

DRIVING DOWN OPERATIONAL COSTS ON MUD PUMPS

The design of mud pumps has not changed much for decades and this is especially true for L-Shape Fluid Ends which were introduced to the industry more than 30 years ago. At that time this was a major design development enabling users to replace valve and module parts when required instead of the whole fluid end. This was faster and importantly more cost efficient. Since then two-piece L-Shape Fluid Ends have slightly improved with the use of more advanced materials and retention systems, but the underlying L-Shape design of these has remained relatively unchanged.

Back in 2019 Bentec identified the need to modernize this key piece of equipment and began to look at ways to improve the operability of mud pumps through innovation and advancements in design. This work recently culminated in a brand new product called a Smart Fluid End which reduces the overall cost of ownership at Mud Pumps.

Using its design and engineering expertise Bentec has been able to successfully modify the two-piece Fluid End into a three-piece Fluid End, with the result that identical valve modules can now be used for mud pump suction and discharge part. The idea for the new Bentec Smart Fluid End came from splitting the pressure module into two, thereby creating a carrier block, mounted to the mud pump body, suitable to the type of Mud Pump while suction and discharge modules remains identical. This new innovation enables drilling contractors and operators to significantly reduce operational costs through the interchangeability of components, simplification of overhaul and minimisation of spare part costs.

7500 PSI UPGRADE

When planning to upgrade your pumps to 7500 PSI it is the right moment to install Bentec Smart Fluid Ends. There are no changes on the power necessary to reach the higher discharge level. Installing modules that withstand higher pressure and using a smaller liner size is enough. Due to the easy adaptability of the carrier modules and the large variety of available valve seat sizes, the upgrade can be perfectly matched to your system. Bentec already equips its own mud pumps with this new technology, but it is also possible to supply them to other pump manufacturers. Bentec can also provide a complete rig upgrade package.

Smart Fluid Ends are available in:

- Pressure Rating 5000 and 7500 PSI
- 10.000 PSI on request
- Valve pot sizes 6, 7 and 8
- Pot design API 7K and monogram

Important to know:

Bentec can adapt these Smart Fluid End systems to a wide range of other mud pump brands, leading to significant reduction in rig fleet operating costs with common spare parts instead of multiple fluid end brands.