



PRODUCT DATA SHEET

Xmas Tree Sleeves

WELL-CENTRIC'S XMAS TREE SLEEVES HAVE BEEN DEVELOPED TO PROVIDE PROTECTION TO THE INTERNALS OF XMAS TREE AND WELLHEAD EQUIPMENT DURING PRODUCTION ENHANCEMENT TECHNIQUES.

In mature basins, production enhancement techniques often expose xmas tree and wellhead equipment to harsh environments they were not designed for. Changing out this equipment for suitably rated alternatives can mean long lead times and expensive capital expenditure. The higher rated equipment is also not often required for the production phase following the enhancement operation.

Well-Centric have developed Xmas Tree Sleeves to provide equipment protection for companies carrying out production enhancement techniques, such as fracking and chemical treatments. The Xmas Tree Sleeves can also be used for cementing operations.

An upper spool is installed on top of the xmas tree with a sleeve that runs down the internal diameter of the xmas tree and wellhead components, sealing within the tubing hanger and providing complete protection to the existing equipment from high pressures and harsh fluids pumped into the well.

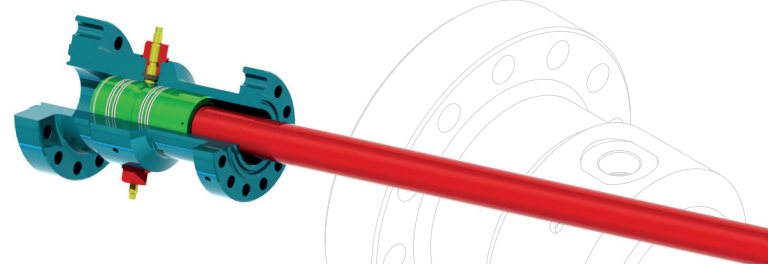


Benefits:

- **Helps access additional hydrocarbon revenue from mature fields.**
- **Saves over £200,000 by negating the need to purchase new, suitably rated xmas tree equipment.**
- **Revenue from increased production can be accessed 12-18 months quicker by eliminating the lead times on new xmas tree equipment.**
- **Enables existing equipment to be used in higher pressure and harsher environments than they were originally designed for.**
- **Quick and easy to install helping to reduce operation times.**
- **Easily adaptable design to suit the specific requirements of client operations.**

Features:

- Designs can be adapted to suit the necessary xmas tree connections.
- Designs can be adapted to suit the necessary pressure and flow environments.
- Single piece forged body upper spool with a no-go shoulder for landing the internal sleeve.
- Tie-down bolt lock down arrangement prevents upward movement of internal sleeve.
- Specialist low profile seals provide secure seal on inner bore of existing tubing hanger.
- Multiple test ports allow testing of seals to confirm pressure integrity.
- Large bore design, reducing internal diameter restrictions.



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