

Subsea Riser Engineering Dept provides professional engineering services of riser designs from concept to detailed engineering for offshore oil & gas field development in compliance with class and Industry Standards. COTEC conducts advanced riser analysis and performs evaluation of riser related equipment. We deliver high standard products in an efficient manner.


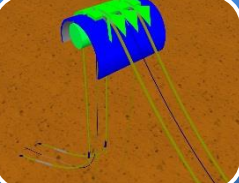

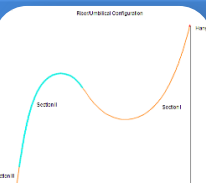
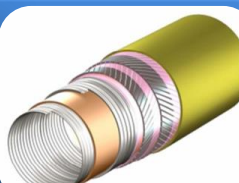
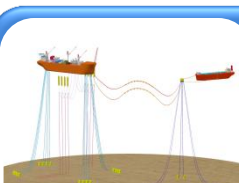
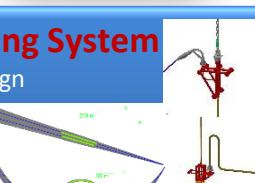
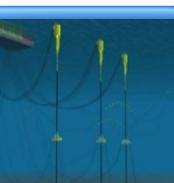
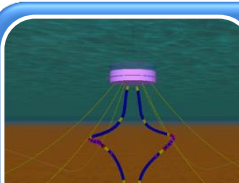

### SCOPE OF SERVICES

- ❖ Flexible Dynamic and Static Risers
- ❖ Free Standing Hybrid Risers (FSHRs)
- ❖ Drilling Risers
- ❖ Oil Off Loading Line (OOLs)
- ❖ Umbilicals
- ❖ Power Cables

### SOFTWARE TOOLS

- ❖ Orcaflex
- ❖ Ansys
- ❖ Abaqus
- ❖ Mathcad
- ❖ Wamit
- ❖ Shear 7

### REPRESENTATIVE PROJECTS

|   |  |   |   |
|---|--|---|---|
|   | <p><b>HYSY 981 Drilling Riser</b></p> <ul style="list-style-type: none"> <li>• Riser Operating Limits</li> <li>• Installation Analysis</li> <li>• Hang-off Analysis</li> <li>• Drift-off</li> <li>• Weak Point Assessment</li> </ul>   |    | <p><b>PY 4-2 Riser Relocation</b></p> <ul style="list-style-type: none"> <li>• Mid Water Arch Configuration</li> <li>• Riser and Cable Configuration</li> <li>• Riser and Cable Dynamic Analysis</li> <li>• Interference Check</li> </ul> |
|  | <p><b>EP24-2 FPSO Basic Design</b></p> <ul style="list-style-type: none"> <li>• Evaluate the Riser and Cable Options</li> <li>• Derive Flexible Riser and Cable Configurations</li> <li>• Riser Cross Section Design</li> <li>• Conduct Riser Dynamic Analysis</li> <li>• Riser Installation Analysis</li> </ul>                           |  |    |
|  | <p><b>West of Africa Deep Water Oil Offloading System</b></p> <ul style="list-style-type: none"> <li>• Free Standing Hybrid Riser (FSHRs) Configuration Design</li> <li>• FSHR Dynamic Analysis</li> <li>• Oil Offloading Line Design</li> <li>• FSHR Riser Upper Connector Design</li> <li>• FSHR Riser Lower Connector Design</li> </ul> |  |    |
|  | <p><b>Mundra Hose Study</b></p> <ul style="list-style-type: none"> <li>• CALM Dynamic Analysis</li> <li>• Hose Configuration Study</li> <li>• Hose Dynamic Analysis</li> </ul>   |   | <p><b>Husky MDA Development</b></p> <ul style="list-style-type: none"> <li>• Flexible Jumper Configurations</li> <li>• Flexible Jumper Dynamic Analysis</li> <li>• Clashing Check</li> </ul>  |