

# DIN EN ISO 16070:2006-05 (E)

Petroleum and natural gas industries - Downhole equipment - Lock mandrels and landing nipples (ISO 16070:2005); English version EN ISO 16070:2005

---

## Contents

|   | Page |
|---|------|
| Introduction .....  | 4    |
| 1 Scope .....   | 5    |
| 2 Normative references .....  | 5    |
| 3 Terms and definitions .....   | 7    |
| 4 Abbreviated terms .....   | 8    |
| 5 Functional specification.....   | 9    |
| 5.1 General.....  | 9    |
| 5.2 Functional characteristics of lock mandrels and landing nipples .....                     | 9    |
| 5.3 Well parameters .....   | 9    |
| 5.4 Operational parameters .....  | 9    |
| 5.5 Environmental compatibility.....  | 10   |
| 5.6 Compatibility with the related well equipment .....                                       | 10   |
| 5.7 Quality documentation.....  | 10   |
| 5.8 Design validation .....   | 10   |
| 6 Technical specification .....   | 11   |
| 6.1 General.....  | 11   |
| 6.2 Technical characteristics of lock mandrels and landing nipples .....                      | 11   |
| 6.3 Design criteria .....   | 11   |
| 6.4 Design verification.....  | 13   |
| 6.5 Design validation .....   | 14   |
| 6.6 Design changes .....  | 16   |
| 6.7 Functional test parameters.....   | 16   |
| 7 Supplier/manufacturer requirements.....   | 16   |
| 7.1 Documentation and data control.....   | 16   |
| 7.2 User/purchaser documentation.....   | 17   |
| 7.3 Product identification .....  | 18   |
| 7.4 Quality control.....  | 18   |
| 7.5 Functional testing .....  | 25   |
| 8 Repair.....   | 26   |
| Annex A (informative) Example of landing nipple validation test dimensional check sheet ..... | 27   |
| Bibliography .....  | 28   |