



## ELSA-EA adjustable fluted hanger assembly

The Adjustable Fluted Hanger Assemblies consist of a threaded mandrel and a hanger assembly. They are designed to set in the casing hanger of the wear bushing in the subsea wellhead so that the full weight of the set string can be suspended at the point.

The mandrel and lock-bolt arrangement allows for adjusting the height of the mandrel above the casing hanger of wear bushing. This in turn permits precise placement of the subsea test tree inside the blowout preventer (BOP) stack in relation to the position of the various BOP rams.

In addition, the mandrel also has slotted or bored holes to permit communication of annular fluid through it, above or below the fluted hanger. Also available is the special grooved or “pass through” mandrel that permits a chemical injection line or hydraulic control line to be run below the unit to a chemical injection sub or safety valve, respectively, located further downhole.

Note that when selecting a fluted hanger assembly, it is imperative that the angle of the fluted hanger seat matches the angle casing hanger or wear bushing. If this angle-to-angle interface does not match, excessive string weight could cause the fluted hanger to be partially pulled into the well.

### Features & Benefits:

- Designed to set in wear bushing or casing hanger in subsea wellhead
- Adjustable mandrel height to permit precise placement of SSTT inside BOP stack
- Slotted holes in the mandrel to permit communication of annular fluid
- Available with grooved or “pass through” mandrel for chemical injection sub or safety valve



Adjustable  
Fluted Hanger  
Assembly



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### Technical Specifications:

|                     |  |
|---------------------|--|
| Internal Diam       | 3 IN -10K<br>2.75 -15K                         |
| Outside Diam-Hanger | 11 IN, 13IN, 13.75IN, 15,75IN                  |
| Make-up Length      | 74.5 IN -10K<br>70 IN -15K                     |
| Working Press       | 10,000 PSI, 15,000 PSI                         |
| Tensile             | 347,000 Lbs at WP-10K<br>400,000 Lbs at WP-15K |
| Connection          | 4 1/2-4 ACME – 10K<br>5-4 ACME – 15K           |
| Service             | H <sub>2</sub> S                               |