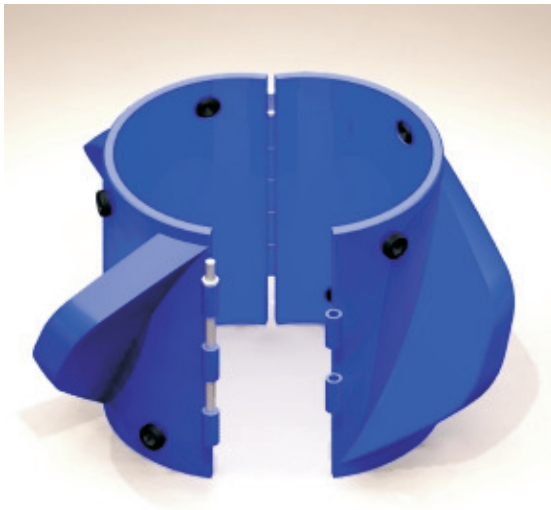


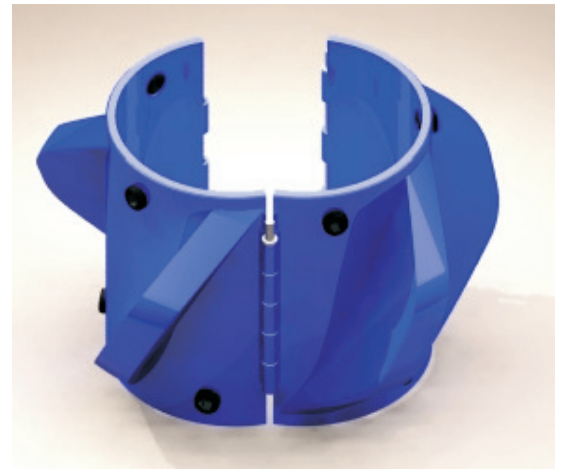
# HINGED

## Turbulator for Upset Pin End Tubing



Industry Proven Technology

Rugged New Hinge Design

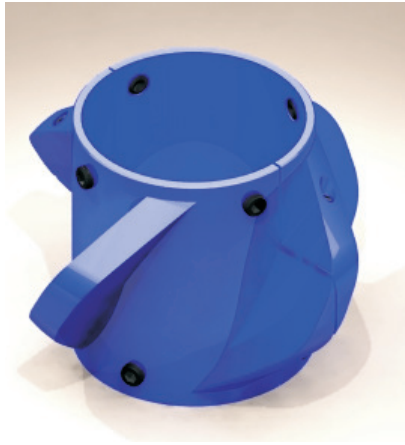


The Spidle Turbeco Hinged Turbulator is commonly installed on upset pin end tubulars where it is advantageous to run solid body centralizers as opposed to bow spring type centralizers.

The primary advantage of the Spidle Turbeco Hinged Turbulator is the attention paid to the hinges during the manufacturing process. The hinge ends are welded closed which makes an almost indestructible connecting device. Once the hinge is pinned, the turbulator can either be free to rotate on the tubing, between tubing couplings, or can be rigidly attached with setscrews.

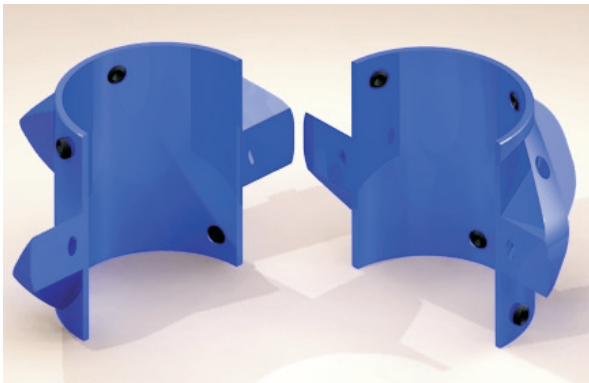
# SPLIT-LOK

## Turbulator for Upset Pin End Tubing



**No Hinge = Full Bypass Area**

**No Hinge = Full Strength Tool**



**No Hinge = Wide Range of Sizes**

The Spidle Turbeco SPLIT-LOK Turbulator is the industry's first rigid vane turbulator that has all of the advantages of a solid body centralizer plus the ability to be installed on upset pin end tubulars, without hinges or welded halves.

The SPLIT-LOK incorporates mating halves which are connected via thread locked bolts in counter-bored holes. Once the two halves are attached and connected, the turbulator can either be free to rotate on the tubing, between tubing couplings, or can be rigidly attached with setscrews.

