



# SharkTAC™ Tubing Anchor Casing-Scraper



### USE IN WELLS TO:

- Maximize rod pump fillage and production drawdown in combination with a **WhaleShark™** gas separator and a **Q2-Flow™** equipped downhole pump
- Stabilize and control flow slugging and/or flumping
- Maximize pump run-life and reliability
- Run tubing swivels with anchored tubing
- Reduce running risk of capillary lines or electrical cables

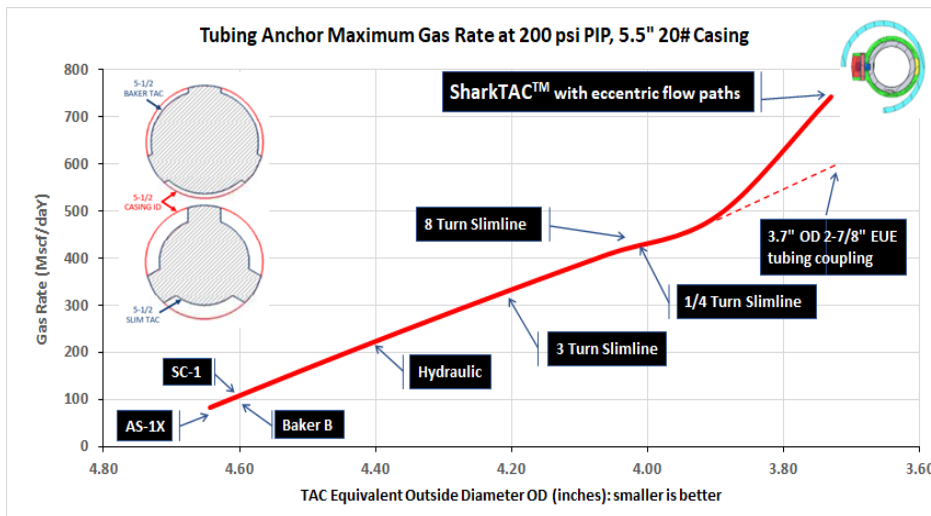
### VALUE FEATURES

- Patent pending mechanical tubing anchor design with a fully engineered annular flow path
- Offers greatest possible annular flowby cross sectional area for a tubing anchor and does not limit production
- Annular flow-by cross sectional area is greater than a standard 2-7/8" (73.0mm) EUE tubing coupling
- Eccentric flow path increases gas annular flow-by efficiency by 30%
- Does not require rotation to set or unset (simple up/down movement)
- Extended auto-J avoids unplanned setting risks while running in hole
- Unrestricting, full 2-7/8" EUE tubing drift internal diameter (ID), so can be run above pump seat nipple
- Can be positioned above or below the downhole gas separator; can be run on bottom of mud joints
- Can be run at high inclinations with low-risk setting/unsetting
- Adjustable emergency shear pin release (1 to 12 shear pins)
- Novel integrated casing scraper drag blocks avoid costly dedicated casing scraper runs

A fully engineered tubing anchor that eliminates limitations of existing tubing anchors. The **SharkTAC™ Tubing Anchor Casing-Scraper** is a high-performance downhole tubing anchor that offers the greatest possible annular flowby cross sectional area – more than a tubing coupling and is no longer the production limiting component in the annular flow path above a downhole pump.

It is very common for annular flow-by restrictive tubing anchors to cause erratic pump fillage and reduce downhole gas separator performance. An annular flow path restriction above a pump also prevents annular fluid levels from being pumped down or pumped off (limiting a well's production potential). See technical paper: McCoy, J., Rowlan, L., Taylor, C., Podio, A. (2014), "Tubing Anchors Can Reduce Production Rates and Pump Fillage", URTEC-1918491.

The "catcher" feature common with standard tubing has been limiting both the annular flowby area and the internal diameter of tubing anchors. As such, a catcher feature has been engineered out from this design to avoid such limitations.



The figure above shows maximum allowable gas rates for the various existing tubing anchors as compared to the SharkTAC. The smaller a tubing anchor's equivalent outside diameter (including when slips are set), the greater annular flowby area and therefore production performance.

