

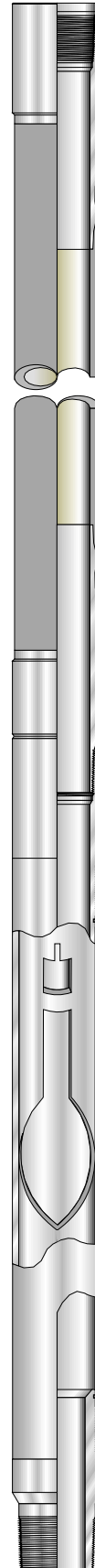
WINDOW  
CUTTING  
PRODUCTS  
A DIVISION OF TIW



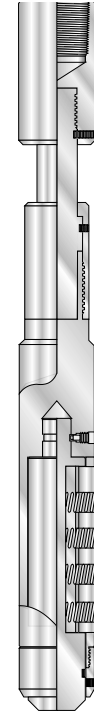
## Multi-Lateral Access System (MLAS)

The field-proven MLAS provides specialized methods and equipment for opening low-stress casing windows for drilling multiple lateral wellbores that extend from vertical, high-angle and/or horizontal wellbores. It employs a system of specialized casing joints and well tools that permit selective azimuthal or rotational departure points from one or more high-strength, composite-material casing joints strategically positioned in the primary wellbore.

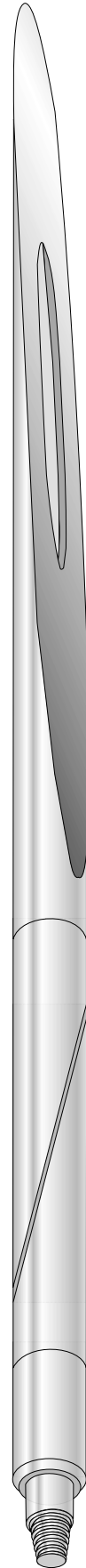
The Multi-Lateral Access System is designed for maximum flexibility. It utilizes tools that are conveyed and operated by either a conventional rotary or coiled-tubing drilling system. Lateral drilling can proceed in any sequence. The composite-material joints require no special milling tools for opening the windows. The low-stress opening procedure minimizes vibrations which might affect the cement bond between the departure joint and the formation.



Multi-Lateral  
Access System



Orientation  
Assembly



Wedge  
Whipstock