

CONVERGE

INTERCEPTION MILLING

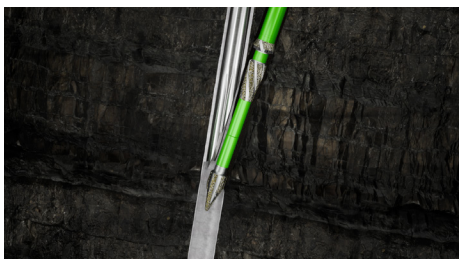
Converge Interception Mills are designed to effectively intersect an existing wellbore and regain wellbore access.

Converge Interception Mills are used in multiple applications, such as:

- Well abandonment, where traditional access through the wellhead or tubular has been compromised or lost.
- Carbon Capture, Utilization and Storage (CCUS) wellbore architecture construction.
- Relief well drilling

The family of Converge Interception Mills comprises of a series of custom configuration mills that are designed to (a) cut an initial slot in the intercepted casing, (b) elongate the slot to the desired length and (c) sever the casing if required.

All Converge Interception Mills have undergone a comprehensive full-scale laboratory testing program to validate performance.



A comprehensive range of Mills.

Slot Mill: designed to create the initial slot in the intercepted casing, its unique design ensures that the edge of the attack face contacts the casing wall first, providing stability while milling through the metal and creating a precise slot in the casing. The mill is equipped with super-tough crushed sintered tungsten carbide, with custom-sized granules on the attack face. It is capable of cutting through both casings and internal production tubing strings if required.



Elongation Mill: extends the casing slot created by the Slot Mill. Its outer diameter is dressed with crushed carbide and features spiral watercourses for cooling and efficient removal of cuttings. This design allows fluid to flow smoothly, preventing interference with the slot.



The mill's unique center round profile minimizes lateral movement, reducing the risk of slipping during casing milling

operations. If tubing is present inside the casing, the mill will continue cutting until the tubing is severed.

Severance Mill: engineered to cleanly sever the casing after the slot has been created. It enters the slot made during the milling operation and provides a precise cut. Once the cut is complete, the crushed carbide feature mills the casing further as needed, creating a clean window. This allows other fishing tools, such as Section Mills or Casing Mills, to pass through for P&A operations.



Applications

- Drilling relief wells.
- Intercepting wells for Plug and Abandonment (P&A) operations.
- Reusing wells for Carbon Capture, Utilization and Storage (CCUS).

Benefits

- Provide access to wells where conventional access has been compromised.
- Capable of creating slots and severing casing.
- Designed to mill casing and tubing with enhanced design features.

Features

- Unique design for creating slots and ensuring stability.
- Spiral watercourse design for efficient swarf and fluid flow.
- Center profile to minimize lateral movement during milling.
- Ability to sever casing slots and mill ahead in a single run.

Converge Interception Mills Specifications

| Mill Type | Diameter, in. | Connection Type |
|-----------------|---------------|---------------------|
| Slot Mill | 10½, 10⅝, 12¼ | 6⅝ inch API Reg Pin |
| Elongation Mill | 10⅝, 12¼ | 6⅝ inch API Reg Pin |
| Severance Mill | 10⅝, 12¼ | 6⅝ inch API Reg Box |