

## Case study: Cutting Through Complexity in Offshore Bundle Decommissioning



### Challenge

A complex offshore decommissioning project required the cutting and removal of a 9.9 km rigid bundled flowline situated in approximately 60 meters of water, off the coast of Australia. The bundle included a 10" raw gas production pipeline with piggybacked 2" chemical injection lines and an electrical heating unit (EHU). These components were attached using polymer saddles and secured with Inconel straps spaced every six meters, making the cutting process more intricate. Several sections of the bundle contained duplex stainless steel, which added further challenge due to the material's strength and resistance. Additionally, the project faced strict environmental constraints, as operations needed to be completed before the start of the whale breeding season, leaving a limited window for offshore activity.

### Solution

Ashtead Technology provided the MSD4500 Shear Cutter equipped with our patented bat blade, specifically selected for its capacity to handle duplex materials. The system was powered and controlled topside, with Ashtead Technology technicians supporting operations onboard.

To execute the campaign:

- Over 500 cuts were made along the bundled flowline.
- The cutter was effective in cutting the composite structure of the bundle, including Inconel straps and duplex pipe sections.
- All operations were conducted safely within the environmental window, concluding before the whale migration season commenced.

Ahead of deployment, all equipment underwent functional testing at Ashtead Technology's Singapore facility, ensuring seamless integration and performance offshore.

Additionally, bespoke tooling was fabricated to work with a 4" ROV dredge allowing efficient clearing of debris from the flowlines prior to recovery.

### Results and impact

The deployment of the MSD4500 Shear Cutter enabled the project team to complete over 500 complex subsea cuts safely, efficiently and within the designated window.

The cutting equipment performed reliably under demanding conditions, successfully handling a mix of materials including Inconel-strapped piggybacks and duplex pipe. By completing the removal of all duplex-containing sections, the operation significantly reduced technical risk for future decommissioning phases. This phase of the project demonstrated the value of specialised tooling and technical expertise in achieving successful outcomes in offshore decommissioning under tight environmental and operational constraints.