

The **PLUG 24-inch Isolation Tool** is a remotely operated, double-block isolation solution designed to secure pipeline sections at full operating pressure (max 1000psi) - eliminating the need for depressurization. Its bi-directional piggability ensures seamless deployment, with no need for digging, welding, fittings, or other intrusive modifications. Customers have access to a dedicated tool monitoring page for real-time status updates, enhancing operational visibility. The tool offers competitive pricing compared to conventional isolation methods, with fast delivery to meet project timelines. An advanced external surface antenna system enables precise location, control, and communication, ensuring efficiency and reliability in pipeline maintenance and modification.

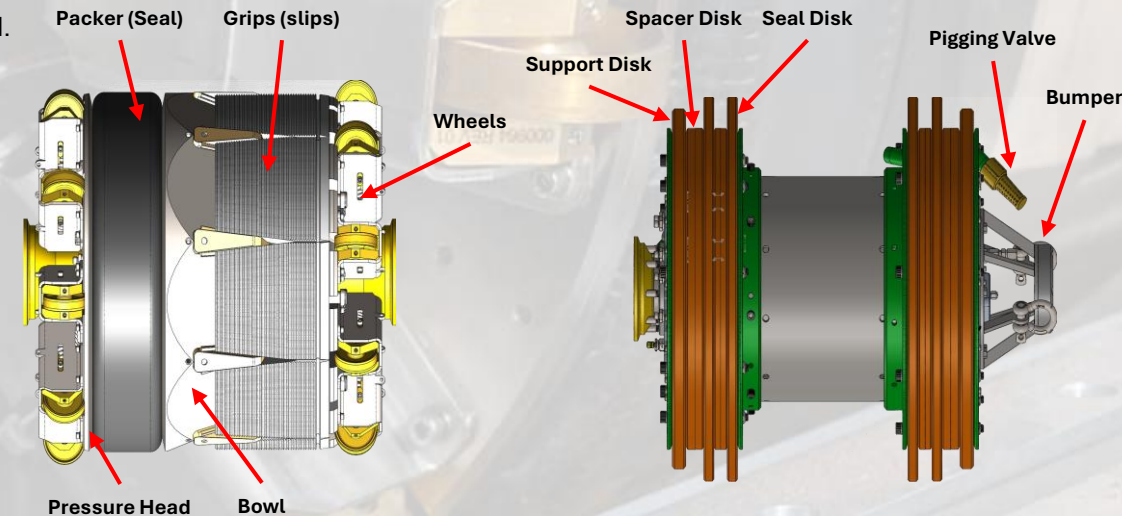
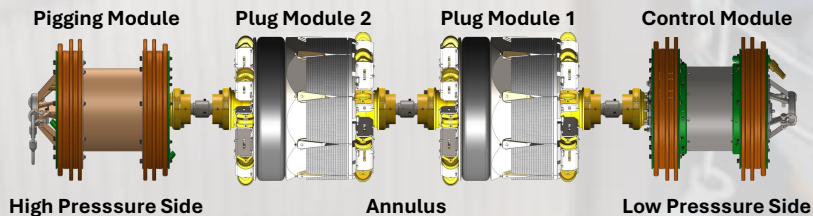
Tool Components:

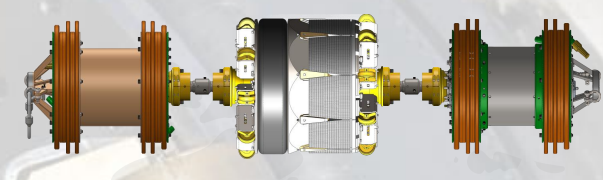
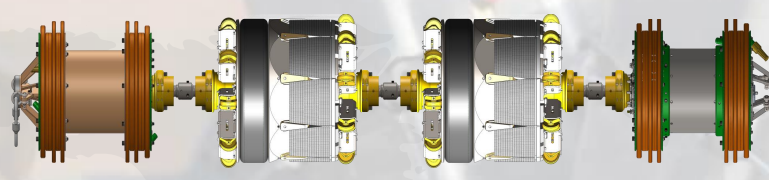
• Plug Module (PM)

- **Packer** = Forms a seal between the packer and pipe wall.
- **Grips** = Grips mechanically bite into the pipe wall to prevent axial movement.
- **Wheels** = Wheels help the tool glide through the pipe and keep tool centered.
- **Bowl** = Provides the rigid framework that allows the packer and grip elements to deploy outward and engage the pipe wall.
- **Pressure head** = It acts as a load-bearing interface between the pressurized fluid and the mechanical structure of the tool. This ensures that the seals and grips aren't overloaded or displaced.

• Control Module (CM)

- **Support Disk** = It keeps the pig aligned within the pipeline, preventing it from tilting or dragging against the pipe wall.
- **Space disk** = Used to space out sealing disks and support disks. This ensures proper compression, alignment, and performance of each element.
- **Seal disk** = A seal disk provides a tight seal against the pipe wall, enabling the pig to push liquids or gases and move through the pipeline without bypass.
- **Pigging valve** = Ensures controlled movement and avoids damage from excessive force or misalignment.
- **Bumper** = Protects the front and back part of the tool.





Features:

- Double block & Monitor for enhanced operational security.
- Competitive pricing and expedited delivery to meet project timelines efficiently.
- Fail-safe plug modules, ensuring reliable functionality under all conditions.
- Each plug operates independently, enhancing operational safety.
- Contingency release mechanism for emergency intervention.
- Redundant annulus pressure sensors for improved safety and performance monitoring.
- Each run supports multiple isolation points, allowing for seamless valve replacements.
- Thru-wall ELF signal communication, with surface antenna-based tracking for precise tool operation.
- Customizable monitoring tailored to specific project and customer requirements.
- Compatible with a wide range of petroleum and crude oil environments.
- Project-specific FAT and pigging tests available upon request.
- Dedicated tool monitoring platform providing real-time status updates for customers.
- Global access to tool data enabled through Starlink connectivity.
- Comprehensive project documentation included.

Applications:

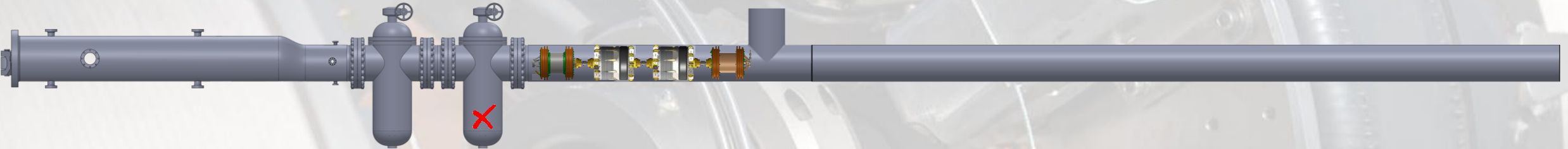
- Launcher / Receiver valve replacements.
- Pump station service / repair.
- Riser replacement / repairs.
- Asset protection during heavy lifts.
- Emergency Pipeline Repair Systems (EPRS).
- Midline repair.
- Tie-ins.



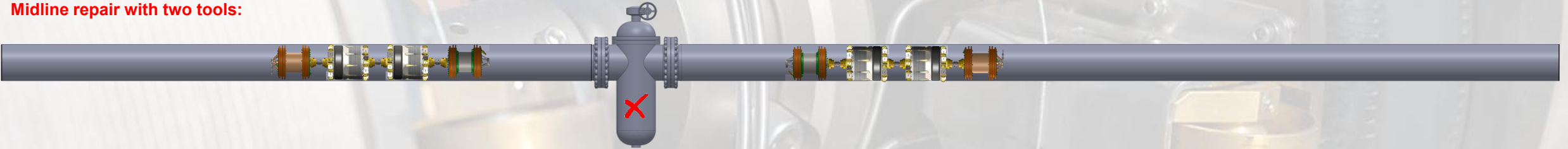
24in Tool specifications	
Dimensions	
2 module tool	12'-7" (3.38m)
1 module tool	9'-3" (2.8m)
Weights	
2 module tool	2933 lbs. (1330 kg)
1 module tool	1844 lbs. (836 kg)
Transport Tray	1870 lbs. (848 kg)
Isolation pressure range	0-1000 psi (69 bar)
Pipe material	Max X65
Pipe wt.	0.250"-0.562"
Pigging medium	Liquids and gases
Tool operational temp.	30F-120F (-1C-49C)
Piggability	3D bends
Pigging speed:	
Straight pipe	10 ft/s (3m/s)
Bends / valves	3.3 ft/s (1m/s)
Battery life	Project specific
Pigging DP	~20 psi (1.37 bar)
Tool positioning accuracy	<1in
Max pipeline burial depth	9'

Tool Applications:

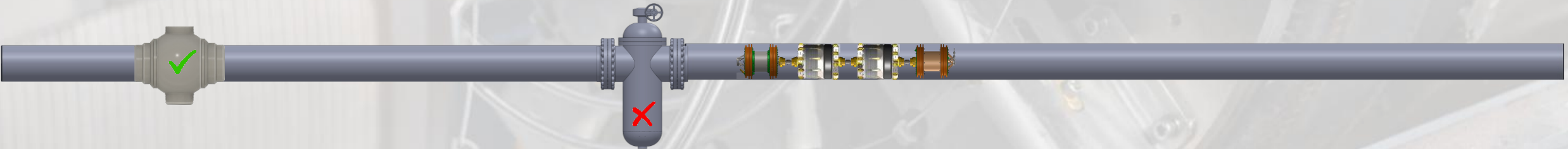
Launcher / Receiver valve replacement:



Midline repair with two tools:



Midline repair with one tool and an inline valve/alternative isolation:



Tool SET Sequence:

