

## AGING SUBSEA WELLS?

- VALVE ACTUATOR PROBLEMS?
- STRUGGLING TO MAINTAIN PRODUCTION?
- UNECONOMICAL TO PULL THE TREE?

## WE CAN HELP YOU

Schoolhill has a number of low cost subsea solutions for these problems, to help you continue producing through the tree, with addition of some special tooling at minimal intervention costs.

These Schoolhill Tools (LAOT – Linear Actuator Override Tools) can be supplied for short or long-term applications on subsea or topside trees.

For subsea use they can be diver or ROV fitted and locked in place, or recovered to the surface after use.

Typical uses might be;

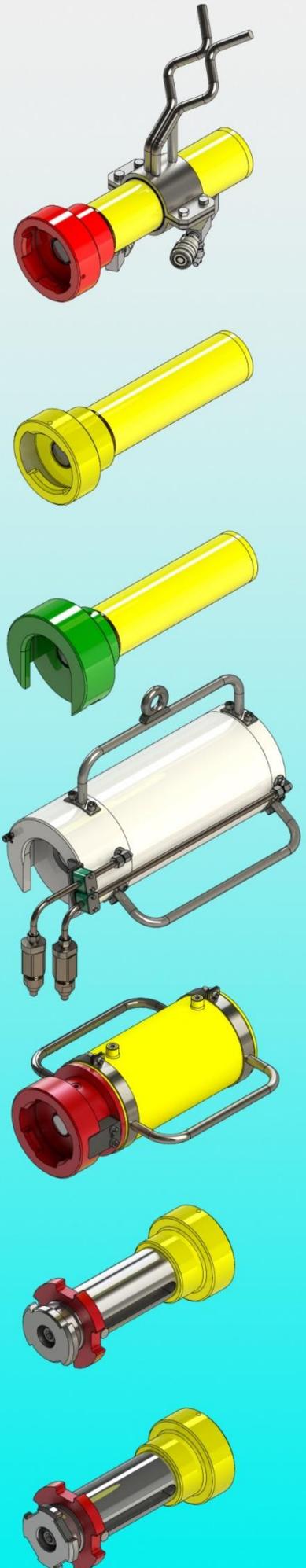
Where a tree valve actuator is not holding hydraulic pressure, making it difficult to hold the valve open and incurring high fluid losses from the control system.

OR

Where actuator springs have failed and effective control of the tree has been lost.

These tools effectively replace the problematic actuator and can be used to operate the valve from a separate hydraulic supply, or can be connected into the existing tree hydraulics and operated via a QEV.

Our engineers have produced a number of different types of these tools for most of the commonly used subsea tree types, but if we do not have suitable tools for your tree valves, our engineering team will be pleased to find a solution for you.





### **Linear Actuator Override Tool - High Pressure**

- Common Tool with interchangeable Interface Caps (per ISO 13628-8)
- Operates at 10,000psi generating 70,000 lbf
- Small Tool Footprint
- Various Valve /Fitting options
- Handles to suit Diver or ROV operations

### **Linear Actuator Override Tool – Low Pressure**

- Common Tool with interchangeable Interface Caps
- Operates at 3,000psi generating 150,000 lbf
- Suits Lower Pressure tree hydraulics
- Various Valve /Fitting options
- Handles to suit Diver or ROV operations



### **Mechanical Lockdown Cap**

- Allows Valves to be mechanically held in position
- Interchangeable caps allow for common design
- Hydraulically Actuated by Linear Override Tool
- Removes the need to leave Hydraulic Tools Subsea
- Small Footprint