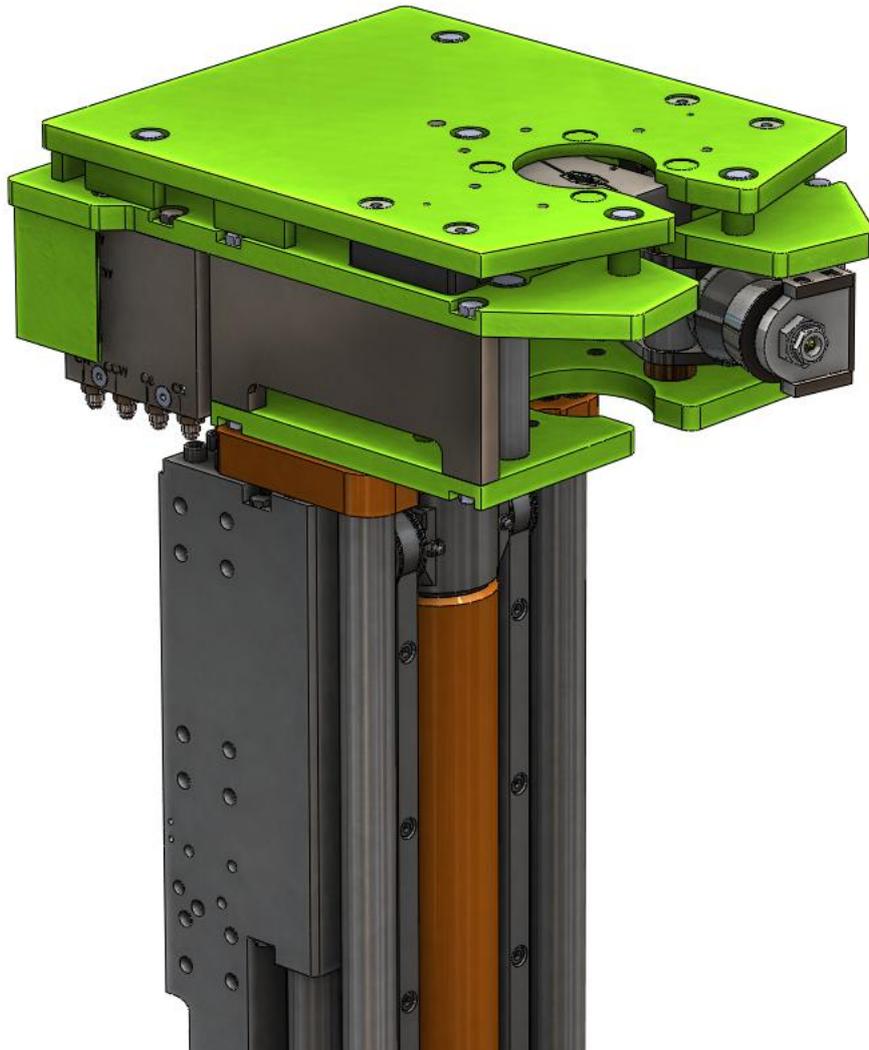




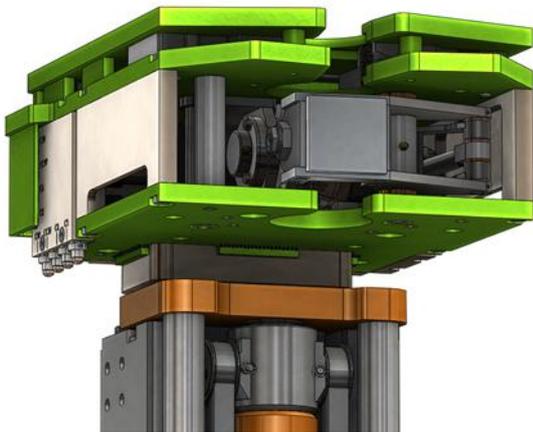
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LOBSTER HR CABLE BOLT PUSHER
HEADPLATE REPLACEMENT SERIES
FOR
JOY, SANDVIK ETC. DRILLRIG FEEDFRAMES
INTEGRATING BOTH
CABLE BOLT PUSHER AND GRIPPER JAWS

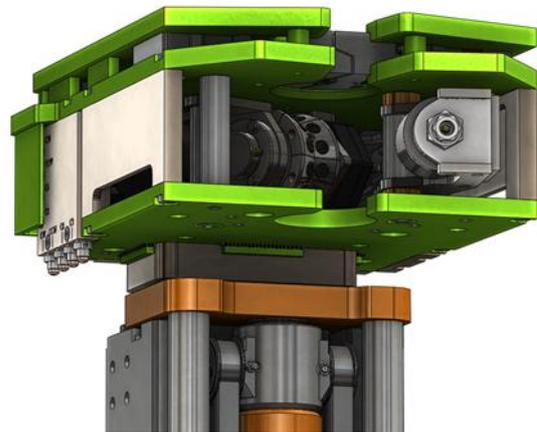


INTRODUCTION

- The Conway Engineering LOBSTER HR is designed to mount to the top of an existing Joy HFX, Sandvik S2500 or other similar market standard feedframes. The LOBSTER HR hydraulically pushes the cable bolt into a predrilled hole in the roof strata. This dramatically reduces the amount of physical input from the operator and in turn increases safety and productivity. The LOBSTER HR also integrates a set of gripper jaws for breaking strings of drill steels.
- The LOBSTER HR has been developed to meet the following goals:
 - Maximise level of integration
 - Maximise gripper jaw distance from drill chuck
 - Improve safety
 - Minimise added size and mass
 - Push as many varieties of cable bolt as possible:
 - With Bulbs or Plain
 - Single or Multi Strand
 - Simple operation and servicing
- Conway Engineering can customise the LOBSTER HR to suit any of your specific needs.



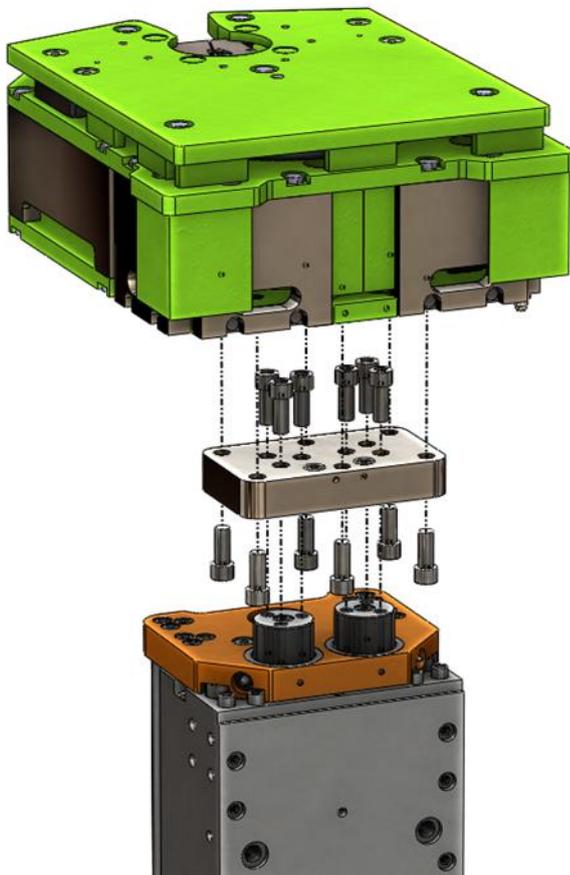
LOBSTER HR shown with gripper jaws open and drive rollers closed



LOBSTER HR shown with gripper jaws closed and drive rollers open

INTEGRATION ONTO DRILLRIG

- Using an adaptor plate, the LOBSTER HR mounts directly onto the existing gripper jaw ported timber-jack rods.
- The LOBSTER HR requires hydraulic power to operate. This is typically sourced from the host machine and plumbed into the Conway valvebank. There are 3 lines required: Pressure, Tank, and Load Sense (Load Sense is typically plugged off on air-over-hydraulic powered rigs). Alternatively, if there are spare DCVs on the host machine, they may be utilised in place of the standard Conway valvebank.

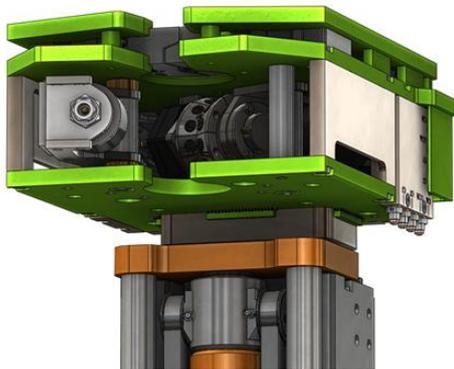


LOBSTER HR and example Joy HFX feed frame shown with mounting hardware.

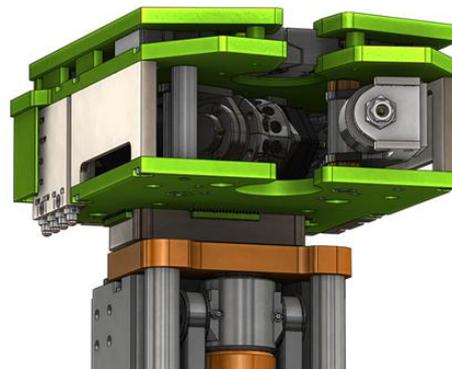
- The LOBSTER HR has been designed with gripper jaws for 'breaking' strings of drill steels. Being positioned at the top of the unit allows the longest possible drill steels to be used.
- The LOBSTER has a keyhole aperture dimension that suits the original specification of the host machine head plate. This is typically 110mm, but 80mm can be configured upon request.

CONFIGURATIONS

- The LOBSTER HR can have the Lobster 'Claw' configured left or right handed. This gives the operator the best possible visibility and access when bolting.

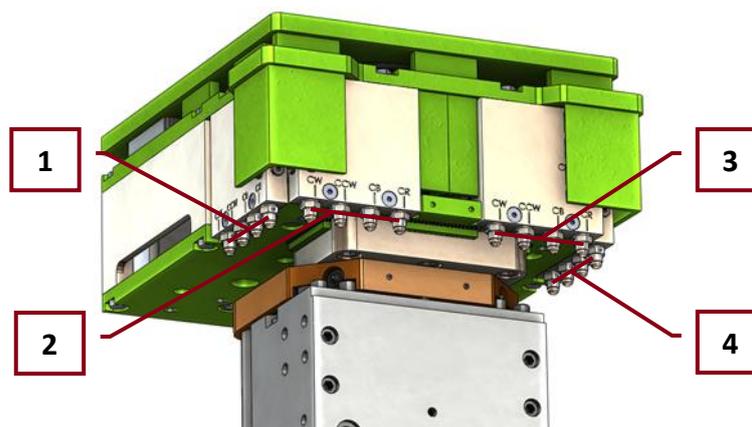


LOBSTER HR shown with
left handed 'Claw'



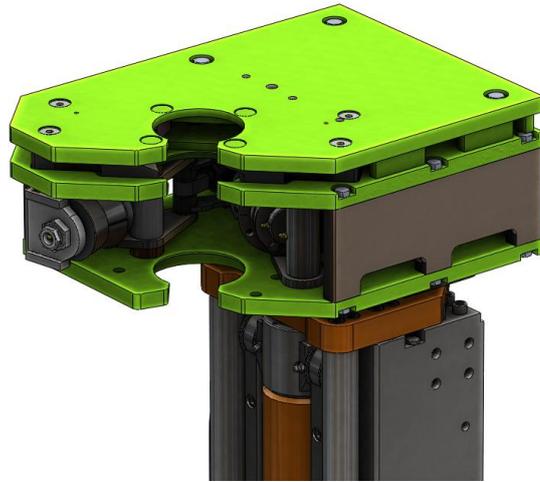
LOBSTER HR shown with
right handed 'Claw'

- The LOBSTER HR can have the Hose Entry Manifold configured in 4 possible positions:
 - Towards the back, along the left (1) or right (4) sides- usually used for Continuous Miner installations
 - On the back, left (3) or right (2) corner- usually used for Secondary Support Rigs such as Airtracks or other similar bolting rigs.



LOBSTER HR shown with hose entry
manifolds in all 4 possible locations

- The LOBSTER HR can be configured as straight entry or side entry (front corner)

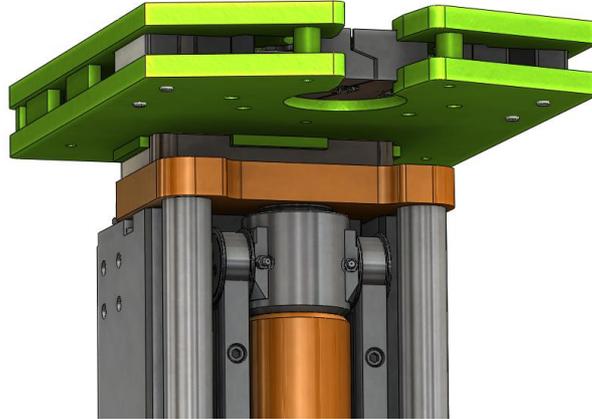


LOBSTER HR side entry configuration
(left handed)

- On Continuous Miners, both North-South & East-West drill rig orientations can be catered for.
- Any standard hardware such as magnetic plate holders, can be integrated into the LOBSTER HR.

'GRIPPERS ONLY' OPTION

- Conway Engineering has developed a 'Grippers Only' plate that allows the Cable Bolt Pusher portion of the LOBSTER HR to be removed and a more traditional Gripper Jaw only 'Headplate' configuration to be used.



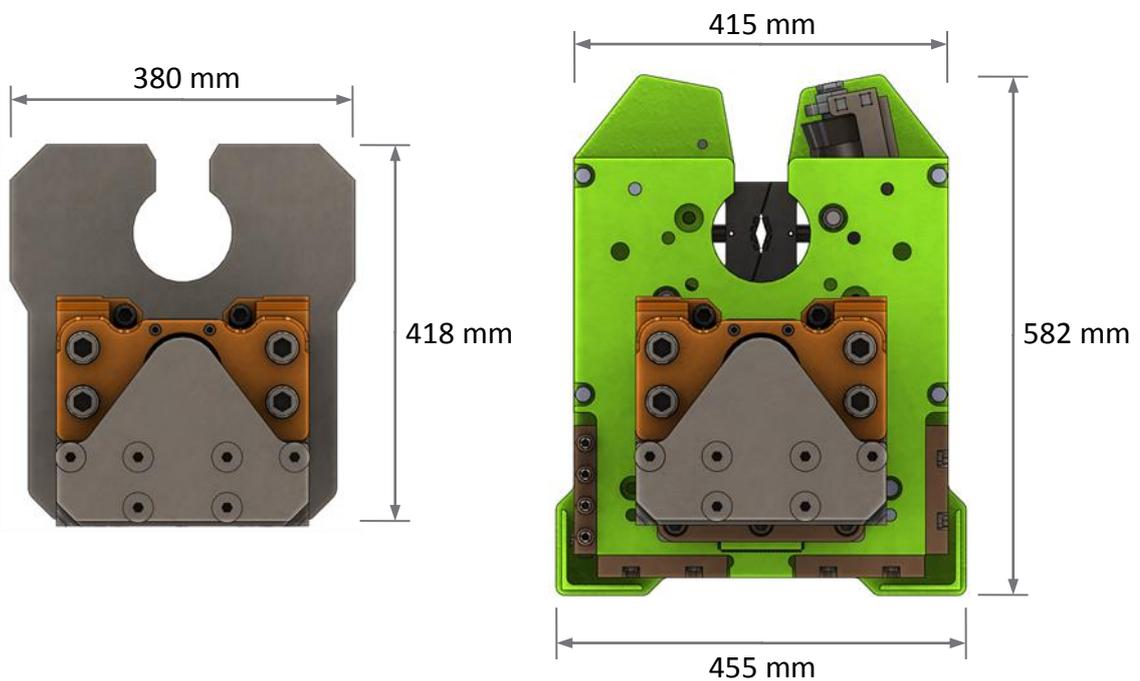
GRIPPERS only plate shown installed
onto an example Joy HFX feed frame-
gripper jaws shown closed

SAFETY

- The LOBSTER HR represents a significant safety improvement in cable bolt installation. It significantly reduces high effort manual cable bolt handling and has inbuilt safety features including:
 - Hydraulic latching of pinch function – once bolt is gripped and ready to be fed, it stays gripped via internal hydraulic logic and stops the bolt from falling.
 - Two handed control of feed function – to feed the bolt, two handed control is required, thus removing the possibility of an operator getting their hands entangled in the rollers.
- As the LOBSTER HR is integrated into the host machine, emergency stops on the host machine will also disable the LOBSTER HR.

ADDITIONAL MASS AND SIZE?

- Mass- a LOBSTER HR unit weighs approximately 150kg, meaning that compared to (for example) a Joy TSRU headplate, approximately 80kg is added to the drillrig feedframe.
- Size- compared to (for example) a Joy TSRU Headplate, the LOBSTER HR adds approximately:
 - 75mm width (37.5 per side)
 - 145mm height
 - 164mm length (80mm front, 84mm rear)



LOBSTER HR size shown in example comparison to Joy TSRU head plate

OPERATION AND SERVICING

- LOBSTER HR Cable Bolt Pushing functions are activated via the Conway control bank (pictured below in an example cabinet). The LOBSTER HR is very simple to operate, adding only two controlled functions to the existing bolting rig, with the gripper jaw control remaining as part of the host machine.



Typical **LOBSTER HR** Valvebank shown in an example cabinet

- The LOBSTER HR has a number of easily accessed service elements including grease points for critical bearings/bushings, as well as replaceable sacrificial wear segments on the feed drive wheel and easily replaceable gripper jaws.
- Operating parameters:
 - Typical supply pressure: 3000 psi (207 bar)
 - Flow rate: Consumption is very low. LOBSTER HR units have been successfully operated on flows as low as 5 lpm.

CURRENT PRICING

- The LOBSTER HR unit complete with:
 - Valvebank c/w Cabinet (Delete Option: \$4,376)
 - Mast Manifold
 - Operations & Maintenance Manual
 - Training Package
 - \$36,500 plus GST

- A complete spares pricelist can be provided upon request.