

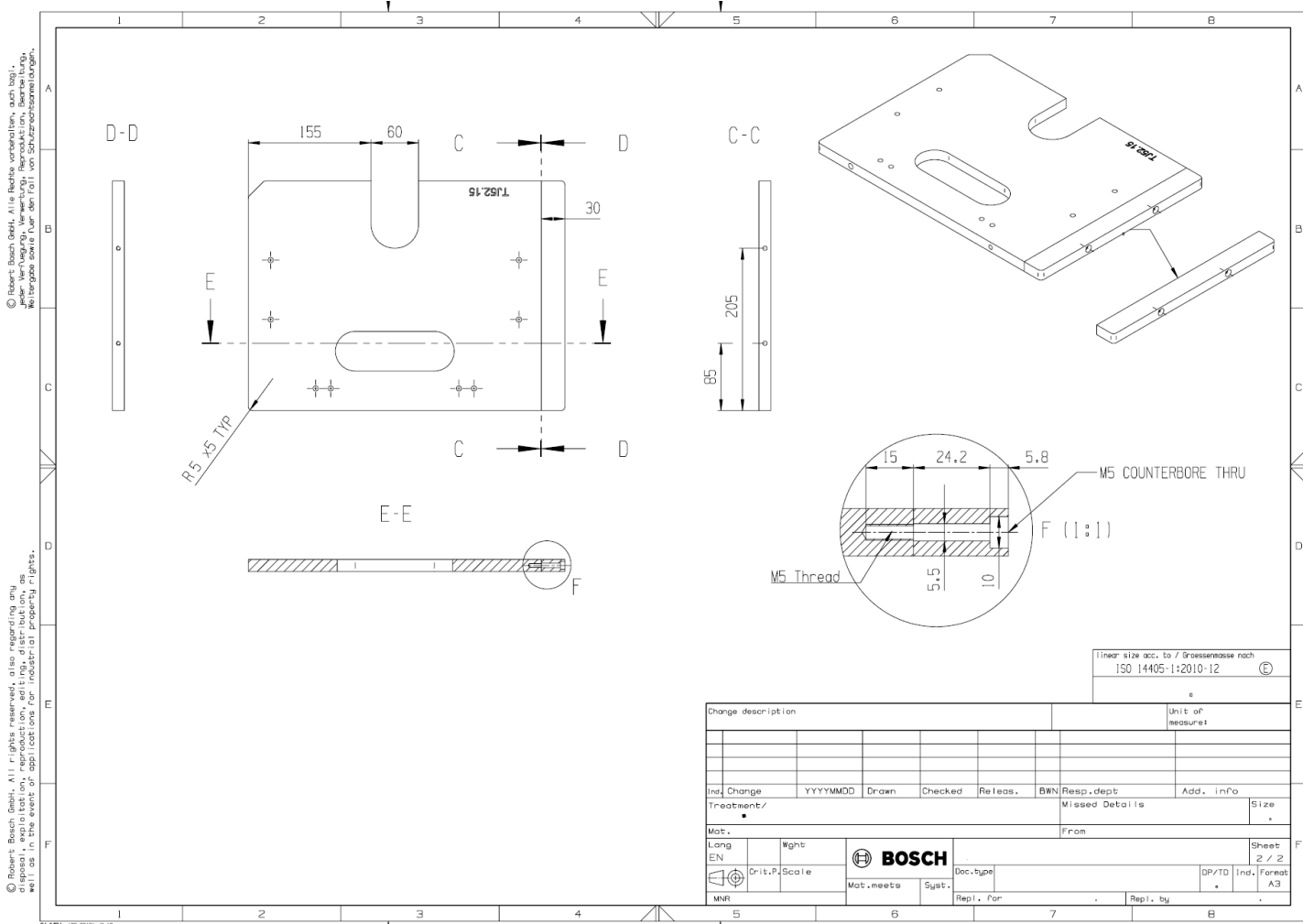
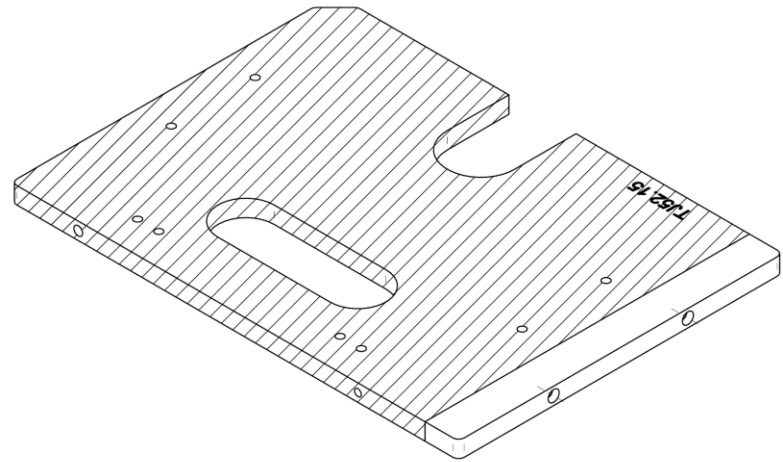
Owen Exon
Droitwich Spa High



I played a part in the process of the recreation of this Jig and provided a suggestion on a way to standardise across the different assembly lines.

Left: The Jig

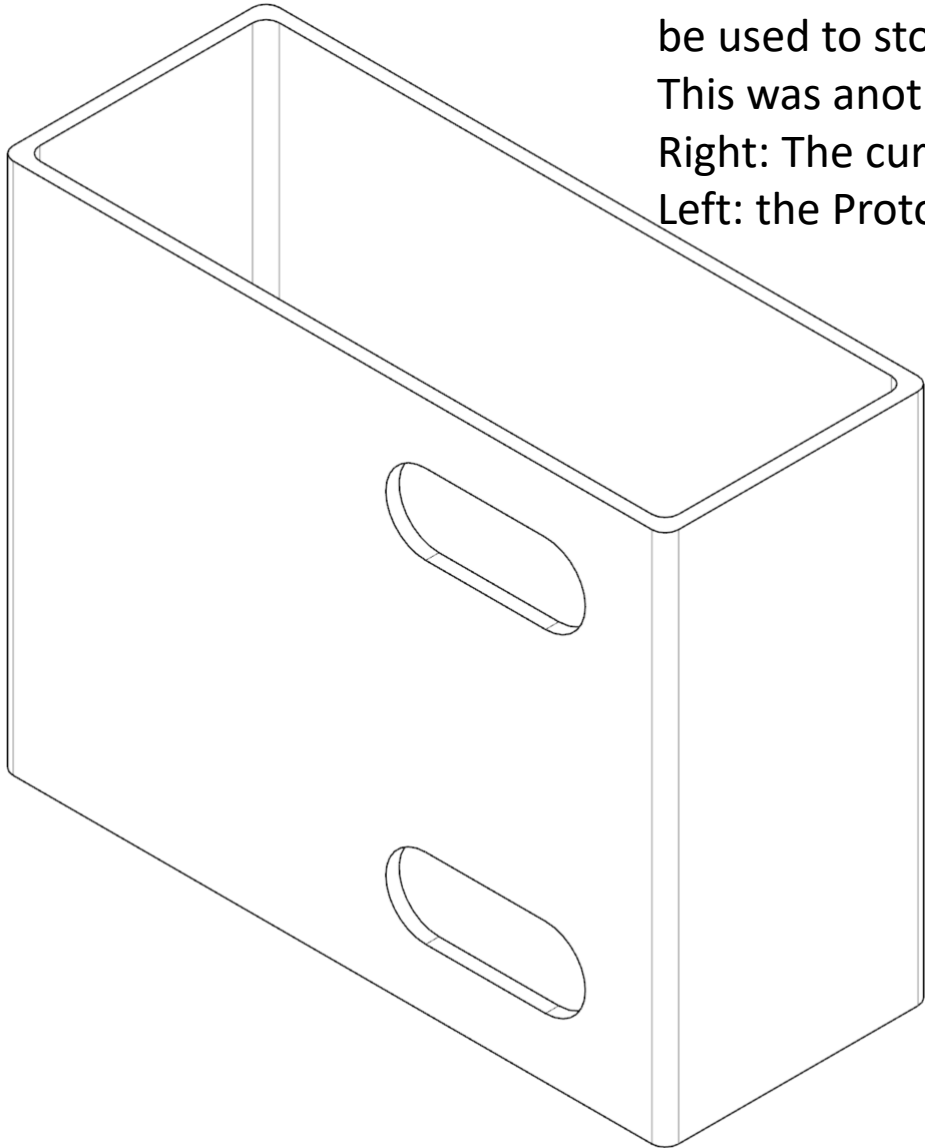
Below Left: shows the part I designed to standardise



This is a holder for a pistol drill that I played a small part in designing, so that it can be hung from a cable on the line. The person I worked on this with also showed me how to do an FEA for it.



Some of the boiler carriers had issues where the part they were resting were getting bent, so me and their current intern mocked up a small part that can be used to stop them from bending. This was another opportunity for FEA
Right: The current rest
Left: the Prototype bracket.

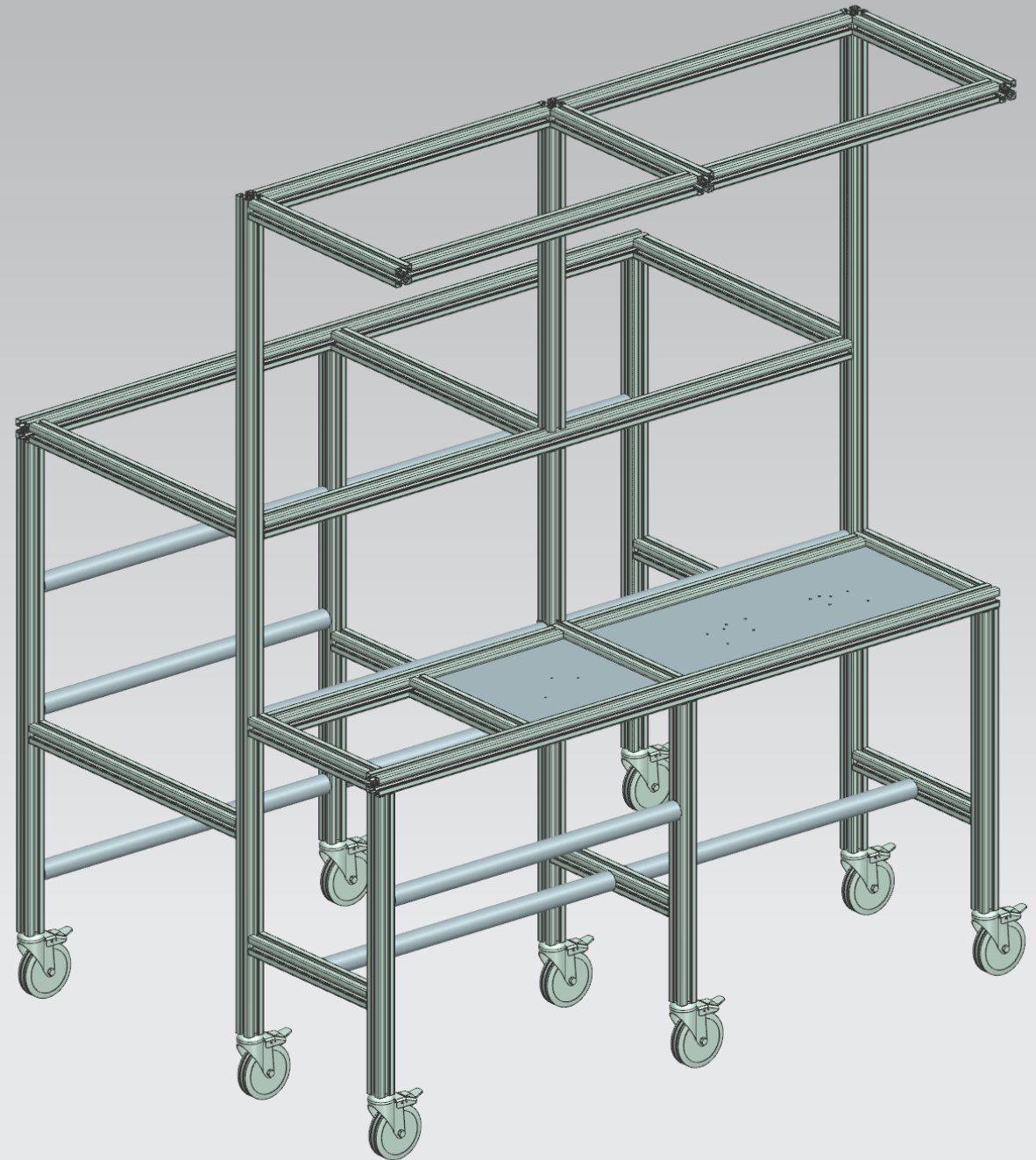




This is a workstation on the pre-assembly line that I redesigned from scratch. It's made of Rexroth beams and will be more ergonomic for the operator and easier for logistics to feed boxes of parts in and out.

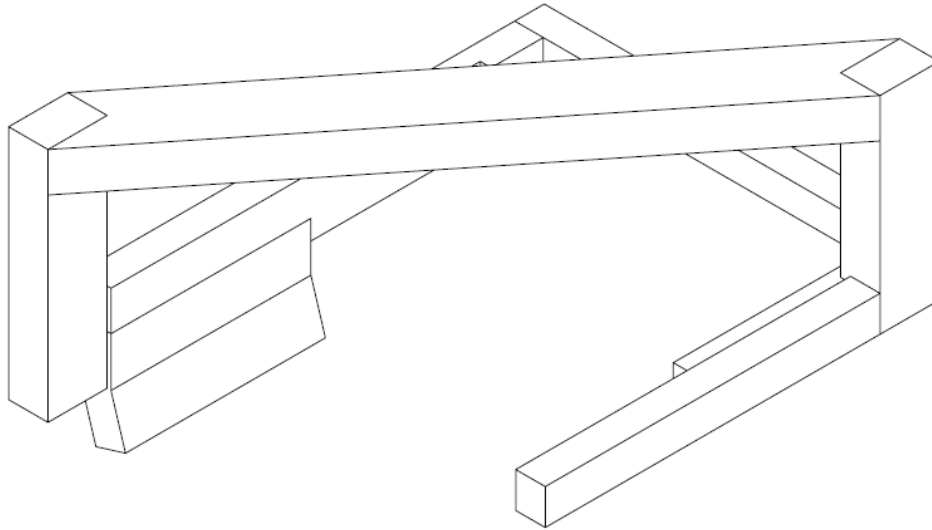
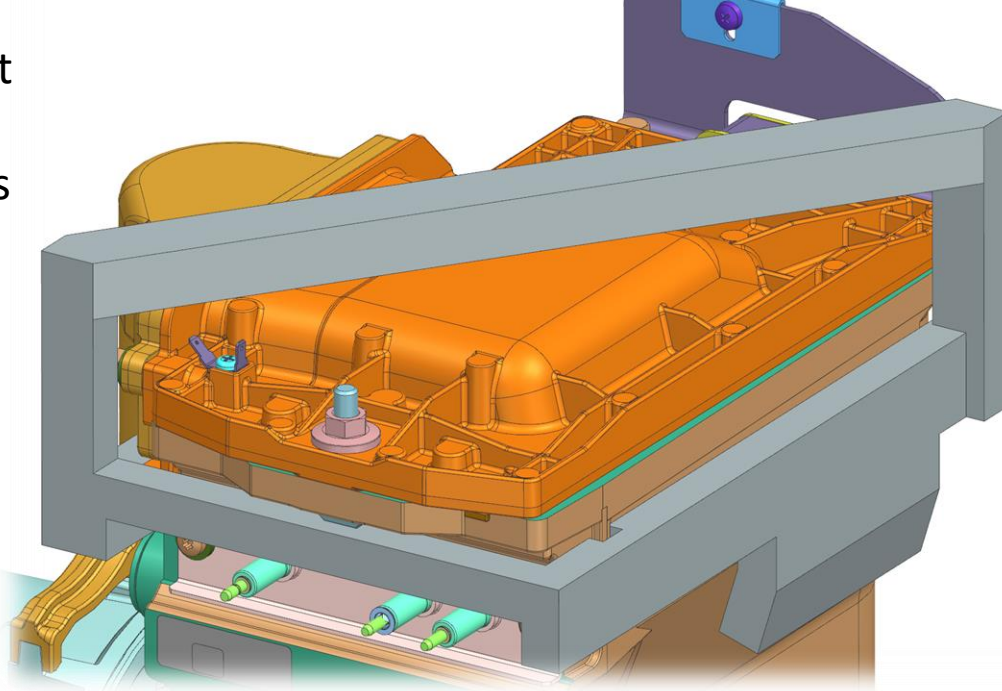
Right: Racking CAD model

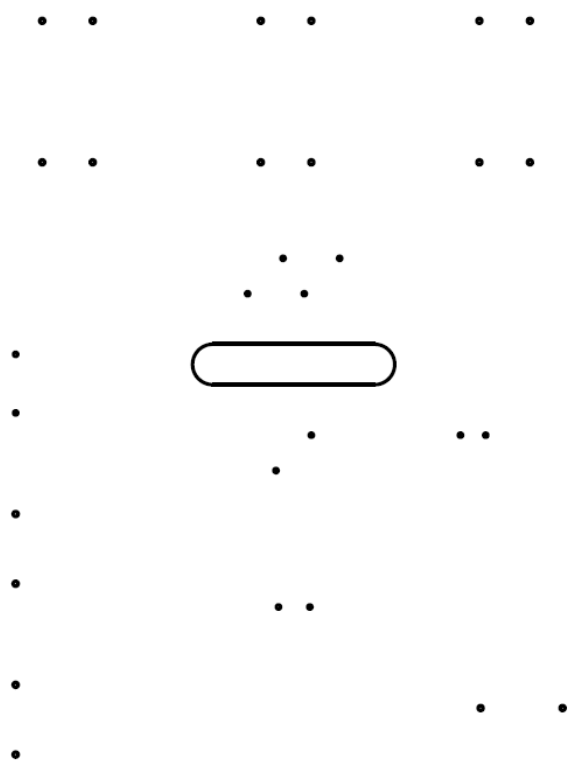
Up: The old workstation



This is a prototype hoist for a heat exchanger. The current hoist bends over time as it is a very thin piece of metal lifting the entire part.

Right: Heat exchanger
Top: Shows how it fits.

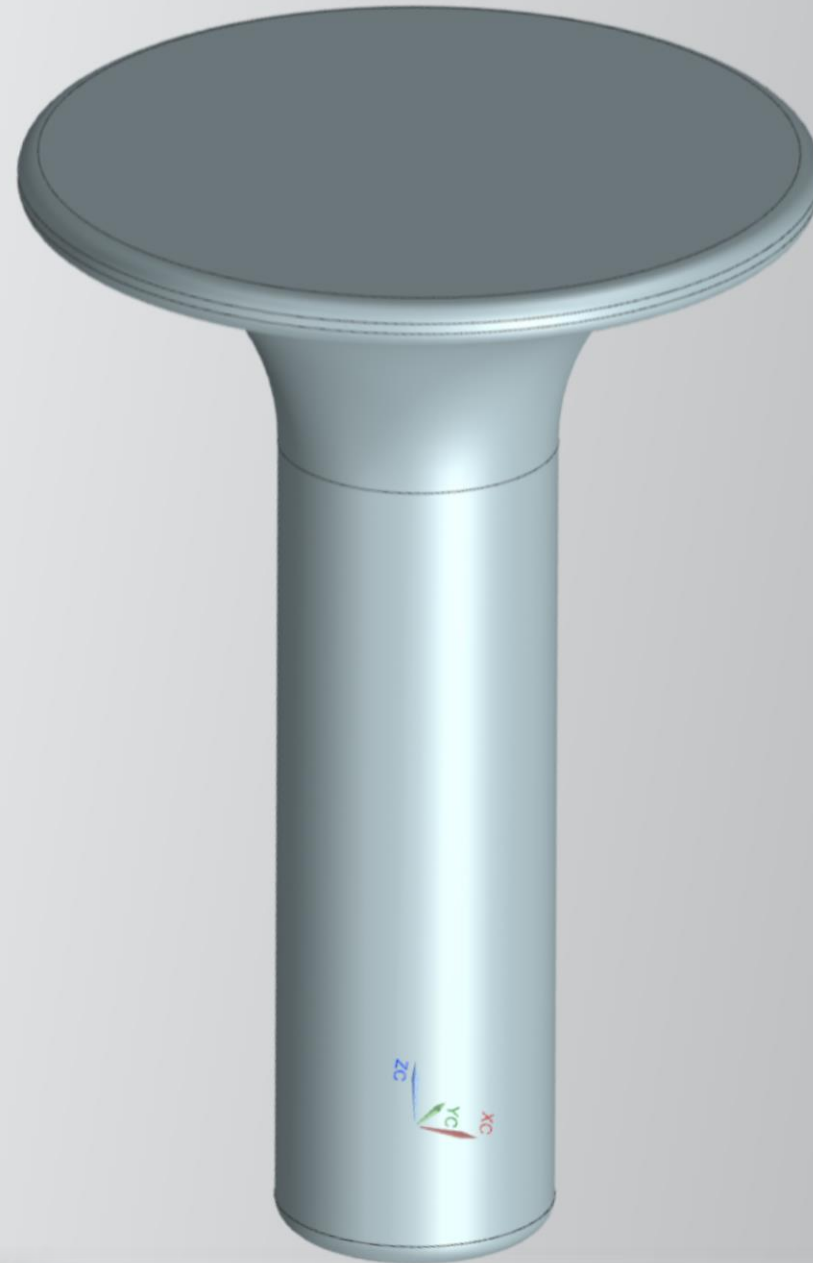




The test rigs on one of the assembly lines were getting replaced so I was asked to take one of the old ones and CAD up and rearrange the fixing holes to be appropriate for the new base plate.

Left: Redesign
Right: The Old Test Rig





This is a small tool on preassembly for pushing in clips that they needed putting into CAD and redesigning slightly so a spare can be made.
Left: the current tool
Right: the redesign

