

# X-Y MILLING OF COOLER BOX PLATES

## ON-SITE MACHINING TOOLS USED IN WORKSHOP TO MACHINE PIECES TOO LARGE FOR WORKSHOP MACHINES

VARD, a major global shipbuilder of offshore and specialized vessels approached Goltens to machine a number of surfaces on cooler box plates.

The plates were large, measuring 1,600mm x 3,800mm with a thickness of 50mm. The dimensions of the plates made them too large for Goltens' installed milling machines.

As an alternative, Goltens proposed solving the challenge with its large-scale 3000i X-Y Milling machine. The machine, designed and built by Goltens, was normally used for on-site / in-situ machining applications, but with some careful preparation could be used to solve VARD's requirements.

Each cooler box plate needed to be machined in 4 to 5 locations where it would be mounted to the Cooler. This included both face and ID machining. The specification required flatness after machining of 0.4 to 0.6mm.

Goltens undertook the challenge and fabricated a foundation to place the cooler box in position.

#### X-Y MILLING WORKSCOPE:

- Inspection of Cooler Box Plate
- Fabrication of foundation to place the plate for machining
- X-Y milling to the drawing specifications provided byt the shipyard
- Performed post machining flatness measurements
- Drilling Ø18 x 580 holes
- Flange dimension:
  - o 3800mmL x 1600mmW x 1no
  - o 3485mmL x 2035mmW x 2nos

### X-Y MILLING RESULTS:

The results were reviewed and accepted by both the Shipyard and the owner. Goltens Vietnam completed this machining within 2 weeks closely coordinating with the shipyard in order to meet owner's urgent schedule.

#### PROJECT FACTS:

Customer name: Box plate Dimensions: COOLER BOX X-Y MILLING

VARD CO.,LTD 3,800mmL x 1600mmW (1 pc.) 3,485mmL x 2035mmW (2 pc.) 2 weeks

Work period:



X-Y Milling of cooler box plate in Goltens' shop



