

CASE STUDY - Vessel Plate Weld Preparation

- **Requirement:** Machine vessel plates prior to welding
- **Location:** Saudi Arabia
- **Equipment:** MR3000 + Swivel spindle



Mirage supplied a standard 2 axis MR3000 milling machine and a $\pm 40^\circ$ swivel milling spindle to allow straight bevels of 37.5 degrees and also J preps to be machined with a round inserted tool and 4 off mounting magnets spaced over the 3m bed.

The machine cut the time for plate preparation from 26 to 4 hours and removed all handling operations. It also complied with new QHSE legislation governing hand grinding.

Mirage were asked to provide a machine to machine both a 37.5 degree weld prep and also J prep on plates used for pressure vessel manufacture.

The plates were up to 120mm thick carbon steel, up to 12 ft long and 8 ft wide and were being prepped by hand.

Once prepped the plates were then rolled and welded. The client wanted to be able to quickly mount and align the machine and then fix to the plate using magnets.

