

## Flange Facing Case Study

This case study demonstrates the quality of surface finish that can be achieved using a Mirage Flange Facing Machine. It also shows why Mirage is the market leading manufacturer and highlights what can go wrong when an inferior machine is used.

### REQUIREMENTS

A pipe fabrication company had the requirement to machine eight 300NB (485 OD) flanges that had been galvanised for use in a refinery construction project. The galvanizing process had covered the flange sealing surface, so it was necessary to machine back to the base metal and create a gramophone finish for the gasket sealing surface.

Initially, a machine manufactured by a Mirage competitor was used, but an inspector rejected the gramophone finish as it was too smooth. Other difficulties encountered with the machine included poor stability, which resulted in the machine moving during machining and creating a groove in the flange face.

### SOLUTION

The customer contacted our regional Mirage representative, who responded immediately by arranging for a MM1000i flange facing machine to be supplied on a rental basis.

The MM1000i Flange Facing Machine has the capacity to face diameters from 6" to 40". It includes a three speed continuous feed gearbox, to deliver three different gramophone surface finishes.

The quick set adjustable clamping jaws minimise set up time and the 360° tool post enables a wide range of machining operations.

Training for the machine operators was also provided, which included set up, test cuts and full instructions on machine operation.

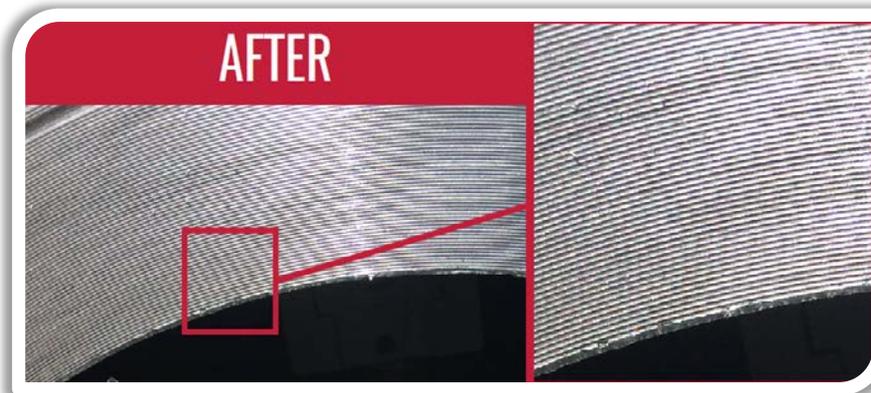
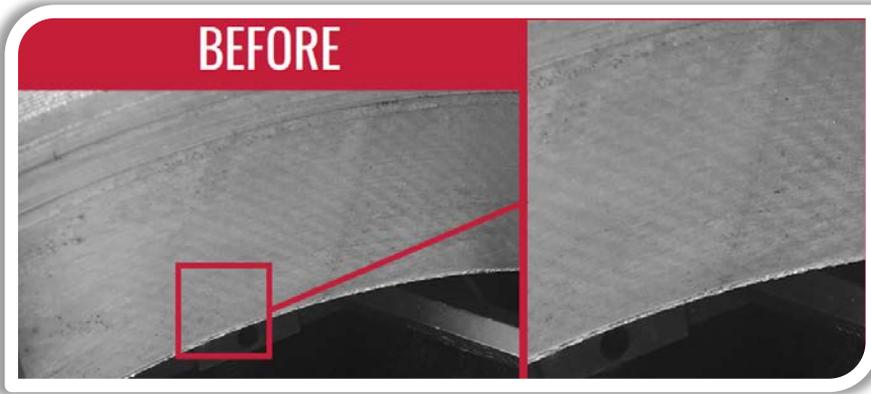


Above: One of the problem flanges showing the rejected surface finish and grooves caused by movement of the machine during operation.



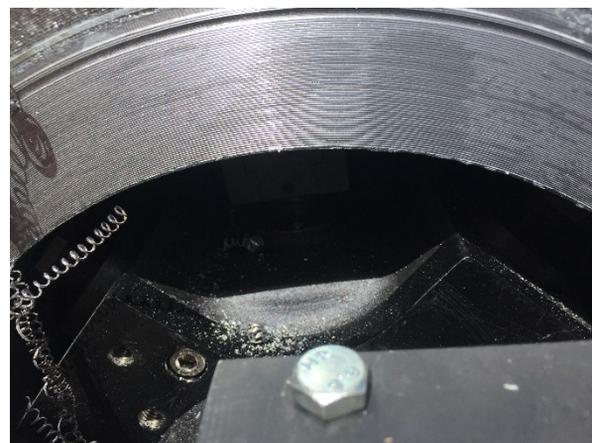
The Mirage MM1000i  
Flange Facing Machine

# Flange Facing



## OUTCOME

The situation was resolved in just a matter of hours, with the machine being supplied from Mirage rental stock, the machine operator fully trained and flanges machined to the desired specification.



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