

Machining valves and fittings with a us25 beveler for the nuclear industry

CASE STUDY:

Machining a by-pass connection welded on a valve located in a nuclear facility.

The angle and the root face of the connection failed to meet the specifications for the welding operation.

The installation of the valve on a lathe is very complicated.

SERCO has, therefore, been requested to machine this connection directly on-site while respecting the dimensions and the tolerances of the drawing (0.1 mm (.004")).

- ID of the connection: 25 mm (1").
- OD of the connection: 34 mm (1.339").
- Tolerance of the root face dimension: 0.1 mm (.004").



EQUIPMENT USED:

PROTEM US25 pipe beveling machine with pneumatic drive.

- Mandrel - Ø 18 mm (.709").
- Specific tool bits.
- Protective collet for the ID of the connection.



MACHINING TIME:

Assembly of the machine.

+ adjustment of the machine in the connection.

+ machining of the connection.

+ disassembly of the machine.

TOTAL : 20 minutes



RESULTS:

The customer performed a control with the use of a wax molding.

The result was verified to the tolerances requested.

The use of a portable machine avoided the need to install the valve on a conventional lathe.

The adjustment on a lathe would have required a great deal of time.

In addition, the accuracy would not have been guaranteed.

Only the [PROTEM machine](#) was rigid and accurate enough to perform such a machining.

Read **18** times

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