

MODIFICATION OF A FLUE GAS DOUBLE DISC SLIDE VALVE
FCC TURNAROUND - March 1997

PETRONOR requested a feasibility study for the modification of a double disc slide valve, Ø 103" size, *Cold Wall* type, installed before the orifice chamber of the FCC unit with an operating pressure of 2,5 kg/cm² and temperature of 700°C, normally operating in the closed position and with gas leakage estimated at around 10%.

REMOSA's proposal consisted of a field modification with the design of a tighter internal closing, estimating theoretical gas leakage at 1% and assuring maximum leakage at 2%. Their proposal was assessed as technically sound and economically competitive.

PETRONOR signed a purchasing agreement with REMOSA for the supply of new parts and the complete in-situ modification, including disassembling and reassembling of the valve internal parts during the turnaround of the FCC unit.

Supply of the following newly designed parts:

- Circular-to-rectangular cone with stainless steel 304H flange;
- Orifice plate, stainless steel 304H;
- Two discs, stainless steel 304H with STELLITE #1 hardfacing;
- Two guides, stainless steel 304H with STELLITE #1 hardfacing;
- Internal bolting, type A-453 Gr. 660.

Plateworking and welding were subcontracted to a local company under supervision and responsibility of REMOSA's technicians.

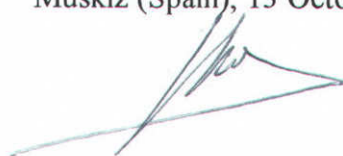
Machining and final assembly were carried out under supervision of REMOSA's technicians and using REMOSA's special machines. Their work left a strong impression of quality, later confirmed when measuring the final clearances at room temperature.

All tasks were carried out meeting time schedules in a safe manner, complying with the quality standards set by PETRONOR and to full satisfaction of PETRONOR's personnel involved with this project.

During the start-up the valve at operating temperature showed to work efficiently, fully meeting the gas leakage target set by REMOSA.

WE CERTIFY THE GOOD WORK PERFORMED BY REMOSA AND THE EXCELLENT COOPERATION OF THEIR TECHNICIANS who are held in high respect by Petronor.

Muskiz (Spain), 13 October 1997



Alberto González
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