

## Case Study 02

# Sand Filtration Pilot Test Rig for multi-national research and development team.



### OBJECTIVES

- To supply a compact skid mounted pilot test rig.
- To be built to the client's standards, higher than the Australian Standards.
- To adhere to the company's very high safety standards.
- To deal with a corrosive and abrasive environment.
- To be low maintenance and easy to use.
- To have a high level of versatility in the rig's design .
- Be adaptable and intelligent to a huge range of possible operating scenarios and conditions.
- Transport to site by truck.

### INTRODUCTION

The Client needed a system which could model the sand filtration for two of their process plants. Control and Thermal engineering was commissioned to design, budget, manufacture and commission the system, CTE also installed the system on site.

Before the system was delivered, the filter was modified to act as a high rate thickener. This was achieved quickly due to flexibility in design.

The client knew what they wanted to achieve but needed a company who could make it happen.

The rig consisted of a unique configuration of agitators, heaters, pumps and sparge drives with high level 'SCADA' , Supervisory Control And Data Acquisition systems monitoring and controlling the rig at all times.

Corrosive and abrasive materials are commonplace in the rig. Therefore stainless steel was widely incorporated to reduce maintenance, and prolong the life of the rig.

The rig was fully programmed, trialed and commissioned in the C.T.E. manufacturing facility for easy site installation.

The final dimensions of the rig measured some 4m x 2.8m x 5.2m high, and weighing 6.7 tonnes.

*For more information about our services and products contact:*

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