



# Autoclave - Reactor

Chemical Processing –Laboratory Equipment

## General Information

**Customer:** Technical University of Munich  
**Product:** Autoclave  
**Application:** Laboratory Reaction Evaluations  
**Install Date:** 2006

## Problem

Laboratory evaluation of chemical reactions in 100% trifluoroacid and tri fluoroacetic anhydride. For evaluation of the chemical reaction nickel acts as a catalyst. Contact to nickel containing materials could not be accepted. PTFE materials did not have sufficient temperature stability. Fabrication of a solid tantalum autoclave would require thicker walled dimensions due to limited material strength.

## Solution

A **Tantaline JobShop** solution was applied to a commercial available autoclave design (Limbo from Büchi-Glass).

## Result

Since tantalum is inert, accurate measurements and data could be achieved through a Tantaline solution. No other practical solution was possible to give the results at the costs of a Tantaline treated steel autoclave.



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