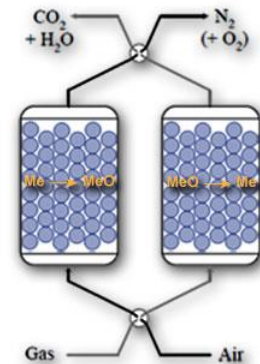


Workshop



WP3  
**DemoCLOCK**

13-12-2016  
Katowice



# Mission & Vision



## Mission:

Engineering design and supply of high quality products to the 'petro'chemical, industry and Oil&Gas markets in line with client specific requirements.

## Working philosophy:

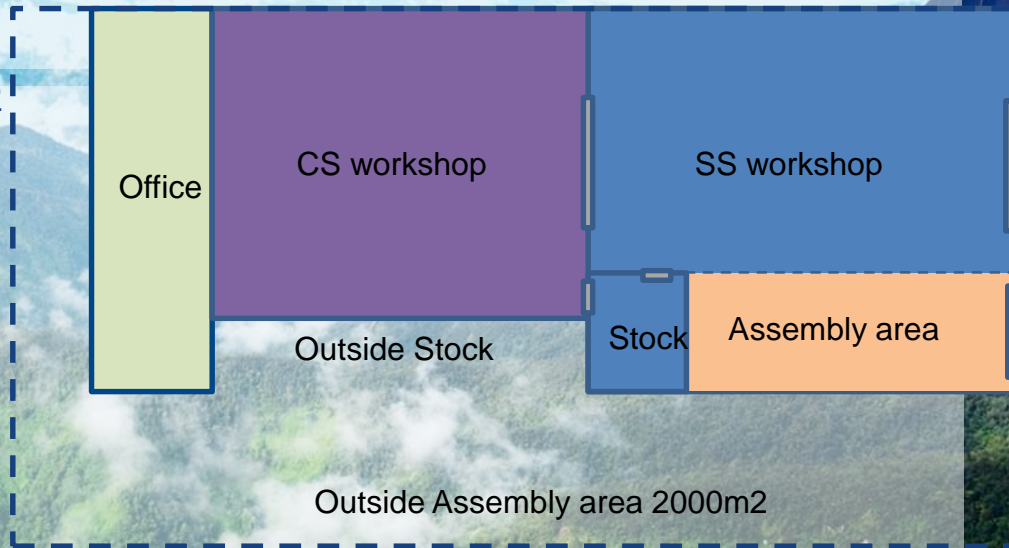
We work in a no-nonsense atmosphere thinking in solutions rather than problems. Our aim: One goal, together!



# Facilities

## Production:

- Workshop 2000 m<sup>2</sup>
- Yard 2000 m<sup>2</sup>
- Offices 750 m<sup>2</sup>



# Company activities



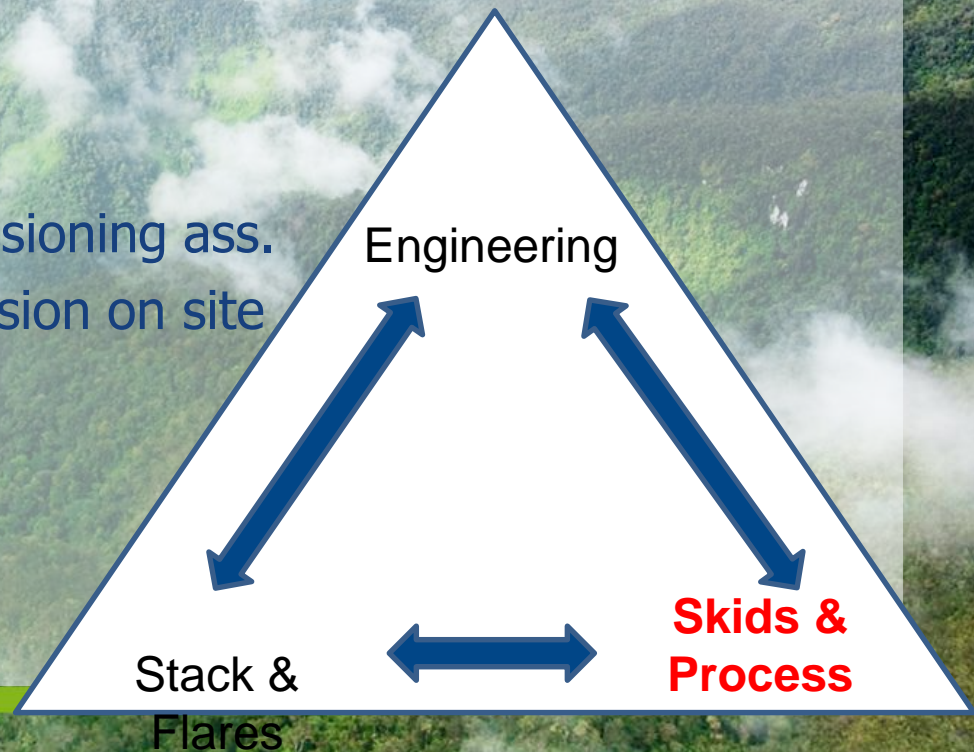
» Engineering company with production facility

» Three main company activities:

- » Engineering
- » Stacks & flares
- » **Skids & Process**

» Other activities

- » Startup and commissioning ass.
- » Installation/ supervision on site



# Skids & Process



## Process:

- » CO<sub>2</sub> conditioning system
- » CO<sub>2</sub> flue gas cleaning package
- » CO<sub>2</sub> mission:

“Array CO<sub>2</sub> want’s to make a positive contribution to the efficient capture of CO<sub>2</sub> for recycling or storage. We want to achieve this by using our innovative solutions and high-tech production facilities.”



# Project path

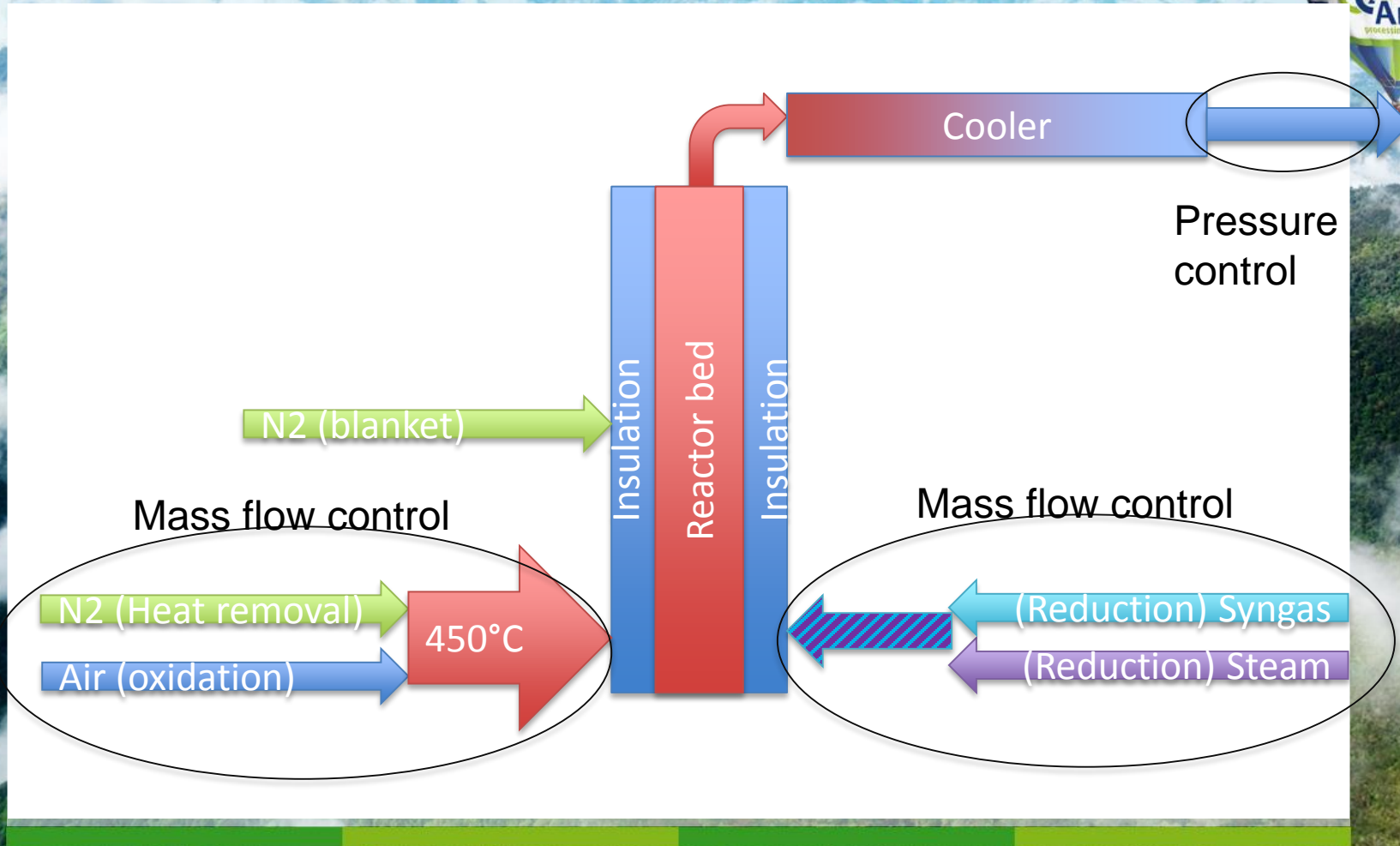
- **WP 3: Basic engineering & pre-commissioning**

Design, manufacturing and realization of 500kW  
DemoCLOCK installation at Puertollano.

Design parameters: 23 bar and 1100° C



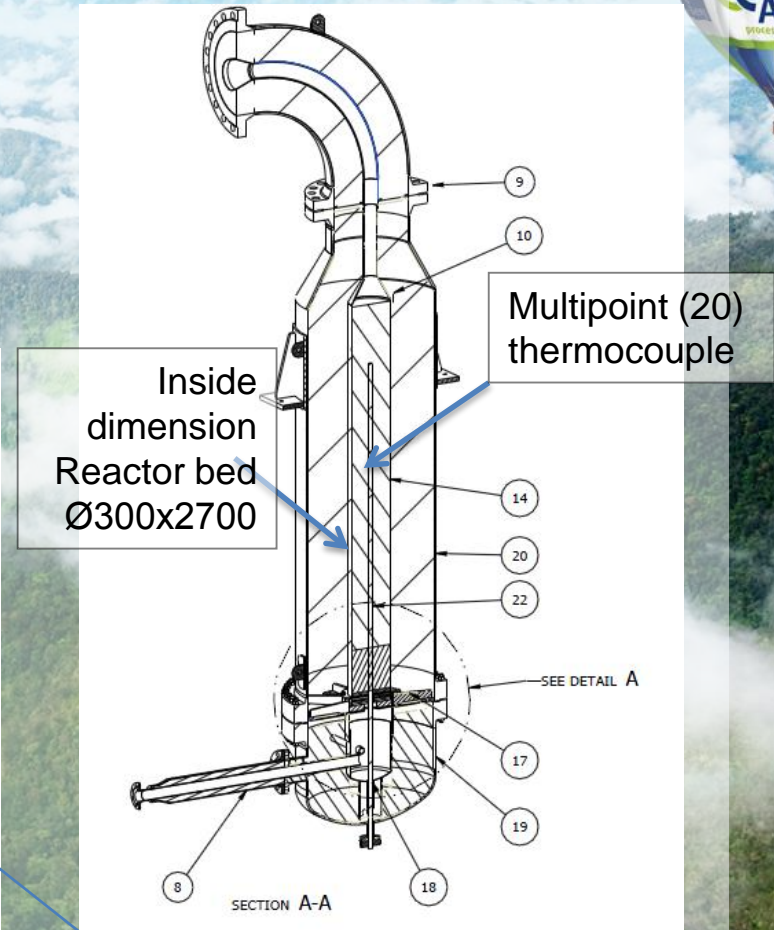
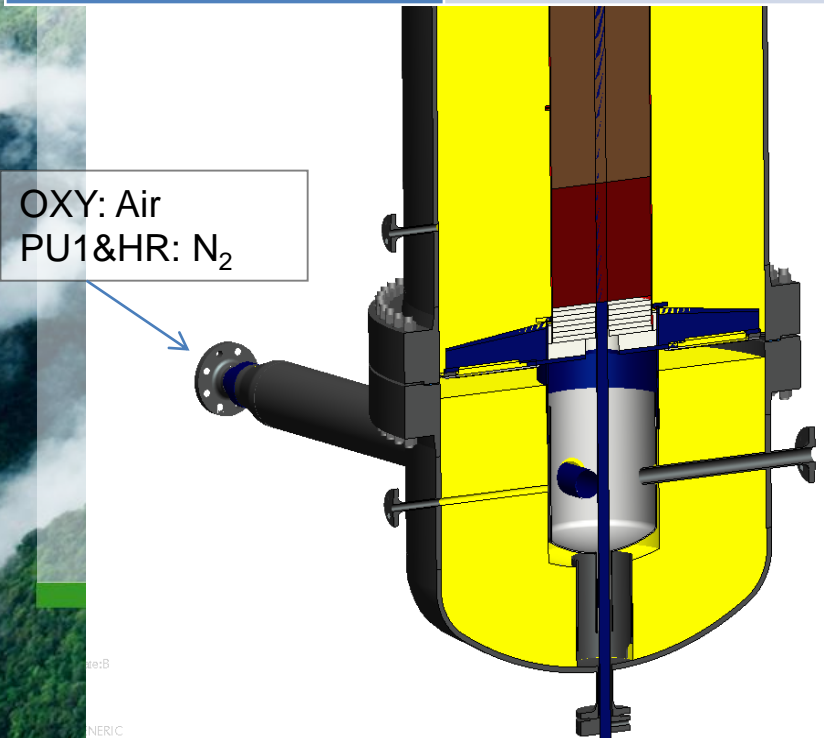
# Process description



# Reactor Ø1016x4000 mm



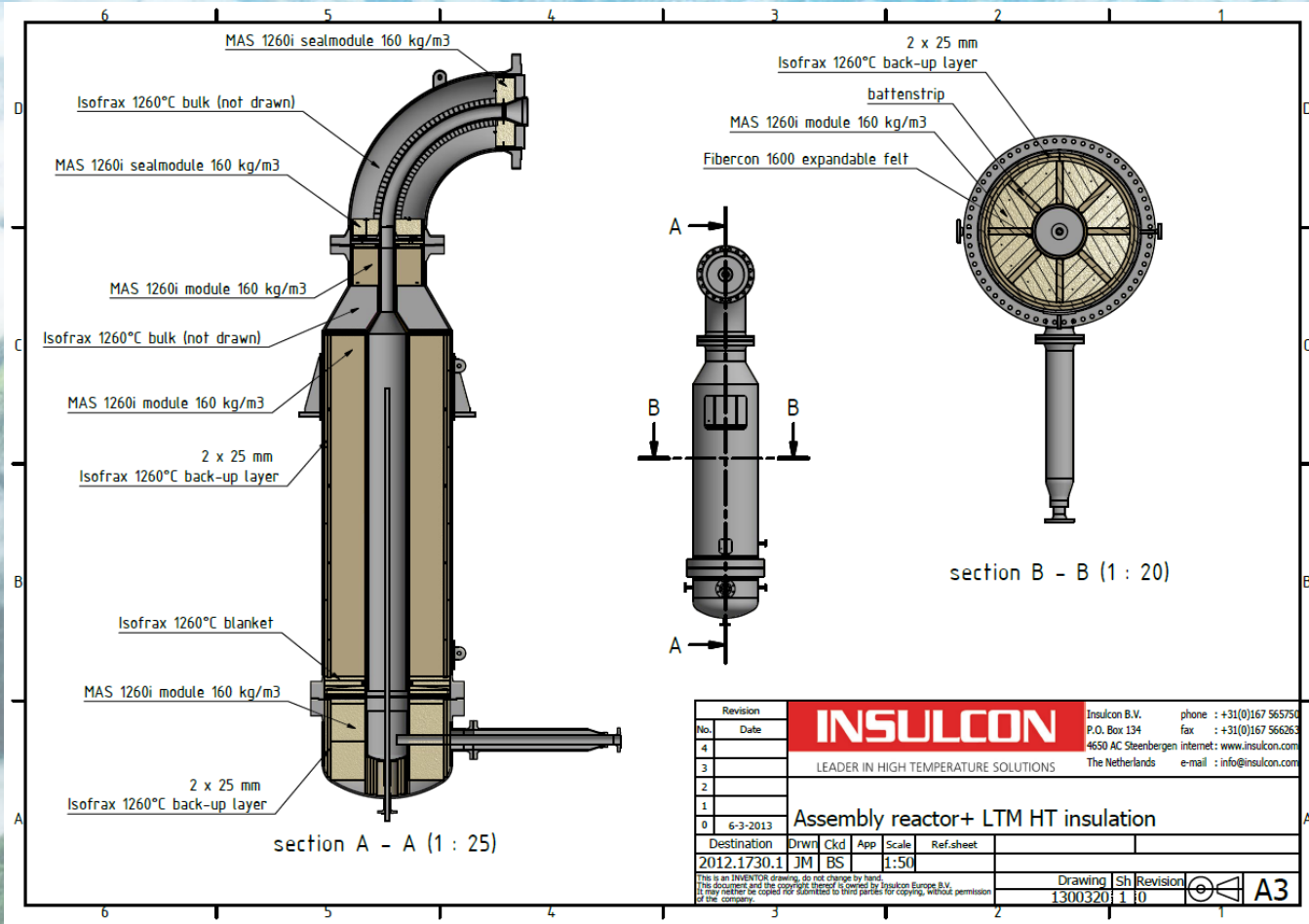
	Conditions
<b>Internal Pressure</b>	±19 barg
<b>Catalist</b>	290 kg
<b>Pressure difference</b>	1.0 barg (OXY&HR)
<b>Feed gas (preheated air)</b>	450 °C, up to 500 °C during start of system
<b>Reactor bed</b>	1100 °C



RED: Syngas+Steam  
PU2: N<sub>2</sub>

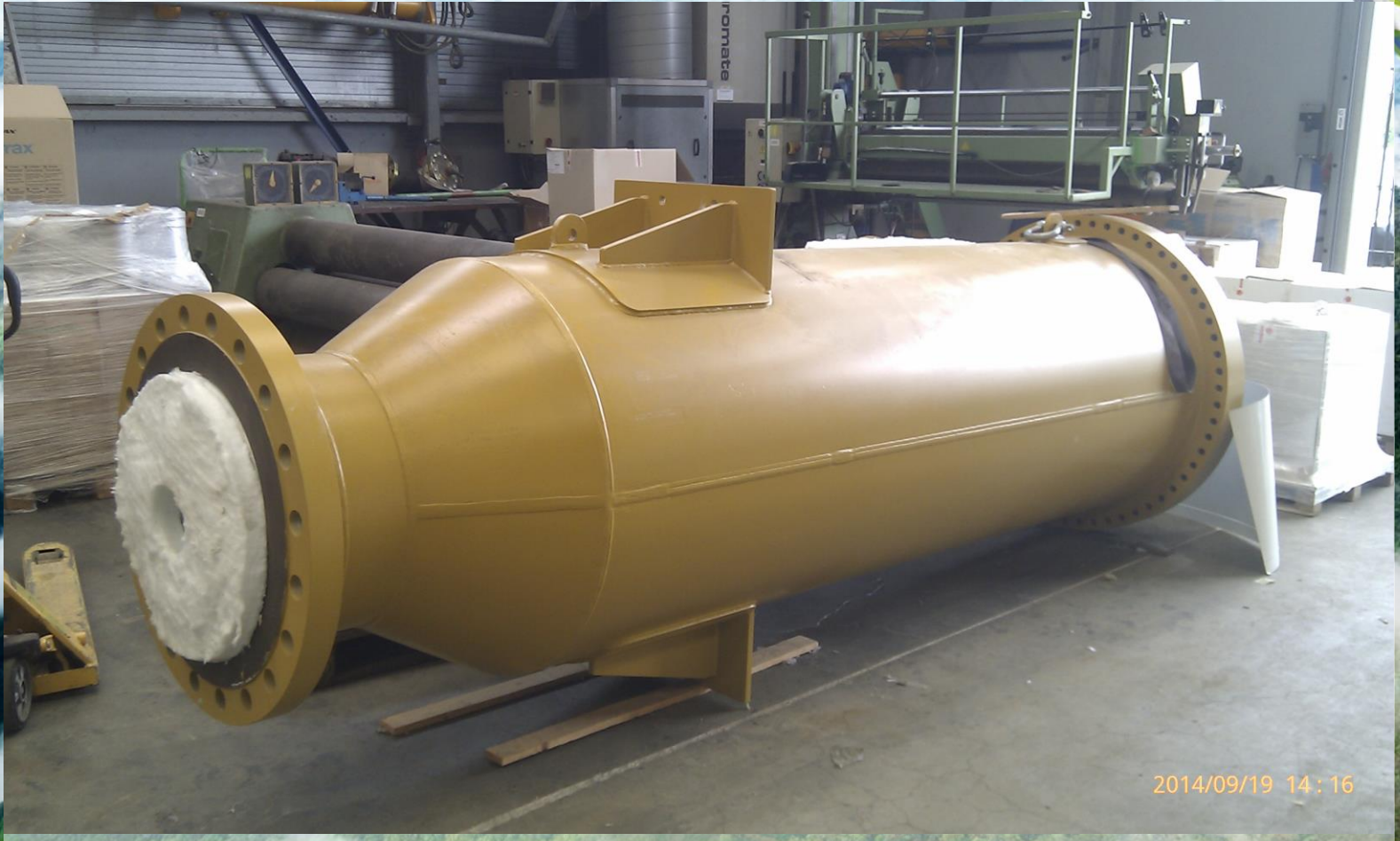


# Reactor Insulation



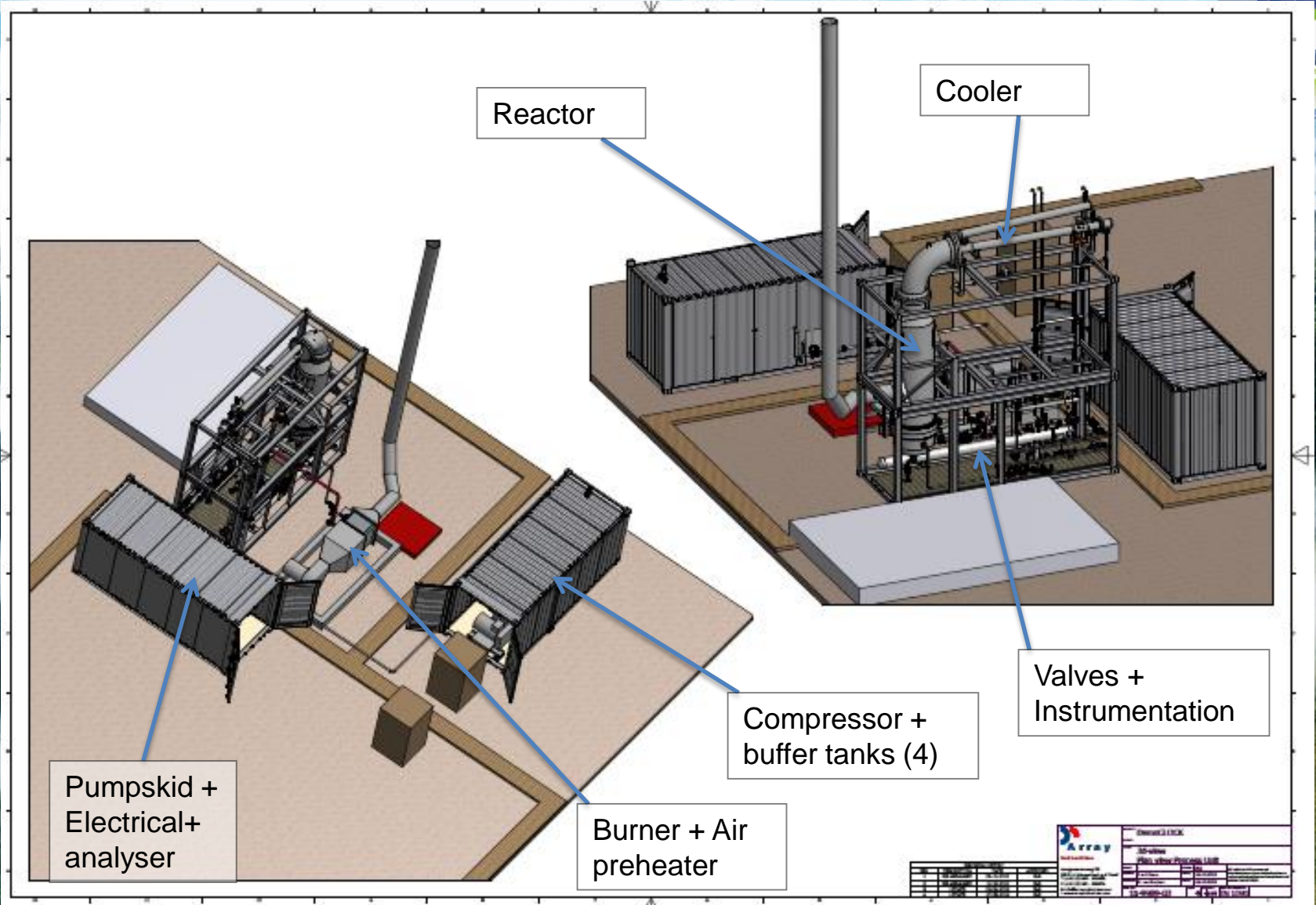
Revision		<b>INSULCON</b>	Insulcon B.V. phone : +31(0)167 565750										
No.	Date		P.O. Box 134 fax : +31(0)167 566263	4650 AC Steenberghe internet: www.insulcon.com									
4		LEADER IN HIGH TEMPERATURE SOLUTIONS The Netherlands e-mail : info@insulcon.com											
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Destination		2012.1730.1		JM BS		Scale		1:50		Ref.sheet			
This is an INVENTOR drawing, do not change by hand. This document and the copyright thereof is owned by Insulcon Europe B.V. It may neither be copied nor submitted to third parties for copying, without permission of the company.													
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# Reactor

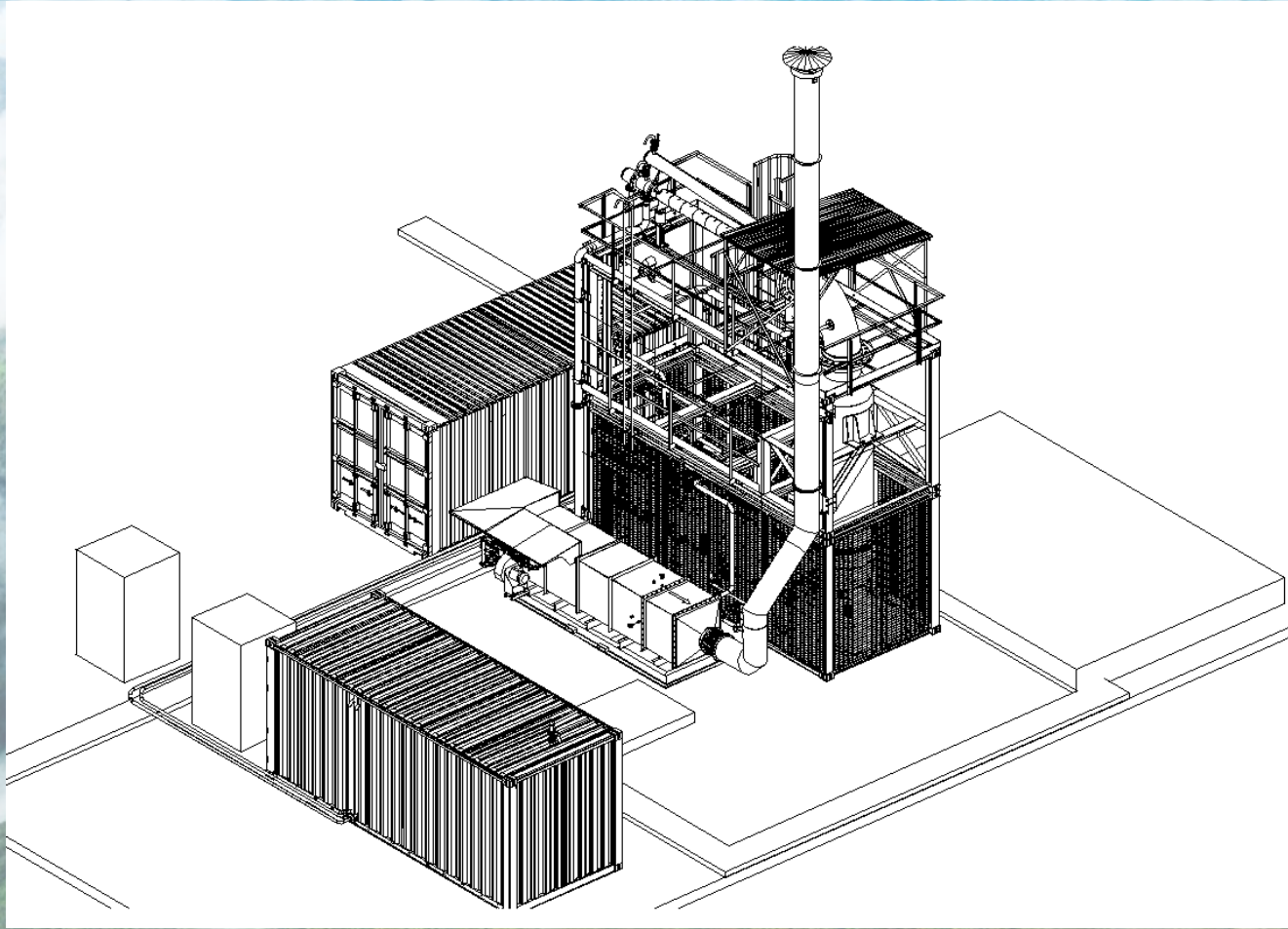


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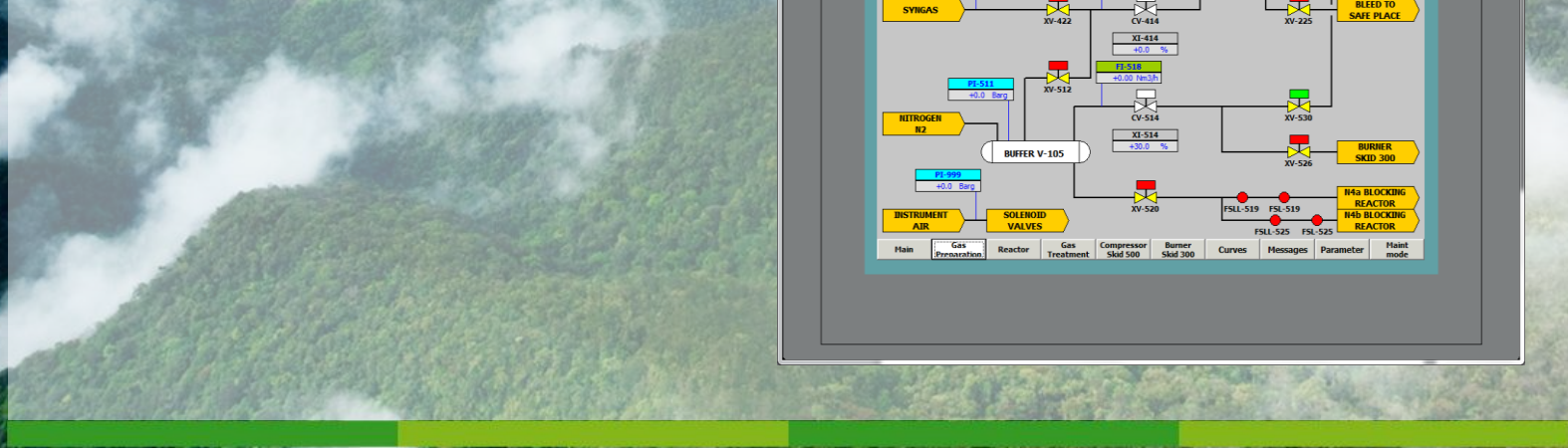
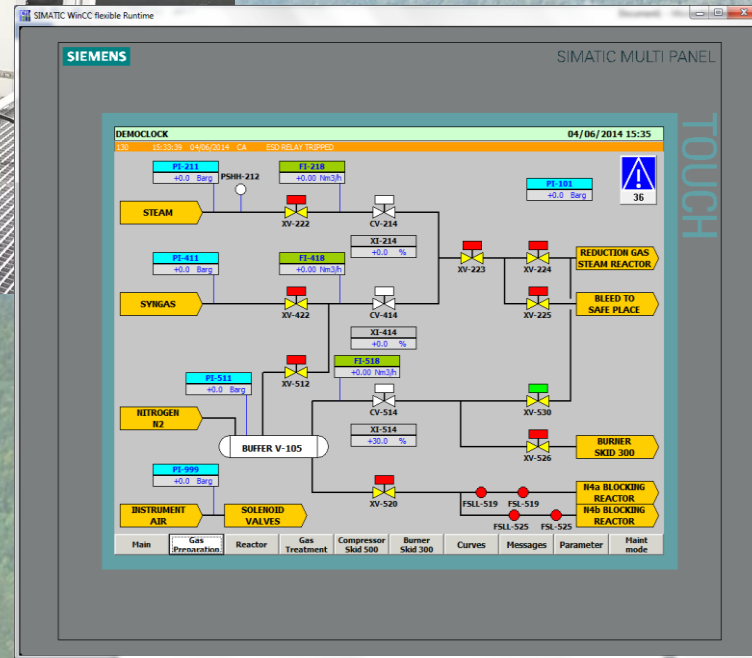
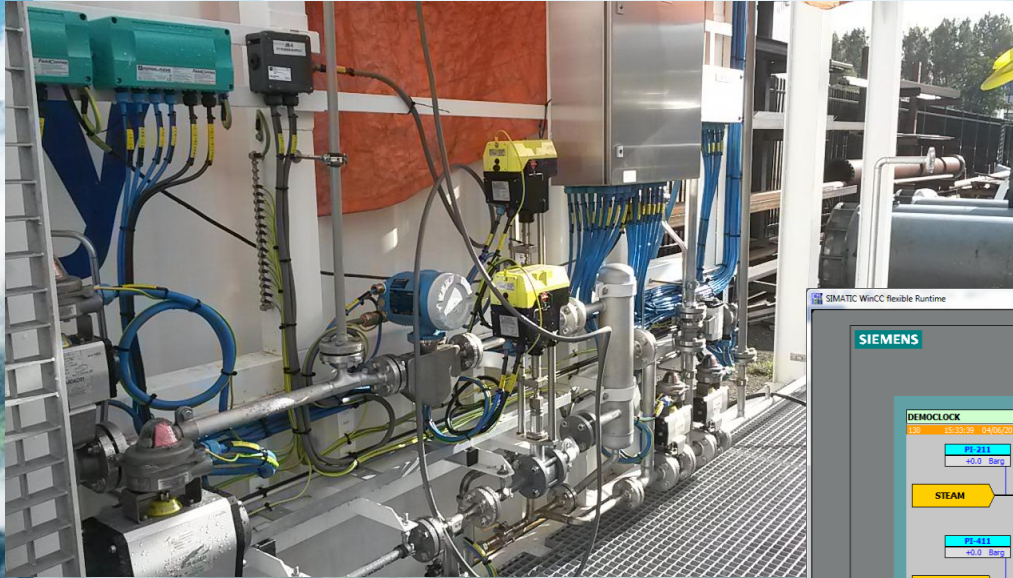
# General layout of Democlock plant



# Demonstration plant



# Demonstration plant



# Demonstration plant



2014/02/25 15:19

# Burner skid



# Installation in Gussing





# Installation in Gussing

