ETP: a new technological platform within CRM group

June 2014

Integration of ETP-W into CRM group

- ETP (Eco-Techno Pôle) holds an impressive set of pilot facilities, a characterisation lab and an efficient operating team
- Recent activities in:
  - Gasification of lean coal
  - Torrefaction and pyrolysis of biomass
  - Recycling of mill scale and oily sludge
  - Valorisation of sewage sludge
  - Processing of glass residues

- ETP has been integrated into CRM group as a new technological platform

CRM-ETP

- Industrial R&D fields:
  - Combustion, gasification and processing of syngas
  - Fluidised bed technologies
  - Treatment of solid residues (fuel production, recycling)
  - Waste gas cleaning
- Trends of development:
  - Energy (including the production of syngas)
  - Recycling (including the treatment of sludge's)
  - Valorisation (recovery of metals)

CRM-ETP Facilities

- Thermo-conversion unit
- Thermo-conversion pilot plant
- Fluidised bed boiler
- Circulating fluidised bed pilot plant
- Interconnected dual fluidised beds
- Fluidisation test bench
- Pre-conditionning units
- Laboratory

To be revamped

CRM-ETP Facilities

Dedicated to high T & P processes:

- Combustion
- Gasification & pyrolysis
- Gas/solid reactions
- Processing of syngas (shift, CO_2 scrubbing, de-S, etc.)

Batch & continuous units

Feed gases:
air, O_2, CO, CO_2, CH_4, H_2O, N_2, H_2, SO_2

CRM-ETP Facilities
Thermo-conversion unit

- Batch processing of a fixed bed of granular solids (35l = about 20 kg)
- Heated and pressurised chamber (1050 C, 45 bar)
- Solid materials are contacted with gaseous reactants (air, O_2, CO, CO_2, CH_4, H_2O, N_2, H_2) pre-heated up to 500 C

- ✓ Measurement of the gas flow
- ✓ Sequential collection of tar and condensates (down to -5°C)
- ✓ Measurement of the volume of condensates
- ✓ Continuous analysis of the produced gas (FTIR analyser)
- ✓ Batch analysis of the solid residue

Contact details

CRM-ETP :

Rue du Chéra, 200
4000 Liège
Belgium
info@crmgroup.be

CRM Group headquarters :

Avenue du Bois Saint Jean, 21 (P59)
4000 Liège
Belgium