

Catching the Indian Tiger or Herding Tigers?

Europem's endeavors in India



We design and execute **Environmental Payback Projects** by turning an environmental problem into a revenue stream for our clients

- **Energy production** using industrial effluents, waste streams and by-products
 - Advanced burners
 - Incinerators and thermal oxidisers
 - Boilers and heaters
- **Product recovery**
 - Vapour recovery units (VRU)
 - Flare gas recovery (FGRU)
 - Sulphur recovery units (SRU)
- **Safety and environmental protection**
 - ATEX zone 0 vapour extraction and treatment systems
 - Elevated and ground flares
 - DeNOx and flue gas cleaning systems



Lier, Belgium

Lille, France
Milan, Italy

Dubai
UAE

Mumbai
India

tialoc

China
Singapore
Vietnam
Malaysia

Partners and Agents:

Netherlands – France – Spain – Italy – Sweden – Finland – Latvia – Poland – UK – Kazakhstan
Saudi Arabia – Kuwait – Oman – Qatar – AbuDhabi – Egypt – Iran
USA – Mexico – Argentina – Suriname
Singapore – PR China – Malaysia – Vietnam – Indonesia

- 1999: Europem founded by a team of combustion specialists
>300 references in 30 countries
- History of technological innovations
 - 2000: Low energy DeNOx system
 - 2003: TÜV approval for Dynamic Flame Arrestor
 - 2004: Development of Venturi Flame Holder for combustor burners & flares
 - 2007: Development of combustors for tank storage industry and terminals
 - 2008: High Intensity (HI) incinerator
 - 2009: Reduction-oxidation system for waste gases to improve energy efficiency
 - 2011: Feed-forward/feed-backward control system for fuel efficient combustors
 - 2012: Low NOx multifuel burner design for waste gases and liquids
 - 2013: Gasification-oxidation energy system for waste gases, liquids & slurries
 - 2015: Gasification-oxidation energy system for solid waste & biomass
 - 2016: Vapour Recovery Units for Chemical Storage Facilities
 - 2017: Low NOx process burners and photocatalytic reactor

- 1999 : Europem founded by a team of combustion specialists
- 1999-2000 : Projects in Belgium for SME's
- 2000-2005 : Projects in Benelux, Germany, France for SME's and
: chemical companies
- 2005-2010 : International expansion by following European clients
- 2007 : Start partnership with Tialoc to expand into PR China
- 2012-2013 : First project in India in partnership with Tialoc
- 2011-2013 : Projects for Sasol South Africa
- 2014 : Start Europem India Pvt Ltd
: Start Europem Thermal Technologies (Dubai)
- 2015 : First project in South America
- 2016 : Breakthrough in India and Middle East
- 2017 : Year-on-year growth of 300% (help!)
- 2018 : Large projects in Middle East, Southeast Asia, India
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- 2012-2013 : First project in India in partnership with Tialoc for Cairn India Ltd
- 2014 : Start Europem India Pvt Ltd as JV with local partner
: Start registration process with Engineers of India Ltd
- 2015 : Europem India becomes 100% daughter of Europem NV
: Start bidding process for key projects for key clients
- 2016 : Breakthrough in India
 - » SRU MCC Burner for Numaligarh Refinery in Assam
 - » ERTO Plant for ONGC Uran in Maharashtra
 - » SRU Tail Gas Incinerator for Numaligarh Refinery in Assam
 - » SRU MCC Burner for Bharat Oman Refinery in Madhya Pradesh
 - » Andicos demonstration plant with VITO (B) and Ion Exchange (India)
- 2017 : Successful realisation of projects
: Further commercial developments
: Developing the supply chain in India
: Fast-track development of engineering and project delivery
: office in Navi Mumbai
- 2018 : Expanding into private sector and non-oil&gas sectors in India

Establishing the Company

- Company Registration:
 - Signing and submitting hundred of pages and **be patient**
- Opening Bank Account:
 - Signing and submitting hundreds of pages and **be very patient**
- Moving Registered Office from Delhi to Mumbai:
 - Signing and submitting hundreds of pages and **be extremely patient**
- Tax System and Transition to GST System
 - Signing and submitting hundreds of pages and **be extremely patient and confused**

Without dedicated staff, professional support from key people in our (historical) network and patience, patience, patience it would not have been possible. The barrier to entry is high.

Europem moved to India because management had a track record in India, resulting in a network to rely on.

Flanders Investment and Trade and Diplomatic Services have been very supportive

Establishing the Business

- Registration Process for Engineers of India Ltd
 - Submitting hundreds of signed documents and **be patient**
- Engineering Documents Approval Process of EIL
 - Submitting hundreds of documents and **be very patient (& persistent) to get them signed and stamped**
- Importing of Equipment
 - Submitting many documents and **be extremely patient (and flexible)**

Doing Business

- Tax System and Transition to GST System
 - Project Office : submitting...
 - GST Registration : be extremely...

The Story Continues....

- High quality engineering office established in 6 months
 - Large pool of highly qualified engineering staff
 - Dynamic and flexible recruiting environment
 - Abundant availability of highly qualified sub-contractors
 - Motivated team
 - Trial-and-error // learning as we go to do the right things
 - Frequent visits of Belgian staff to India, frequent visits of Indian staff to Belgium
 - Long term resident engineer from Mumbai office in Lier office
 - ...

- Winning projects within 2 years after establishing the company.
- Keys to our success:
 - Europem India was from day one an Indian company doing business in India with Indian staff
 - We engage, motivate and support the local team but the local team leads
 - Europem India brings state-of-the-art European technology to India at Indian price levels
 - We accept (and learn) that (European Perspective)
 - The impossible can be possible, the possible can appear to be impossible (but is still possible)
 - The meaning of “Time is of the essence” is different in Europe and India
 - The more we understand India the more we understand how little we understand of India
 - Different management models apply in India
 - We accept (and learn) that (Indian Perspective)
 - Get a chance to learn multi-cultures
 - Open and friendly atmosphere
 - Less intensive, more productive and more satisfying
 - Less social/peer pressure
 - Discuss ideas rather than to reach a decision

Catching the Indian Tiger



Bhumi Pooja Ceremony

Left/center

*: Mr. SK Pandey, Executive Director ONGC (retired)
Mr. Narendra Asija, Group General Manager ONGC*

Centre

: Mr. Peter Huyghebaert, Consul General of Belgium in Mumbai

Right

: Mr. Marcel Goemans, Managing Director Europem and Europem India

Client:

- Private Oil & Gas company developing strategic asset in Rajasthan

Project:

- Environmentally friendly processing and valorization of CO₂ rich production gas

Capacity:

- 15 MW, 6.9 TPH waste gases
- Heating 368 m³/h crude oil @ 23 bar

Design:

- Thermal Oxidizer with crude oil waste heat recovery heat exchanger (duplex)

Commissioned:

- Contract Signed in June 2012
- Plant Start in March, 2013





Client:

- 3rd in Fortune Global 500 list of the world's biggest corporations in 2015
- India's largest oil and gas exploration and production company. Produces ~ 77% of India's crude oil and ~ 62% of its natural gas.

Project:

- Enhanced Reactive Thermal Oxidation to eliminate H₂S emissions

Capacity:

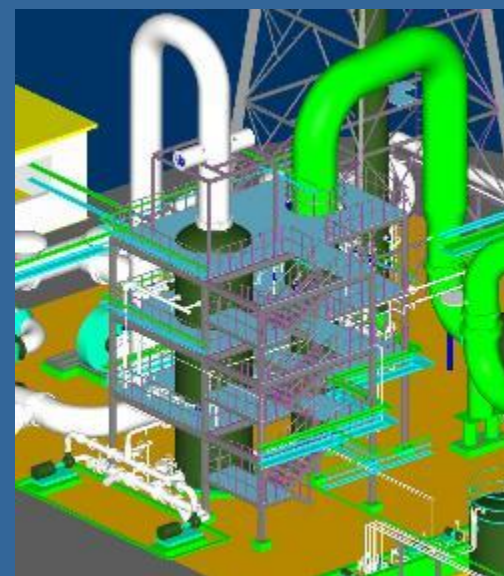
- Treatment of 400,000 kg/day of waste gases

Design:

- Enhanced Reactive Thermal Oxidiser
- Heat Exchanger > Quench > Scrubber > Stack

Commission:

- Project awarded August 2016
- Completion by December 2017





Client:

- Refinery upgrading to Euro 6 standard

Project:

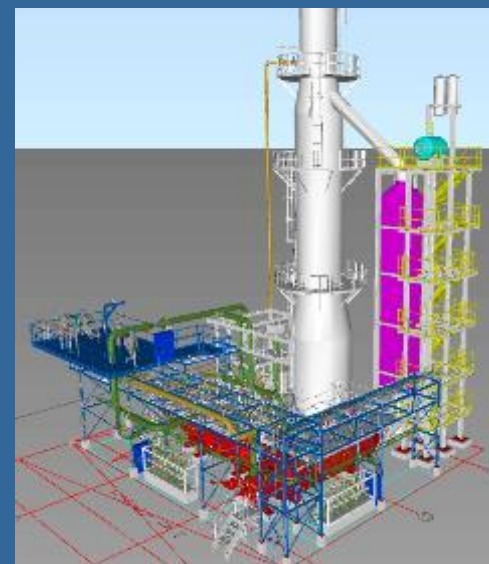
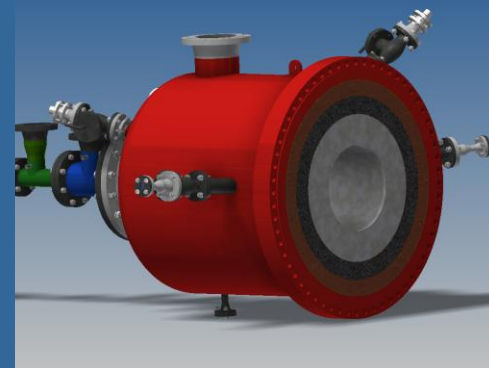
- Supply of Sulphur Recovery Unit main reactor burner using proprietary Europem Tulip Vortex Venturi Burner Technology
- Tail-gas incinerator to eliminate H₂S sour gas and ammonia emissions from SRU process

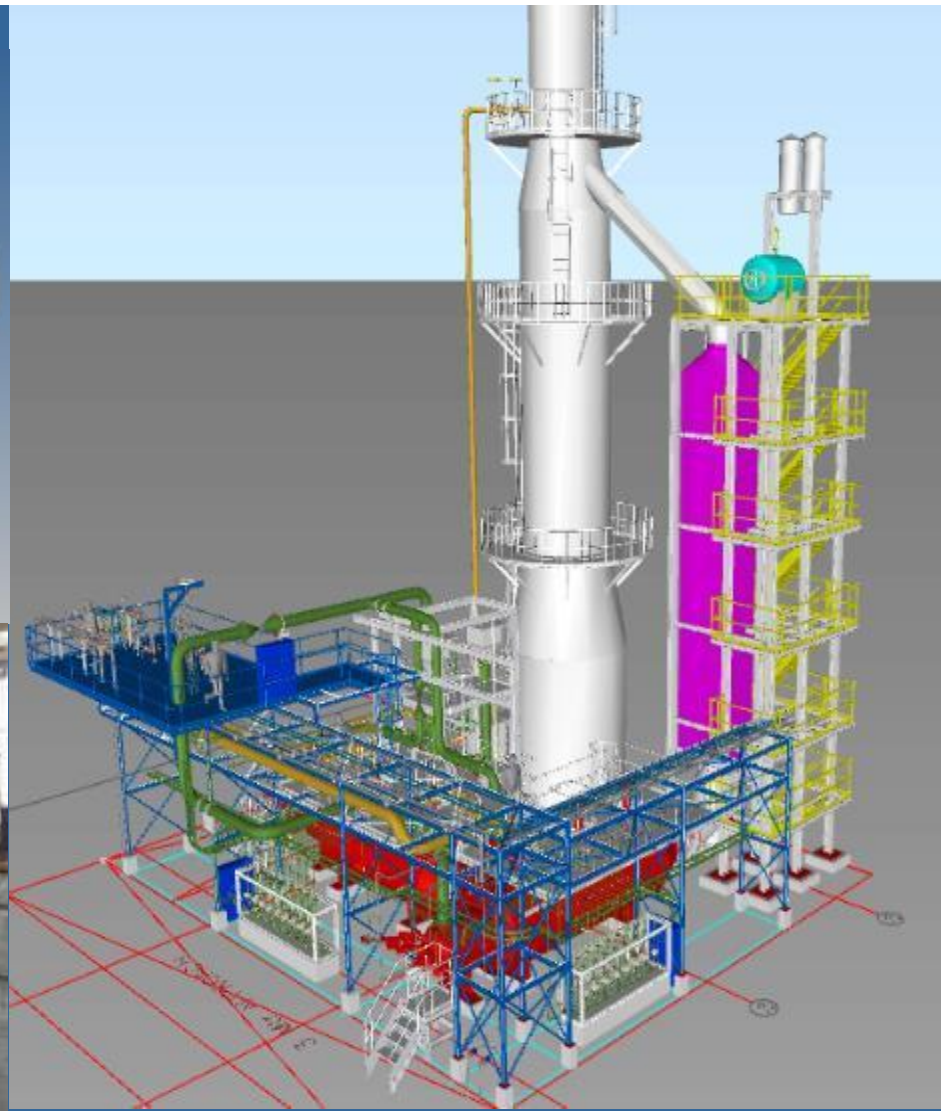
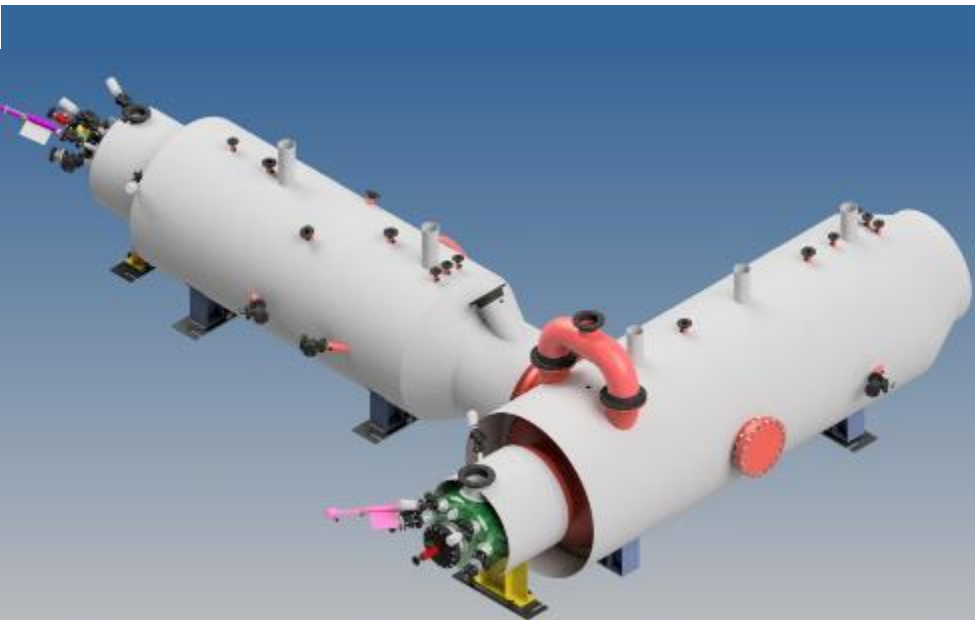
Design:

- SRU MCC TV² Burner
- 2-Chamber incinerator with WHRB and TV² Burner system

Commission:

- Contract award December 2016
- Completion by December 2017





Client:

- Refinery upgrading to Euro 6 standard

Project:

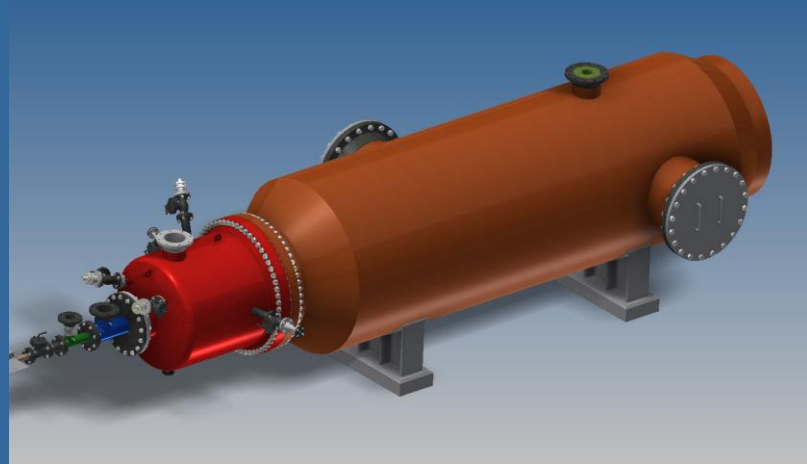
- Supply of Sulphur Recovery Unit main reactor burner using proprietary Europem Tulip Vortex Venturi Burner Technology

Design:

- SRU MCC TV² Burner

Commission:

- Contract award September 2016
- Completion by December 2017





!! Happy Diwali !!



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