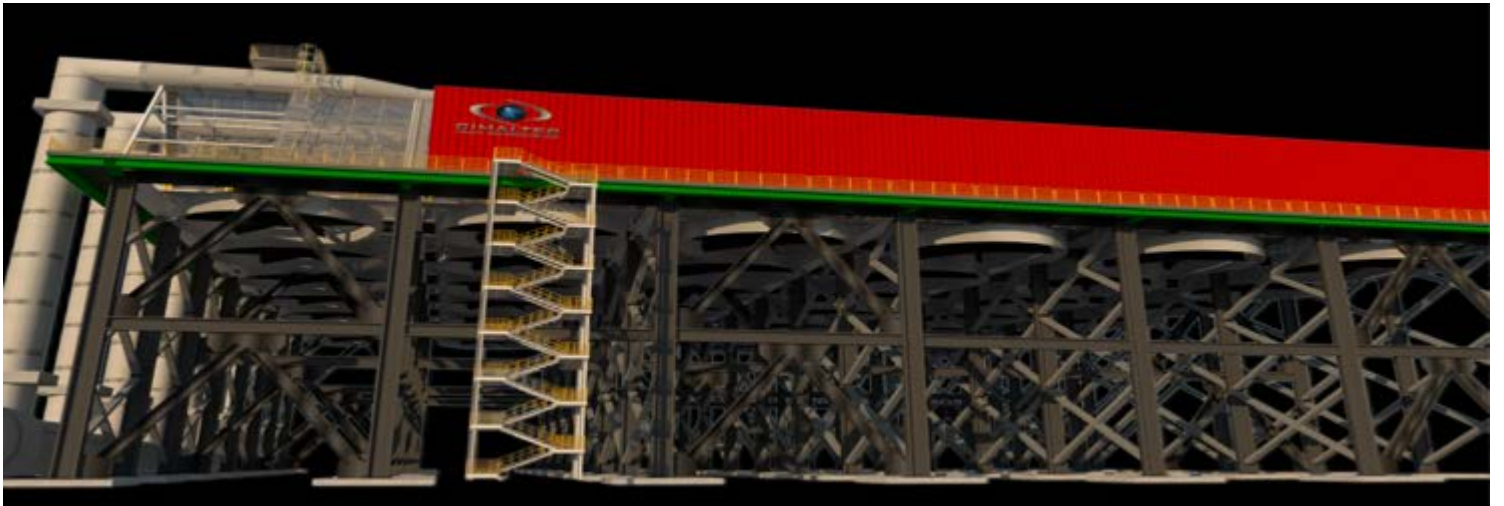
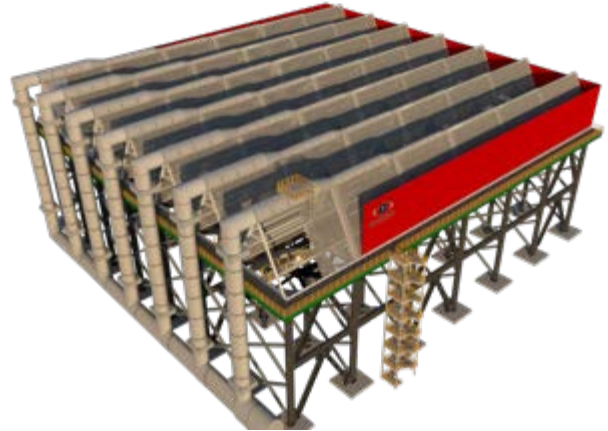




ACC AIR COOLED CONDENSERS

APPLICATIONS FOR DRY COOLING





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CIMALTEC®

Our Air cooled Condenser ACC Division leaded by **BEM**, is backed by our experience. Over 60 years in Heat transfer and metal fabrication focused on the power industry. The Division specializes in Dry Air cooled Condensers and Surface Condensers as the design and supply of ACCs and ACHes for the power industry. **CIMALTEC** has thousand of MW of operating references and experience and is considered a reliable supplier of ACC and WCC for the Mexican power sector.

ABOUT CIMALTEC:

The **CIMALTEC** facilities are located in Mexico City, where it was born in 1958 dedicated to the production parts for light trains, later in the 80's it opens a division for the manufacture of boilers, preheaters and industrial heaters for the oil, Gas, and Energy Power Sector also in Mexico City. Early 90's the on site Works Division was born, for the develop of turnkey projects in power plants and oil refining facilities, at the end of the 90's it installed a manufacturing plant in the city of Querétaro Mexico, in order to manufacture and feed our space needs and the grow of metal and mechanical manufacturing products in the country, in mid-2005 it opened its manufacturing workshop in British Columbia, Canada, to serve the North American market and export of complex engineering products, such as surface condensers and Steam turbine cooling condenser applications. 10 years later and taking advantage of the infrastructure developed over the years, the manufacture of metal structures for heavy industry and Air cooled condensers of height greater than 20 meters begins, now managed by **BEM** division.



APPLICATIONS INDUSTRY



The direct dry cooling option, condenses turbine exhaust steam inside finned tubes, which are externally cooled by ambient air instead of sea or river water, as in once-through water-cooled plants. There are two options for circulating the ambient air for condensate cooling either use fans to move the air or leverage nature's draft.

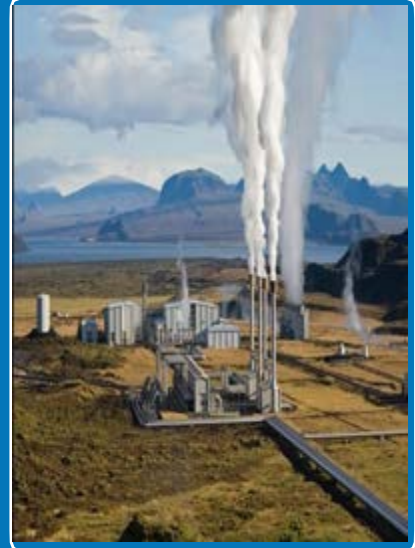
BIOMASS (WASTE -POWER)



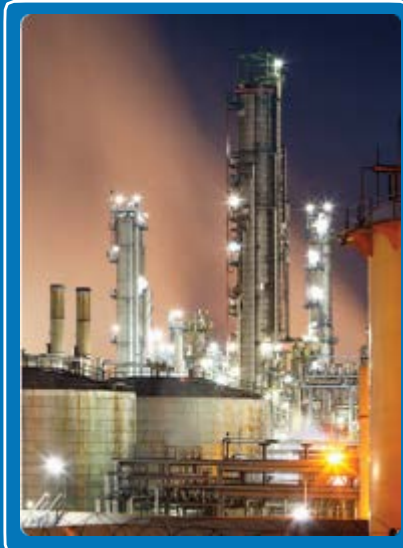
SOLAR TOWER



GEO THERMAL



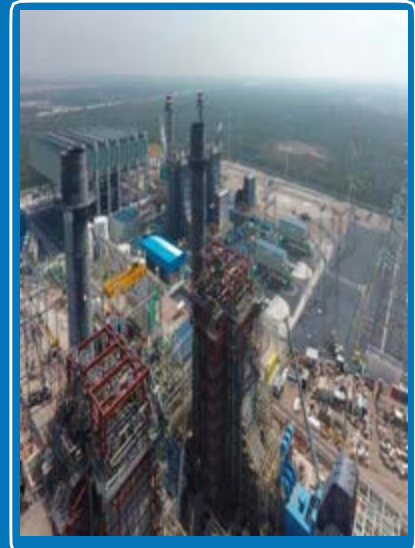
OIL AND GAS



COAL-OIL



C. CYCLE



BEM

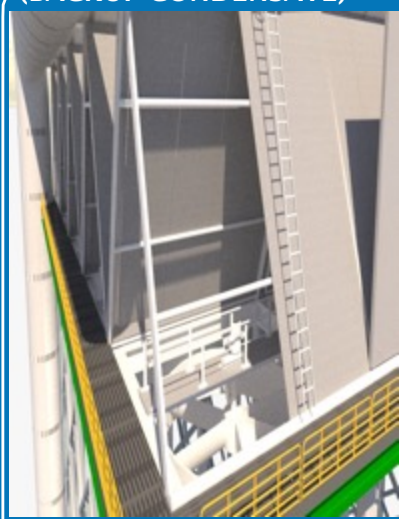


MODELING



All components are modeling to ensure the perfect performance, including: ACC Tube Bundle, Condensate tank, Steam Ejectors, Automation Equipment, Basic and detailed design, based on design system, ACC peripherals own production.

**NON-CONDENSABLE
(BACKUP CONDENSATE)**



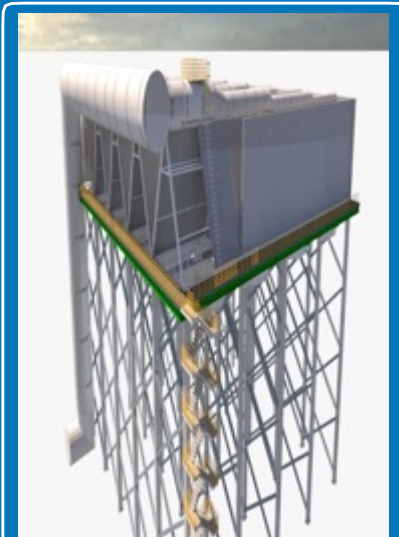
DISTRIBUTION



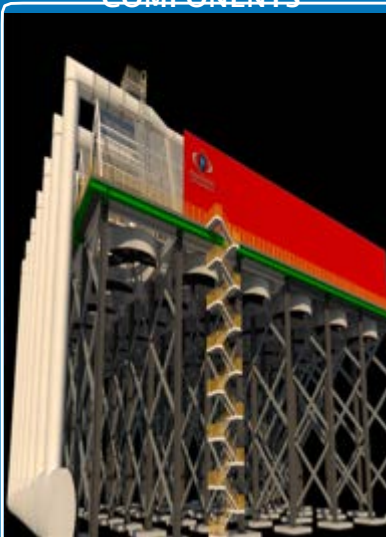
AIR FANS



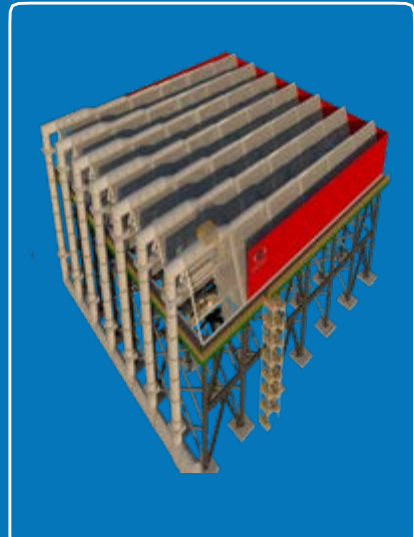
HEIGH



**ALL
COMPONENTS**



ALL IN ONE



BEM



COOL-IN-G



Design

The principle difference between ACC designs from different suppliers is in the details of the heat exchanger and its finned tubes. There are basically two types of heat exchangers: single-row and multi-row. The single-row design is inherently more suitable in extreme freezing ambient conditions. There are also three tube shapes available in the market: round, oval, and flat. Our flat tubes are the most sophisticated and perform better under just about all conditions.

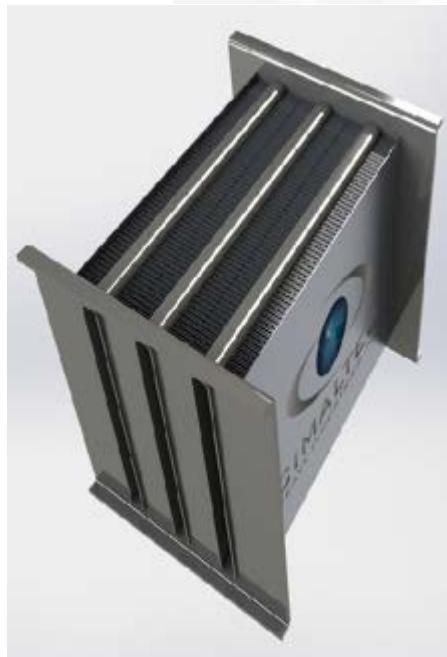
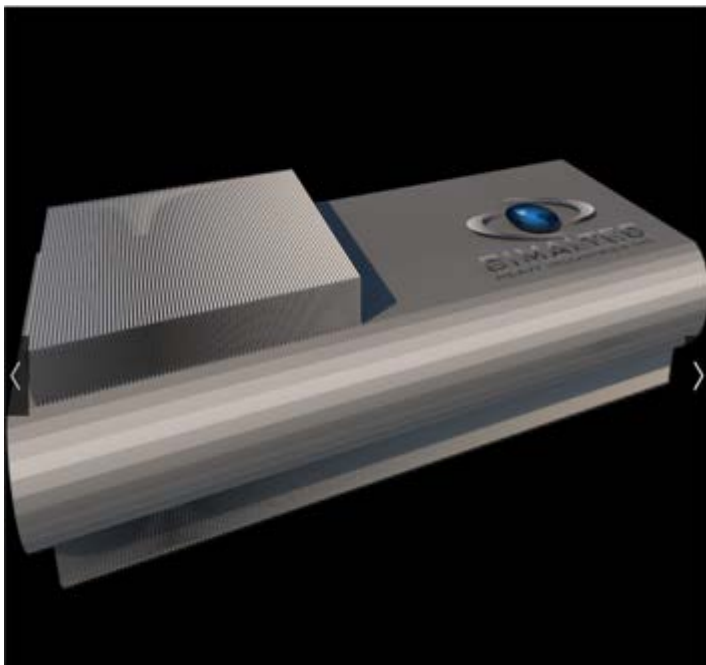
KEY PROJECT INCLUDES	
ITEM	INCLUDING
STRUCTURAL DESIGN	YES
MECHANICAL DESIGN	YES
THERMAL DESIGN	YES
CAD CAM	YES
FABRICATION	YES
SHIPMENT	YES
SPECIAL COAT	YES
INSTALLATION	YES
ENGINEER STAMP	YES
LIFT SERVICES	YES
ALL AMERICA	YES

Our Flat G Brazing Finning Tube Type

- ▶ Dependable
- ▶ Made in Steel Flat shape tube with aluminium coated for a bigger steam flow volume
- ▶ Brazed fins made with a higher aluminium alloy with our G design of single row type
- ▶ Better steam distribution
- ▶ Operation under control
- ▶ Better control under low range and pressure drop.

Suitable for:

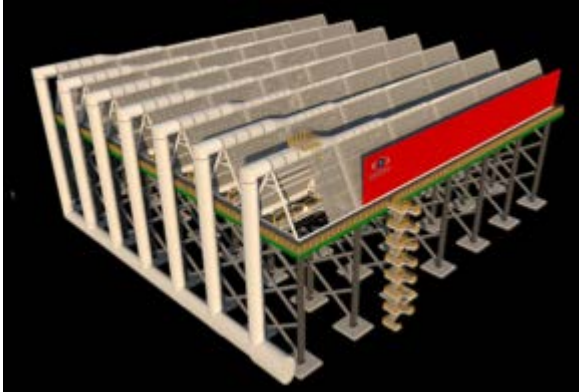
- ▶ Combine Cycle Power plants Air Cooled Condensers
- ▶ Coal and Gas power Plants



A – FRAME ACC PROCESS:

1. DESIGN

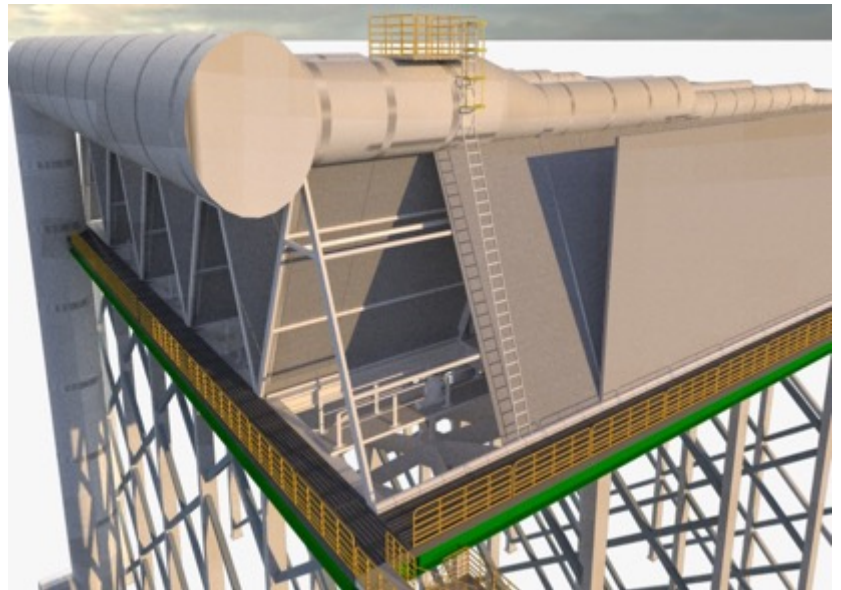
ACERO



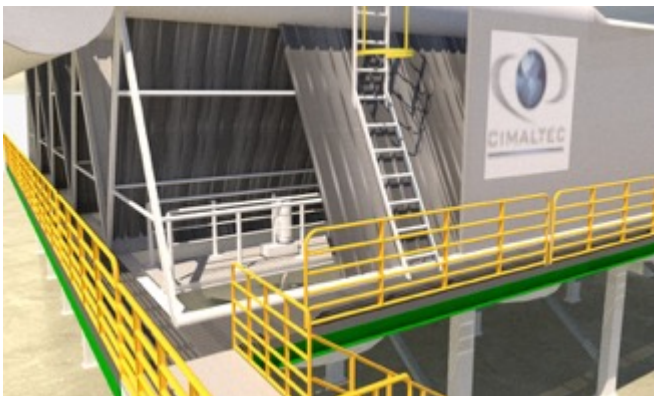
3. MANUFACTURING



4. INSTALLING

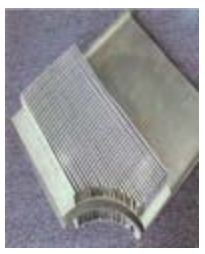


2. EPC MAT SUPPLY



MODULATED CELLS

Simple + Strong = Reliable



BEM

Modular Cells

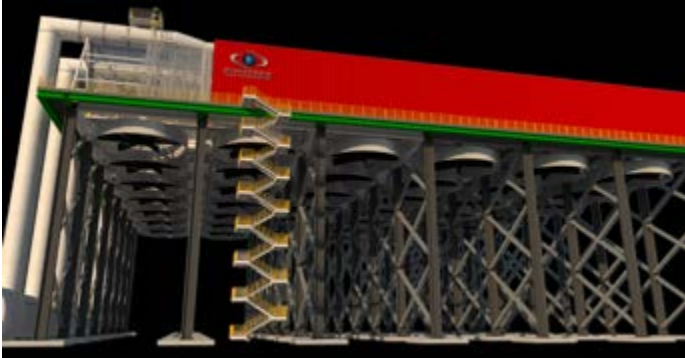
Our Module cells are manufactured in the way of cells to make easier their maintenance, transfer, manufacture and installation, thereby obtaining greater efficiency and improvement in production and maintenance costs. Modulated cell design for higher efficiency for Aero condensers greater than 300 MW total production and up to 1200MW are calculated for easy handling of 15MW for steam condensate. (This may vary depending on the temperature of the place, height and other variables). Allowing a simple, strong and very reliable dynamic project in addition to better control of the operation and future savings for future growth of MW.

The single row design coupled with our G brazing fin system achieves the performance required for most environmental conditions from -10oC to 50oC . Each cell is prepared to function autonomously, which allows us to continue with the operation of the equipment in the event of failure or maintenance of the fan drive systems. We can also integrate into our models the pressure water jet cleaning systems in a modulated or combined way, automatically and programmed, guaranteeing an optimal cleaning factor for thermal transfer.

GALLERY PROJECTS

BEM

POWER GENERATION



S



OIL AND GAS



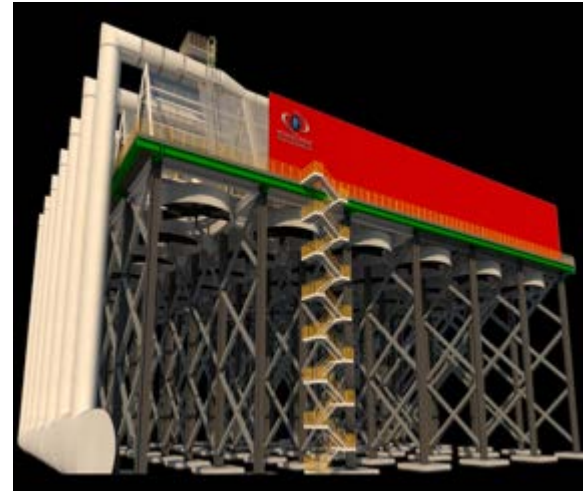
COMBINE CYCLE POWER



GALLERY PROJECTS

BEM

POWER GENERATION



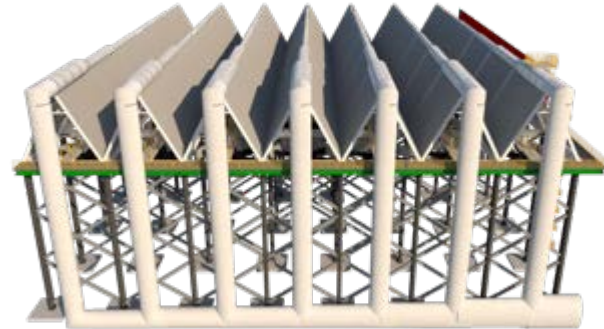
CHEMICAL



GALLERY

BEM

PROJECTS



60 YEARS OF EXPERIENCE



ASME, API, AWS, CWB, NATIONAL BOARD.

Whatever your country is, our quality system meets and adapts to most general world quality requirements, from an AWS welder qualification to ASME pressure vessel design. If your Project is a multinational one, we will have no problem to meet the regulations of your country, such as working conditions, Health and environmental protection. And if it is for export most of the international certifications that are valid in North America and Europe, for more information on the regulations in force in your country, please write to us to arrange a conference.



REFERENCES



NOTES



A series of horizontal blue lines for taking notes, arranged in two columns.





Info:



INQUIRIES

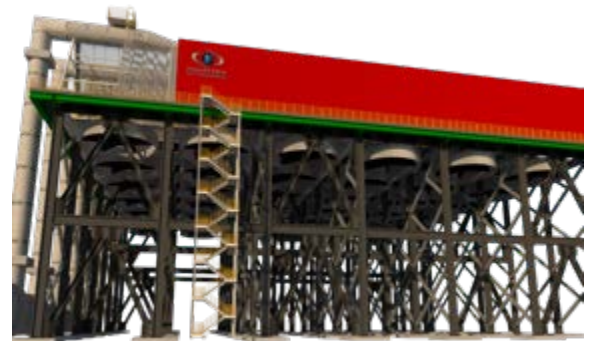
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QUERETARO MEXICO 76138.

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