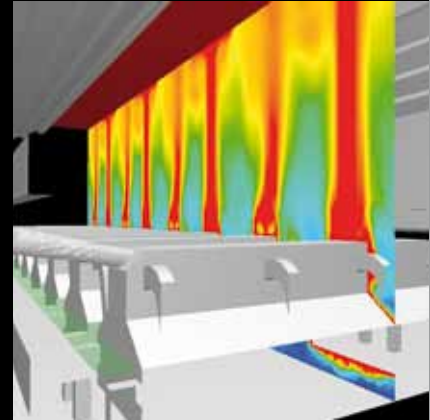




Emirates Aluminium (EMAL) Abu Dhabi



Colt Gravity ventilation

Case History

PROJECT:
 LOCATION:
 THE COLT SOLUTION:
 COLT PRODUCTS USED:

EMAL
 Abu Dhabi, United Arab Emirates
 Gravity ventilation
 Colt Labyrinth

OVERVIEW: WORLD'S LARGEST, SINGLE-SITE SMELTER

EMAL is a joint venture (JV) between Dubai Aluminium Company Limited (DUBAL) and Mubadala Development Company (Mubadala) and was established in February 2007 to construct the world's largest, single site aluminium smelter at Al Taweelah, Abu Dhabi, UAE. The project will be built in two phases and utilises Emirati-developed technology. At the end of phase one in 2010, the facility will produce 700,000 tonnes of aluminium per annum and 1.4 million tonnes annually at the end of phase two.



STATE OF THE ART IN VENTILATION

Colt has won the tender for EMAL's natural ridge ventilators in the potrooms, baking furnaces and casthouses. The new smelter has chosen Colt Labyrinth due to the distinguishing coefficient of performance value of 0.22, meaning a very high ventilation capacity for

the given ventilation surface area. The new smelter will consist of 4 potrooms, each approximately 1,250 m long. The casthouse and anode baking furnace buildings also will be covered with static Colt Labyrinth roof ventilators. The Labyrinth meets all requirements concerning wind load, sand load and rain resistance. They will ventilate continuously without the threat of rain getting into the building. For this specific smelter, the Labyrinth will be executed to marine quality standards, due to its proximity to the sea.

performance ratio while achieving a low temperature on the operating floor, thus achieving better working conditions for their employees.

SAFETY FIRST

The Colt Labyrinth will be uniquely installed using a purpose-built 'roof car'. Workers drive the vehicle over the opening of the roof, making it the safest method of installation compared to conventional methods. Other advantages include reduced time required for installation and minimal disruption to work within the building.

BEST PRACTICAL MEANS

EMAL will benefit from maximum ventilation and the best price/quality/

Colt International
www.coltsmelters.com

