

ALUMINUM HOT ROLLING MILL EXHAUST SYSTEMS

PiTTek Engineers are well acquainted with the Aluminum Hot Rolling Mill Fume Exhaust Systems. The RME-4 components of this system are very different than those applied to the Cold or Foil Rolling Mill systems.

Hoods for a Hot Mill must be stronger and heavier than those for other mills. PiTTek provides several methods of Hood removal offering the operations and maintenance personnel much quicker removal of Hoods. Hoods can be lifted off, hinged or rolled away on tracks. Hoods are drip resistant and designed to minimize interference with mill operation and maintenance, as well as plant safety.

Duct is heavy gauge carbon steel painted on the exterior only. Joints include BUNA-N gaskets and use closer bolt spacing to reduce coolant leakage. Dampers are installed in the duct for Balancing, Fire Protection and Pressure Relief. Round duct is used where possible to assist in proper drainage. Specially designed drains are incorporated in the duct system along with leak resistant fire system ports.

PiTTek uses only centrifugal fans for the main exhaust system. These fans are modified to reduce leakage of coolant. Fans are of a high efficiency design to optimize motor size. Over 20 modifications are made to the fans to provide a fan more suitable for the application. One modification is the use of spray cleaning systems to reduce the need to manually clean the fans. VFD drives are suggested to power the fans.

Mist eliminators are selected to meet the client's required efficiency. These include lower efficiency CSE's to provide first stage agglomeration and to reduce the loading to any second or third stage device. Because the Hot Mill coolants are typically water based it is also necessary to spray clean the mist eliminators to reduce down time and increase the time between manual cleanings. Higher efficiency second stage mist control can reach down into the submicron size particulate making the Pittek systems the highest efficiency available on the market today.

The final device in the system mounts of the exhaust stack. The SCE collects stack wall born condensation and agglomeration of coolant. The SCE minimizes stack "spitting" or "rain".

There are many unique features of design that make up the successful Aluminum Hot Rolling Mill Exhaust System. Please contact us to discuss your application.