

**ALUMINUM COLD ROLLING MILL EXHAUST SYSTEMS**

PiTTek's Engineers are experienced at providing the best exhaust systems available for the Aluminum Cold Rolling Mill Application. While there are many versions of Cold Rolling Mills in the Aluminum industry they can be categorized to some extent by the coolants they use. Aluminum Cold Rolling is done with either oil based coolants or water based coolants.

The design of Hoods and Closures is essentially the same for either type of coolant. PiTTek uses Drip Resistant hoods to reduce the possibility of staining the aluminum sheet with dirty coolant. PiTTek hoods and closures use the latest designs to achieve the desired level of efficiency at exhausting the mists and vapors from the work area. Closures used include plate closures, plate doors, and electrically operated doors.

Duct for an aluminum cold rolling mill includes many of the features common to all RME-4 systems. Cold Mills using oil based coolants use Viton gaskets in almost all cases. Duct welds are dye penetrant tested prior to shipment. Cold mills require the use of three types of dampers in the duct; volume control, fire and pressure equalizing dampers.

Fans for a cold mill system are a centrifugal design to improve operating characteristics, reduce noise and rpm, and improve mist collection. Fans undergo more than 20 enhancements for rolling mill applications. In some cases, clients prefer two fans to create redundancy. Fans are, in some cases, equipped with AMCA designed modifications for spark resistance.

Mist Eliminators and Gas phase VOC collectors are both available from PiTTek. Mist eliminators can include PiTTek CME, PS-1, PS-2, and EF-3 designs. These can be coupled with gas phase VOC controls including heavy oil scrubbers, carbon adsorption designs through consortiums PiTTek has established in the VOC control arena.

Stacks may be used in the case of some systems and in others are incorporated in the VOC control device. PiTTek can supply RME-4 systems of this type turnkey if it is desired.

This brief summary of our systems for Aluminum Cold Rolling Mills will, we hope, encourage our clients to call us and discuss any applications they may have in mind.