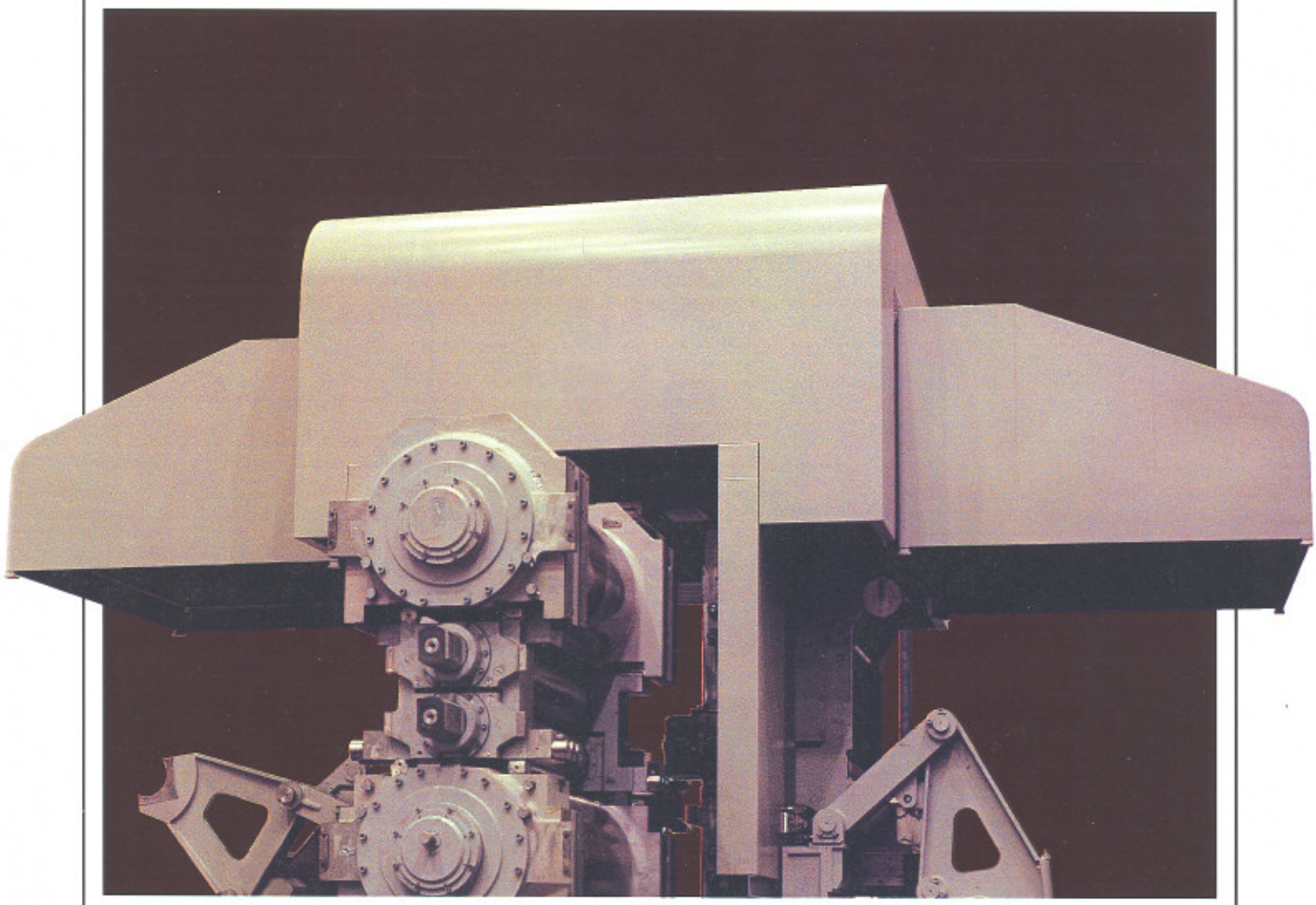
BUSCH JET-WALL™ HOOD

Air-Curtain Hood For Rolling Mill Exhaust Systems



Air curtain hood featuring vertical air jet barrier for fume containment

The BUSCH **JET-WALL** Air Curtain Hood has been developed specifically for rolling mill applications. The **JET-WALL** system captures fumes much more effectively than conventional canopy designs. The system combines an adjustable perimeter air curtain jet with variable internal exhaust air slots to capture and exhaust rolling mill fumes. Higher capture efficiencies can be achieved with lower exhaust air volumes than mills using outdated canopy hood designs. The BUSCH **JET-WALL** hood has been recognized by the EPA as the standard method of choice for rolling mills for fume capture.

The **JET-WALL** Hood is also built to reduce drippage of rolling mill coolant onto the strip. Slopped baffle plate eliminators that are fully adjustable combined with a unique drain system serve as additional protection from unnecessary drippage. These features are unique to the BUSCH **JET-WALL** Hood.

The **JET-WALL** Hood may also be equipped with filtered or heated supply air to further enhance the ability to keep the metal strip and mill equipment clean. Support legs are furnished so that the hood can be lifted off the mill and set on the floor without damaging key hood components. Quick disconnects can be provided to further aid in ease of

hood removal. **JET-WALL** Hoods may be rolled away or hinged to move away from the mill providing instant access to the line components under the hood.

DESIGN AND CONSTRUCTION

Hoods are fabricated of 12 gauge to 1/4" plate depending upon size and the type of hood component. External sheets are typically the heaviest gauge to insure a flat "automotive" grade appearance. Hoods having bolted components for adjustability use specialized securing methods to be certain no bolts, nuts, or washers fall into the mill roll bite.

BUSCH CLOSURES FOR ROLLING MILLS

To help contain fume within the exhaust system, operator-side mill windows are frequently covered by motorized closures. While allowing easy access for roll removal and maintenance, the doors also overcome objections common to less efficient closures such as rubberized sheets, roll-away covers and hinged metal doors.

BUSCH mill window closures under test following fabrication.

The improved BUSCH closure design provides an effective barrier to the escape of rolling mill coolant/lubricant fume and improves the appearance of the mill.

TOP CLOSURES

These closures contain fume driven upward fromwithin the mill housings by thermal pressure. They are bolted to the mill housings and extend from entry hood to exit hood.

INTERSTAND MILL CLOSURES

These closures are typically 10 gauge or heavier metal plates mounted around the mill periphery. They contain the fume and improve the overall capture of coolant mist generated by the mill.

DESIGN AND CONSTRUCTION

Closures can be fabricated from 10 gauge to 1/4" plate depending upon loading and exposure to damage. Top closures, used for maintenance access, are 3/16" or heavier steel plate, structurally reinforced according to load and the required support span.

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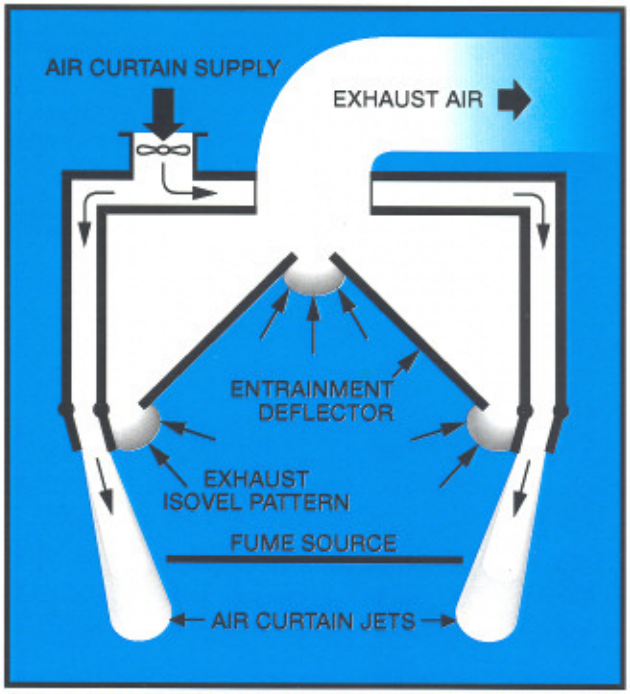
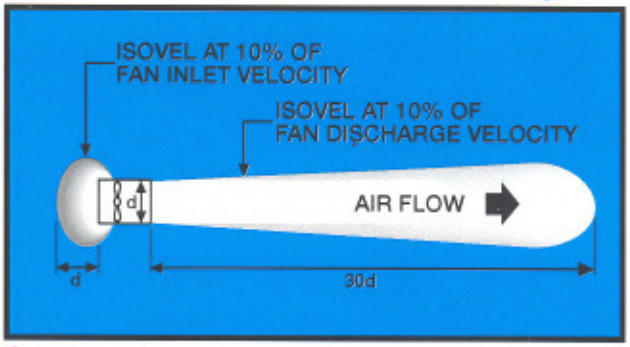


Schematic cross section of a JET-WALL Hood for a metal rolling mill. Air jets reduce exfiltration of fume into work areas surrounding the mill.



Comparison of projection distance of identical isovels at inlet and discharge fan.

ACCESSORIES AND OPTIONS

- Fire suppression piping and nozzles
- Drip-resistant drainage systems
- Quick removal mounting brackets
- Heated air supply systems
- Hinged hood mounting
- Roll-A-Way hood mounting
- Lightning rods
- Special materials of construction

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