

AIR CURTAINS

by Powered Aire Inc.

Industrial Applications for Rail Facilities

Protect large openings up to 50 ft. high!

APPLICATION

Air curtains installed vertically on each side of the door openings of a major train maintenance facility to prevent air infiltration and other issues as trains enter and exit the bays.

PROBLEMS

- A train will move very slowly through the door opening which permits the unwanted infiltration of outside air to the inside of the facility.
- Similarly, costly inside conditioned air will escape to the outside as long as the door is open for entry of the train.
- An uncomfortable and unsafe problem occurs when snow and water drips off of a train onto the maintenance workers in the pits below.

SOLUTION

Powered Aire Inc.'s Engineering Department collaborated with an engineering firm to design **Model HDC-4-216** air curtains for mounting vertically on each side of the opening.

BENEFITS

- This design will prevent infiltration of outside air as well as prevent conditioned air from escaping.
- This design allows for the air curtain to create a seal around the exterior of the trains.
- This design improves worker comfort and safety by blowing beads of water off the sides of the trains.



Doors are 18 ft. high

Job required 6 air curtains for 3 door openings

Corro-duty HDC units feature:

- Heavy-duty 316 stainless steel case
- Heavy-duty Totally Enclosed Air Over (TEAO) 3 HP Dirty Duty Autophoretic motors with 316 stainless steel shafts.
- 316 stainless steel fans, housings and fastening components.
- Perforated 316 stainless steel air intake screen.
- NEMA 4X stainless steel control panels (one panel controls both air curtains at each door)
- High efficiency discharge plenum.