

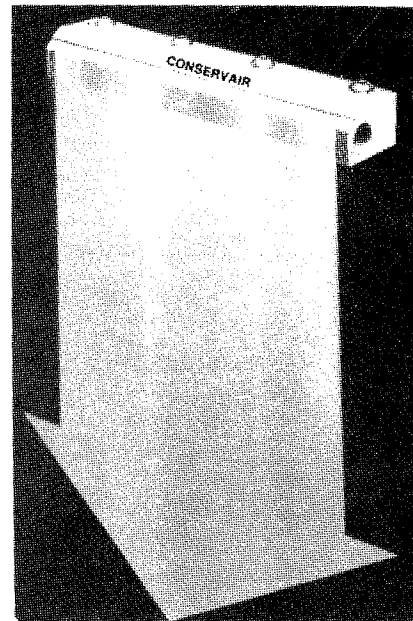
# ConservAIR-Knives . . .

- Save 40 to 90% of compressed air to clean, dry or cool parts, webs and conveyors
- reduce noise in web, sheet and parts blow off.

## WHAT IS A CONSERVAIR-KNIFE?

A quiet, energy efficient way to clean, dry or cool parts, webs, or conveyors. The ConservAIR-Knife utilizes the coanda effect (wall attachment of a high velocity fluid) to create air motion in its surroundings. Using a small amount of compressed air as a power source, the ConservAIR-Knife pulls in large volumes of surrounding air to produce a high flow, high velocity curtain of air for blowoff.

Amplification ratios (entrained air to compressed air) of 30:1 are achieved with a ConservAIR-Knife, compared to 3:1 for drilled or slotted pipe. **Air savings of 40% to 90%** are possible when replacing these "homemade" blow-off devices. **Typical noise level reduction is 10 dBA or more.** Pay-out is normally measured in weeks, not months or years.



## ADVANTAGES

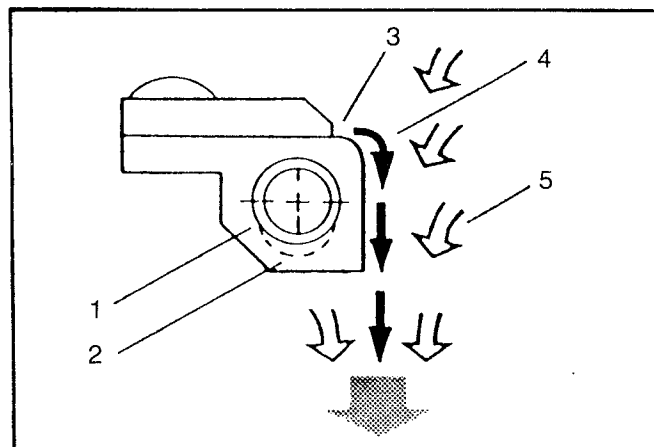
- Compact design
- No moving parts - maintenance free
- Infinite flow/force control
- Quiet — greatly reduced noise
- Minimizes air consumption — 40-90%
- Added reliability of air flow
- Payback measured in weeks, not months or years

## TYPICAL APPLICATIONS

- Parts drying after wash
- Sheet cleaning in strip mills
- Conveyor cleaning
- Web drying or cleaning
- Parts cooling
- Environmental separation
- Pre-paint auto body blow-off
- Scrap removal on converting operations

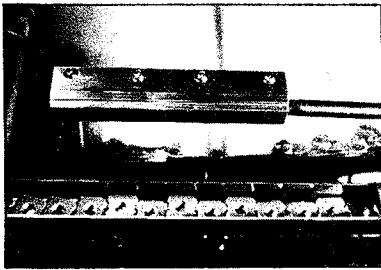
## HOW THE CONSERVAIR-KNIFE WORKS

Compressed air flows through the inlet (1) into a plenum chamber (2). It is then throttled through a thin nozzle (3) extending the length of the Air Knife. This primary air stream adheres to the coanda profile (4), which turns it 90° and directs it to flow down the face of the unit. The primary stream immediately begins to entrain surrounding air (5), while velocity loss is minimized through the wall attachment effect. Interaction of the ejected and entrained air dampens "air shear", reducing noise levels dramatically. The result is a high velocity, high volume sheet of air, achieved at minimum noise level and air consumption.



A ConservAIR-Knife Entraines Air at a Ratio of 30:1 vs. 3:1 For Drilled Pipe.

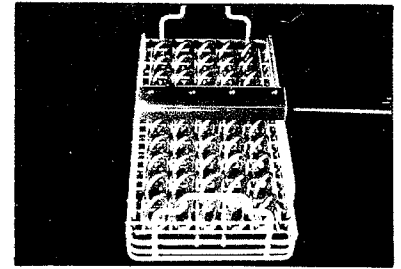
# ConservAIR-Knives—Versatile, Efficient, Reliable



Blowoff Parts on a Conveyor

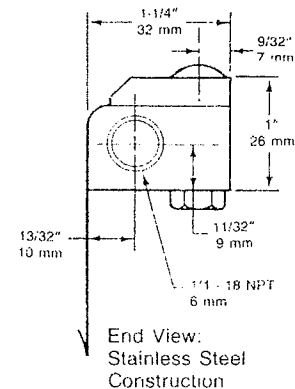
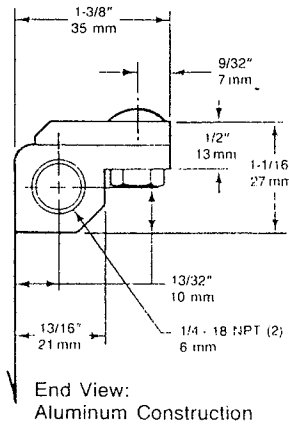
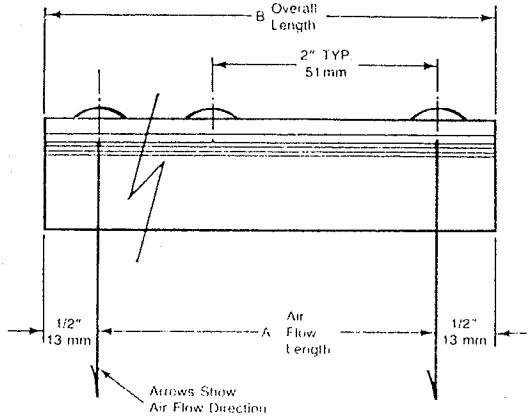


Chip Removal on a Transfer Line



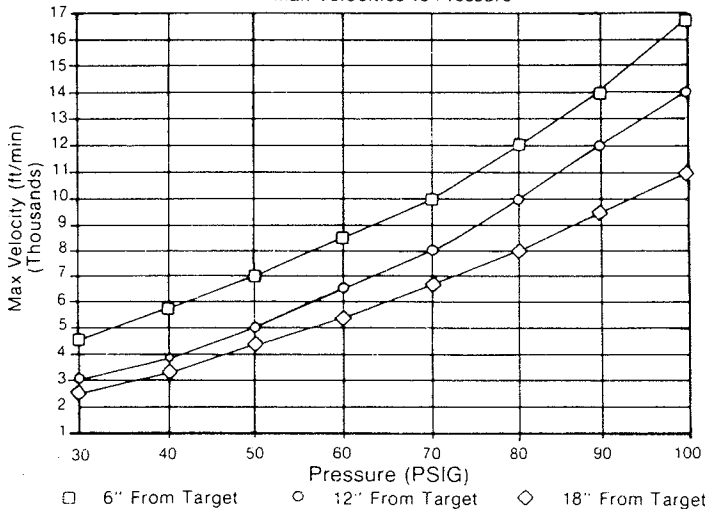
Blowing Coolant Off Parts

## CONSERVAIR-KNIFE DIMENSIONS



## CONSERVAIR-KNIFE PERFORMANCE

Max Velocities vs Pressure



## ALUMINUM AIR KNIVES AND ACCESSORIES

Model #	Description	A	B
2006	6" Air Knife	6"	7"
2012	12" Air Knife	12"	13"
2018	18" Air Knife	18"	19"
2024	24" Air Knife	24"	25"
2030	30" Air Knife*	30"	31"
2036	36" Air Knife*	36"	37"

NOTE: Part numbers above denotes aluminum air knives. Add suffix "SS" for stainless steel construction.

- 20xx is an air knife only
- 21xx is an air knife with filter separator
- 22xx is an air knife with filter separator and key lockable regulator
- 24xx is an air knife with Key Lockable Regulator

Max Temp: Aluminum - 200°F SS - 400°F

**SHIM SETS:** A standard ConservAIR Knife has a .002" gap setting. Force and flow through the Air Knife may be easily increased by adding shims to open the gap. 23xx denotes shim set for 6"-36" air knives.

\*Air Knives 30" and longer must be fed from both ends.

DISTRIBUTED BY:

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