



LUTHRA AIR AMPLIFIER

The **LUTHRA Air Amplifier** takes energy from a small volume of compressed air to produce a high velocity, high volume, low pressure output air flow.

LUTHRA Air Amplifiers are quiet, efficient and can amplify flows up to 20 times their input air Consumption rate.

Compressed air flows from the supply inlet

- (1) into an annular chamber
- (2) and then throttled by an annular gap
- (3) resulting in high velocity air
- (4) which directs the flow outward. The low pressure area at
- (5) draws in a high volume of surrounding air
- (6) producing high volume, high velocity output flow.

ADVANTAGE OVER FANS

- More compact, simple, lightweight and portable
- Driven by air, not electricity for safety
- No moving parts - hence more safe and maintenance free
- Each end can be ducted for light conveying applications

Typical applications replace fans, used for blow-off, cleaning, drying, cooling and conveying:

Automotive:

Remove water, coolant, dust, and scrap in parts manufacturing and in assembly operations. Cool enamel and water based paints in parts manufacturing, auto body shops or assembly lines.

Bottling :

Blow off of water from the tops of cans or some bottles prior to labelling, ink jetting, palletizing or packaging. Conveying light materials.

Food :

Remove water from product or packaging.

General Manufacturing :

Part ejection, fume removal, dust and liquid blow off from all types of parts, conveying away waste, ideal for replacing fans in some cooling operations such as tempering glass.

Metals :

Coolant and other liquid removal on process lines from Aluminum, Steel, Brass or other materials. Dry metals



prior to other operations such as plating or polishing. Cool metal parts prior to coating or painting. Coolant mist removal. Boost vacuum systems to remove grinding dust. Cool steel forgings.

Plastic :

Dust and scrap blow off. Cool mouldings after extrusion, then blow off and dry prior to forming.

Printing :

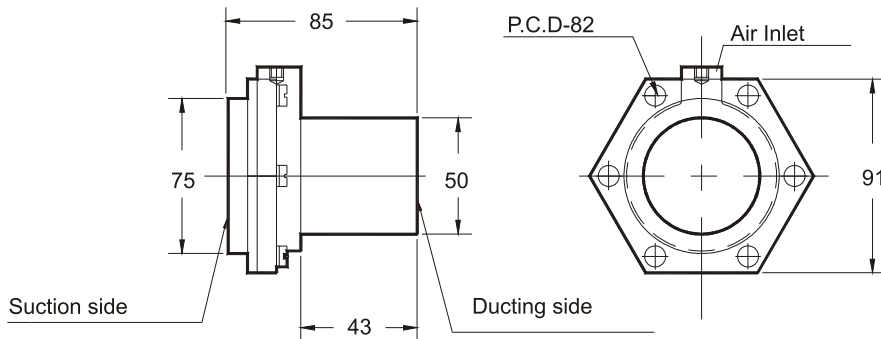
Cooling to set some inks, scrap blow off.

Pharmaceutical :

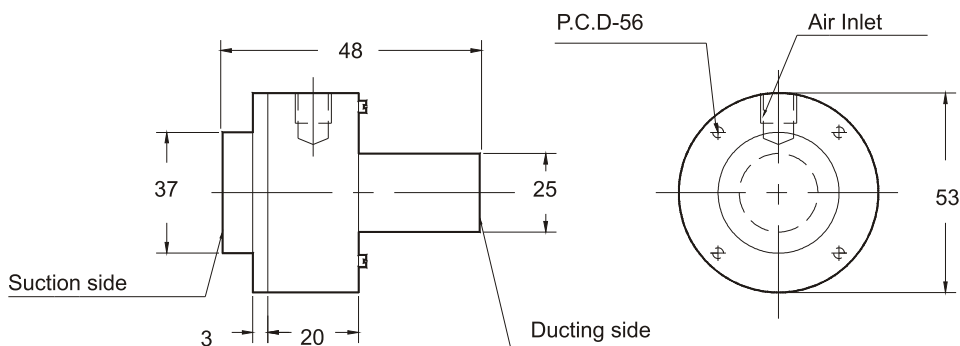
Remove liquid prior to labelling or packaging waste removal for solid materials. Extract unfilled capsules by vacuum as they pass on a conveyor.

Textile :

Scrap and trim removal on textiles to eliminate expensive vacuum systems.



Air Amplifier Size : 2



USING THE AIR AMPLIFIER, INCREASING & REDUCING FORCE, AND THE CONSERVATION OF AIR

In many cases the Air Amplifier can either be supported by the compressed air supply piping or, by using the mounting holes provided on the body of the units

By moving the Air Amplifier toward or away from the target, an optimum distance for operation can be found. To decrease force, a **LUTHRA** regulator may be added and simply reduce the pressure to reduce the force required.

To conserve compressed air, it is best to use a **LUTHRA** regulator to reduce the pressure to the point where the Air

Amplifier still performs as it must, but by minimizing compressed air use by utilizing the air at a lower pressure. The Air Amplifiers are especially ideal for applications where intermittent blow off is required.

A sensor or timer can have the compressed go on and off to the Air amplifier as required utilizing a **LUTHRA** solenoid valve. Energy is only consumed when the unit is operating.