

Tri-Metal Fans

Tri-Metal Fans manufactures its own line of CSA-NRTL approved axial fans for hazardous and non-hazardous locations, and EMR approved axial fans for coal mine applications. Fans come in sizes up to 60 inches in diameter with air moving capacities ranging from less than one hundred cubic feet per minute to in excess of one hundred twenty thousand cubic feet.

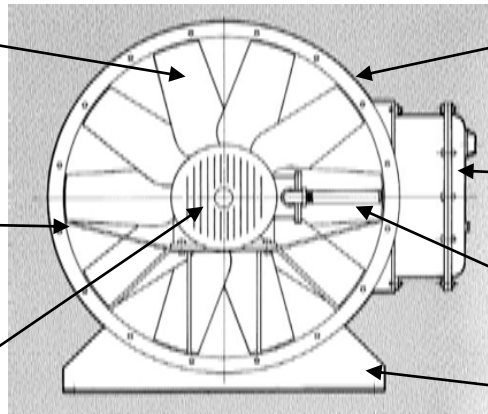
Specifications and Features

- CSA approved to 75 HP or less for hazardous and non-hazardous locations.
- EMR approved to 75 HP or less for coal mine use.
- Axial Fans are explosion proof, panels or roof mounted, direct or belt driven.
- All sizes and types are approved for 600 Volts or less, single or three phase, single and multi speed, direct and belt drive.
- Standard fans are constructed with heavy gauge mild steel flanged housings, standard T-frame foot mounted motors and cast aluminum alloy adjustable pitch impellers.
- Manufactured to order in any size ranging from 10 to 60 inch diameter.
- All aluminum or stainless steel alloy construction is optional.
- Externally mounted junction box is standard.
- Factory mounted motor control and/or safety switches are optional.
- All wiring and components are in strict accordance with CSA requirements.

Standard adjustable pitch approved aluminum alloy impeller. Optional fixed pitch fabricated stainless and mild steel, cast bronze.

Standard Diameters 12", 15", 19", 21", 24", 30", 38", 42", 48", 54", 60". Optional any diameter 10 to 60 inch.

Standard T-Frame foot mounted approved motor. Optional multi-speed.



Standard heavy gauge flanged steel housing. Optional aluminum, stainless steel alloys.

Standard externally mounted approved junction box. Optional factory mounted motor control, safety switch.

Wiring is in strict accordance with CSA requirements.

Optional Accessories: Mounting feet, guards, cones, silencers, dampers.

Standard Silencers

The Fan Silencers have been developed over the years by improving on a basic concept. With noise reduction, strength, long lasting and ease of maintenance as criteria, our design offers the optimum in fan noise suppression.

Centre Core Section

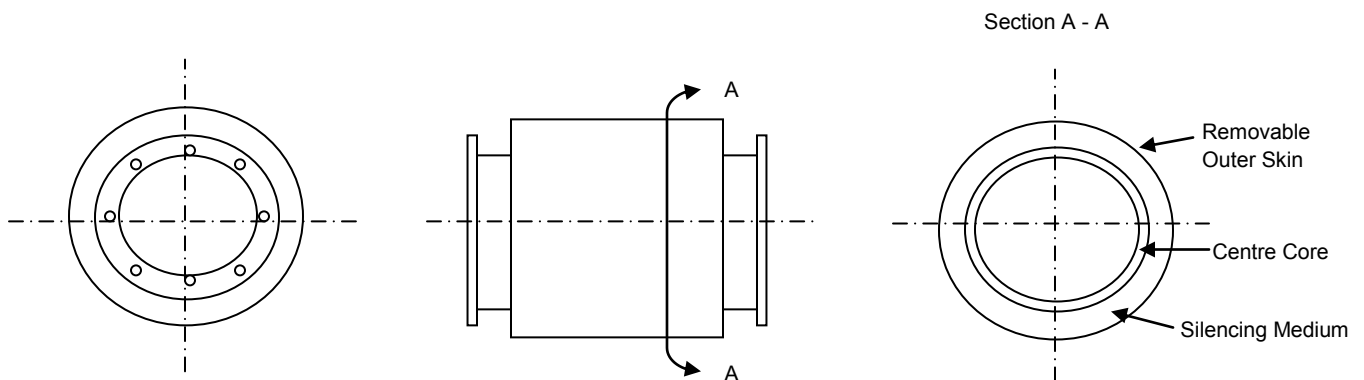
We have strengthened the centre core section by manufacturing with expanded metal mesh. This maintains as smooth an inner surface as possible for maximum air flow with little pressure drop, but still allows the silencing medium to achieve desired properties. With the center core kept rigid, the ventilation line is not disturbed during scheduled maintenance of the silencer.

Silencing Medium

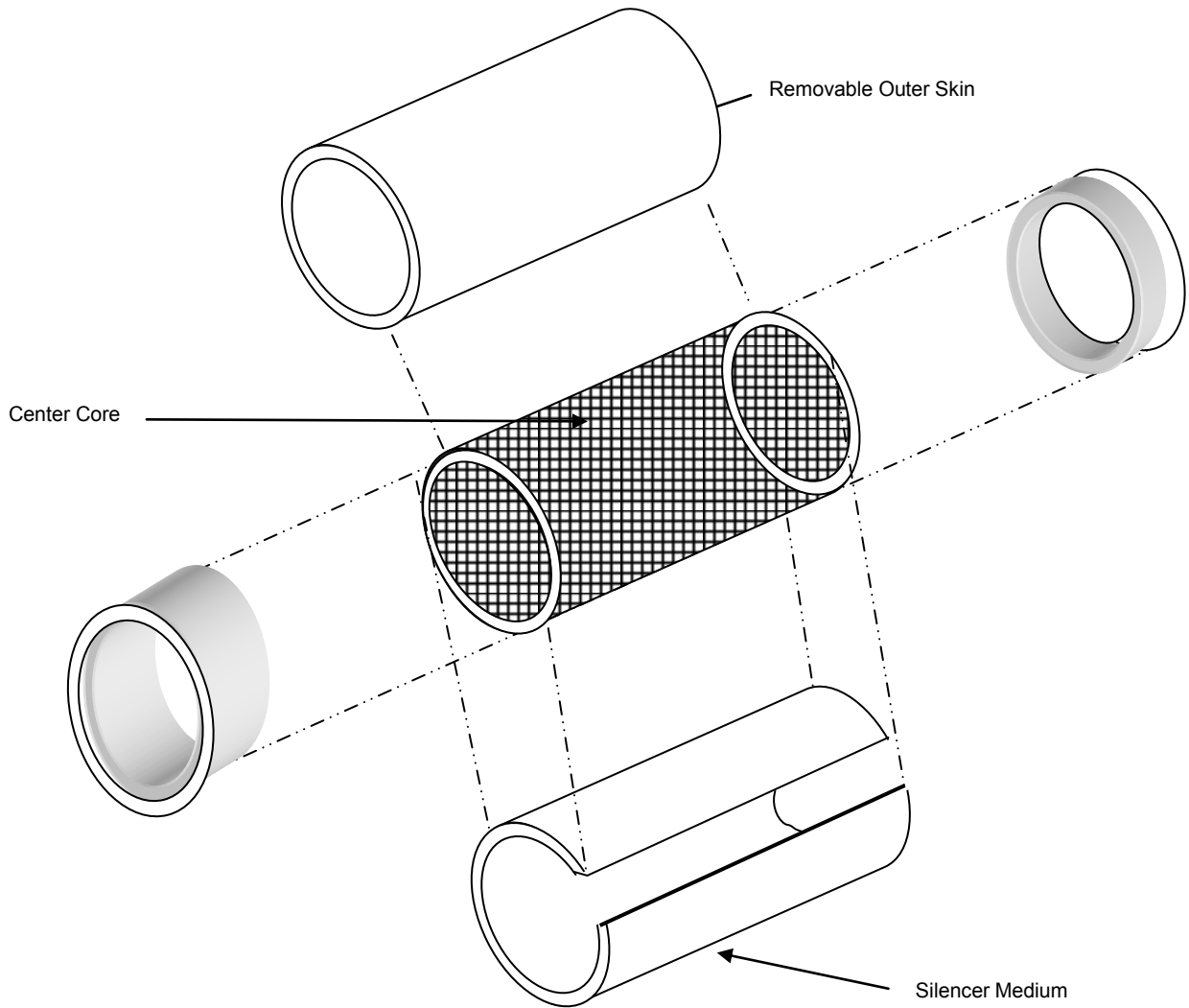
The packing consists of a fiberglass insulation selected for maximum silencing properties. We start with 6" fiberglass and compress it to 3". This is held in by a fiberglass screen between the insulation and the expanded metal mesh.

Outer Skin

On the outer portions we have selected steel to achieve the strong, noise dampening qualities sought in fan silencers. As mentioned we design our silencers with maintenance in mind and the outer skin is flange fitted for quick removal. The silencing medium is then exposed for a complete change with the fan and the ducting kept intact by way of the centre core.



Standard Silencer Diagram



Silencer Features

- Efficient and durable all steel construction.
- Separate flanges with no nuts to strip.
- Bolt hole arrangement for any size fan model.
- Replaceable inner and outer parts provide longer life and lower maintenance costs.

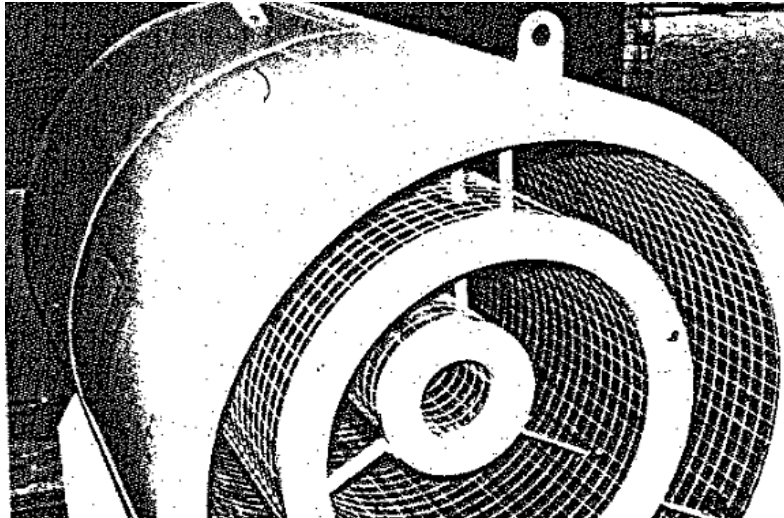


Double Pod Silencer

A Double Pod Silencer is recommended where extreme overall noise reduction is required.

The Double Pod Silencer is generally similar to our standard model in construction. The ends are flanged to fit the fan hole pattern, removable fiberglass outer casing, dense medium fiberglass for maximum noise reduction, and fully supported retaining mesh to minimize the air pressure drop. Units can also be fitted with anti-static fiberglass for coal mine use.

Double Pod Silencers can be manufactured in any diameter from 24" to 90"+, for use in mining, tunnelling and general industrial applications.



Heavy Duty Blanket Silencer

Below is a photo of the Heavy Duty Blanket/Silencer used for covering the circumference of a fan.

- Custom built to customers specifications.
- Fast and easy installation.
- Manufactured to fit all makes and models of fans.



Inlet Bells with Screen

We manufacture all sizes of Inlet Bells with Screens to fit all makes and models of fans. We offer the option of having a bolt on pattern specific to your current fan or a V-Lock. All items come primed, painted and ready for installation.



Painted and Primed

