

# AirEng – Accessories

In addition to the standard fan assembly, the following accessories are available.

## 1 Inlet boxes

Aerodynamically designed for optimum performance. Can be integrated with the fan casing, or designed as a separate unit. Complete with pre-drilled rectangular inlet flange and either a pre-drilled circular discharge flange, or plain spigot. Available in different orientations.

## 2 Dampers

Available as parallel or louvre bladed inlet or outlet. Opposed blade operation for outlet dampers. Bearings can be rolling or plain, operation manual or automatic.

## 3 Damper actuator

Affords more precise control over damper. Pneumatic or electric are the most common type. These can be fitted with positioners.

## 4 Structural sub-base

Supports entire fan assembly, and is available with vibration isolator for reduced transmission of vibration.



Automatic lubrication system designed to meet American Petroleum Institute (API) standards.

## 5 Vibration/Temperature sensors

Available for motor and fan bearing monitoring the "health" of the fan.

## 6 Silencers

Reduce noise levels at inlet and/or discharge.

## 7 Evasé

Available for improved fan performance. Converts velocity pressure to the more useful static pressure. (Sometimes called static regain.)



Internal drive Variable Inlet Vane (VIV). Cost effective design.

## 8 Inspection door

Quick-release or standard bolt-on design, available as curved or flat, raised or flush.

## 9 Safety guards

Inlet and discharge screens, belt guards and shaft guards.

## 10 Cooling fins/heat deflectors

Dissipates heat from shaft/bearings when fan is operating in high temperature environment.

## 11 Drain points

Available as threaded plug or ball plug types.

## 12 Volume measurement

Annubars and other similar equipment can be fitted to measure volume flow at either fan inlet or discharge.

## 13 Shaft seals

Available in many different types depending on application i.e. noise containment, temperature or to reduce gas contamination.

## 14 Flexible connections

For isolating any fan vibration from the ducting or structure.

## 15 Water sprays

Used to reduce buildup materials on the impeller.

## 16 Lagging and cladding

Insulating the fan for noise or gas temperature.

## 17 Motors

Electric, pneumatic, combustion, steam turbines, hydraulic etc can be used to power the fan.

## 18 Welding

Either AirEng Certified Welding Standard or other International Welding Standards can be employed.

## 19 Anti roll-back clutches

Anti roll-back clutches can be fitted if required.

## 20 Wear liners

Impellers can be fitted with wear plates for operation in highly erosive environments.

## 21 Special materials/coatings

Special materials of construction and coatings can be employed in the fan where erosion, high temperature or corrosion may occur, to prolong operational life of the fan.

## 22 Anti-spark rings

Anti-spark rings can be fitted where flammable or explosive mixtures are moving through the fan.



External drive Variable Inlet Vane (VIV). Used for high temperature or contaminated air.

## 23 Lubrication

Automatic lubrication connections, extension oil recirculation and cooling systems can be factory fitted to the fan.

## 24 Split casing

The fan casing can be constructed in two parts to facilitate easy removal and fitting of the impeller where required.



Hydraulically adjustable belt tensioning device

## 25 Drives

V-belts, direct, coupling, gearbox, variable speed drives can be supplied and fitted to meet the individual requirements of the fan.

## 26 Hollow shafts

Generally used for high temperature application, lowering the shaft inertia or reducing bearing loads.

## 27 Variable inlet vanes

A VIV is fitted to control fan airflow where a system requires accurate process control.

## 28 In-motion balancing

Fixed equipment which continually refines the balance of the fan, this is ideal for fans subject to high concentrations of contaminant.

## 29 Fully seal welding

Is employed to reduce corrosion at weld joint especially where special coatings are employed.

## 30 Floating pedestals

Isolating the pedestal from the casing to allow for thermal expansion in high temperature applications.

## 31 Isolation mounts

Are essential where fans are mounted on structures or where transmitted vibration is an issue.

## 32 Modular construction

Fan manufactured in components to allow for installation restrictions, change overs, high wear application etc...

