

INDUSTRIAL VENTILATION - ENGINEERING

PRODUCTS AND SERVICES PRESENTATION

AXIAL FANS

- Own design executions at top technical, quality and performance levels
- Totally customized and personalized executions
- Carbon steel, stainless steel or aluminium casings and impellers
- Diameters 400 up to 2400 mm in single piece casing
- Diameters up to 5 meters in sectional casing execution
- > Special executions for extreme temperatures or corrosive atmosphere
- Bifurcated executions
- Silenced and low-noise executions
- Fans for hazardous areas
 - Group I, ATEX Zone M2 (Cat. M2, underground)
 - Group II, ATEX Zones 1 and 2 (Cat 2G, 3G, 2D, 3G, surface operation)
- Spark-proof and API 661 compliant executions for heat exchangers
- Fans mounted on skids with silencers and accessories for a convenient and safe transport
- Single-stage and multi-stage executions
- Electric motor, pneumatic motor and hydraulic motor operated fans
- Direct coupling, belt & pulley transmission or gear motor transmission fans
- Hot dip galvanised or painted surface finish

ENGINNERING & PROJECT MANAGEMENT

- Mechanical, airflow and thermal design and prototyping
- Preliminary or executive design of ventilation systems for tunnelling and mining operations
- 3D modelling, kinematic analysis and stress/strain analysis with emission of certified reports
- Technical documentation writing, safety risk analysis, conformity evaluation, product design and engineering support
- Project management, retrieval and coordination of resources for complex production, research or innovation projects
- > Consultancy and training in the air design field



INDUSTRIAL VENTILATION - ENGINEERING

- > Sound, vibration and general physical parameter measurement and monitoring
- Acoustic data analysis
- > Expert reports, appraisals and assessments on fans and ventilation plants

FAN ACCESSORIES

- > Circular silencers with optional internal pod and aerodynamic inlet fairing
- Splitter silencers with aerodynamic inlet and outlet fairing
- Airflow straighteners with fixed or adjustable winglets
- > Rubber or spring vibration absorbers
- Supporting structures, skids, anchors and inertial bases
- Custom-designed curves, transition pieces and diffusers
- Ventilation ducts (metal, PVC, spiral or flexible)
- Plane or basket-type protection grids for fans and moving parts of machinery
- Circular or rectangular dampers with or without sealing capability, with optional electric or pneumatic operation
- Starting devices (star-delta, soft-starters, inverters)
- External junction boxes for power and auxiliaries (also available ATEX components)
- Custom-designed accessories for fans and machinery

REVAMPING, REPAIR & MAINTENANCE

- Specialized workshop in fans and ventilation plants maintenance and repair
- Electric and mechanical assessment of fans and accessories
- > Safety evaluation and conformity certifications
- Motors and electric components maintenance and repair
- > Revision and re-certification of electrical panels and cabinets
- > Re building of damaged components
- Impeller balancing
- Obsolete or damaged parts substitution
- > Retrofitting or revamping of fans and plant components
- > Routine and special maintenance operations



INDUSTRIAL VENTILATION - ENGINEERING

AXIAL IMPELLERS

- Axial impellers
 - extruded or die cast aluminium aerofoil blades
 - antistatic plastic aerofoil blades
 - carbon or stainless steel laminar blades
- Diameter range 250 mm up to 5 meters high rotation speeds or low-noise executions
- Own-design impellers or impellers selected among the production ranges of top European manufacturers
- Prototyping of special impellers

SERVICES

- > Surface treatment of metals (hot dip galvanising, cold galvanising, sand blasting, painting, chrome plating, nickel plating, pickling and passivation, anodising, polishing)
- Static and dynamic balancing of impellers and rotors
- > Heat treatments of steel
- Repair of motors, gearboxes and mechanical equipment
- Steel working
- Metal sheet spinning
- Traditional or computer controlled milling and turning
- Non-destructive testing (radiography, dye penetrant, magnetic particle inspection, etc.)
- Assembling of machines and structures

CENTRIFUGAL FANS

- Production and supply, in partnership with top European producers, of centrifugal fans for all industrial sectors
- Custom built centrifugal impellers in all materials