Matthews + Yates
The Fan Makers

A Century of Air Movement

Matthews & Yates Centenary 1882-1982
The World of Matthews + Yates

In the year 1882 William Matthews and Joseph Yates met and formed a partnership which supplied local merchants with heating and ventilating equipment. One hundred years later Matthews & Yates has grown into a 15,000 sq. ft modern manufacturing plant in Swindon on the outskirts of the city. They sell equipment to the best in the industry.

The excellent reputation which M & Y products enjoy today is due to the years of experience and expertise gained by the firm. Matthews & Yates has a full range of industrial and commercial equipment for heating, ventilation and air conditioning.

The firm has a comprehensive range of products, from small fans to large fans, and from small ducts to large ducts. Matthews & Yates has a full range of industrial and commercial equipment for heating, ventilation and air conditioning.

As standard policy, this programme has been pursued and has ultimately produced modern and efficient equipment for applications in the air movement and conditioning services. The use of computer aided design and analytical techniques to provide information from which the products are designed ensures that the products perform reliably and are capable of meeting the highest specifications imposed by modern requirements.

Technical Design in the drawing office.
The unrivalled experience of the design team allows the production of reliable efficient and competitive units. It also enables them to plan for future customers - customers in industries which are changing faster than ever before.

A custom built laboratory equipped with the latest test rigs and instrumentation explores the future requirements of the industry.

Manufacturing facilities include numerical controlled punching, modern presses and up to date machine tools thus ensuring that the end product will be to the customer's specification. During and after manufacture, individual units pass non-destructive test checks before dispatch to the customer.

The company's service and spares division is in a position to provide a prompt and expert service in relation to the total range produced.

Equipment has been installed in major UK paper manufacturers and is quickly becoming recognised for its quality and economic operation throughout the world.

The future trends for M.A.Y are exciting and demanding but with the knowledge gained in the past 100 years and with an ongoing programme of research and development, we look with confidence to our next century as leaders in the field.

Micro Computers used in the installation of fans and air handling units.

M.A.Y activities have extended during the past decade into the field of pneumatic material handling and the formation of a Special Contracts Division to design and manufacture aspects of this business. This Division utilises special airlift handling fans manufactured by M.A.Y, installs and services complete systems for waste removal from printing houses, paper mills and plastic manufacturers.
Engineered for performance

Air Handling Units

Cycloptic Mark II
Cycloptic range of air handling units designed in a similar form of construction providing sections each completely self-contained which can be conveniently coupled together in any combination to suit individual requirements.

Excellent in-line appearance is achieved by positioning the fan drive within the fan section casing and maintaining the same cross-sectional dimensions for all sections in each size of unit.

The unit frames are manufactured from heavy gauge mild steel formed into pentagonal sections. The frames are then panelled, the panels constructed in double skin form with insulation between the skins.

All the necessary heating, cooling, filtration and humidification options are provided.

Variable speed motors, in-line variable speed controllers, mixing box and damper sections are optional. There are fifteen sizes of units with an air volume range between 0.6m³ to 28.0m³/hr.

For further details please ask for catalogue Cycloptic Mk II.

VH1 & VH2 Units
The Cycloptic VH Air Handling Units provide most compact units for heating and ventilation applications.

Each unit comprises a double width fan, with motor, air heater and filter mounted in a common insulated casing.

Installed horizontally or vertically with left or right hand connections. Approximate volume range as follows:

VH1 Up to 0.75m³/hr
VH2 Up to 0.925m³/hr

Ask for Leaflet PAC H.

Centrifugal Ventilating Fans

The SS Multifane Fan, the VCB Backward Curved Fan and the V. Aerofoil High Efficiency Fan are all the result of intensive research, testing and development. They have been designed to provide efficient and stable operation over their normal operating range.

SS Multifane Fans
Produced in 26 sizes with impellers having curved forward blades and ranging from 50mm to 200mm in diameter.

Designed to give large fan volumes at low outlet velocities and at slow speeds with low noise levels. Ideal for lower pressure ventilation and air conditioning systems and other clean air applications.

Volumes range up to 1000 m³/hr.

VCB High Efficiency Fans
Produced in 19 sizes with impellers having backward curved blades and ranging from 300mm to 2800mm in diameter.

These fans have non-overloading characteristics; low outlet velocities and high peak efficiencies. Suitable for medium pressure and/or where parallel operation is required. Volumes range up to 1200m³/hr. Pressures approximately 4000 Nm².

V. Aerofoil High Efficiency Fans
Produced in 16 sizes, impellers have aerofoil section backward curved blades and range from 450mm to 2800mm in diameter. They have non-overloading power characteristics, low outlet velocities, but higher peak efficiencies than VCB Fans. These fans are recommended for higher pressures and air conditioning systems to ensure minimum running costs. Volumes range up to 120m³/hr and pressures up to 6000 Nm².

Fans are available as single inlet, single width units to various arrangements or alternatively as double inlet, double width units.

Fan casings are of all welded steel construction, reinforced with tees and angles where necessary.

A drilled flange is fitted to the outlet of all fans.

Bolt-on bearing units are fitted as standard with optional sleeve bearings available for some of the units.

Accessories

The units can be provided as a basic fan or complete with various accessories such as motors, drives, guards, base frames, anti-vibration mountings, flexible connections, drains, inspection doors etc. etc.

For further details please ask for Catalogue F/F.
Engineered for performance

Zephyr Heavy Duty Industrial Fans

Have been designed to provide a custom built fan to your special requirements from a number of standard components.

The range consists of five types. Each type is manufactured with a choice of blade angles to give a total of 19 different fans. For each type of fan there is an impeller suitable for handling air or waste gases with either dry, hot dust loadings, normal dry dust loadings and dust or material liable to adhere or cake.

The variations in types, impeller blade angles, and fan sizes enable the optimum selection to be made to suit the required duty and application. Various arrangements are available.

Ruggedly constructed for trouble free operation, the fans are of all-welded construction with suitable reinforcement, and they can be manufactured in mild steel, special steels, stainless steel or aluminium.

Gas tight fans have spiral shaft seals and particular care is taken in construction and welding of the fan casing.

All impellers are laminar blade with centrifugal shrouds and dependent on type and application, total efficiencies of 87% are achievable.

All fans are statically and dynamically balanced before leaving our Works.

The volume range is up to 95,000 m³/hr with total pressures up to 5.9 KN/m².

For further details please ask for catalogue reference T19.


Trim Handling Fans

For Waste Recovery Installations

The patented TH Fan has been specially designed to handle wastes in the paper board, foil, packaging and plastics industries.

Fans will handle continuous trim from all types of paper, corrugated and solid board, metal foil, thermoplastic films and high density polythene.

The fan can be in varying thicknesses from less than 0.05 mm in thick solid board at 5.8 mm.

The non-dragging impeller is of very rugged construction with heavy gauge steel plate blades welded to the back plate.

The front edges of the blades are fitted with removable high speed steel knives in effectively cut the continuous trim.

Six sizes are available with impeller diameters from 450mm to 1016mm.

For further details please ask for catalogue TH44.
Engineered for performance

Axial Flow Fans

Manufactured in 13 sizes ranging from 315mm to 2000mm.

Each fan is available at a variety of speeds, with 3, 6 or 9 blade impellers.

The aluminium die-cast impellers are bolted into an aluminium hub. The pitch angle is set during manufacture; however, if necessary, adjustments can be made on site. The pitch angles range from 6° to 30°.

The standard L type casing completely encloses both impeller and motor. On this arrangement a weatherproof terminal box is provided on the outside of the casing together with an inspection point.

The alternative G type casing is available where required, enclosing only the impeller. On this arrangement electrical connections are made directly to the terminal box on the motor.

Various accessories are available including mounting brackets AV, in-line flanges, mounting bases, flexible connections etc.

Bifurcated Fans

Bifurcated Axial Flow Fans are available and particularly suitable for the higher temperature applications. They are also suitable for handling moisture laden air and for many other industrial applications.

These standard type of bifurcated fans are available where being suitable up to 300°C. For further details please see catalogue AFV.

Multistage Fans

Two stage, non-rotating units are available as standard.

For higher pressure development fans can be supplied with additional stages.

Belt Driven Fans

Where the application requires the motor to be outside the airstream belt driven units can be supplied.

The impeller is mounted on a short revolving in two bearings within the casing and this is driven by vee belts from a motor mounted on the outside.

Air Heaters

Steam, Low, Medium & High Temp

Hot Water

Plate finned heaters for air conditioning, plant or heating, drying etc.

Suitable for use with hot water or steam.

Materials:

Copper or Aluminium fins.
Copper or steel headers.
Gallion galvanised mild steel case.

For further details on air heaters ask for Leaflets AH14, AH15, and AH16.

Cooling Coils

Chilled Water & Direct Expansion
Applications

All over the world millions of people go about their daily business in factories, offices and shops completely unaware that products from Matthews & Yates are making their lives more pleasant by providing clean fresh air at an ideal temperature as and when required.

We don't mind this at all. We are satisfied in the knowledge that we have supplied the best product available so that it is working and will carry on working economically and efficiently.

Matthews & Yates refuse to produce anything but the finest air moving equipment. This is probably why our products are specified by the majority of leading designers, architects and consultants in both commerce and industry in the UK and overseas.

Each unit produced is designed and manufactured to meet the exact requirements of an individual customer. It is then dispatched with an assured highest quality performance to give safe operation and maximum life expectancy under normal operating conditions.

A few of our highly respected and satisfied customers are shown.

Dungeness B Nuclear Power Station was the first Commercial Nuclear Station in the world to use advanced gas-coupled machines. To help provide the necessary ventilation at critical ambient temperatures Matthews & Yates Equipment was installed.

Since then practically all the UK nuclear reactors have been supplied with M & Y products.

M & Y Equipment. The impressive list of installation includes Oldebury, Barrow-in-Furness, Heysham I, Hinkley Point, Pinderton, Hartlepool and Heysham II.

A further two sites are currently under construction at Heysham III and Torness - naturally with M & Y products.

Seven of the plant rooms at the New Grimsby (Distant) Hospital have been supplied with Matthews & Yates air handling units and centrifugal fans. These will provide air at the differing temperature requirements for the operating theatres, children’s isolation rooms, wards, X-ray Dept., accident section, wards etc.

One of three large V. Aerotol High Efficiency fans supplied for the Shipley Foss Street S. O. Condeep drilling platform. These fans provide ventilation for 9 buildings containing equipment and a three storey accommodation block housing the crew of 90.

The fans are specially treated with a thick coat of blackened rubber paint to withstand the weather conditions.
Matthews + Yates
Service and Spares

Since William Matthews and Walter Yates first produced their innovative fans a hundred years ago, Matthews and Yates has been totally committed to providing an after-sales service.

So much so that now the M & Y Service Department can offer you the men, the experience, the facilities and the equipment to provide you with the best package of support services in the business.

The team of highly skilled and fully trained Service Engineers can handle all your repair, servicing and testing whenever you want.

Spares also are speedily handled through the service department.

Just a quick telephone call and expert help is at hand:
- Installation
- Maintenance
- Parts
- Overhaul
- Repairs
- Dynamic Balancing
- Parts
- Preventive Maintenance Contracts
- Performance Testing

Matthews + Yates Ltd
The Fan Makers

CENTENARY
1882–1982

Matthews + Yates

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