

New generation

TA Series

High performance
duct axial fans



DYNNAIR®
INDUSTRIAL VENTILATION

— Dal 1970 la ventilazione made in Italy

Technology and expertise
for professional ventilation



MANUFACTURING FACILITIES IN THE WORLD

Our mission is to provide better air distribution services every day. We achieve this by offering a wide range of well-designed, functional ventilation products that serve local market needs.

Maico products can be found in many countries and are sourced from local production facilities or manufactured in regional factories. In this way, we can ensure the delivery of the promised goods in the required quality. We are promoting continuous growth by pushing development and impressing customers with our innovative products.



The path followed by DYNAIR® is part of the history of a large German industrial group, which started as early as 1928, the year when Christian Maier set up Maico Elektroapparate. Since then, the group has been able to build up a well-established industrial reality and to acquire the technological and commercial know-how which has allowed it to become one of the top names in the ventilation industry. In the last few years, the group focus to grow on a global level has been speeded up and materialised with important investments in emerging markets: a culturally exciting and highly promising scenario.

DYNAIR®, as a brand-division of Maico Italia S.p.A., is a well-known brand name at global level in the industrial ventilation and plant engineering sector. Technological expertise, high production capacities, strong research and investment policies together with a personalised back-up service focused on customer needs have been, for over 35 years, the qualities that distinguish our company.

TAILORED VENTILATION SOLUTIONS

The quality of the air we breathe and the safety of our working and living environments are the inspiration behind the study and production of our fans.

Our business organisation is characterised by strong coordination and cohesion in throughout every one of its stages. Every department operates in a productive system that works as a large, efficiency-oriented organisation at your service.



DESIGN

The design process is entrusted to **highly-qualified technicians and designers** who are ready to satisfy your real needs with state-of-the-art products and solutions, designed in compliance with existing regulations.



TECHNICAL & COMMERCIAL SUPPORT

An extensive commercial network and a team of 20 commercial experts and back-office assistants at your service to listen and provide you with pre- and after-sales support.



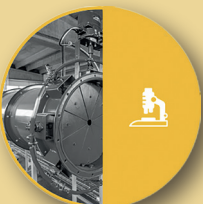
LOGISTICS

Strategic partnerships with suppliers, extensive warehouses, meticulous quality control of incoming goods and punctual shipping form the perfect cogs of a logistical **process that guarantees efficiency and rapid delivery.**



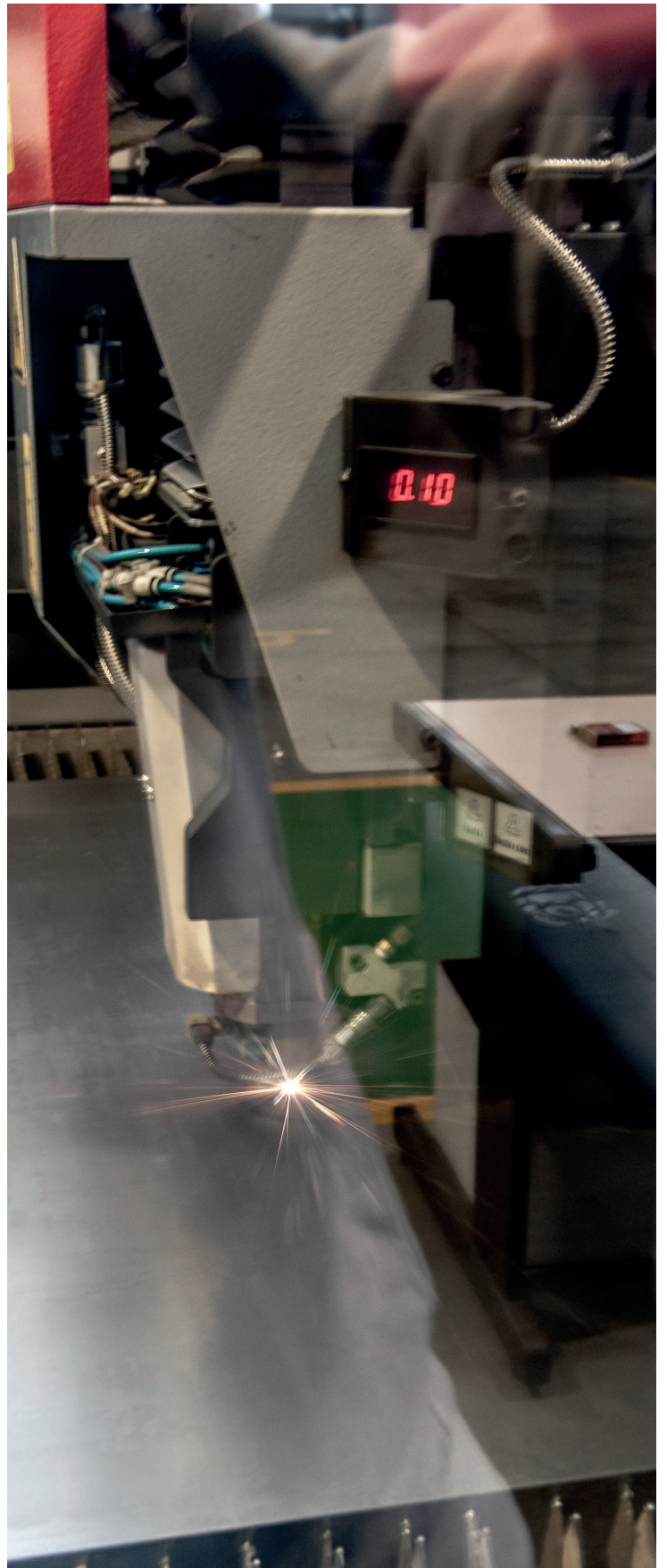
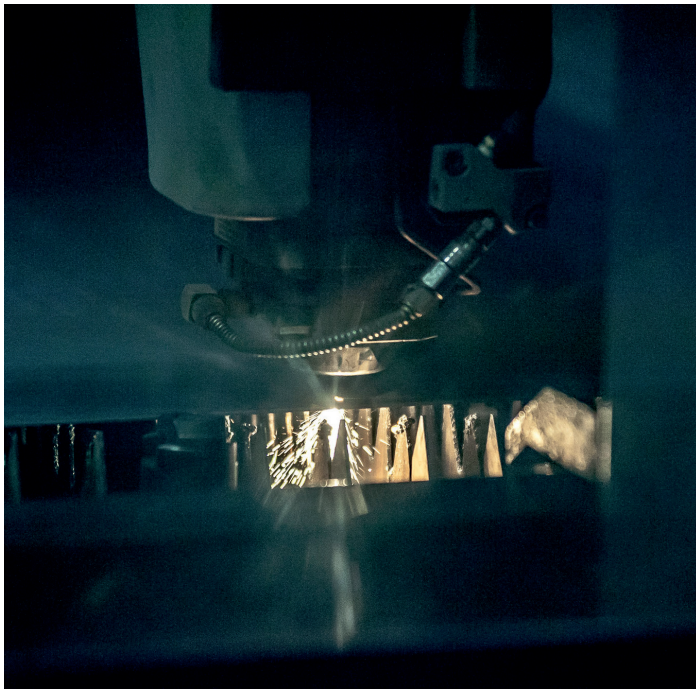
PRODUCTION

100% made in Italy, our products comply with the strictest international regulations in terms of safety and efficiency. We guarantee the production of **customised ventilation units with quality standards tested in every stage of the process.**



R&D

Continuous technical innovation, research into new functions and tests of conformity with existing regulations: **our research and development department is the beating heart of our business.**



We monitor the whole manufacturing process, step-by-step, from design to delivery. Punctual pre- and after-sales service has always been our great strength, as well as rigorous yet flexible logistics that enable us to operate as leaders in highly competitive markets.

DYNAIR® overview

DYNAIR® fans are the results of a detailed and **constant R&D activity** which is vital for the purpose of both promoting continuous **technological innovation** and guaranteeing the efficiency and compliance with current regulations. The complete range is designed and produced in conformity with the latest norms, especially focusing on **Safety**.

All our production is 100% Made in Italy.

The **application fields** of DYNAIR® fans cover a wide range of sectors: from chemistry and jewellery laboratories to galvanic and metal treatment systems, from petrochemical industry to environment purification systems, from corrosive and dangerous fumes to ATEX ventilation. We have a **wide reference list of projects at the international level:**

- Electrical power stations
- Oil refineries
- Off-shore oil platforms
- Natural gas treatment stations
- High speed railways
- Underground metro stations
- Chemical industries
- Waste and sewage treatment
- Recycling plants
- Smoke evacuation in case of fire
- Underground car parks
- Ship building and maintenance
- Telecommunication
- Public buildings
- Shopping malls

DYNAIR® is working in accordance with the following standards:

Quality

ISO 9001:2015 Quality management system

ISO 45001:2018 Health and safety management system

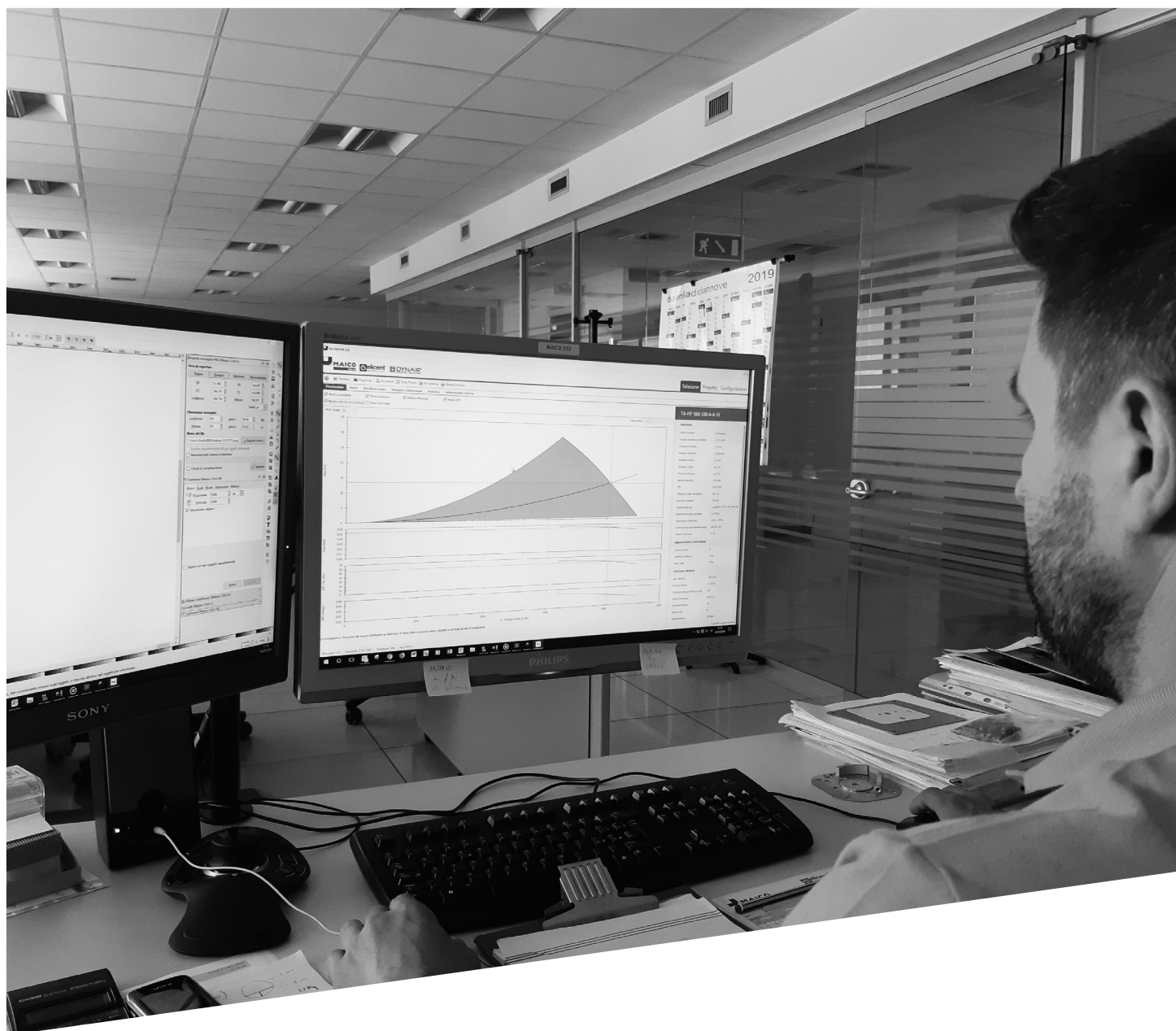
Both certifications are monitored by CSQ. Certificates are available on www.dynair.it

CE marking

The **CE** marking is a mandatory conformity mark within the European Economic Area. The whole Dynair production is CE marked, which means that as a producer, Maico Italia asserts that the fans meet all the essential requirements of the relevant European Directives.



Testing

- ISO 5801: "Industrial fans, performance testing"
- AMCA 210-07: Laboratory methods of testing fans for aerodynamic performance rating"
- EN 12101-3: "Smoke and heat control systems - powered smoke and heat exhaust"
- EN 12101-6: 2005: "Smoke and heat control systems specification for pressure differential systems - "Kits".
- Machinery Directive 2006/42/EC
- Low voltage Directive 2014/35/UE
- EMC Directive 2014/30/UE
- Rohs-2 Directive 2011/65/UE
- ATEX Directive 2014/34/UE
- ErP Directive 2009/125/CE, Regulations 327/2011, 1253/2014, 1254/2014



Selecting the correct fan

Dynair® is able to offer a real and valuable engineering support thanks to the **experienced and highly skilled technical assistants, all with consultancy-based training**, that accompany you step-by-step and know how to guide you in choosing the right solution, with the help of two technologically-advanced support tools:

-  **The selection software BLOWDYN 2.0**, a highly accurate tool that can quickly and easily identify the most suitable product for producing any ventilation installation or system. Available online on **www.dynair.it**.
-  **The CFD (Computational Fluid Dynamics) analysis software** for simulating all the fluid dynamics variables, i.e. the conditions of use for a ventilation system.

Testing



There are different potential risk elements subsequent to a fire which have a direct influence on the occupants' safety: the release of gas and toxic substances, the diffusion of fire and very high temperatures, the reduction of the oxygen and the increase of carbon monoxide in the air can immediately lead to the lack of visibility, the impossibility to escape and a quick poisoning or suffocation. **As manufacturers of fire-fighting products, evaluating the strength, the stability and the fire-resistance of our fans is of paramount importance.** Fire-fighting fan design and installation is regulated by the **European standard EN 12101-3** which establishes the temperature ranges/operation time certified products must comply with. All our fans for smoke extraction comply with such standard and are tested and certified by the independent notify body Applus+, a worldwide leader in the testing, inspection and certification sector and a primary European reference laboratories with over 25 years' experience working in fire-testing.



Maico Italia is a proud member of the North-American AMCA, the Air Movement and Control Association which mission, at global level, is to advance the knowledge of air systems and uphold industry integrity on behalf of AMCA members worldwide.

Certified Ratings Program (CRP)

AMCA International's Certified Ratings Program (CRP) assures that a product line has been tested and rated in conformance with AMCA International's test standards and rating requirements. Performance seals are documented and displayed on equipment after a product has been tested and its cataloged ratings have been approved by AMCA International's staff. Each certified product line is subject to continued check tests in AMCA International's laboratories. All certified products are open to challenge testing that any third party or competing manufacturer may initiate.



A TA fan being tested in AMCA



TA Ventilation system

High performance duct axial fans

Application and duties

TA series are duct axial fans with aerofoil impellers and adjustable pitch angle for maximum efficiency. They are particularly indicated in those applications that request an absolute conformity to high specifications in terms of pressure and air volume. They are available in sizes from diameter 400 mm to 1600 mm (bigger sizes upon request) for performances ranking up to 210.000 m³/h and 1.500 Pa. Higher pressures can be reached with two fans installed in series. Fan performance and sound emission are in accordance with Amca 210 and 301, category D (see Installation type at page 10).

Construction

Casing - Long cased execution as standard, manufactured in steel sheet epoxy painted, with fixing flanges manufactured according to UNI ISO 6580-EUROVENT standard. An inspection door is fitted on the casing.

Impellers - The high performance axial impeller with aerofoil blades are totally made in die-cast aluminium and balanced according to ISO 1940 Norm. Their aerodynamic profile guarantees high aerodynamic performance and low noise level.

For each diameter a wide range of pitch angles can be set during assembly thanks to the design of the hub. This allows to accurately meet the optimum reachable working point of each ventilation project.

Motors - TA fans are equipped with built-in asynchronous three-phase motors according to international standards IEC 60034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP55, class H or F. They are suitable for S1 service at constant load. Execution 4 (with impeller directly coupled to motor with feet) and airflow from impeller to motor as standard.

Upon request

- Bigger sizes.
- Casing protected against the atmospheric agents by hot dip galvanizing.
- High temperature external terminal box.
- IE3 motor.
- 2 speed version.

Accessories

- Inlet/outlet cone (CCbo)
- Damper (CCda)
- Outlet terminal (CCot)
- High temperature flexible joint (CCga-HT)
- Flat protection grid (CCr)
- Support feet (CCst)
- Counter-flange (CCf)
- Counter-flange with collar (CCfc)
- Cylindrical silencers with or without pod (CCsa/CCsb)
- Anti-vibration mounts








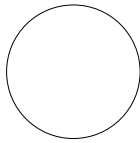
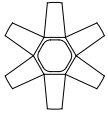
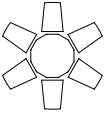
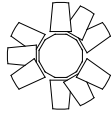
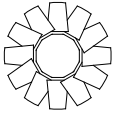
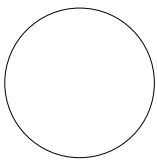
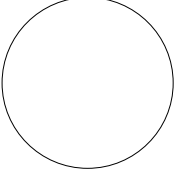
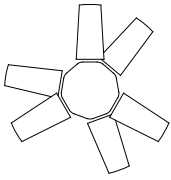
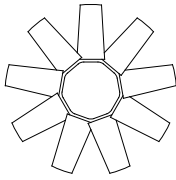
TA Ventilation system

Available TA ranges

TA Series	Application	Impeller diameter mm	Temperatures			Frequencies		AMCA Sound performance FEG
			-20°C to +70°C	300°C 2 hrs	400°C 2 hrs	50Hz	60Hz	
TA HP	Exhaust/Supply	400 - 1600	•			•	•	•
TA HT F300/120	Exhaust	400 - 1600	•	•		•	•	
TA HT F400	Exhaust	400 - 1600	•		•	•		•

TA-HT	1250	406	12-9	33
Fan model	Ø in mm	Hub	Blade	Pitch angle

Item description legend

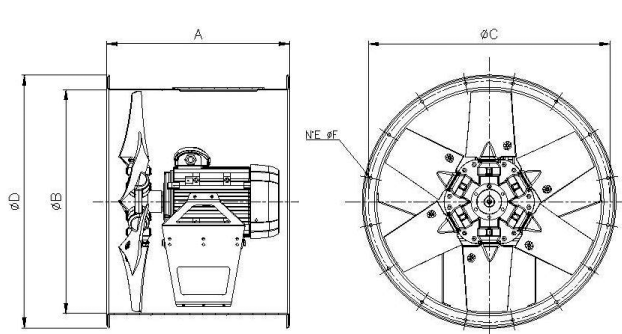
Diameters (mm)	Types of Hubs / Blades
From Ø400 to Ø710  	150-6-6 240-12-6 240-12-9 240-12-12    
From Ø800 to Ø1250  	297-6-6 406-12-6 406-12-9 406-12-12    
From Ø1400 to Ø1600  	523-9-6 523-9-9  

TA Ventilation system

Installation types

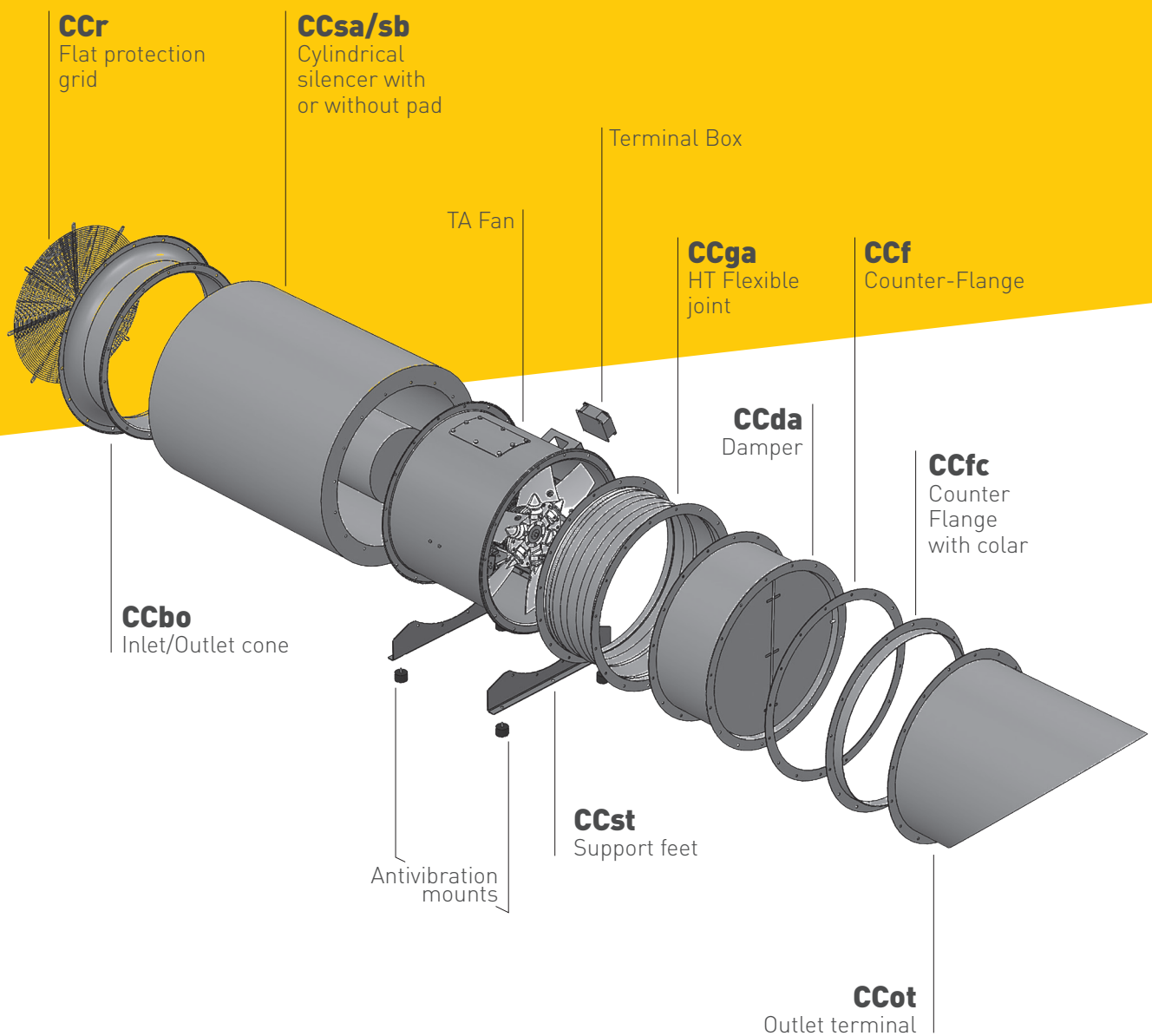


Dimensions (mm)



TYPE	A	B	ØC	ØD	E	ØF	kg
TA 400	450	400	450	503	8	12	54
TA 450	450	450	500	553	8	12	82
TA 500	575	500	560	603	12	12	131
TA 560	575	560	620	623	12	12	150
TA 630	725	630	690	733	12	12	167
TA 710	600	710	770	813	16	12	173
TA 800	650	800	860	903	16	12	202
TA 900	770	900	970	1013	16	16	268
TA 1000	840	1000	1070	1113	16	16	318
TA 1120	840	1120	1190	1233	20	16	491
TA 1250	1090	1250	1320	1367	20	16	653
TA 1400	1400	1400	1470	1517	20	16	1235
TA 1600	1400	1600	1680	1717	24	16	1182

TA Ventilation system





Maico Italia headquarters in Lonato del Garda, Brescia, Italy.



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We are at your full disposal for any inquiry related to professional ventilation;
our technical team will take care of any special request and will find
a solution able to meet your spec's.

sales@maico-italia.it

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