series

laboratory furniture

PratiKa

KEY TO SAFETY

FERRARO
arredi tecnici

www.ferraroat.it

PRATIKA
KEY TO SAFETY

PRATIKA
SAFETY GETS SMART

The operator-centred collective protection device

PratiKa is the **Made in Italy** fume cupboard designed and manufactured by Ferraro Arredi Tecnici to ensure maximum safety in professional laboratories, with no compromise on **performance, energy efficiency and design.**

Operator protection is an essential requirement. PratiKa has been engineered to strict fume containment criteria, validated through advanced in-house testing, and certified compliant with European and national standards. Every detail is designed to ensure a controlled and protected working environment.

High-tech safety without compromise.

Green Pix is the technological heart of PratiKa: a high-tech system enabling **continuous monitoring and management of critical parameters,** smart alarm supervision and recording, and control both in front of the hood and remotely, through a simple, intuitive interface. A system **fully integrated with Industry 4.0 and 5.0 models**, designed to streamline working procedures, make integration between fume hoods and the Building Management System (BMS) simpler and more effective, and make two-way remote control and remote connection to any online platform leaner and more secure. Always connected, quickly and in a modern way.
PratiKa makes the laboratory a safe, operator-centred environment that simplifies day-to-day work in complete safety.

PratiKa
MEANS
INNOVATION
→
IN LAB
FURNITURE

flexible

safe

sustainable

high-tech

FROM ZERO
TO PRATIKA

Safety tested in our own test chamber

Ferraro Arredi Tecnici's goal is to ensure the highest level of safety. To meet this challenge, **we have developed a state-of-the-art production site** entirely dedicated to the engineering and manufacture of our products, where we implement innovative technologies and production processes to guarantee outstanding quality standards.

Delivering maximum flexibility

The effectiveness of our fume hoods is **tested in our new test chamber**, a cutting-edge facility approved by a certification body to carry out rigorous testing, ensuring the reliability of every single fume cupboard.

In this facility we systematically test:

- AERODYNAMIC PERFORMANCE
- FUME CONTAINMENT LEVEL
- ELECTRONIC CONTROL SYSTEMS
- MATERIAL QUALITY AND RESISTANCE

Direct control of the entire production cycle allows a **careful, scientific assessment of numerous parameters** during the design and engineering of the fume cupboard, improving its geometry, structural components, and extraction and containment logic.

PratiKa is the result of this professional approach: constantly striving to improve the functionality and performance of the fume cupboard, towards absolute safety for those working in the laboratory.

Our production philosophy: ***test every innovation***

Pratika

DESIGNED
FOR EVERY NEED

Two models, three configurations. With PratiKa, you choose

A fume cupboard truly designed around the operator must let users choose the solution that best suits their workflow and aesthetic preferences.

The PratiKa Core and PratiKa Side models offer the **same build quality** and the same safety and containment performance.

With PratiKa, the choice is yours. Services can be installed below the worktop in an integrated service panel, or on the side posts of the structure.
PratiKa is also available in 3 functional configurations, designed to meet every specific requirement: Standard, Distillery and Walk-in.

PratiKa Core and Side

Two models, the same quality

PratiKa Core

Below-worktop positioning of the services, housed in an integrated service panel, optimises the working space inside the fume cupboard, making the most of the ratio between its external footprint and the usable worktop size. In addition, the single glazed side panels provide wide lateral visibility and let natural light into the fume cupboard.

PratiKa Side

The **service side posts** improve access to fluid and electrical services and enhance the ergonomics of the fume cupboard.

Services can be positioned at the most suitable height for correct use by the operator. PratiKa is the fume cupboard that adapts to the needs of the laboratory.

THREE WAYS
TO BE PRATIKA

Standard, Distilleria and Walk-in

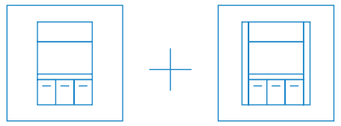
PratiKa is available in three different configurations.

The aim is to provide operators with a protective device that adapts to day-to-day work, while offering an advanced fume containment system.

STANDARD
available for Core and Side

DISTILLERY
available for Core and Side

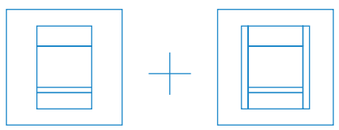
WALK-IN
available for the Side model



CORE *SIDE*

PRATIKA
STANDARD

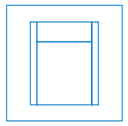
The most popular, **multi-purpose** configuration. The worktop is set at 90 cm from the floor, in line with the height of laboratory benches, ensuring optimal ergonomics for everyday tasks.



CORE *SIDE*

PRATIKA
DISTILLERY

Designed for **large vertical equipments**, such as traditional distillation units. The worktop is set at 60 cm from the floor, allowing distillation set-ups to be housed safely and easily inside the fume cupboard.



SIDE

PRATIKA
WALK-IN

Featuring a **double sash frame that opens down to floor level**, this configuration has no worktop and allows walk-in access to the interior work chamber, both for the operator and for instrument trolleys. Ideal for setting up experimental pilot plants or bulky equipment.

UNCOMPROMISING
BUILD QUALITY

Technical features and selected materials

PratiKa Core

High-strength stainless steel pulley and cable system connecting the glazed front sash to the rear counterweight system, easily inspectable from the front of the fume cupboard.

LED lighting fitted on the top canopy, outside the fume cupboard interior.

Ø 250 mm spigot for connection to the exhaust system.

Back panel and top of the fume cupboard interior made of HPL panels resistant to aggressive agents

Metal front panel, easily removable for maintenance and inspection of the top section

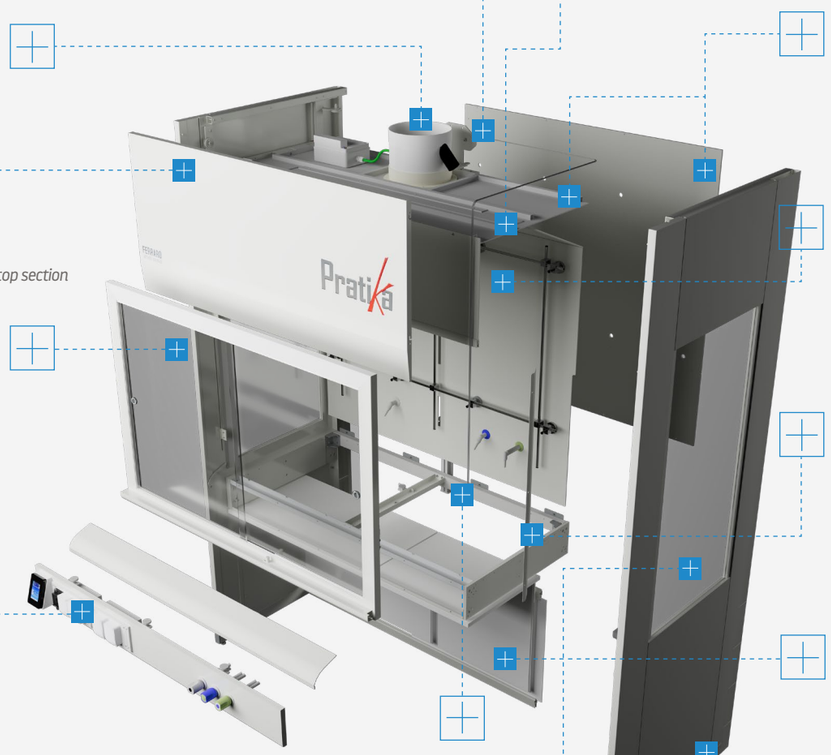
Dual extraction plenum inside the fume cupboard to efficiently capture both heavy and light fumes, increasing the overall containment index.

Front sash in painted aluminium with horizontally sliding safety glass panes. Mechanical maximum-opening stop according to EN 14175

Integrated system of internal side baffles and front airfoil, designed to minimise turbulence and optimise the airflow entering the work zone. Less disturbance, better fume containment.

Front service panel with electronic fume cupboard control panel

Sliding lower infill panel for easy inspection and maintenance of the technical compartment below the fume cupboard.



Sturdy worktop support frame fixed to the self-supporting side walls, allowing the worktop to be replaced easily at any time without dismantling the fume cupboard.

Glazed side panels

Self-supporting structure and glazed side walls in solid steel, epoxy-polyester powder coated for long-lasting, top-quality strength and resistance to aggressive agents. Adjustable feet for correct installation.

PratiKa Side

Central body of the fume cupboard with the same features and operation as PratiKa Core

Electronic fume cupboard control panel.

Double side post with high-strength epoxy-polyester powder-coated steel frame, acting as a service void for building services and carrying full-height front service outlets

Recess in plastic material resistant to aggressive agents:

- *to make full use of the total width of the worktop inside the fume cupboard;*
- *to house an optional cup sink with tap;*
- *to access the cable grommet linking the fume cupboard interior to the outside and to the power socket area.*

Access doors to recessed power sockets and to the cable glands connecting with the fume cupboard interior. Maximum ergonomics and a clean look on the working front

Arrangement for multiple remote-controlled valves for fluid and gas services and pressure reducers for technical gases. Available on both side posts

Arrangement for taps.

PROTECTING **THE OPERATOR**

Outstanding containment performance

The fume cupboard is the **primary safety device** in professional laboratories.

PratiKa is built to protect those who work with it

When handling harmful and hazardous chemicals, it is essential to have a system capable of protecting the working environment and, above all, the people who work there every day.

Through a **constantly monitored extraction system**, our PratiKa fume cupboards capture gases, vapours and particulates and exhaust them outside before they can disperse into the laboratory work area and reach operators, reducing exposure and allowing staff to work with complete peace of mind, whatever the hazard level of the substances handled.

Every element contributes to risk prevention and to maintaining ideal operating conditions.

1. *Large glazed surfaces with explosion-resistant safety glass.*
2. *A safer sash to prevent physical hazards: certified anti-drop system in the event of cable failure; guaranteed minimum clearance between the sash and the worktop to protect the operator's hands and forearms.*
3. *Safety stop set at 50 cm above the worktop.*
4. *Carefully selected high-quality materials ensure lasting performance even in demanding environments, guaranteeing high safety standards from the first to the last day of use of our fume cupboards.*
5. *The structure is designed and certified to meet all electrical and mechanical safety requirements of the applicable standards.*
6. *The aerodynamic design of the external profiles and the internal chamber ensures a stable exhaust airflow.*

AVERAGE TRACER GAS CONCENTRATION

≤0.1 ppm

ROBUSTNESS OF CONTAINMENT

≤0.3 ppm

FACE VELOCITY

≥0.3 m/s

Large worktop

The worktop extends right up to the side walls of the fume cupboard, maximising the working surface without increasing the external footprint. The fume cupboard **can be fitted with taps, cup sinks and a rear lattice frame** to support equipment. The glazed side panels widen the field of view and improve brightness inside the work chamber.

Front-mounted services

In the PratiKa Side version, services are **positioned at the front for easier access** during work.

Recessed cup sink

Housing the cup sink in the double side post **makes the most of the width** of PratiKa Side.

Cabinets below the worktop

To optimise space, **cabinets can be integrated** below the worktop for material storage, or ventilated safety cabinets.

FULLY **DISASSEMBLABLE**

Built to last

Every component of the fume cupboard can be dismantled

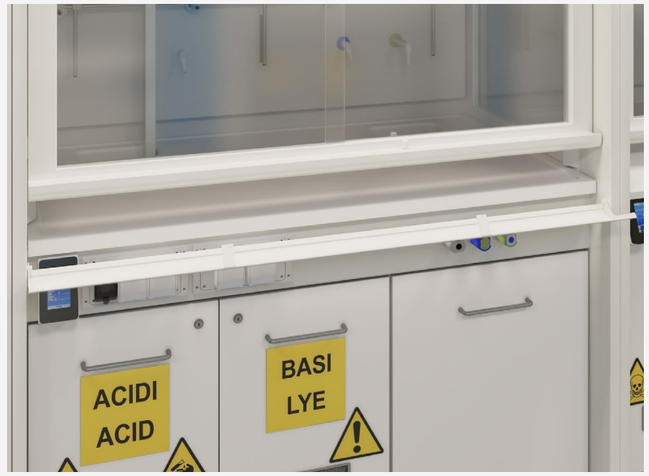
PratiKa has been designed according to the principle of **complete disassembly**.

This feature meets the criteria of **sustainability, easier maintenance and recyclability**. This construction method allows materials to be managed selectively and helps extend the product life cycle, reducing overall environmental impact. **All components can be dismantled easily.** The benefits of disassembly:

1. *Routine maintenance can be carried out from the front of the fume cupboard, so there is no need to move the unit for servicing.*
2. *Quick replacement of components, reducing downtime.*
3. *Easier cleaning and decontamination.*
4. *Easier end-of-life disposal of materials, in compliance with environmental regulations and with a circular economy approach.*

PratiKa provides operators with **a collective safety device built to stand the test of time**, always maintaining high performance. Every component of our PratiKa fume cupboards is prepared independently in the factory and then assembled on site. This makes handling easier and allows every element of the structure to be disassembled in future if needed or for maintenance.

Furthermore, no material is ever bonded to a different material, allowing all future waste to be disposed of separately.



In the Side version, the side posts act as service extensions and are easy to remove, simplifying both initial installation and the maintenance or replacement of integrated services.

Easily removable dual extraction plenum. The brackets allow multi-purpose tubular lattice frames to be fitted.

Easily removable worktop, with no need to work on the structure.

GREEN PIX
HIGH-TECH CONTROLLER

The technological heart of PratiKa

Our search for new technologies serving modern laboratories continues: **Ferraro Arredi Tecnici presents Green Pix**, PratiKa's **digital controller**, ushering in the next generation of fume cupboard control systems.
The operational core and smart brain of PratiKa fume cupboards, Green Pix is a control centre for managing all fume cupboard functions and monitoring correct operation in real time, even remotely, removing every barrier between operator and device thanks to a simple, intuitive HMI.

The fume cupboard enters the Industry 5.0 era

With **Green Pix**, the laboratory manager and/or the building services manager (BMS) can access and check operation from anywhere, through a dedicated portal included in the supply at no subscription fee, via a web app protected by multiple password levels, from any PC, Android or iOS device, whether company-owned or personal.
A single click on the icon puts every function, data point and alarm of the fume cupboard at your fingertips, wherever you are.

An intuitive colour-coded signalling system gives an instant view of the **operating status of each fume cupboard**. Stand-by, Running, Alarm or Maintenance Required are always signalled to the operator, both visually and as an online remote signal, providing a constantly updated overview of the operating status of every PratiKa fume cupboard.

The controller features a large colour **touchscreen display** with clear, intuitive graphics, showing operating data, the alarm list and alarm history, and all configuration parameters, accessible at different levels through dedicated passwords for the customer's managers, maintenance managers and the system administrator. A multi-page menu gives clear control of extraction and performance values, and allows every working function to be operated: fan on/off, lights, power sockets and main system.

Integrated Ethernet TCP/IP connectivity provides **stable, fast communication with the building BMS**, enabling the fume cupboard to interact with other digital environments and integrate into laboratory workflows.

Every function is designed to simplify work, reduce downtime, improve safety and increase transparency in the management of our PratiKa fume cupboards.

With Green Pix you can:

1. *Easily access all data processed by the fume cupboard*
2. *Monitor operation and assess any inefficiencies and alarms to pinpoint the root cause of a problem, both at the fume cupboard and remotely*
3. *Schedule servicing with dedicated countdown hour meters for filters and fume cupboard*
4. *Operate remotely and via remote assistance*
5. *Integrate each individual fume cupboard into the Building Management System*
6. *Check the fume cupboard's operating status at any time: 4 colours for 4 statuses*

The web portal for data communication, remote assistance and remote control involves no additional fees or subscriptions

ADVANCED **CONTROL SYSTEM**

Monitoring velocity and airflow

Using a state-of-the-art electronic control unit and a front HMI operator panel, the Green Pix system can **monitor, manage and control every vital parameter of our** PratiKa fume cupboards, always ensuring optimal extraction and fume containment performance by continuously adjusting the exhaust airflow according to the actual opening of the front sash or its horizontally sliding panes. This adjustment works both with individual fan/fume cupboard systems and with centralised extraction systems. **Monitoring and always maintaining the right extraction level** delivers high energy efficiency, with no waste of air needlessly extracted from the laboratory, and excellent levels of operator safety.

Ferraro fume cupboards offer **two different airflow control systems.**

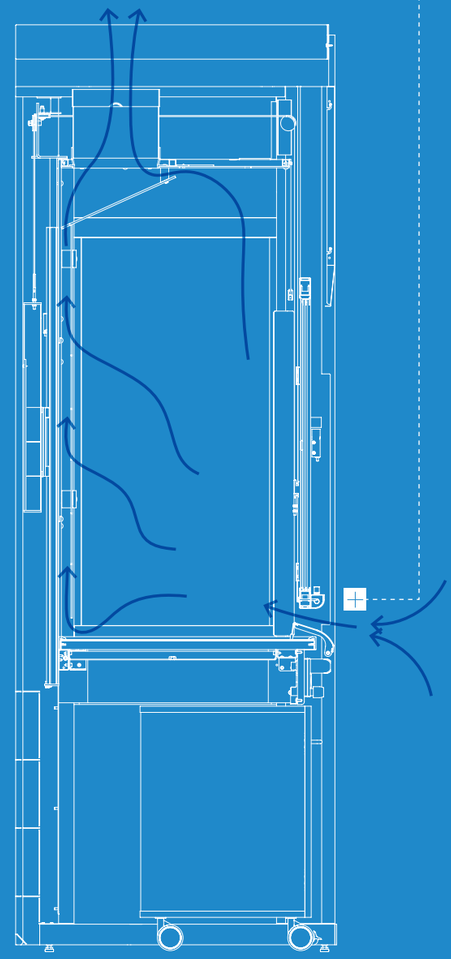
Velocity control

This control system **measures air velocity** with a hot-wire sensor located on the top of the fume cupboard.
The measured velocity is compared with the set-point velocity, and **the system automatically varies the exhaust airflow to keep the face velocity constant**, even with horizontally sliding panes. Velocity control is a highly sensitive and precise system.

Flow rate control

In this configuration the system measures the exhaust airflow with a **sensor located along the fume cupboard exhaust duct**. The measured airflow is compared with the set-point airflow defined for each front sash position, and the electronic control unit automatically adjusts the fume extraction rate to keep the face velocity at the working opening constant. This solution **is suited to complex environments with many** hard-to-manage variables, and where heavy evaporation of liquids or high concentrations of explosive substances are present.

EXTRACTION SYSTEM



Airfoil

The airfoil sill closing the lower part of the front opening has been designed to **optimise the flow of gases and vapours.** It can be opened to allow bulky equipment to be brought in.

Dual extraction plenum

Gases and vapours do not spread evenly in the work chamber. Denser vapours collect in the lower areas, while lighter ones rise. **PratiKa acts on both layers.** The fume cupboard has two extraction plenums to ensure maximum extraction both at the top of the chamber and at the worktop surface.

Sash handle and internal side baffles

The sash handle **stabilises incoming air along the lower edge of the glass**, at the operator's face height. The internal side baffles connect the chamber side walls to the back wall and eliminate corners where air would otherwise stagnate, directing it towards the extraction plenums.

Brushless motor

The brushless motor maintains high efficiency across the entire control range and responds precisely to commands from the control system.
The absence of brushes eliminates one of the most common sources of wear requiring servicing. This system also reduces environmental impact.

BETTER QUALITY OF WORK IN THE LABORATORY

The device is in continuous use, and operating conditions affect the quality of work. PratiKa has been designed with users' working comfort in mind.

Ergonomics

In the Standard configuration the worktop is set at 90 cm from the floor, level with laboratory benches: **operators keep the same posture when moving between the two workstations.** In the DS version, services installed on the side posts can be positioned at the most suitable height, reducing movements in a bent posture.

Microclimate conditions

The automatic airflow controller (VAV), combined with an operating face velocity of 0.3 m/s, reduces the exhaust volume and with it the required make-up air. The result is **more stable microclimate conditions and lower air velocities at adjacent workstations.**

Acoustic comfort

Extraction noise is continuous and causes fatigue even at levels below the risk thresholds set by regulations.
Reducing the flow rate significantly lowers noise emissions. PratiKa operates at reduced flow rate, cutting the noise generated by air passing through the fume cupboard. In addition, the brushless motor contributes with smooth rotation and none of the vibration associated with brush contacts.

QUALITY MATERIALS FOR A HIGH PERFORMANCE FUME HOOD

Where design meets functionality

The PratiKa fume cupboard has a clean, technical design. Its **clean lines and compact shapes** follow the stylistic and functional logic of modern laboratories, blending seamlessly with laboratory furniture.

Epoxy-polyester powder coating strikes the perfect balance between technical performance, aesthetic value and chemical resistance to acids and solvents, extending the service life of every fume cupboard. Solvent-free, the coating complies with the latest environmental regulations.

The interior work chamber is fully lined with HPL panels (high-pressure laminate) with a chemically resistant surface treatment, giving high resistance to most substances commonly used in research and quality-control laboratories.

Special linings in plastic materials such as polypropylene and Teflon (polytetrafluoroethylene, PTFE) are available for interior parts for heavy-duty use and aggressive acid attack. A porcelain stoneware lining is also available.

All transparent surfaces are made of **safety glass** which, in the event of an explosion inside the fume cupboard, does not project fragments towards laboratory users.

You can **choose under-cupboard cabinets** in standard versions, ventilated for acids and bases, or as safety cabinets for storing solvents and flammables. Here too, materials and finishes are of the highest level, in line with the high standards of our PratiKa fume cupboards.

Interior linings in polypropylene and Teflon, or porcelain stoneware, are available depending on the application.

Epoxy-polyester powder coating for the perfect balance between aesthetic value and chemical resistance.

LOWER COSTS, **GREATER SUSTAINABILITY**

The fume cupboard that optimises energy demand

The PratiKa series features a **state-of-the-art exhaust airflow control system**. An innovation that reduces the fume cupboard's environmental impact, strongly supporting a green shift that leads the modern laboratory towards a new, more sustainable operating paradigm.

Less exhaust air means less energy.

PratiKa stands out for its ability to **significantly reduce the energy needed** to maintain correct airflows for the highest levels of operator protection.
The system is designed to ensure effective containment even at reduced airflow rates.

An optimal combination of electronic extraction control and the shape of the internal extraction chamber delivers **maximum performance with the lowest possible volume of exhaust air**.

This is complemented by **dynamic, motorised control of the front sash frame**, which closes automatically when not in use by the operator, allowing the electronic extraction control unit to reduce exhaust air to a minimum.

Technical details that translate into direct energy and cost savings.

Containment values in line with UNICHIM guidelines, at an operating face velocity of 0.3 m/s.

STANDARDS: **A GUARANTEE OF SAFETY**

Choosing a certified fume cupboard is an act of responsibility

PratiKa has passed all the tests required by **EN 14175** and has been certified by **Bureau Veritas**, a third-party body recognised at European level.

PratiKa meets all the required parameters.

This means that every functional aspect, from containment to monitoring and resistance in extreme environments, has been **assessed against objective, validated criteria.**

In addition, PratiKa complies with **UNI/TS 11710:2023,** which sets even stricter thresholds for containment, robustness and airflow stability under dynamic conditions.
It has also passed the electromagnetic compatibility tests required by **EN 61010 and EN 50370**, ensuring maximum safety and reliability across all electrical and service installations.

PratiKa meets all the required parameters, positioning itself as one of the **most reliable solutions on the market today.**

Certifications

UNI EN 14175
Parts: 2:2004 – 3:2019 – 4:2005 – 5:2007 – 6:2006 – 7:2012

EN 50370
Parts: 1 / 2

EN 61010
Part: 1

ABOUT US

Ferraro Arredi Tecnici manufactures Made in Italy laboratory furniture designed for cutting-edge professional laboratories. With over **60 years of experience,** our company has grown from a small joinery workshop in the heart of Val Bormida into a trusted partner for leading Italian and international organisations.

Our entrepreneurial spirit has driven continuous growth, both in production capacity and in the quality of the services we offer. Today, **Ferraro Arredi Tecnici** looks to the future with a clear, shared vision: to constantly innovate production technologies and deliver solutions that meet our customers' most demanding requirements.

With a **production facility of over 4,000 m²** and a warehouse for immediate delivery, we guarantee fast production and delivery times while maintaining high quality standards at every stage. Our highly qualified team handles every detail in-house, from R&D to prototyping, ensuring complete control over the quality of the finished product.
Our ISO 9001, ISO 14001 and ISO 45001 certifications are tangible proof of our commitment to quality, safety and sustainability. Ferraro AT is not just a manufacturer of laboratory furniture: we are the partner supporting the evolution of tomorrow's laboratories, **with innovative, tailor-made solutions to meet the challenges of the future.**

RELY ON FERRARO

1 **QUALITY LABORATORY FURNITURE**
*Managing the production process in-house allows us to offer **numerous benefits in terms of build quality**. Ferraro AT selects **top-quality raw materials** from qualified suppliers and entrusts laboratory installation to specialist technicians.*

2 **EXPERIENCE**
*Our technical and professional expertise, built over many years, enables us to deliver an **excellent service**, structured to respond effectively to the changing spatial and technological needs of laboratories.*

3 **SUPPORT AT EVERY STAGE**
Ferraro AT offers free coordination of the laboratory project, from initial concept to acceptance testing. For every project, the customer benefits from dedicated technical and administrative supervision by our own experienced technicians.

4 **AFTER-SALES SERVICES**
After acceptance testing, we continue to support laboratories with maintenance programmes to preserve furniture performance, and with fast, effective after-sales service.

5 **PRODUCTION CAPACITY**
*We use **latest-generation machining centres** to improve production cycles, together with high-precision survey and drawing tools capable of producing 3D models directly during the site survey. Our highly qualified staff have extensive experience and expertise in laboratory furniture, covering installation, design and site management.*

Scan
the QR code

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