EN
1st Edition

TECNO-GAZ industries

DENTAL MACHINE A6

5-AXIS MILLING MACHINE FOR THE DENTAL LABORATORY

The new range of compact milling machines
by Dental Machine

Start however you want, but start off great!

A6, the milling machine range to start your digital journey at the top.

A6 | **A6** Plus | **A6** Evo

HIHG TECHNOLOGY
100% MADE IN ITALY

Enter the digital age as a protagonist

Compact Dental Machine milling machines. No compromise. Superior quality and reliability.

The new A6 Dental Machine range has been designed to meet the needs of dental technicians for a compact milling machine that does not compromise the industrial construction logic that has always made our milling machine models stand out. The unrivalled quality of the materials used, and the latest generation electro/mechanical components built in, make the A6 a true masterpiece to add to the range.

Compact, intelligent design

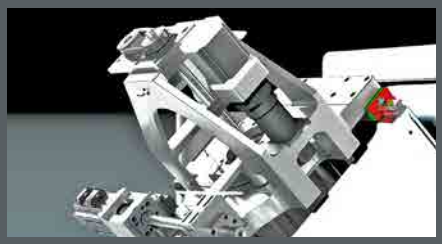
Tabletop machine, designed for soft materials

Built to work hard... using soft materials

Solid steel structure for maximum stability (98 Kg)

All the control you need

Optimised strategies for continuous 5-axis milling on all materials



High-end mechanical components

Cartesian movements with ground screws and recirculating ball bushings

Super-optimised operation

Automatic 11-position tool changer

Undeniable quality

Jäger high-frequency spindle, 0.4 kW or 0.55 kW and 60,000 rpm for 3 mm tool shank

The ideal solution is in the range

A model to suit every requirement of the digital laboratory

Creating a range of products means thinking about one's customers and their needs, and it was with this in mind that the A6 line was created. Not just equipment, but a solution to every demand, developed to help and facilitate the work and production of dental laboratories. The A6 range emerged to meet the needs of professionals wishing to be part of the digital age without compromising the outstanding performance for which the high-end Dental Machine systems are known.

A6

Everything you need for a great start, and designed to adapt as you do

- 5-axis compact milling system
- 0.4 W JAGER pneumatic spindle
- Stepper drive motors
- 11 tools with automatic recognition and change
- Complete with Cam
- Dry or wet processing (System available upon request)
- 7 bar air consumption

A6 Plus

For the advanced user looking for a practical, effective device

- 5-axis compact milling system
- JAGER 0.55 kw electro-pneumatic spindle
- Stepper drive motors
- 11 tools with automatic recognition and change
- Complete with Cam
- Dry or wet processing (System available upon request)
- 2 bar air consumption

A6 Evo

Power concentrated into a compact, functional chassis

- 5-axis compact milling system
- JAGER 0.55 kw electro-pneumatic spindle
- Brushless transmission motors
- 11 tools with automatic recognition and change
- Complete with Cam
- Dry or wet processing
- Air supply with integrated compressor

TECNO-GAZ industries

Digital native.

App Dental Machine Remote Control

For remote access to the machine to check all functions and production status.

Live chat on Telegram with your A6

You can access your milling machine from your phone and receive real-time Information using the free App Telegram®.

SmartAlert

Advanced alarm functions with text-message or email alerts for real-time notification of operating problems.

Cloud backup Dental Machine

Operating and calibration parameter settings automatically saved for maximum security.

Choose A6 and you're at the heart of a digital ecosystem designed for you!

Maximum productivity, maximum control, maximum sharing. Your A6 is designed to work in an increasingly digital world, with remote access to any function using a simple smartphone, tablet or PC, just as if you were standing next to the machine. These features of the A6 guarantee excellent productivity and safety.

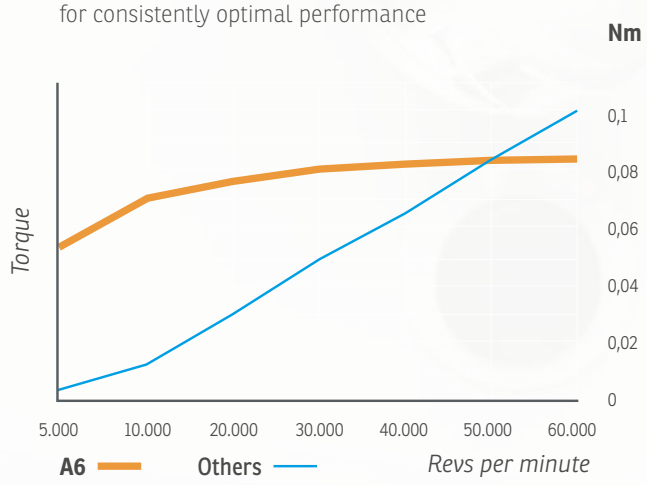
Photo by Dental Style Laboratory - Erbusco (Bs)

Why choose the A6?
Jäger electrospindle
60.000 rpm - 0.4 or 0.55Kw - Torque: 8 Ncm

PRECISION

REPEATABILITY

High torque at all speeds,
for consistently optimal performance



The A6 also makes use of spindles made by Jäger, a market-leading German manufacturer: a guarantee of quality, performance and durability for optimal milling at both low rpm and high speeds. The deciding factor is the torque of this electro-spindle (8Ncm). This makes the A6 powerful even at 20,000 rpm. This sets it part from other electrospindles that must operate at very high speeds, which are not always necessary (or appropriate in some cases). High rotation speeds can also burn the tool and significantly compromise its service life.

Why choose the A6?
Single-piece Aluminium block casting.

SOLIDITY

STABILITY

Single-piece Aluminium block
to ensure maximum rigidity and minimum thermal differential between the components

Streamlined design
to facilitate cleaning of the chamber

140 Kg

Reduced vibration, longer service life of mechanical components

Better machine assembly, fewer errors, less maintenance

Significant reduction in wearing of the mill due to increased stability

The structure is obtained from the casting of a single aluminium block instead of assembled sheets. Its solidity is a crucial factor in terms of stability during milling, leading to higher quality, more refined processing and extending the service life of the tools.

Why choose the A6?

Superior quality and immediately ready for operation

READY TO WORK

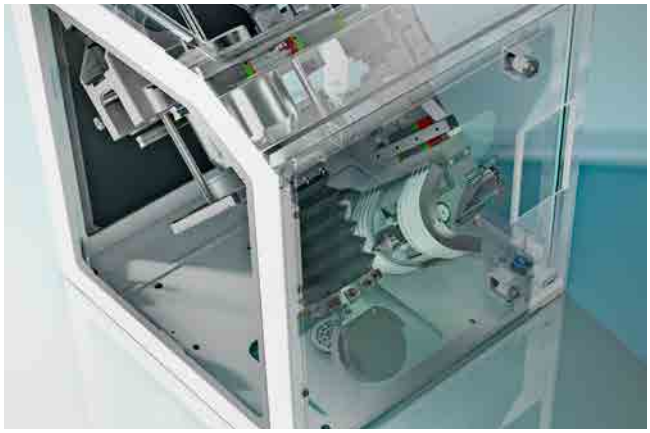
Plug...

AT MAXIMUM PERFORMANCE

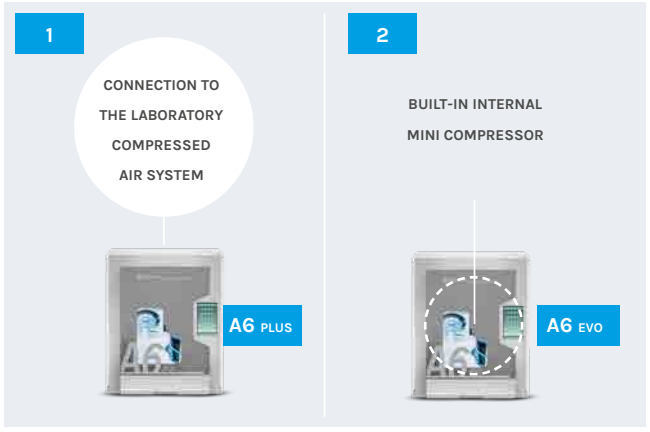
Movement on ground steel screws

The linear axes are driven by ground recirculating ball screws with preload, directly driven by high frequency motors to ensure lasting precision and durability. Continuously lubricated, thus significantly reducing maintenance.

5 Axes



Today, any laboratory wishing to participate in the milling sector must be equipped with 5-axis technology. The fifth axis makes it possible to replicate undercut areas and handle machining operations that have no parallel axis. (Virtually 90% of daily machining operations). 5 axes means being potentially able to mill any type of processing.



Maximum flexibility for compressed air

The milling machine can be connected to a compressor already installed in the laboratory (dry), which means you do not need to purchase a dedicated compressor, thus saving money and space. If you wish to position the milling machine a long way from the laboratory compressed air system, the A6 can be fitted with an integrated mini-compressor inside the milling machine.

Plug it in and start using it immediately.

..and Play!

Its small size means that it can be
installed in any room in the laboratory
and placed in any working environment.

Photo by Gazzano Giovanni Laboratory - Andora (SV)

Photo by Dental Style Laboratory – Erbusco (Bs)

A6. Suitable for milling Zirconia.

Due to the constructive logic in its design, the A6 is revolutionising the way Zirconia is milled.

Optimised strategies

5 continuous axes, exploiting the potential of the milling machine to the full, with execution speeds reduced by 30% and the creation of very fine cervical edges, thus minimising the time the operator takes to finish the prosthesis.

Photo of Gazzano Giovanni Laboratory - Andora (SV)

Quality in the tiny details

We use a 0,3 mm diameter tool for outstanding reproduction of the occlusal plane.

Operator health

Dental Machine is also respectful of this sensitive matter. It uses a powerful vacuum suction system to minimise the inhalation of zirconia nanoparticles by the operator.

Not just discs, but blocks too!

The versatility of A6 also enables you to mill any materials supplied in blocks.

Some materials are only available in blocks (and not in the classic 98 mm diameter disc version). These materials include lithium di-silicates, glass-ceramics, composites and other materials suitable for minor repairs.

Most of these blocks must be cooled with an emulsion of water and oil during milling, to cool the material and the tool. This is why the A6 must be equipped with the Smart Wet system for milling materials that require wet milling.

Photo of Dental Style Laboratory - Erbusco (Bs)

Optimised for milling pre-milled material

Enter the world of metal with A6 Evo and pre-milled material

In the dental CAD/CAM sector a pre-milled refers to a titanium or chromium-cobalt block with a pre-machined engagement, from which a personalised abutment is obtained by milling. It combines industrial precision in the engagement with the versatility of digital dental technology in producing the shape of the abutment.

The Pre-milled material makes it possible to produce a personalised abutment with certified connection* in less than 20 minutes.

Digital: an opportunity you can't miss.

Perfect integration into the internal and external digital flow

70% of dental prostheses in Italy are made digitally, but only 20% of laboratories have an internal milling unit. There is a risk that outsourcing your production will become unsustainable due to continually shrinking margins, more pressing delivery times and the advent of the digital imprint, which is now increasingly significant in Italian dental practices. These factors may put pressure on laboratories that do not create their own "digital autonomy". Most importantly, acquiring expertise in this field also means being able to provide advice to dental practices, thus building customer loyalty by sharing digital security and knowledge.

+

Having an internal milling machine helps you function as a market player and avoid being at the mercy of the general trend (which can also mean taking responsibility for the delays and errors of others). You have definite costs and delivery times, with the possibility of using new materials and thereby keeping up with the times.

Open system. (Really!)

Open system does not mean that you can insert a 98mm diameter disk into the milling machine; nor does it mean you can import and manage an STL file. Of course, these are essential criteria in defining the milling machine as an "Open System" but... the milling machine must have strategies that enable it to mill a specific material in the best possible way, while adhering to the manufacturer's instructions. This is possible because of the CAM software and the Dental Machine technical department, who are constantly "refining" milling strategies for customers who are constantly seeking to use the new materials that companies are placing on the market.

Electronics by Dental Machine

The Dental Machine numerical control has been specifically developed for the dental CAD CAM, which features a clear prevalence of curved paths over straight ones.
Special algorithms avoid abrupt adjustment manoeuvres, which are replaced with a very slight rounding that improves accuracy and results in a better finish on the surface.

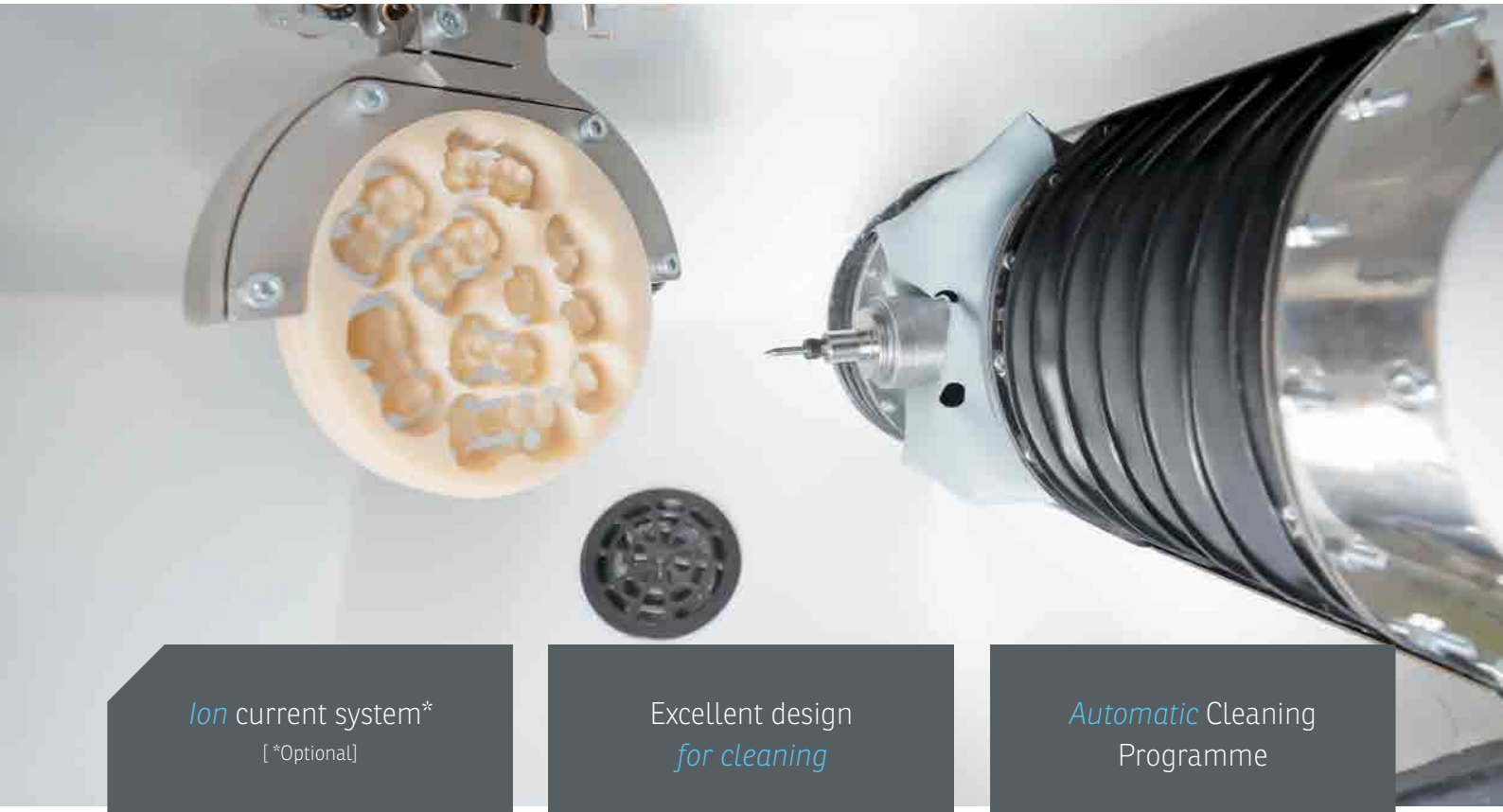
Look ahead algorithm

The look ahead function examines the future positions of the spindle and adjusts, moment by moment, the movement speed of each individual axis according to what comes later, thus increasing average speed and reducing vibrations.

Reduced mechanical stress

Thanks to the Look Ahead predictive function, which reduces wear and tear on the milling cutters and machine mechanical components.

Cleaning Up



Ion current system*

[*Optional]

Special system for cleaning the working chamber based on a current of ions made to flow through a high-voltage charged needle and then into the working chamber to prevent PMMA chips from "sticking to the walls", thus minimising the time required to clean the milling machine.

Excellent design *for cleaning*

Thanks to its smooth, curved internal design (no inlets or shaded areas) and the special non-stick, dustproof paint, the milling machine can be cleaned in a single wipe with a damp cloth.

Automatic Cleaning Programme

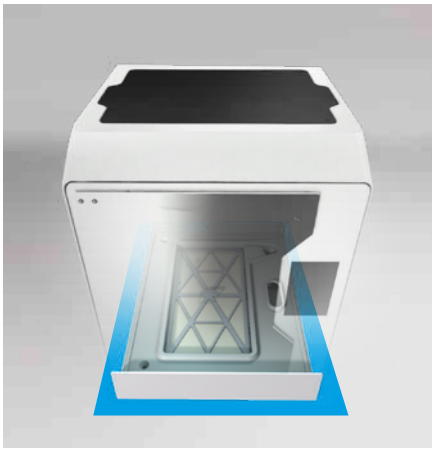
The Automatic Cleaning programme consists of high-pressure air jetscombined with suction, and is able to collect up to 95% of the residues left inside the milling chamber.

Short learning curve

Using the guided software in the Italian language, our customers can be operational even from the first day of the course, while the working protocols tested and certified by our tutors enable rapid achievement of working autonomy, with a quick return on investment.

WetSmart lubrication kit

The A6 is designed for the dry milling of soft materials, but the optional WetSmart milling lubrication module can be integrated at a later stage by applying it beneath the milling machine (7 cm thickness), in order to expand the range of workable materials for which a lubrication system is indispensable, such as glass ceramics.



Processing	A6/A6Plus	A6Plus with WetSmart	A6Evo
Inlay	●	●	●
Onlay	●	●	●
Veneers	●	●	●
Crown	●	●	●
Anatomical crown	●	●	●
Anatomical bridge - cemented	●	●	●
Anatomical bridge - screwed	●	●	●
Telescopic crown	●	●	●
Bar on implants - cemented	●	●	●
Bar on implants - screwed	●	●	●
Secondary bar	●	●	●
Toronto bridge	●	●	●
All-on-4 / All-on-6	●	●	●
Ti / Cr-Co abutment	●	●	●
Ti / Cr-Co hybrid abutment	●	●	●
Abutment from pre-milled material	●	●	●
Scan abutment	●	●	●
Removable prosthetics	●	●	●
Partially removable prosthetics	●	●	●
Occlusal Splint / Bite	●	●	●
Surgical template	●	●	●

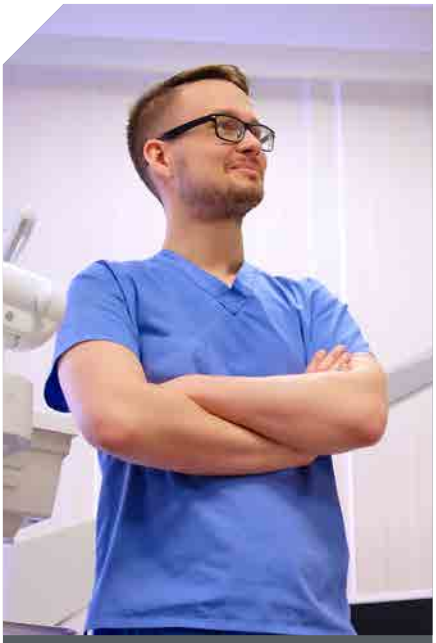
Materials	A6/A6Plus	A6 with Lubrification kit WetSmart	A6Plus	A6Evo
Zirconia	●	●	●	●
PMMA	●	●	●	●
PMMA composite	●	●	●	●
PEEK	●	●	●	●
PU	●	●	●	●
Wax	●	●	●	●
Fibreglass	●	●	●	●
Pre-sintered Cr-Co	●	●	●	●
Disilicates	●	●	●	●
Glass-ceramic	●	●	●	●
Aluminium	●	●	●	●
Grade 2 Titanium pod	●	●	●	●
Grade 5 Titanium pod	●	●	●	●
Cr-Co alloy pod	●	●	●	●
Pre-milled Titanium	●	●	●	●
Pre-milled Cr-Co	●	●	●	●

● Recommended/suitable ● Feasible ● Not recommended ◐ Feasible with optional WetSmart kit

Trust and depend on an Italian manufacturer

We adapt to the needs of your laboratory

Dental Machine is an Italian company that emerged from experience as a manufacturer of machine tools for the industrial sector, consolidating its specific reputation in the dental sector in 2011. Thanks to an awareness of its own resources, it has carved out a leading role in the dental sector, presenting a variety of products ranging from the small laboratory to the milling centre, reaching 500 installations worldwide by the end of 2019.



Personalised Training and *Support*

The technical support team, together with tutors, play a fundamental role within the company, and for this reason specialised staff are employed every year to help maintain the highest standards of quality. In 2019, the ticket service for managing customer support requests recorded an average response time of less than 50 minutes. Our mission is to stay by the customer's side.

SMART

Stay constantly in touch with your A6 using the Dental Machine App and manage it from your Smartphone. e.g. You can start or stop it, find out if the work cycle is finished or if some kind of error has occurred, enabling you to take prompt action.

Using the Telegram® chat you can interact directly with your milling machine and receive replies as if it was one of our employees.

Accademia *Archimede*

The new centre for advanced training, updating and coaching at the service of Dentistry. Our goal is to create culture and opportunities for transferring skills to all professionals who make up the dentist and dental technician teams.

Maximum value for your investment

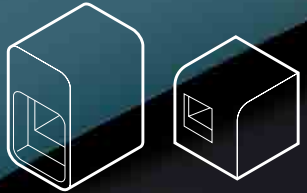
With the Tecno-Gaz Dental Machine, growth is easier

Professionals currently entering the digital world armed with the Tecno-Gaz Dental Machine know they can count on a complete range of high-end solutions such as the C5 Plus and G5 milling machines, specifically for use with metals. Choosing to work with our systems now means entering a world, a system designed to grow as your laboratory business grows.


TECNO-GAZ
dental machine
A6 plus

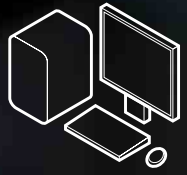
TECNO-GAZ
industries

A6 Enter the digital age as a protagonist



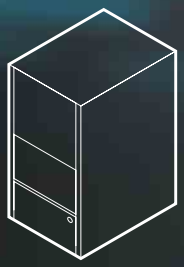
Scanning

Ensure the best starting point to ensure quality and repeatability.



CAD/CAM

Handle all file flows inside and outside the laboratory easily and quickly.



Milling

Provide the best output for all processes required by the laboratory.

Sintering

Guarantee an optimum level of finish for specific processes.

EN
1st Edition

DENTAL MACHINE A6

5-AXIS MILLING MACHINE FOR THE DENTAL LABORATORY

The new revolutionary milling machine
for soft materials

Number of Axes
5 continuous

Dimensions - mm - WxHxD
585 x 750 x 600

Weight
140 Kg

Tool Change
Automatic

Number of tool positions
11

Electrospindle
Jäger 0.4 kW or 0,55 kW - 60,000 rpm

Spindle torque
8 Ncm

Axis inclination angle
A 15° + -(tot 30°)

Disc diameter
98 mm

Tool shaft diameter
3

Tool breakage detection
Automatico

Power supply (single-phase)
220÷240 V - 50÷60 Hz

Compressed Air
Opzionale

Linear axis resolution
± 0.003 mm (3µ)

Duplicated tool management
Optional

Dry processing
Yes

Wet processing
Optional

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