CORNERS GRINDING MACHINES HORIZONTAL DRILLING MACHINES EN





www.adeliolattuada.com

COMPLEMENTARY PROCESSING MACHINES









Passion, technology, service: 40 years of made in Italy. Flexible solutions and high-quality. Each customer can always count on our best resources,

and each project stimulates our R&D to find fully customised solutions designed on individual production needs.

more ambition

90% of production exported

more than 3000 machines sold since 1978 We always strive to be a step ahead so as to offer our customers solutions capable of tangibly boosting the efficiency and quality of the production process.

more automation

We are in a position to offer flexible and customised **new integration solutions**, with the following advantages: increasing the level of automation, flexibility, productivity, optimising production and cutting costs.

more service

Proper maintenance helps keeping machines in optimal and efficient operating conditions all the time, their performance at maximum level ... and customers satisfied. Manufacturing **machines requiring the least and easiest maintenance** has always been one of our strong points.

more quality

We have set up an internal and external supply chain that ensures the highest standards of reliability. We directly take care of the design, selection of suppliers and components; we monitor each processing step, regarding both electrical and mechanical; we study the programming and automation of the software.

more internationality

2017 marked the incorporation of LATTUADA NORTH AMERICA, INC., in Northwood (OH). The aim of this company is reinforcing our presence in the United States and providing any kind of pre and post sales service.

more organisation

We address each project methodically,

following a structured workflow which ensures maximum quality and reliability. A streamlined and coordinated development where all steps are monitored to ensure the required results are achieved and on time.

more technology

Industry 4.0 is the keyword

Thanks to a platform accessible by any device, Lattuada machines are getting smarter and more communicative by the day. This allows the manufacturer and the user to be connected all the time.

more customer satisfaction

At Lattuada, customer satisfaction is our topmost objective.

The key factor lies in interpreting needs, striving towards winning solutions. Flexibility, production capacity and skills combine with an ever-guaranteed support aimed at providing supreme quality products and instant response times.

MADE IN LATTUADA INTEGRATED SOLUTIONS, TO MEET ALL YOUR NEEDS

ORLD TUADA

INDUSTRY 4.0 SOLUTIONS

Are you ready for the fourth industrial revolution? We can support you in the streamlining of production processes by offering high-tech solutions to digitise, connect, monitor, manage and optimise data in real time.

6

4.0

inte

STONE WORKING SOLUTIONS

We know the specificities of stone processing. This is why we can design with you the perfect machine to process marble, stone and synthetic and composite materials.

COMPLEMENTARY GLASS PROCESSING SOLUTIONS

Do you need to drill or process corners? We can provide a complete range of horizontal drilling machines and automatic radius and straight corners grinding machines.

> corners grinding machines > horizontal drilling machines

SPECIAL **MACHINES SOLUTIONS**

Do you have any special needs? Out-of-standard processes? Do you treat composite materials? That's not a problem. We can find the most suitable solution for you and customise our machines to ensure you get the flexibility you need.

•••••••

GRINDING SOLUTIONS

Our strength, always. A variety of solutions taking the shape of a wide range of machines: more than 40 models that can be specifically configured to ensure maximum productivity.

- > edging machines
- > double-edgers

•••••

Α

•

> bevelling machines

WASHING SOLUTIONS

For more than 15 years we have been studying and providing solutions for glass washing. We offer a full range of high-tech, vertical washing machines that are easy to use and maintain.

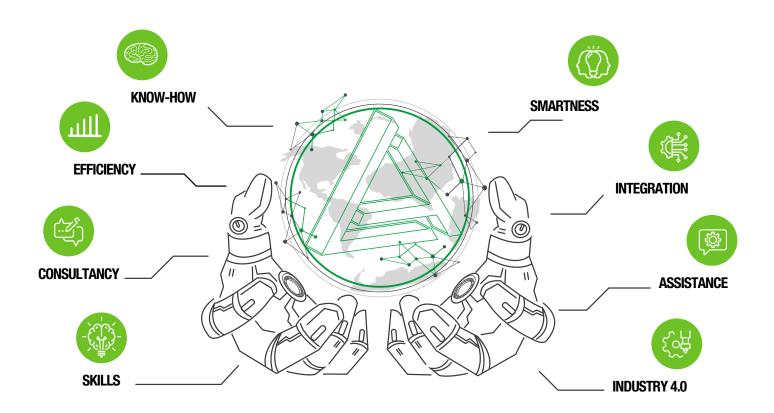
AUTOMATION AND ROBOTICS SOLUTIONS (CYBERAL)

We are constantly formulating solutions to operate at the highest levels of automation, making the most of integration with robotics to increase productivity and reduce costs.

CYBERAL A CHOICE THAT GIVES YOU MORE

CYBERAL, AUTOMATION AND INTERCONNECTION FOR A TRULY INTEGRATED INDUSTRIAL PRODUCTION

Robots, automation, integration, Industry 4.0: glass processing steps into a new era. Those who opt for advanced solutions and technology can count on an effective competitive edge. Right from today, Adelio Lattuada will by your side to help you achieve this new production and flexibility goal through CYBERAL.





KNOW-HOW

We are your partner in automation.

For more than 5 years we have dedicated internal resources and major investments in designing and building solutions that integrate robots and automation to support our glass processing machines.



A single global consultant partner for your current and future needs. Thanks to a powerful simulation software, we can key in standard production data and values of your workday and compare them with those obtained from a presumed use of robots.



We are committed towards making machines more automated and smarter by installing state of the art devices and sensors.



ASSISTANCE

Training e assistenza, dovunque siate.

Our teams are ready to give you appropriate training and technical support you may need, through our hotlines. Whether regarding the machine or the applications, you have a far-reaching network of agents and dealers at your disposal in every corner of the globe.



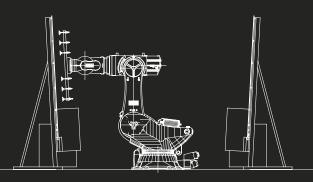
- SKILLS One application, one solution.

Thanks to world-class collaborations and supplies, our solutions gain in effectiveness and efficiency year by year.



The more machines are integrated with each other through specially studied software, the greater their efficiency and productivity. We are working on getting rid of repetitive manuals and combining control operations.

A PERFECT SYNERGY WITH TECHNOLOGY ROBOTS NEW INTEGRATED, FLEXIBLE AND CUSTOMISED SOLUTIONS WITH THE FOLLOWING ADVANTAGES



 \bigcirc

$\bigcirc \mid$ CYCLE TIME

Ξ

The robot is ready for the next glass in just 10 seconds.

Full integration with the machines of the line (edging and washing machines).



SIMPLICITY

Simple and one-point programming of thickness, speed, robot program (90/180°).

| SPECIAL APPLICATIONS

Special applications for very small/large glasses.

SOLUTIONS FOR AUTOMATING ACTIVITIES AND INCREASING PRODUCTION FLEXIBILITY

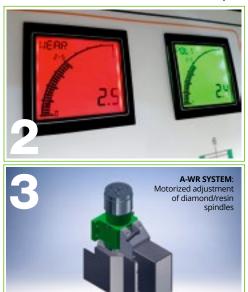


Robots and integrations require machines with greater automation and so we added some features to the list of optionals, including:

- motorized recovery of the wear of diamond wheels
- automatic recovery of the wear of polishing wheels
- automatic adjustment of pressure and speed depending on the set/detected glass thickness
- managing work steps through the touch-screen panel
- remote assistance and support
- data-logging and IOT



Touch-screen operator panel Digital ammeters and polishing wheels automatic wear detection system



SOLUTIONS FOR TRANSFORMING PRODUCTION AND BECOMING A SMART FACTORY

An approach that deeply changes the production process by implementing enabling technologies: a leap you can already take into the future through Adelio Lattuada products.

As a matter of fact, thanks to the **PLM IOT i-Like Machines** software, besides connecting machines to each other so as to monitor them constantly, we also provide clear data through an interface that is intuitive and easy to use.

THIS WILL ALLOW YOU TO:

- monitor production cycle in real time
- receive alerts in case of malfunctions
- optimise plant availability and production
- plan maintenance works
 reduce failures and downtime
- view machine use data and report records

CORNERS GRINDING MACHINES AND DRILLING MACHINES

SOLUTIONS FOR COMPLEMENTARY PROCESSING





Corners grinding machines: cycle time less than 30" for thicknesses up to 20 mm.



productive smart technology

Drilling machines: laser centring system and supports for drilling in series.



reliable little maintenance required

Machines with extremely long useful life and extremely easy to maintain.





Specific machines for automatically processing radius and straight corners, thus recommended for example for glassmakers who manufacture large volumes of furnishing shelves or doors.

Complete line of automatic, semi-automatic and manual horizontal drilling machines with one or two opposing heads.



flexible customised configurations

Corners grinding machines: you can work on different types of corners and profiles depending on the assembled type of tools.



smart simplicity of use

Drilling machines: automatic adjustment of the diamond tool speed by setting the drilling diameter.



excellent top performance

Thanks to optionals such as the use of liquid cerium oxide, our corners grinding machines can offer high final processing quality.





Movement of the pneumatic wheel-holder units.
Spindle adjustment handwheels.
Option to work in automatic cycle.
Manual lubrication of all rotary parts.
Integrated support for processing medium size sheets.
Simple and quick positioning of the templates.



HORIZONTAL DRILING MACHINES

- Automatic ejection of the glass cores (not available for the TP 1000 version).
- Laser centring system.

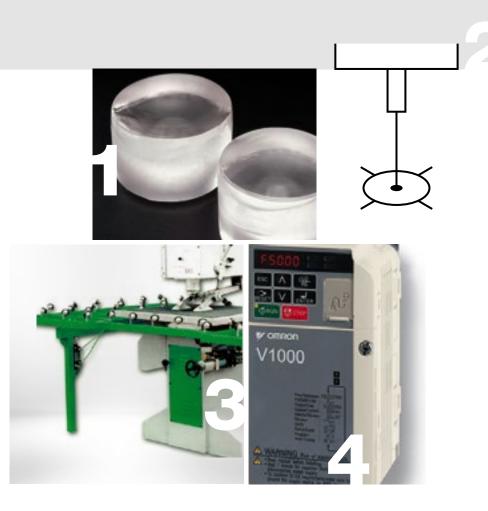
1

2

3

4

- Pneumatic glass **support table**.
 - **Automatic adjustment of the diamond tool speed** by setting the drilling diameter (not available for the TP 1000 version).





The DELTA series comprises specific machines for automatically processing corners, thus recommended for example for glassmakers who manufacture large volumes of furnishing shelves or doors. They can process radius or straight corners on thicknesses up to 20 mm in less than 30 seconds, even with liquid cerium oxide polishing.



CORNERS GRINDING MACHINES DELTA SERIES ALL YOU NEED TO KNOW

How flexible and modular are they?

- Simple and quick positioning of the templates
- Independent adjustment of top and bottom arris
- Integrated support for processing medium size sheets
- Table with wheels for processing large glass sheets

Which are the production control tools?

• Spindle adjustment handwheels

Processing speed oleodynamic adjuster

Which components of the machine allow achieving high performance?

- Option to work in automatic cycle: cycle time less than 30" for thicknesses up to 20 mm
- Movement of the pneumatic wheel-holder units
- Device for processing small pieces

How can I achieve higher quality?

• Liquid cerium oxide for greater processing quality





M3|M4|M4 C|M5

Automatic machines for **processing** radius and straight corners

4

3

0000

2

1

		min	max				Kw.		
3	eu	200x300 mm opt. 100x200 mm	1.000x1.000 mm (square glasses) 1.300x700 mm (rectangular glasses)	10 - 150 mm	10 - 200 mm	4 - 20 mm	0.5	2.200x1.150 xH1.750 mm	900 Kg
DELTA M3	us	7.9x11.8 " opt. 3.9x7.9 "	39.4x39.4 " (square glasses) 51.2x27.5 " (rectangular glasses)	25/64 - 6 "	25/64 - 7.9 "	25/64 - 7.9 "	8,5	86.6x45.3 xH68.9 "	1,984 lbs
						$ \begin{array}{c} 3 & 2 \\ \bigcirc & \bigcirc \\ \end{array} $			
14	eu	200x300 mm opt. 100x200 mm	1.000x1.000 mm (square glasses) 1.300x700 mm (rectangular glasses)	10 - 150 mm	10 - 200 mm	4 - 20 mm	11	2.680x1.300 xH1.750 mm	1000 Kg
DELTA M4	us	7.9x11.8 " opt. 3.9x7.9 "	39.4x39.4 " (square glasses) 51.2x27.5 " (rectangular glasses)	25/64 - 6 "	25/64 - 7.9 "	25/64 - 7.9 "		105.5x51.2 xH68.9 "	2,205 lbs

DELTA M4 C	eu	200x300 mm opt. 100x200 mm	1.000x1.000 mm (square glasses) 1.300x700 mm (vetri rettangolari)	10 - 150 mm	10 - 200 mm	4 - 20 mm	11	2.680x1.300 xH1.750 mm	1000 Kg
	us	7.9x11.8 " opt. 3.9x7.9 "	39.4x39.4 " (square glasses) 51.2x27.5 " (rectangular glasses)	25/64 - 6 "	25/64 - 7.9 "	25/64 - 7.9 "	11	105.5x51.2 xH68.9 "	2,205 lbs
D						`			

DELTA M5	eu	200x300 mm opt. 100x200 mm	1.000x1.000 mm (square glasses) 1.300x700 mm (rectangular glasses)	10 - 150 mm	150 mm 10 - 200 mm		- 13 -	3.000x1.300 xH1.750 mm	1200 Kg
	us	7.9x11.8 " opt. 3.9x7.9 "	39.4x39.4 " (square glasses) 51.2x27.5 " (rectangular glasses)	25/64 - 6 "	25/64 - 7.9 "	25/64 - 7.9 "	13	118.1x51.2 xH68.9 "	2,640 lbs
	5 4 3 2 1								



SERI-AUTOMATIC AND AUTOMATIC MACHINES

Complete line of automatic, semi-automatic and manual horizontal drilling machines with one or two opposing heads (bottom automatic and top manual). Common features are the automatic locking of the glass during the drilling cycle and the option to adjust the drilling depth on the bottom head. Just like for all of our models, they come in various options, thus allowing utmost customisation and adaptation of the product to the various needs.



Γ	\downarrow	7





Ø 4 - 200 / 250 mm Ø 5/32 - 7.9 / 9.8 " Ø 4 - 130 mm Ø 5/32 - 5.1 " 50 mm 2 " 1.000 / 1.065 / 1.200 mm 39.3 / 41.9 / 47.2 "

HORIZONTAL DRILLING MACHINES TP SERIES ALL YOU NEED TO KNOW

How flexible and modular are they?

• Pneumatic glass support table

• Option to adjust the drilling depth on the bottom head

Which are the production control tools?

• Automatic locking of the glass during the drilling cycle

Which components of the machine allow achieving high performance?

- Automatic ejection of the glass cores
- Laser centring system
- Supports for drilling in series

How can I achieve higher quality?

• Automatic adjustment of the diamond tool speed by setting the drilling diameter (not available for the TP 1000 version)





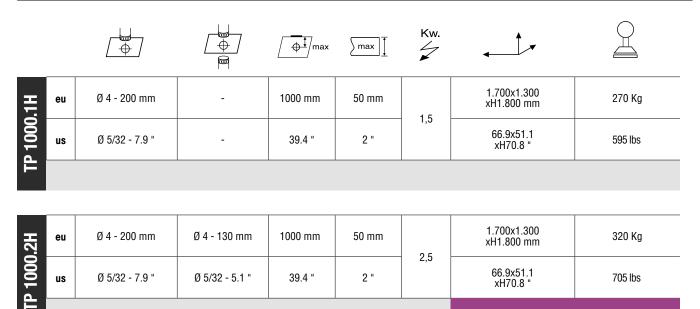
TP SERIES 1000.1H 1000.2H 1065 1200

Manual and **semi-automatic** horizontal drilling machines



1000.1H 1000.2H

Manual horizontal drilling machines



Available also the automatic version

TP SERIES

1065 1200

Semi-automatic

horizontal drilling machines

				 max	∑max	Kw.			
ល្អ	eu	Ø 4 - 250 mm	Ø 4 - 130 mm	1.065 mm	50 mm		1.700x900 xH1.760 mm	550 Kg	
TP 1065	us	Ø 5/32 - 9.8 "	Ø 5/32 - 5.1 "	41.9 "	2 "	3	66.9x35.4 xH69.2 "	1,212 lbs	
							Available also the automatic version		
			1						
9	eu	Ø 4 - 250 mm	Ø 4 - 130 mm	1.200 mm	50 mm	0	1.900x900 xH1.760 mm	650 Kg	
TP 1200	us	Ø 5/32 - 9.8 "	Ø 5/32 - 5.1 "	47.2 "	2 "	3	74.8x35.4 xH69.2 "	1,433 lbs	
			1				Available also the automatic version		
			,− lud −,				≺w. 	0	
LEGEND			<u> + </u>] 	max	∑max	î		Ä	
Ë		drilling diameter (with 1 head)	drilling diameter (with 2 heads)	useful depth	max glass thickness		talled dimensions ower	weight	

AS BIG AS THE WORLD

Our solutions are working all over the world. Since 2017 we operate in the USA through LATTUADA NORTH AMERICA based in Northwood (Ohio). A precise corporate choice to stay close to our customers by offering top quality services and products specifically designed for a demanding and competitive market that requires compliance to specific standards.

LNA

Northwood (OH) A precise corporate choice to stay close to our customers HEADQUARTER

90+

countries where we are present

We are an international company: today our machines are working in 90 countries.

agents worldwide

Find our agents worldwide.





LNA provides all pre- and after-sale services directly from the united states, including a qualified and highly professional technical support service with longstanding experience in the glass-working machine industry.

This new company allows us to offer endless benefits to all our us customers:

- no more problems related to transportation issues;
- machinery are invoiced directly from the united states,
- eliminating the currency problem;
- specific services for the us market;
- technical support always available with no more time zone issues;
- spare parts are supplied directly from Lattuada North America.

Adelio Lattuada Srl assumes no responsibility for any mistakes in the contents. All data are subject to change without notice. Images can be only representative of the products' typology.



ADELIO LATTUADA S.R.L. Via Abbondanza, 11/13 - 22070 Carbonate (CO) IT Tel. +39 0331.832713 - info@adeliolattuada.com adeliolattuada.com

LATTUADA NORTH AMERICA, INC. 6967 Wales Road, Suite F - Northwood 43619 (OH) T. 567 249 4486 - info@lattuada-na.com lattuada-na.com