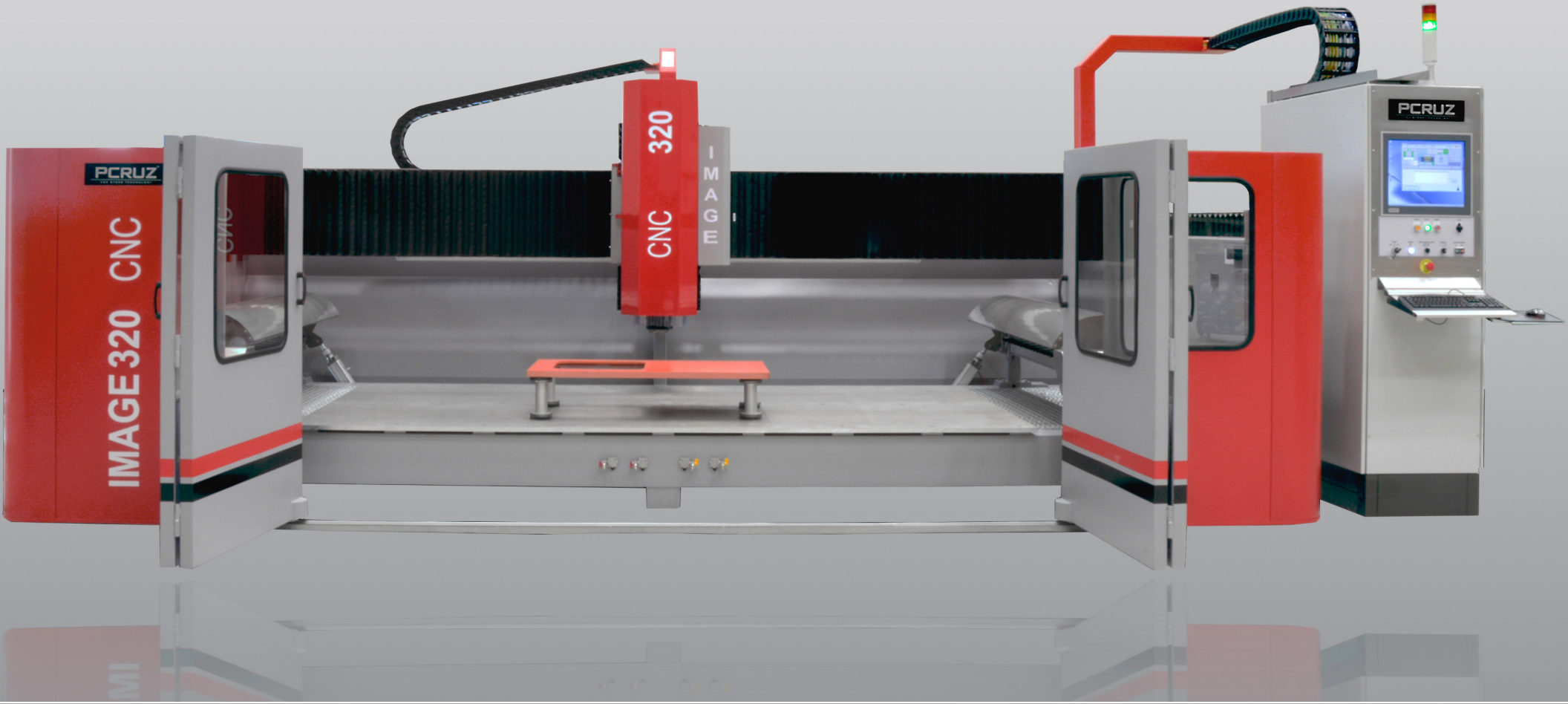
PCRUZ®

USA STONE TECHNOLOGY

1 (800) 995 3708

IMAGE320 CNC 3 axes

WORK CENTER



NEW DESIGN

2016 EDITION

PCRUZ USA

STONE TECHNOLOGY

After nearly 40 years of innovation and leadership in the global stone technology, **PCruz Group**, producer of high-quality machinery based in Europe, decided to establish **PCruz USA**, a company focused on the US market.

PCruz USA has been working for several years in the US market and recently has introduced a new range of stone machinery.

Our approach is to be a reliable long-term partner for our customers. We are here to offer perfect solutions for their needs and to provide them with the maximum level of product quality and service.

Member MARBLE INSTITUTE of America

ISO 9001 BUREAU VERITAS Certification

IMAGE320 CNC 3 axes

NUMERICAL CONTROL WORK CENTER

IMAGE320 CNC 3 axes work center performs all kinds of work with great accuracy and speed.

This work center has been designed in order to perform jobs of any level of sophistication with guaranteed high quality.

IMAGE320 CNC 3 axes proficiently executes all tasks requiring milling, grinding, drilling and polishing with the optimal cost and minimum time.

Due to outmost simplicity of programming, it can be handled by an operator with little computer knowledge.

Combination of perfect design, intelligent processes and high quality components enables **IMAGE320 CNC 3 axes** to meet the highest standards of stone processing.

ROBUST STRUCTURE COMBINED WITH HIGH TECHNOLOGY

1. MONOBLOCK STRUCTURE

IMAGE320 CNC 3 axes has a solid monoblock structure self-supported on 6 levelled slabs.

It is made of stabilized milled steel to guarantee strength, solidity, protection and safety. Steel parts are sand-blasted, double coated with zinc and finished with two layers of high quality industrial paint.

The monoblock structure facilitates machine transportation, assembly and installation. It also provides for increased resistance to vibrations that results in higher precision of finishing.

All the mechanical elements of the center are lubricated via a centralized greasing system.

2. HIGH PERFORMANCE HEAD

IMAGE320 CNC 3 axes' head is equipped with a powerful motor that ensures excellent performance of works requiring strong effort.

The head also has a pneumatic circuit for retention of material particles.

An **automatic head tilting system** optimizes elaboration of lowering. **[optional]**

3. FLAT WORKING TABLE

Working table is made of high-quality aluminum and is rectified automatically to guarantee maximum flatness of the surface. This is essential to reach top quality of finishing.

4. ACCURATE MOVEMENTS

Due to high accuracy linear guides, the bridge and the head move with the maximum precision.

The servomotors moving the bridge and the head in vertical direction are totally CNC.

Unique combination of the servomotors and gear motor ensure acceleration most appropriate for each job.

5. SUCTION CUPS

Set of 13 pneumatic cups with double suction effect, jigs and clamps allow for easy and quick positioning of material.

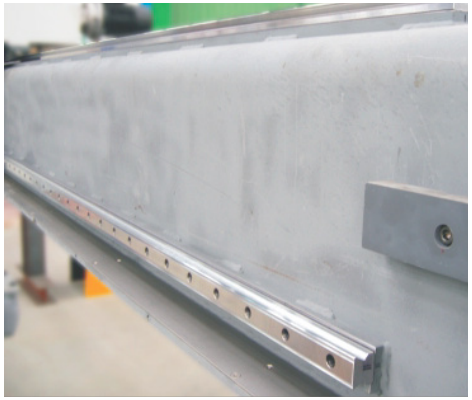
A remote control system makes it easier to put fixing elements in a right position.

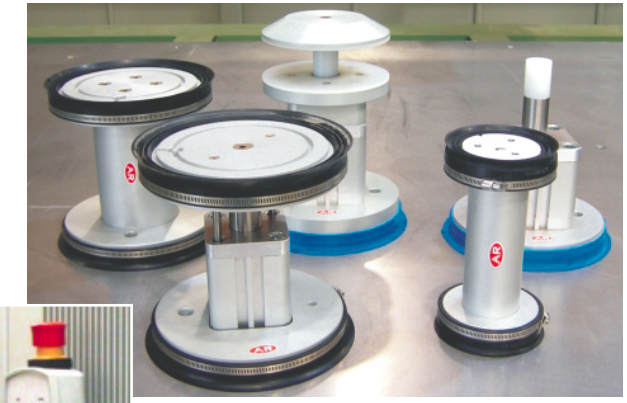
More suction cups [optional]
Any number and combination of additional suctions cups, jigs and clamps can be acquired.

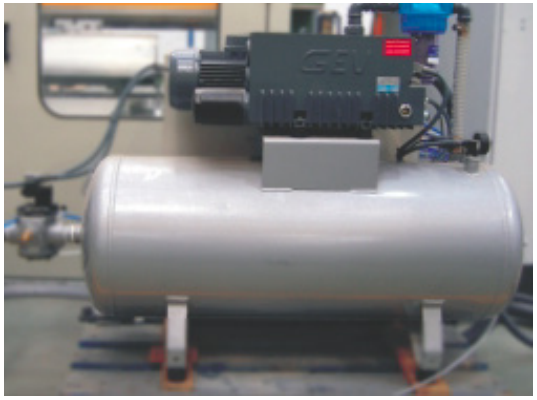
6. VACUUM PUMP

IMAGE320 CNC 3 axes is provided with a vacuum pump in an oil bath which ensures protection, lubrication and cooling.

A high capacity chamber enables to maintain an optimum vacuum level during entire machining process and is robust to small water and air absorptions that may occur.







ROBUST STRUCTURE COMBINED WITH HIGH TECHNOLOGY (CONT-D)

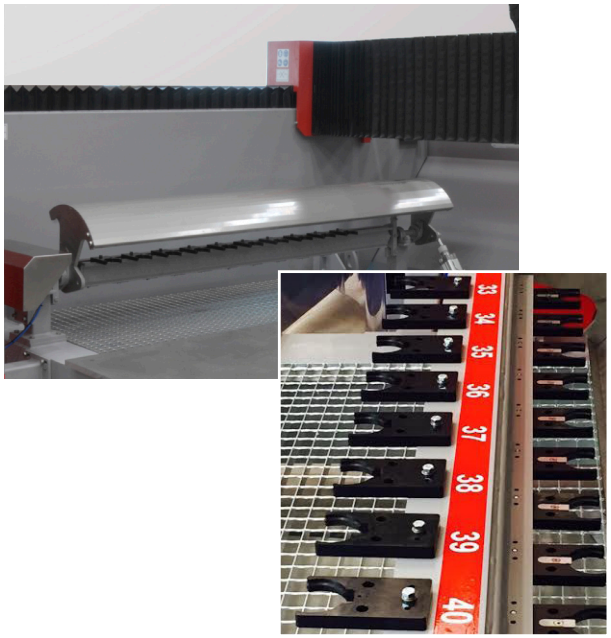
7. FAST TOOL CHANGE

IMAGE320 CNC 3 axes is equipped with ISO40 tool holder for 20 tools with a high-speed tool change system and water and dust protection. The cones are automatically cleaned by compressed air injection at a change phase.

The tools have a double refrigeration system:

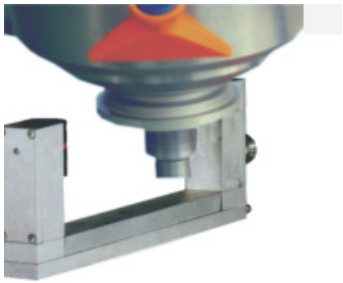
- **External:** water flows through the crown around the tool
- **Internal:** water goes directly inside the tool

Extension to 40 tools [optional]
Additional tool storage with 20 holders can be installed to further expand working capabilities.



8. AUTOMATIC TOOL CALIBRATION

The laser measurement system allows for automatic calibration of working tools, guaranteeing higher accuracy of the result and the most efficient usage of each tool.
[optional]



9. EFFICIENT TOOL MANAGEMENT & CONTROL

IMAGE320 CNC 3 axes has two systems for control, compensation and optimization of wearing of diamond and abrasive tools:

- **Diamond tools:** wearing is corrected on a three foot work distance while the tool is being used
- **Abrasive tools:** wearing is compensated by control of pressure on the material

The work center is provided with a system which allows for **repetition of any tool while the work is being done**, with no need to restart the whole process. With just one click any tool can be repeated or ignored.

10. SECURITY SYSTEM

IMAGE320 CNC 3 axes is protected by the closing that prevents accidents at work and ejection of material particles to the workshop space.

11. ONLY THE BEST COMPONENTS

We have carefully selected each component of **IMAGE320 CNC 3 axes** from the best manufacturers globally and made sure that each part is available in the local market together with the best technical assistance.

BECKHOFF

OMRON

KOLLMORGEN

Because Motion Matters™

RITTAL

TECHNICAL DATA AND DIMENSIONS

General

Main motor power	11 kW / 15 hp
Speed control	11 kW / 15 hp Speed Variator
Max rotation speed	11,000 r.p.m.
Water consumption	50 l per min. / 13 Gal per min.
Max number of tools	20 + 20 (optional)
Toolholder cone type	ISO40
Tool refrigeration	Int. + Ext.
Air pressure	6 bar
Voltage / Frequency	220 or 480 V / 60 Hz

Working speeds

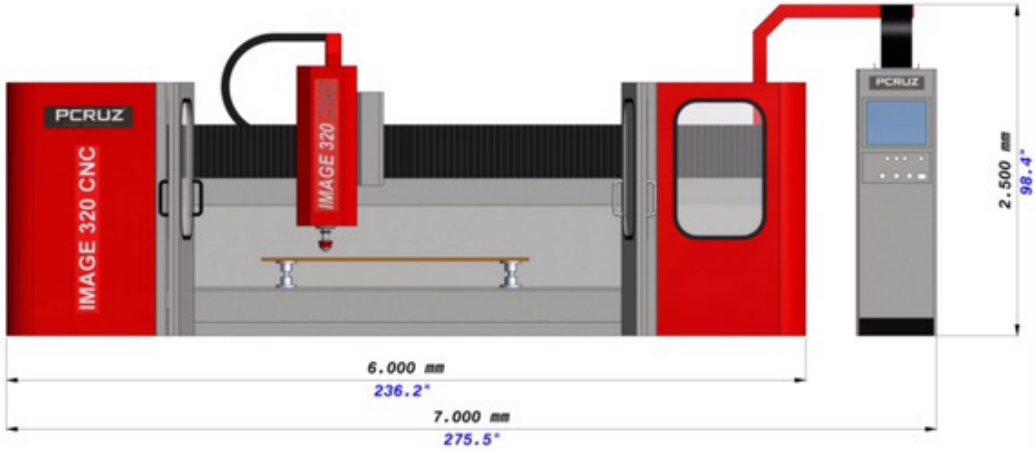
"X" axis	55 m per min. / 180 ft per min.
"Y" axis	40 m per min. / 131 ft per min.
"Z" axis	8 m per min. / 26 ft per min.

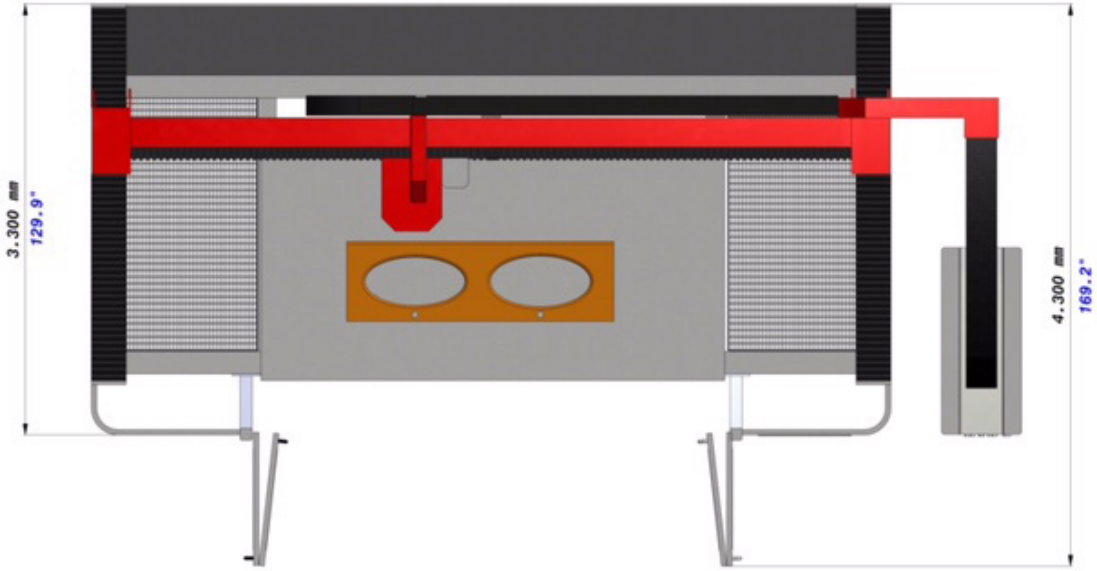
Useful axes

"X" axis	3,200 mm / 125.9 in.
"Y" axis	1,700 mm / 66.9 in.
"Z" axis	350 mm / 13.8 in.

Dimensions of the machine

Length	7,000 mm / 275.5 in.
Width	3,300 mm / 129.9 in.
Height	2,500 mm / 98.4 in.
Weight	7,000 Kg / 15,430 lb





Note: Technical data are provided for information purposes only. PCruz reserves the right to make technical modifications and improvements without prior notice.

PCRUZ SOFTWARE

EASY AND INTUITIVE

An interactive industrial PC with a touch-screen and intuitive interface of **PCruz** proprietary **MECANIZASTONE** software allows for easy handling of the machine. An operator can input full information on the jobs to be performed: type of the material, size, thikness, shape, as well as define the machining mode.

MECANIZASTONE is a user-friendly software that makes running the work center easy even for an operator with little computer knowledge. This turns operating **IMAGE320 CNC 3 axes** into a delightful experience.

Defining a job: choose your way

- Import files via local network from the office computer, via Internet from remote locations, or via USB
- Define a job directly at the machine PC

Performing a job: always optimal

- Work cycles are generated automatically with the machine parameters adjusted to perform the work in the most efficient way using database of the tools available for the machine and of rotation speeds suitable for each tool and material
- Manual adjustments are allowed, even after the work started

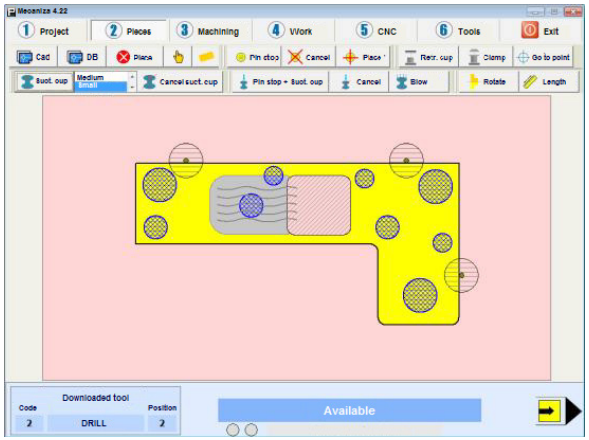
Supplement functions: assistance and convenience

- Machine diagnostics and alarm system
- Teleassistance and telemaintenance software

MECANIZASTONE FEATURES

1. QUICK LAYING OF JIGS AND SUCTION CUPS

IMAGE320 CNC 3 axes automatically defines cups' location on the material and working table for optimal fixation.

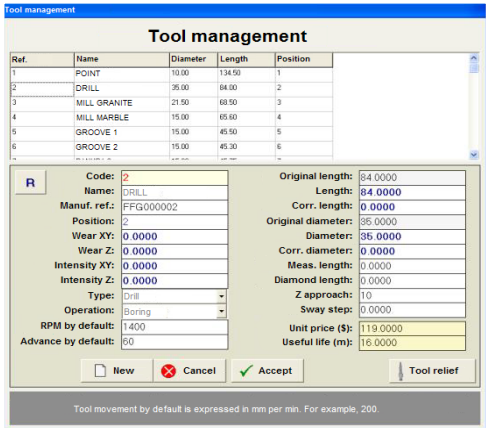


2. PROJECT TIME AND COST CALCULATION

Special screen for optimization of project profitability presents the time required to perform the project and costs related to wearing of the tools.

3. TOOL MANAGEMENT

Tool management is made at a quickly accessed screen. **MECANIZASTONE** provides assistance to an operator to make parametrization of new tools an easy task.



4. SECOND LICENSE AND STARTING UP KEY

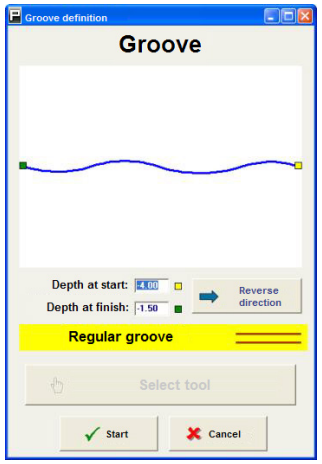
With this **MECANIZASTONE** feature a job can be programmed and executed directly from the office PC.
[optional]

WITH **MECANIZASTONE** SOFTWARE, **IMAGE320 CNC 3 axes** IS EASILY OPERATED AND ACHIEVES THE BEST RESULTS IN TERMS OF QUALITY AND COSTS

5. QUICK DEFINITION OF GROOVES

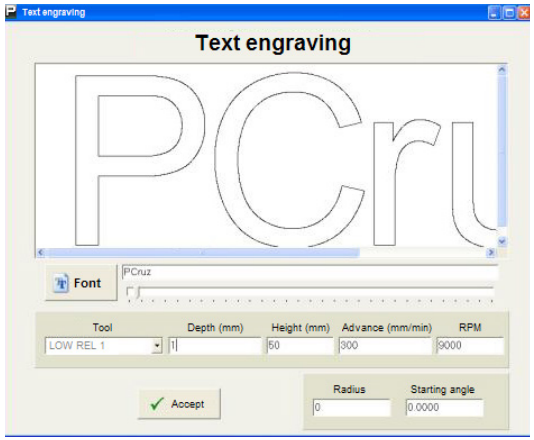
Assistant incorporated in **MECANIZASTONE** simplifies definition of grooves.

Depth and inclination of each groove can be set offering a high customization degree.



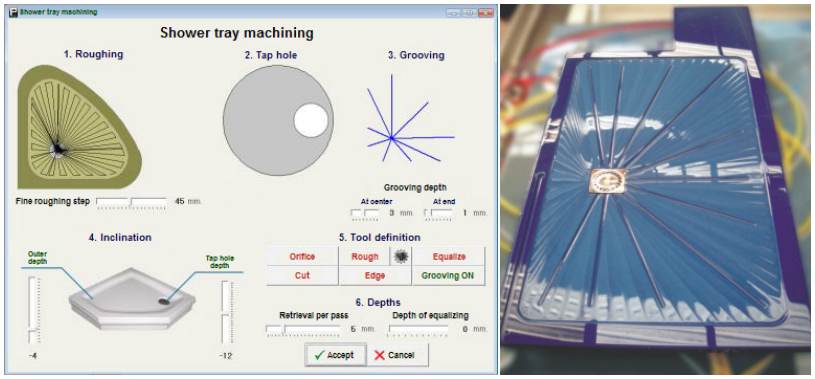
7. FLEXIBILITY IN TEXT ENGRAVING

MECANIZASTONE enables to engrave texts using all True Type fonts plus 17 special fonts and setting depth of engraving, font size and curvature.
[optional]



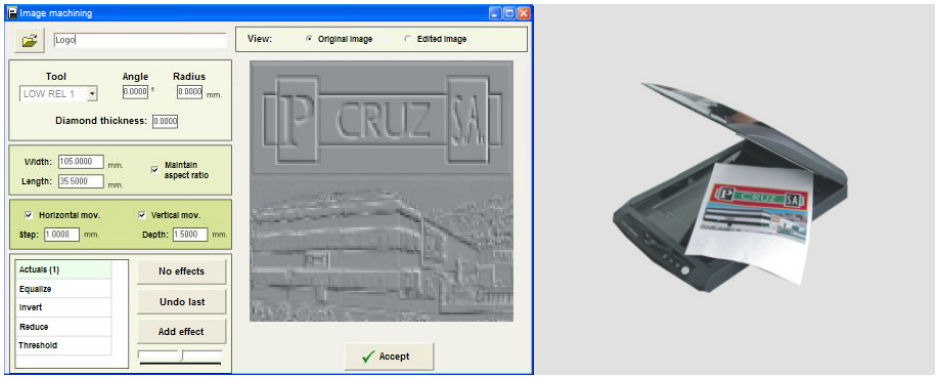
6. ADDITIONAL WAY TO DEFINE SHOWER TRAY

With this **MECANIZASTONE** module an operator can define as a shower tray a piece created in Autocad, indicating desired depth and inclination and the number of passes to process the material.
[optional]



8. ENGRAVING IN RELIEF WITH DIGITAL IMAGE

MECANIZASTONE allows for quick and easy definition of engravings in relief using a digital image.
[optional]



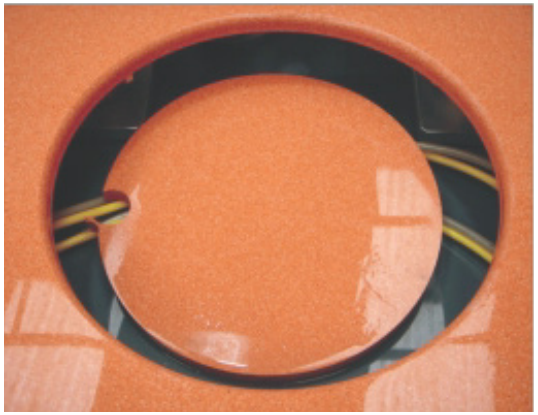
HIGH PERFORMANCE COUPLED WITH REFINED DESIGN

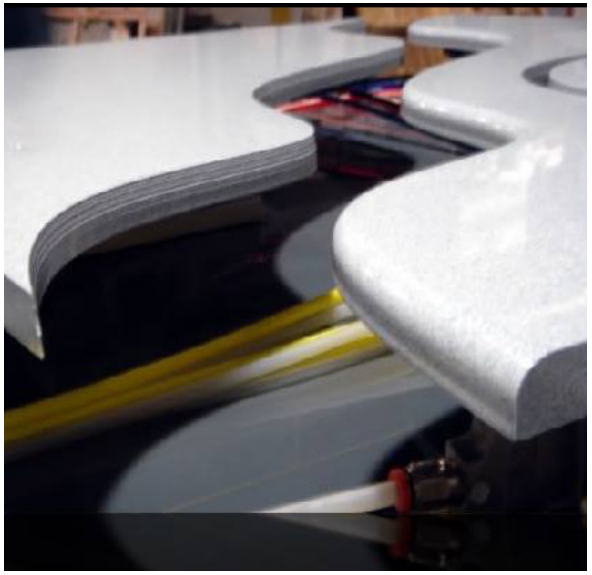
PCRUZ
i320

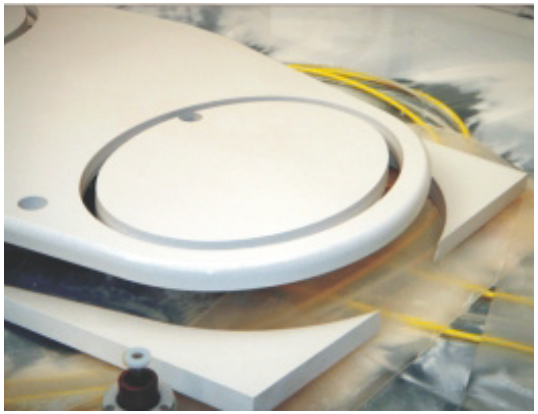
MULTIPLE FUNCTIONS

IMAGE320 CNC 3 axes is capable of doing a wide range of works that require milling, grinding, drilling and polishing, including:

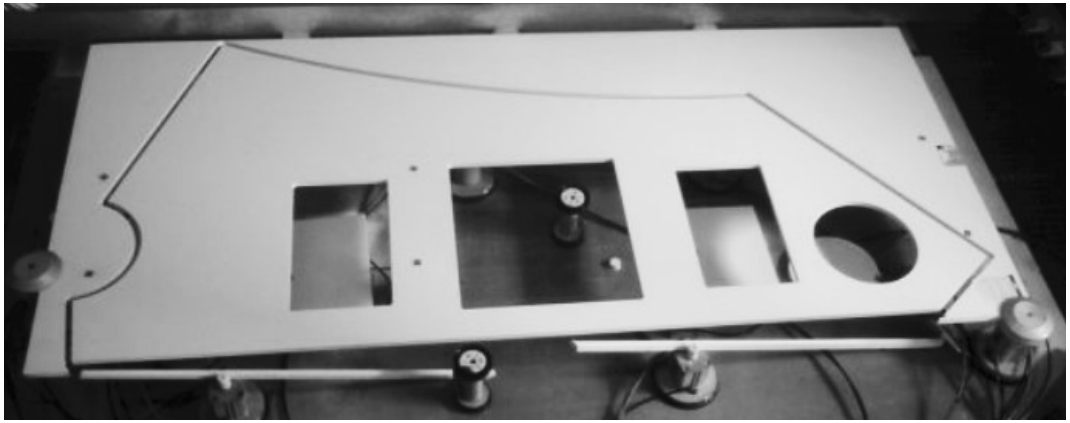
- Countertops (kitchen, bathroom, etc.)
- Grooves, including sink drain grooves
- Shower trays
- Text engraving
- Engraving in relief







Due to the head flexibility, **IMAGE320 CNC 3 axes** can execute the most complex jobs in the simplest way always resulting in the highest quality.



PCRUZ USA PARTS MANAGEMENT

MINIMIZING DOWNTIME

Large stock of spare parts:
We keep substantial inventory at our warehouse in Fort Lauderdale, FL, to make sure our customers timely get spare and consumable parts they might need.

Working with the most important international machinery suppliers:
Most components of our machines are available in the local market allowing for efficient inventory management.

PCRUZ USA CUSTOMER SERVICE

ALWAYS HERE FOR YOU

WE ARE COMMITTED TO PROVIDE THE LEVEL OF SERVICE AND AFTER-SALE SUPPORT MATCHING THE QUALITY AND MERITS THAT OUR MACHINES POSSESS

Installation:
Our engineers will perform all installation and commissioning works on your site.

Training:
Our professionals will provide trainings for your employees, including certification and advanced seminars.

Software upgrade and customization:
To ensure that your **PCruz** machines always perform at the edge of their capabilities and perfectly meet your needs, we upgrade our software and offer customization options.

On-site support and maintenance service:
Our customer service team is trained to solve any issue you might have with the machine in 24 hours.

Remote support:
This service, available only for CNC machines, allows our technical team to access the machine from our offices and solve electronic and mechanical problems in a very short time, even in minutes.

Preventative maintenance:
We advise keeping machines in the best condition at all times to ensure the quality of work. This also extends our guarantee term.

CONTACT US

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PCRUZ®

USA STONE TECHNOLOGY

"To go one step ahead is a continuous challenge for everyone who loves innovation."

PEDRO CRUZ