

STONE MACHINERY

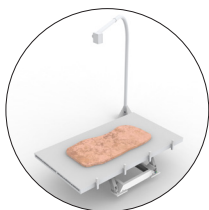
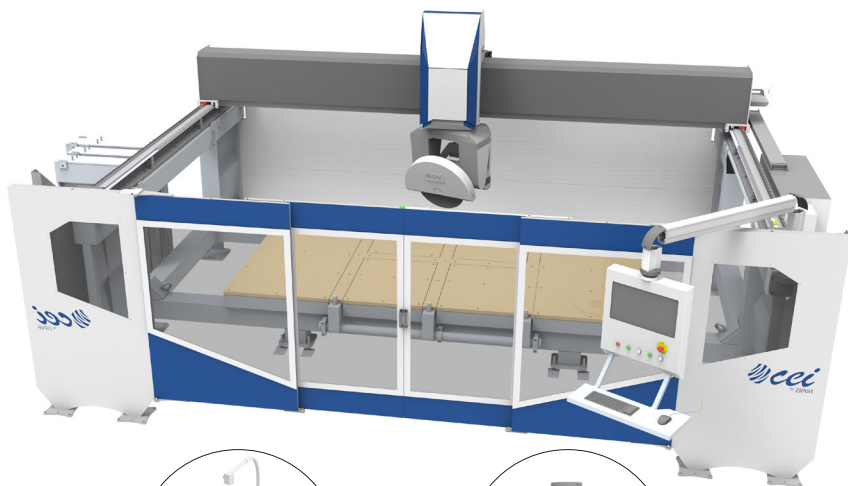


by ZIPOR

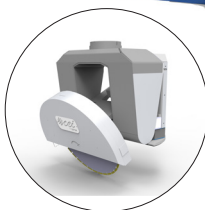
www.ceigroup.net

StoneCUT®

CNC SYSTEM 5 AXIS | DIAMOND DISC CUTTING
WITH ARTIFICIAL VISION



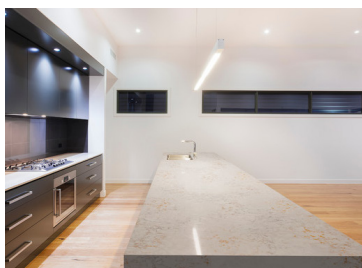
Artificial vision for scanning and optimization of slabs



Tilted cuts from 0 to 90 degrees

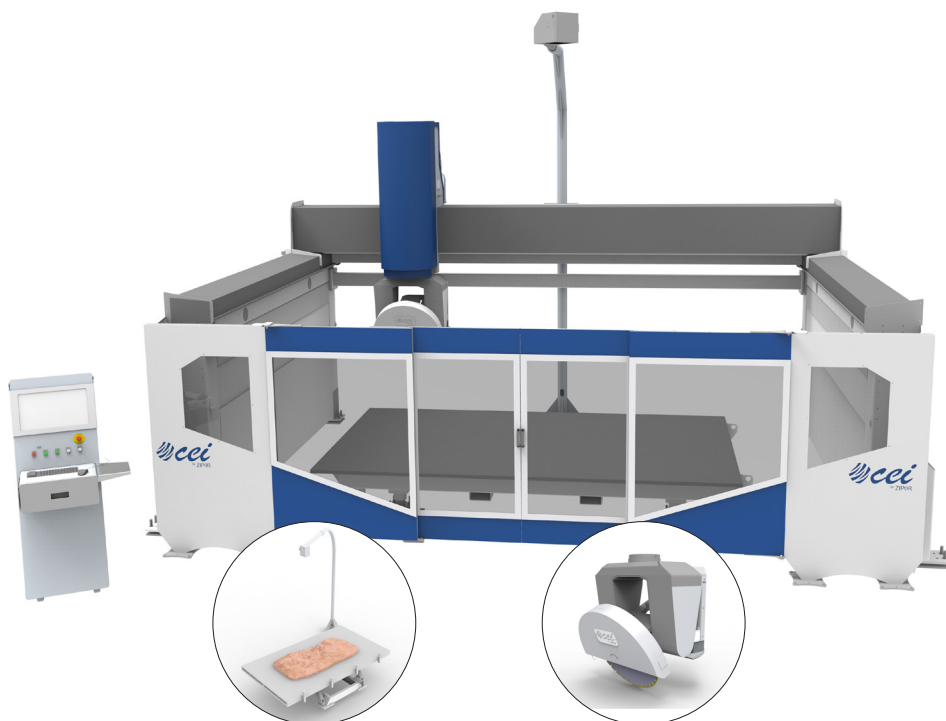
TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Blade diameter from 350 to 625mm
- ▶ Useful cutting area from 3600x2000mm to 3800x2200mm
- ▶ Z Axis 400mm
- ▶ C Axis from 0° to 360°
- ▶ A Axis from 0° to 90°
- ▶ Motor power from 17HP(5000rpm) to 27HP(6000rpm)
- ▶ Manual milling tools exchange 1/2"
- ▶ Cutting operations with 4 or 5 axis
- ▶ Monoblock structure
- ▶ Centralized or automatic lubrication
- ▶ Vacuum cups for pieces up to 400Kg
- ▶ **Artificial vision for:**
Slab defects reading; Slab position reading
- ▶ Automatic tool measuring system
- ▶ Automatic slab thickness measuring system
- ▶ Tilting table (with fibre cement top)
- ▶ Red laser for sw manual cutting
- ▶ Extra milling area
- ▶ 0 Point for table
- ▶ Automatic blade sharpening system
- ▶ **Specific software for:**
Kitchen tops; "Open book" works; Milling, drilling and engraving



StoneCUT®PRO

CNC SYSTEM 4 OR 5 AXIS | DIAMOND DISC CUTTING
WITH ARTIFICIAL VISION



Artificial vision for scanning and optimization of slabs

Tilted cuts from 0 to 90 degrees

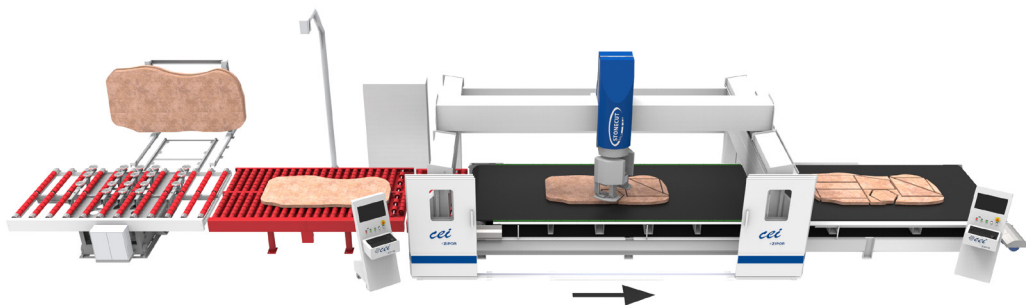
TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Blade diameter from 300 to 800mm
- ▶ Useful cutting area from 3600x2000mm to 4000x2200mm
- ▶ Z Axis from 500mm to 900mm
- ▶ C Axis from -180° to +360°
- ▶ A Axis from 0° to 90°
- ▶ Motor power from 24HP to 36HP
- ▶ Cutting operations with 4 or 5 axis
- ▶ Automatic lubrication
- ▶ Vacuum cups for pieces up to 400Kg
- ▶ **Artificial vision for:**
Slab defects reading ; Slab position reading
- ▶ Automatic tool measuring system
- ▶ Automatic slab thickness measuring system
- ▶ Tilting or fixed table (with cement-fibre top)
- ▶ Red laser for sw manual cutting
- ▶ 0 Point for table
- ▶ Automatic blade sharpening system
- ▶ **Specific software for:**
Kitchen tops ; "Open book" works; Milling, drilling and engraving
- ▶ Manual milling tools exchange 1/2"
- ▶ MASTER head upgrade with blade 900 to 1000mm and 36HP motor

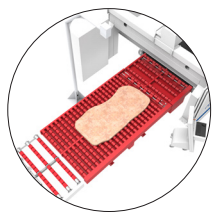


StoneCUT®LINE

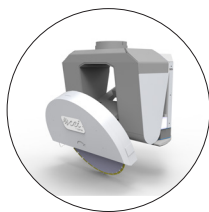
CNC LINE 4 OR 5 AXIS | DIAMOND DISK CUTTING
WITH ARTIFICIAL VISION



Automatic slab
loading



Artificial vision for scanning
and optimization of slabs



Cutting disc and tool spacing
pieces



Unloading, validation and
labeling of pieces

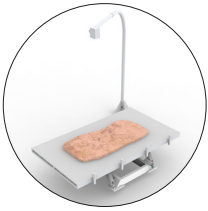
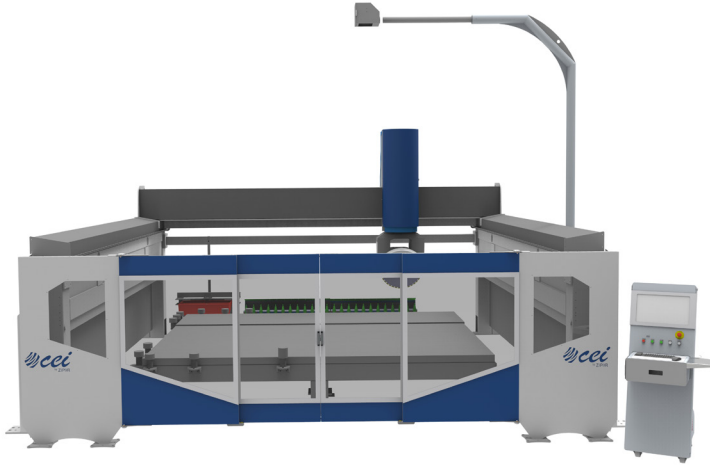
TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Blade diameter from 300 to 800mm
- ▶ Useful cutting area from 3600x2000mm to 4000x2200mm
- ▶ Z Axis from 500mm to 900mm
- ▶ C Axis from -180° to +360°
- ▶ A Axis from 0° to 90°
- ▶ Motor power from 24HP to 36HP
- ▶ Cutting operations with 4 or 5 axis
- ▶ Automatic lubrication
- ▶ Vacuum cups for pieces up to 400Kg
- ▶ **Artificial vision for:**
Slab defects reading; Slab position reading
- ▶ Automatic tool measuring system
- ▶ Red laser for sw manual cutting
- ▶ Automatic slab thickness measuring system
- ▶ Simultaneous loading, cutting and unloading operations
- ▶ Parts washing system
- ▶ Fixed or tilting motorized roller table for loading
- ▶ Belt table with rubber belt for cutting and unloading
- ▶ **Specific software for:**
Kitchen tops; "Open book" works; Milling, drilling and engraving
- ▶ Manual milling tools exchange 1/2"
- ▶ MASTER head upgrade with blade 900 to 1000mm and 36HP motor
- ▶ Unloading controller with tag printing system



StoneCUT[®]MILL

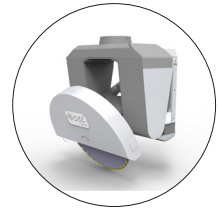
CNC SYSTEM 5 AXIS | CUTTING AND MILLING
WITH ARTIFICIAL VISION



*Artificial vision for scanning
and optimization of slabs*



5 axis milling



Tilted cuts from 0 to 90 degrees

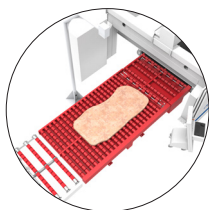
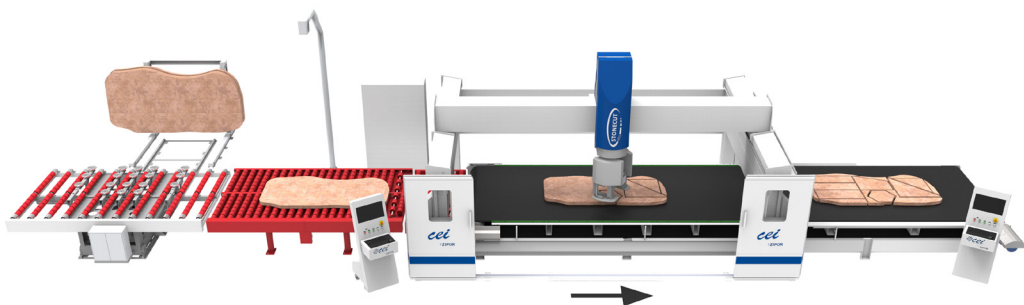
TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Blade diameter from 300 to 800mm
- ▶ Useful cutting area from 3600x2000mm to 4000x2200mm
- ▶ Z Axis from 500mm to 900mm
- ▶ C Axis from -180° to +360°
- ▶ A Axis from 0° to 90°
- ▶ Spindle power 20HP BT40
- ▶ Cutting and milling operations with 5 axis
- ▶ Automatic lubrication
- ▶ Vacuum cups for pieces up to 400Kg
- ▶ **Artificial vision for:**
 - Slab defects reading; Slab position reading*
- ▶ Automatic tool measuring system
- ▶ Automatic slab thickness measuring system
- ▶ Tool storage for automatic tool exchange up to 24 positions for BT40
- ▶ Blade storage for automatic exchange
- ▶ Tilting or fixed table (with aluminum top)
- ▶ Red laser for sw manual cutting
- ▶ 0 Point for table
- ▶ Up to 2 working areas
- ▶ Angular box BT40 4500 rpm for inner edges polishing
- ▶ Vacuum cups for milling table kit



StoneCUT[®]MILL LINE

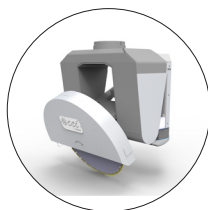
CNC LINE 5 AXIS | CUTTING AND MILLING
WITH ARTIFICIAL VISION



*Artificial vision for scanning
and optimization of slabs*



5 axis milling



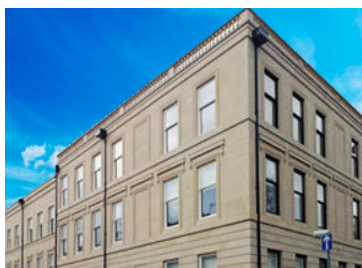
*Cutting disc with milling tools
and parts spacing*

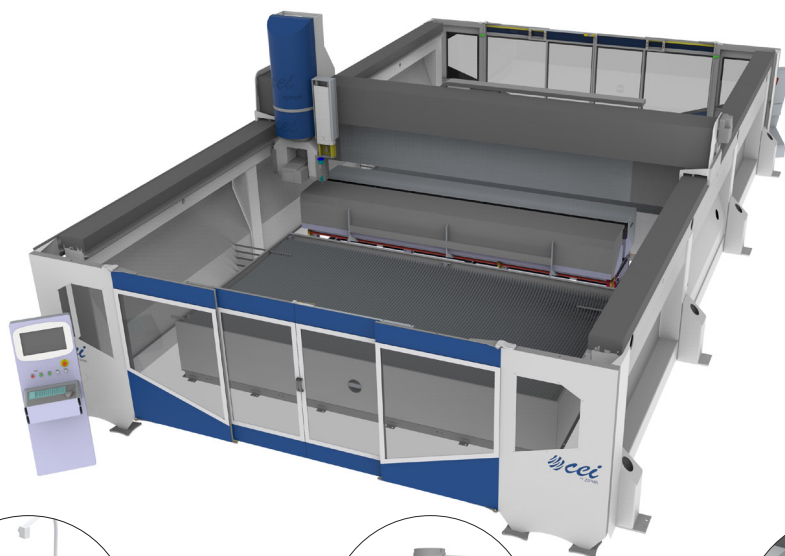


*Unloading, validation and
labeling of pieces*

TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Blade diameter from 300 to 800mm
- ▶ Useful cutting area from 3600x2000mm to 4000x2200mm
- ▶ Z Axis from 500mm to 900mm
- ▶ C Axis from -180° to +360°
- ▶ A Axis from 0° to 90°
- ▶ Axis speed 40m/min
- ▶ Spindle power 20HP with BT40
- ▶ Cutting and milling operations with 5 axis
- ▶ Automatic lubrication
- ▶ Vacuum cups for pieces up to 400Kg
- ▶ **Artificial vision for:**
Slab defects reading; Slab position reading
- ▶ Blade storage for automatic exchange
- ▶ Cut parts washing system
- ▶ Automatic slab thickness and tool measuring system
- ▶ Tool storage for automatic tool exchange up to 24 positions for BT40
- ▶ Simultaneous loading, cutting and unloading operations
- ▶ Fixed or tilting motorized roller table for loading
- ▶ Belt table with rubber belt for cutting and unloading
- ▶ Laser for sw manual cutting
- ▶ Point for belt table
- ▶ Angular box BT40 4500 rpm for inner edges polishing
- ▶ Unloading controller with tag printing system

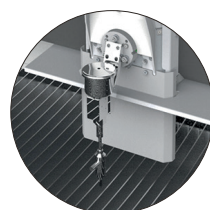




Artificial vision for scanning
and optimization of slabs



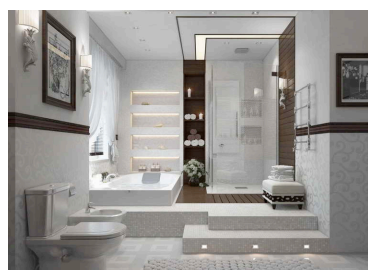
Tilted cuts from 0 to 90
degrees



3 axis cutting

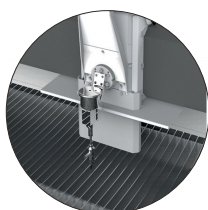
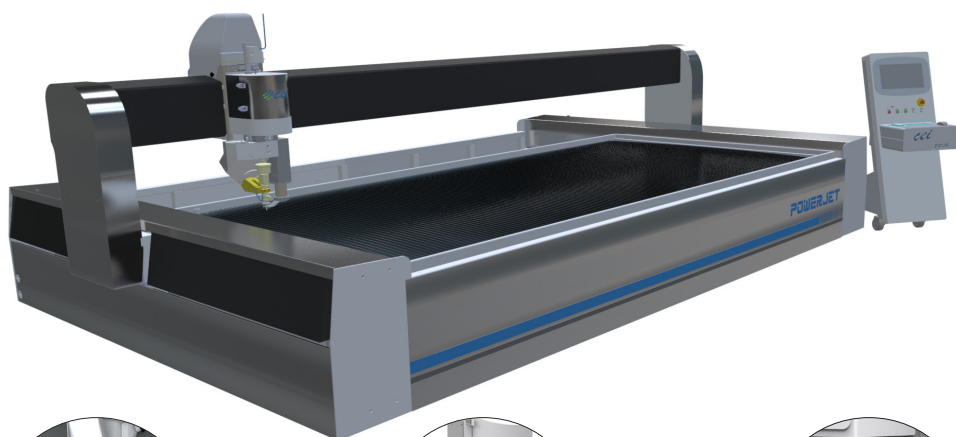
TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Blade diameter from 300 to 625mm
- ▶ Useful cutting area from 3600x2000mm to 4000x2200mm
- ▶ Z Axis from 500mm to 900mm
- ▶ C Axis from -180° to +360°
- ▶ A Axis from 0° to 90°
- ▶ Cutting motor power 24 or 27HP
- ▶ Cutting operations with 4 or 5 axis
- ▶ Waterjet cutting operations from 3 to 5 axis
- ▶ Abrasive tank with automatic head feeding
- ▶ High pressure pump 50HP 4000bar
- ▶ **Artificial vision for:**
Slab defects reading; Slab position reading
- ▶ Automatic tool measuring system
- ▶ Water tank for cutting with blade or waterjet
- ▶ Red laser for sw manual cutting
- ▶ **Specific software for:**
Kitchen tops; "Open book" works; Milling, drilling and engraving
- ▶ Manual milling tools exchange 1/2"
- ▶ Chiller for HP Pump
- ▶ Filtration system with support for single or double big-bag
- ▶ Automatic lubrication

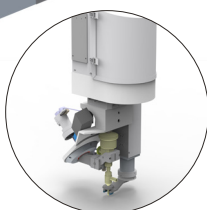


PowerJET®

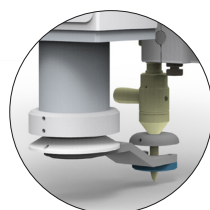
CNC SYSTEM 3 TO 5 AXIS | WATERJET CUTTING
WITH ARTIFICIAL VISION



3 axis cutting



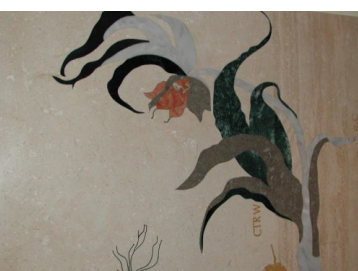
5 axis cutting



Real time slave measuring system

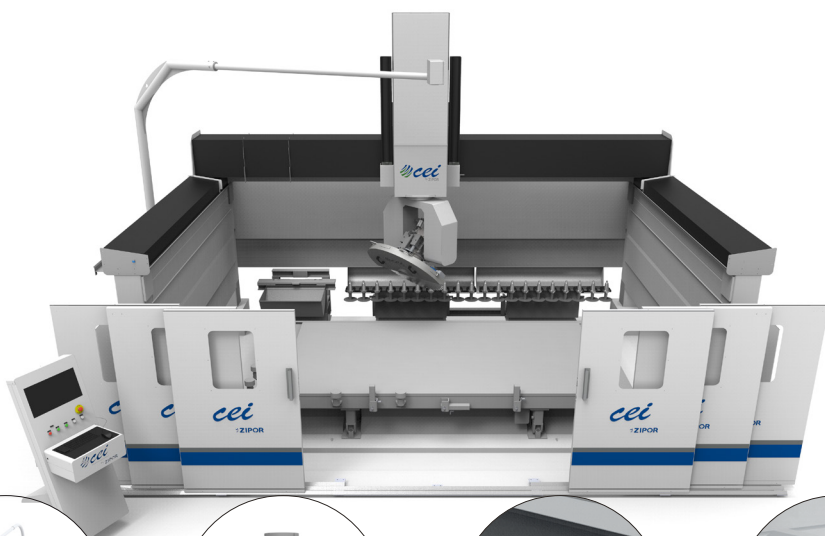
TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Useful cutting area from 2000x1500mm to 10000x3000mm
- ▶ Z Axis 200mm
- ▶ Cutting operations from 3 to 5 axis
- ▶ Waterjet cutting tank
- ▶ Abrasive tank with automatic head feeding
- ▶ High pressure pump 50HP 4000bar, 30HP 3800bar and 60HP 6000bar
- ▶ Automatic lubrication
- ▶ **Artificial vision for:**
 - Slab defects reading; Slab position reading*
- ▶ Single or double working area
- ▶ Second slave head
- ▶ Real time slave measuring system
- ▶ Tilting tank for sheets vertical loading
- ▶ Filtration system with support for single or double big-bag
- ▶ Softener or pH water treatment kit



StoneCUT[®]MILL MASTER

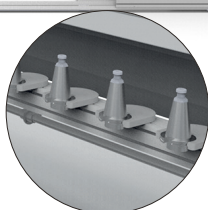
CNC SYSTEM 5 OR 6 AXIS | COMBINED DISC CUTTING AND MILLING
WITH ARTIFICIAL VISION



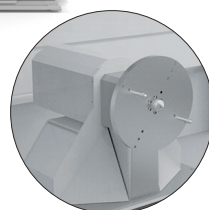
Artificial vision for scanning and optimization of slabs



Tilted cutting and milling from 0 to 140 degrees



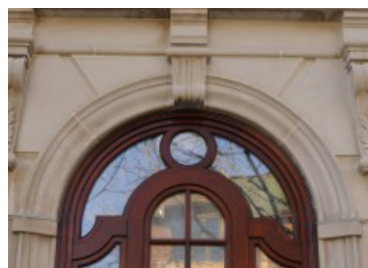
Automatic tool exchange: cutting disks and millers



Special columns lathing (6 axis)

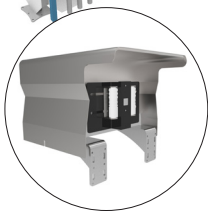
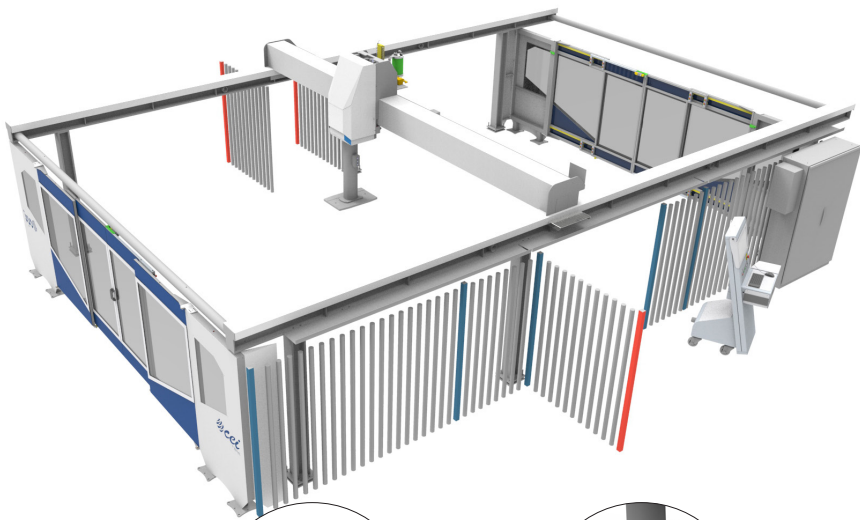
TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Blade diameter from 600 to 1400mm
- ▶ Useful cutting area from 3500x2000mm to 4000x2200mm
- ▶ Z Axis from 1200mm to 1400mm
- ▶ C Axis from -180° to +360°
- ▶ A Axis from 0° to 90°
- ▶ Spindle power 34HP ISO50
- ▶ Cutting and milling operations with 5 axis
- ▶ Automatic lubrication
- ▶ Vacuum cups for pieces movement 600Kg
- ▶ **Artificial vision for:**
Slab defects reading; Slab position reading
- ▶ Automatic tool measuring system
- ▶ Automatic slab thickness measuring system
- ▶ Tool storage for automatic tool exchange up to 20 positions for ISO50
- ▶ Blade storage for automatic exchange
- ▶ Fixed or tilting table (with aluminum top)
- ▶ Red laser for sw manual cutting
- ▶ 0 Point for table
- ▶ Up to 2 working areas
- ▶ Vacuum cups for milling table kit
- ▶ Lathe (6th axis)

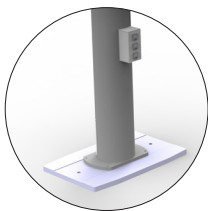


Picker & StonePRINT

DIRECT PRINTING SYSTEM | BARCODE, TEXT, LOGOS



Print head



Picker head

PICKER TECHNICAL SPECIFICATIONS

- ▶ Unload capacity up to 400Kg
- ▶ Movement on linear guides
- ▶ Automatic vacuum system
- ▶ Intelligent approaching adjustment to the slab
- ▶ **Typical applications:**
Unload from cutting lines; Parts palletizing

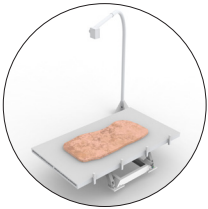
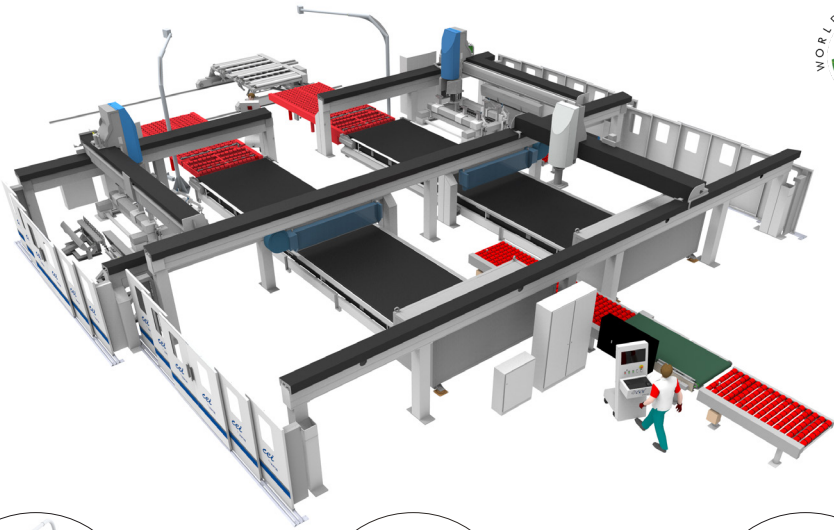
STONEPRINT TECHNICAL SPECIFICATIONS

- ▶ Direct printing on cutted pieces (eliminates manual writing task)
- ▶ Logo, barcode, QR code and text printing
- ▶ StonePRINT can be shared with 2+ StoneCUT Lines
- ▶ Real time connection to the piece validation computer at the end of the belt
- ▶ Automatic water removal system for direct printing
- ▶ Pieces sent to packaging zone by conveyor belt.

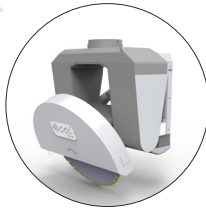


StoneROBOT

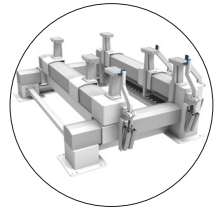
CNC LINE | COMBINED CUTTING AND CUT-TO-SIZE FINISHING
WITH ARTIFICIAL VISION



Artificial vision for scanning
and optimization of slabs



5 axis cutting module



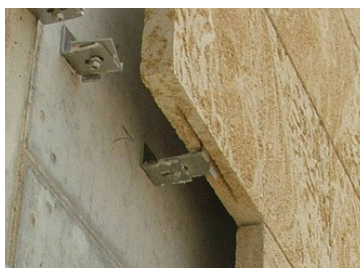
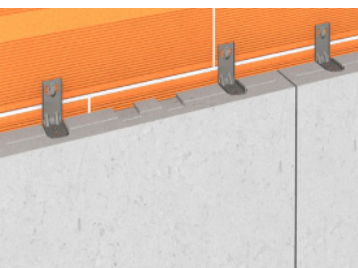
Finishing module 4 to 6 axis

TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Cutting and finishing of cut-to-size facades
- ▶ Automatic slab loading
- ▶ **Execution of:**
*Refends; Quirk miters; Grooves; Anchoring holes;
amongst other types of finishes*
- ▶ Connected to barcode and text printing systems
- ▶ Direct connection to office/smartphone/tablet
- ▶ Online technical support

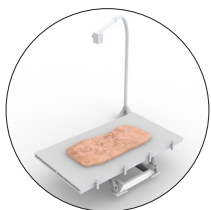
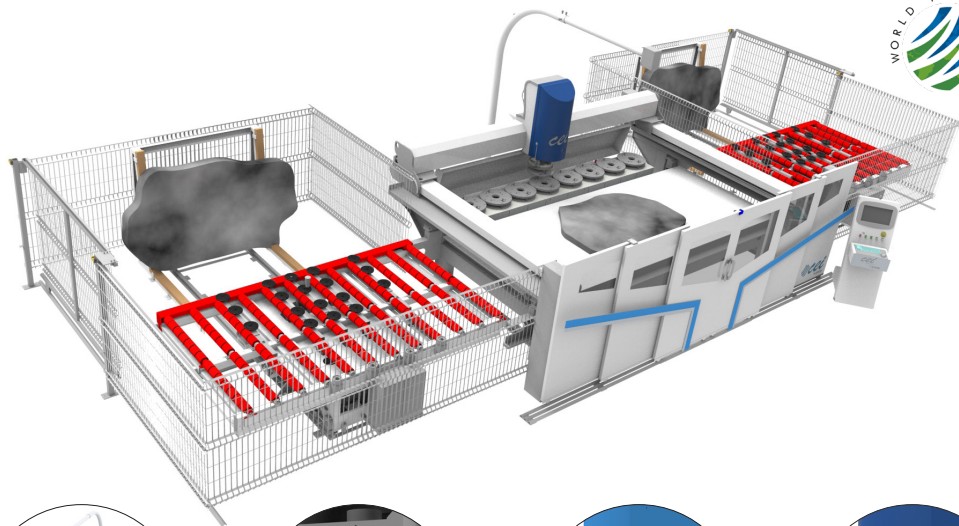
OPERATING MODE

- ▶ Simultaneous loading, cutting/finishing and unloading operations

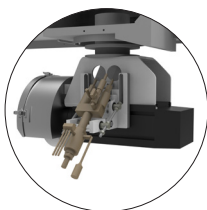


StoneSURFACE®

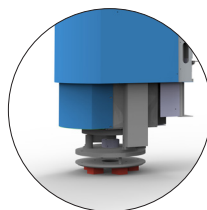
CNC SYSTEM | BUSH-HAMMERING, FLAMING, SCRATCHING, POLISHING AND CALIBRATING WITH ARTIFICIAL VISION



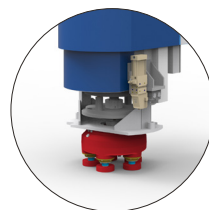
*Artificial vision
for scanning and
optimization of slabs*



*Flaming and
scratching*



*Automatic bush-hammering
and polishing tool exchange*

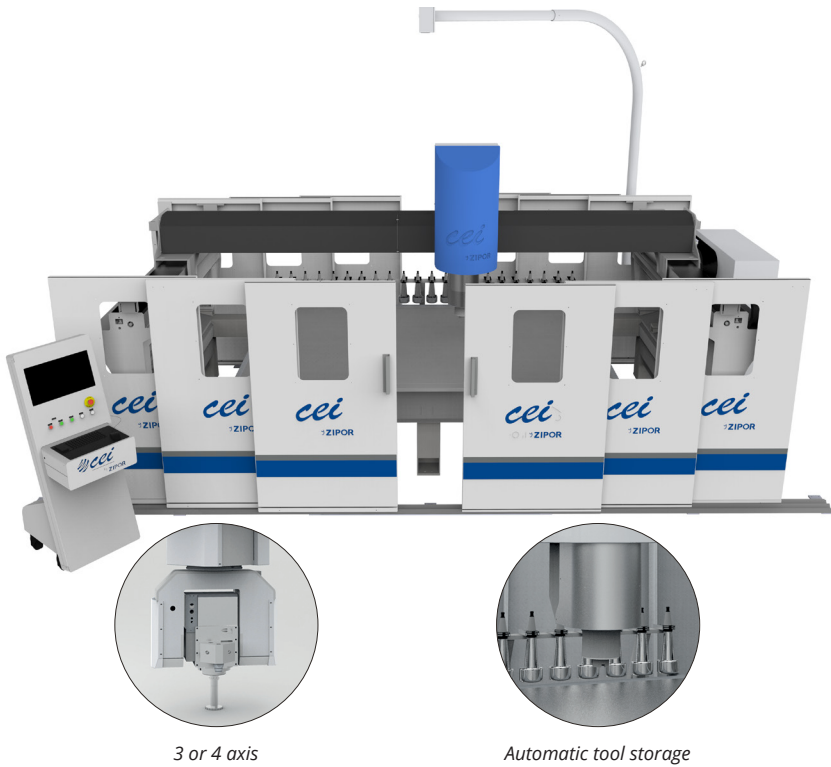


*Automatic satellite tool
exchange*

TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Calibrating, polishing, bush-hammering, scratching and flaming system
- ▶ Head prepared for Frankfurt and Satellite plates
- ▶ Useful cutting area 4000x2000mm
- ▶ Z Axis from 20 to 300mm
- ▶ Motor power 20HP
- ▶ 3 Axis operations
- ▶ Real time tool pressure control
- ▶ Automatic lubrication
- ▶ **Artificial vision for:**
 - Slab defects reading; Slab position reading*
- ▶ Automatic tool measuring system
- ▶ Tool storage for automatic exchange up to 10 positions
- ▶ Simultaneous loading, cutting and unloading operations
- ▶ Parts washing system
- ▶ Z axis 20 to 300mm
- ▶ Slab measuring system to calibrate
- ▶ Loading, texturing and unloading operations simultaneously
- ▶ Fixed or tilting motorized roller tables for loading
- ▶ Belt table with rubber belt for polishing
- ▶ Flaming head connected to the main head
- ▶ Unloading controller with tag printing system
- ▶ Belt washing system





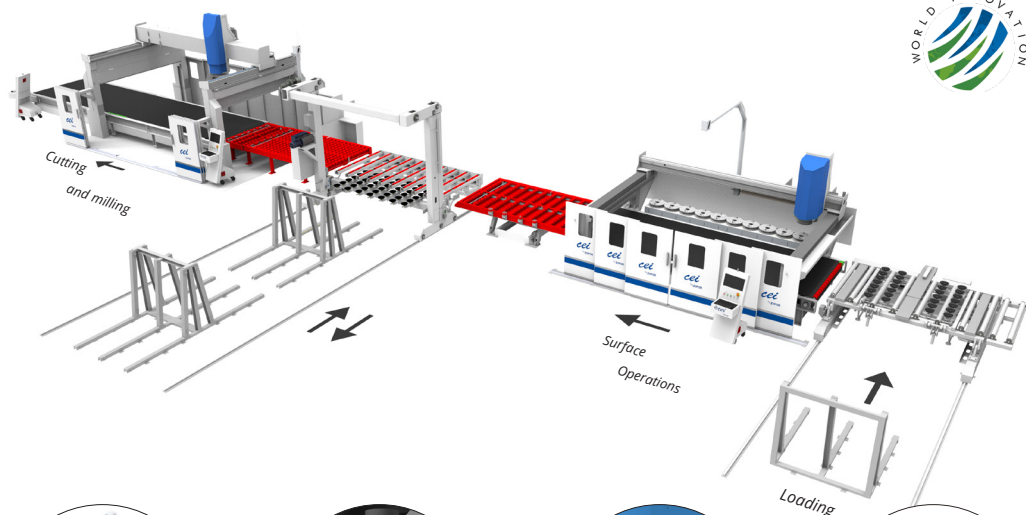
TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Useful working area from 3600x2000mm to 4000x2200mm
- ▶ Z Axis 400mm
- ▶ Spindle power 20HP(10000rpm) BT40
- ▶ 3 Axis operations
- ▶ Automatic lubrication
- ▶ **Artificial vision for:**
Slab defects reading; Slab position reading
- ▶ Automatic tool measuring system
- ▶ Tool storage for automatic exchange from 24 to 48 positions for BT40
- ▶ Tilting or fixed table (with aluminum top)
- ▶ 0 Point for table
- ▶ Angular box BT40 4500 rpm for inner edges polishing (4th axis required)
- ▶ Vacuum cups for milling table kit
- ▶ B axis with tilting up to 3°

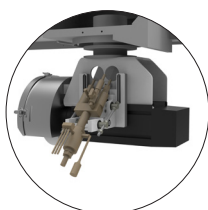


StoneCUT®MILL Surface LINE

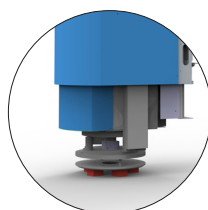
CNC LINE 12 AXIS | SPECIAL SURFACES, CUTTING AND MILLING
WITH ARTIFICIAL VISION



Artificial vision
for scanning and
optimization of slabs



Flaming and
scratching



Automatic bush-hammering
and polishing tool exchange



Cutting and milling from
0 to 90 degrees

TECHNICAL SPECIFICATIONS & OPTIONS

- ▶ Blade diameter from 300 to 800mm
- ▶ Common working area from 3600x2000mm to 4200x2200mm
- ▶ StoneCut Z Axis from 500mm to 900mm
- ▶ StoneCut C Axis from -180° to +360°
- ▶ StoneCut A Axis from 0° to 90°
- ▶ Spindle power from 24HP to 30HP BT40
- ▶ Cutting operations with 4 or 5 axis
- ▶ Head prepared for Frankfurt plates
- ▶ Z axis 20 to 300mm
- ▶ 3 Axis polishing operations
- ▶ Real time tool pressure control
- ▶ Automatic lubrication
- ▶ **Artificial vision for:**
Slab defects reading; Slab position reading
- ▶ Automatic tool measuring system
- ▶ Automatic slab thickness measuring system
- ▶ Tool storage for automatic tool exchange up to 24 positions for BT40
- ▶ Blade storage for automatic exchange
- ▶ Polishing tool storage for automatic exchange up to 10 positions
- ▶ Simultaneous loading, cutting and unloading operations
- ▶ Fixed or tilting motorized roller table for loading
- ▶ Belt table with rubber belt for cutting and unloading



Internal Logistics

AUTOMATIC LOADING, UNLOADING AND SLAB MOVING SYSTEMS

Aerial robot

- ▶ Up to 800kg capacity
- ▶ Moves on linear guides
- ▶ Automatic vacuum system
- ▶ Intelligent slab approachment adjustment
- ▶ Programmable by the operator
- ▶ "Open-book" mode

Typical applications

- ▶ Cutting lines
- ▶ Polishing lines

Competitive advantages

- ▶ Loading/unloading from several racks
- ▶ Direct unloading from machines' dollies
- ▶ Feed several StoneCUT@LINE or polishers



Horizontal Robot-dolly

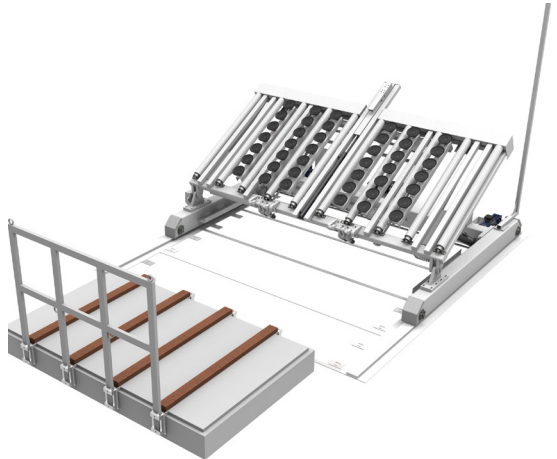
- ▶ 1.500kg to 4.500Kg charge capacity
- ▶ Intelligent vacuum system
- ▶ Vertical slab capture system
- ▶ Moves on rails
- ▶ Motorized rolls
- ▶ Vertical slab unbonding movement

Typical applications

- ▶ Cutting lines
- ▶ Polishing lines

Competitive advantages

- ▶ Feed several StoneCUT@LINE or polishers



StoneInverter

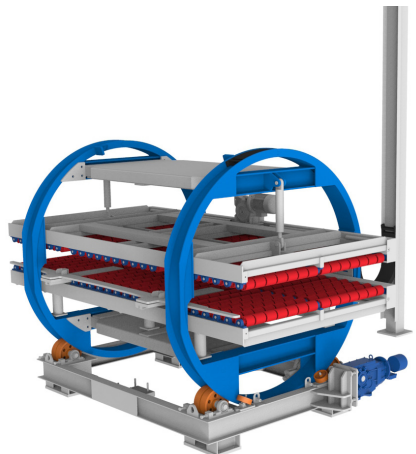
- ▶ Total rotation of the slab
- ▶ Up to 4000Kg charge capacity
- ▶ Possibility of in-line integration
- ▶ Thickness adjustment system
- ▶ Adjustment system to the material dimension

Typical applications

- ▶ Polishing line

Competitive advantages

- ▶ Drastic reduction of turning time



Quality Control Equipments

TEST AND QUALITY CONTROL EQUIPMENTS

Determination of uniaxial compressive strength, EL-200

Determination of uniaxial compressive strength, EL-200

Intended to assess the compressive strength of natural or artificial stone.

The test specimens are laid and centered on the plate of the testing press, then an uniformly distributed load is applied and increased continuously until failure occurs

[Norm: EN 1926]



Determination of the abrasion resistance, EL-210

The purpose of this equipment is to determine the resistance to wear on stones, natural or artificial, used in floors.

The test is carried out by abrading the face of the specimen which will be exposed in use with an abrasive material under standard conditions

[Norm: EN 14157]

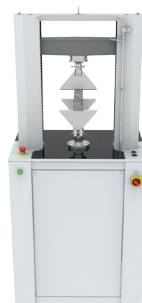


Determination of the flexural strength, EL-220

Intended to assess the flexural strength of the stone, natural or artificial, under concentrated load.

The test specimen is placed over two rollers and then progressively loaded in the middle until failure occurs, then the breaking load is measured and the flexural strength automatically calculated.

[Norm: EN 12372]



Determination of the breaking load at dowel hole, EL-230

Intended to assess the breaking load around a dowel hole in artificial or natural stone.

The test consists of applying a force in a direction perpendicular to the face of a specimen through a dowel previously placed in a hole on one of its sides and measuring the breaking load of the specimen.

[Norm: EN 13364]



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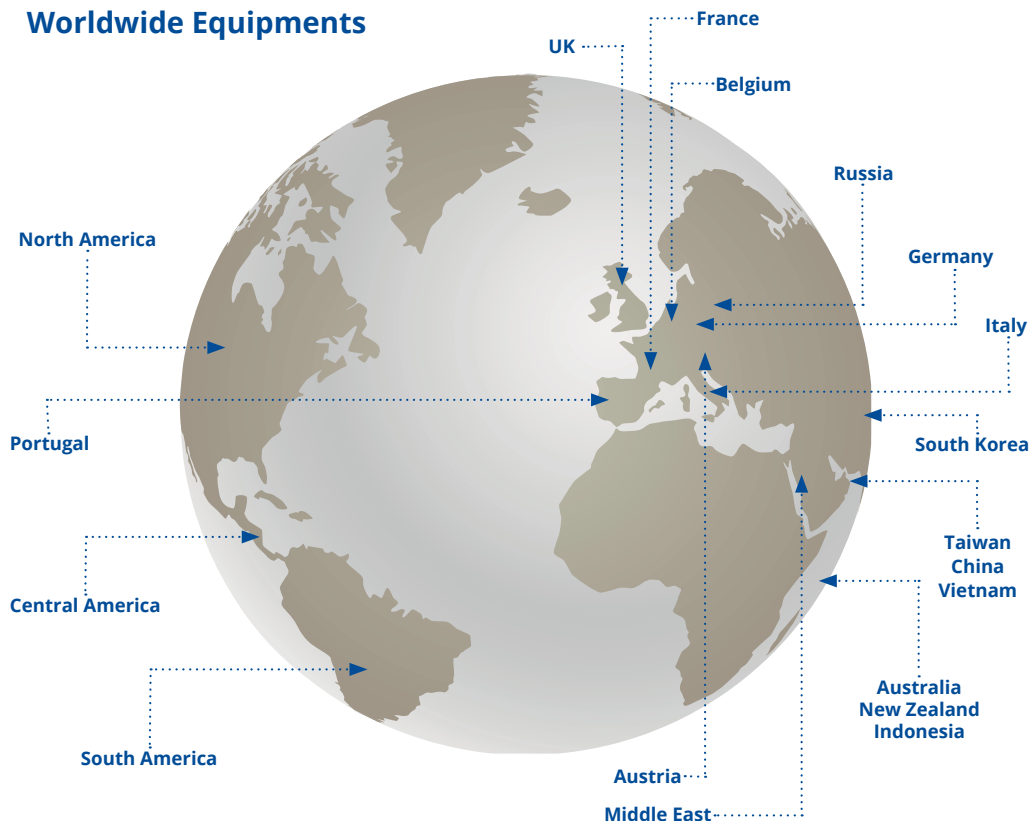
Company Mission and Values

The development and production of technologically advanced equipment is part of our mission, as well as a transparent relationship with our customers and suppliers, never neglecting the environment preservation.



Technology Made in Europe

Worldwide Equipments



Partnerships & Labels



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