KUMAK®

ITALIAN MADE QUALITY

PRECISE CUTTING SOLUTION

OUR MACHINERY

INDEX

PRECISE CUTTING SOLUTIONS

3 WHY KUMAK

4 SOFTWARE AND NUMERICAL CONTROL

5 MACHINERY TYPES

6–7 PROCESSING

8 TECHNICAL DATA SHEETS BY MODEL

20 WARRANTY, DELIVERY, CERTIFICATIONS

21 ABOUT US / CONTACTS

WHY KUMAK

OVERSIZED MOTORS, NOT PUSHED TO THE LIMIT

20HP S1 spindle motor, 7Nm axis motors: more performance and durability, decisive when machining sintered materials.

OPEN SOFTWARE, NO LOCK-IN

The system accepts files from the leading external CAD-CAM software on the market: freedom of choice for the customer.

REAL SUPPORT

Real-time remote diagnostics, plus experienced on-site mechanical technicians.

COMPONENTS AVAILABLE WORLDWIDE

We use quality off-the-shelf components, not custom parts: if something breaks, the replacement is easy to find anywhere, no long downtime, no import costs.

DIMENSIONAL FLEXIBILITY

We build machines in different sizes based on each customer's specific requirements.

SOFTWARE AND NUMERICAL CONTROL

TWO NUMERICAL CONTROLS, DEPENDING ON THE MACHINE:

TEX Automation

3 axes + 1, for traditional milling machines
(EtherCAT bus on the most recent models)

ESA Automotion

5 interpolated axes, CANopen bus
(KUBE HXL)



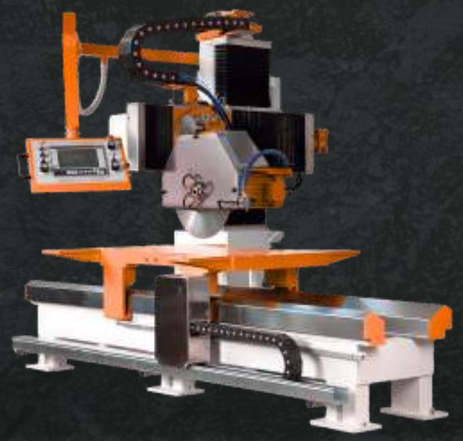
ON-BOARD: TOOL MEASUREMENT, MATERIAL MEASUREMENT, AUTOMATIC OR MANUAL NESTING.

OPERATING AND CAD-CAM SOFTWARE "ZEUS": LIFETIME LICENSE, FREE UPDATES.

MACHINERY TYPES

RADIAL ARM CUTTING MACHINES
COMPACT FORMATS, 3 AXES

- KUT 1
- KUT 3
- KUT 3 MAGNUM



BRIDGE CNC MACHINES
LARGE FORMATS, 4 AXES

- HTO 4
- HTO 4JS
- HTO 4 MAXI



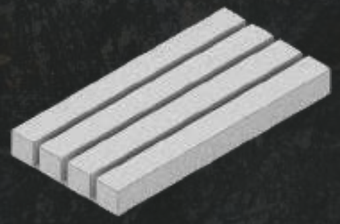
CNC MACHINING CENTER
5 AXIS, FLAGSHIP

- KUBE HXL
- KUBE S



PROCESSING

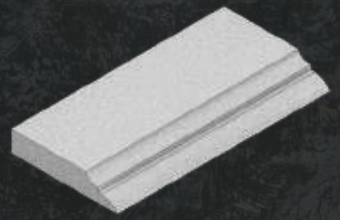
OUR MACHINES COVER A WIDE RANGE OF OPERATIONS, FOR EXAMPLE:



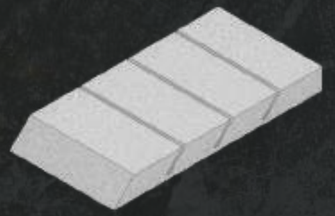
LONGITUDINAL CUTS



ANGLED CUTS



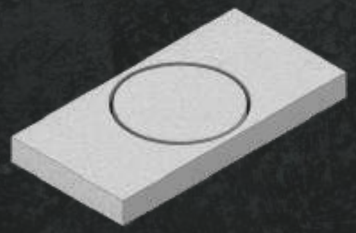
SHAPING



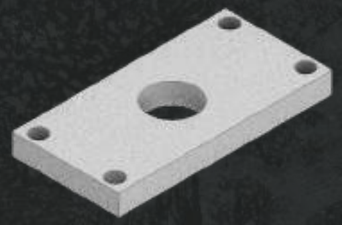
0-90° BEVEL CUTS



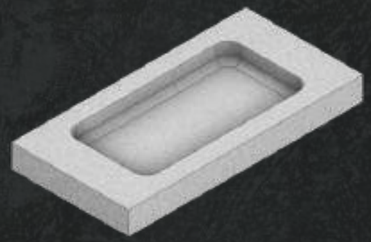
TEXTURING



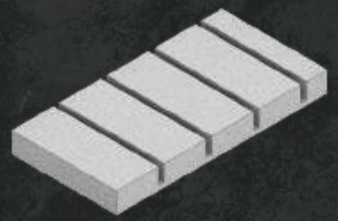
CURVED CUTS



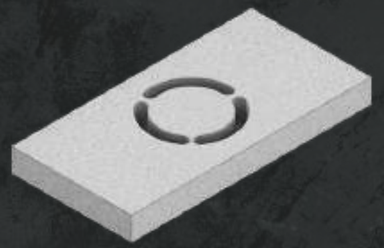
DRILLING



BLOCK CARVING



TRANSVERSE CUTS



MILLING

APPLICATIONS

OUR MACHINES CAN PRODUCE A WIDE RANGE OF ITEMS:



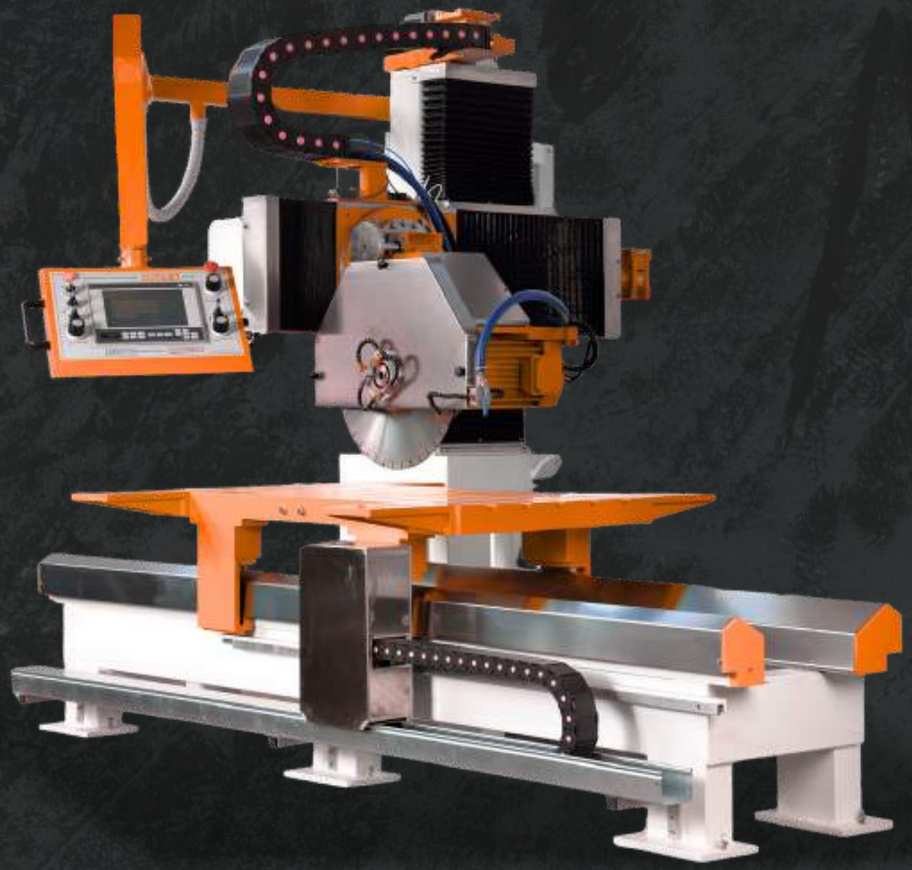




TECHNICAL DATA SHEET: KUT 1

KUT 1

The ideal entry level machine for workshops with **limited space** that want to move to CNC without disrupting daily operations. **Easy to program**, built for everyday reliability, **designed for those who cut every day** without needing oversized formats.

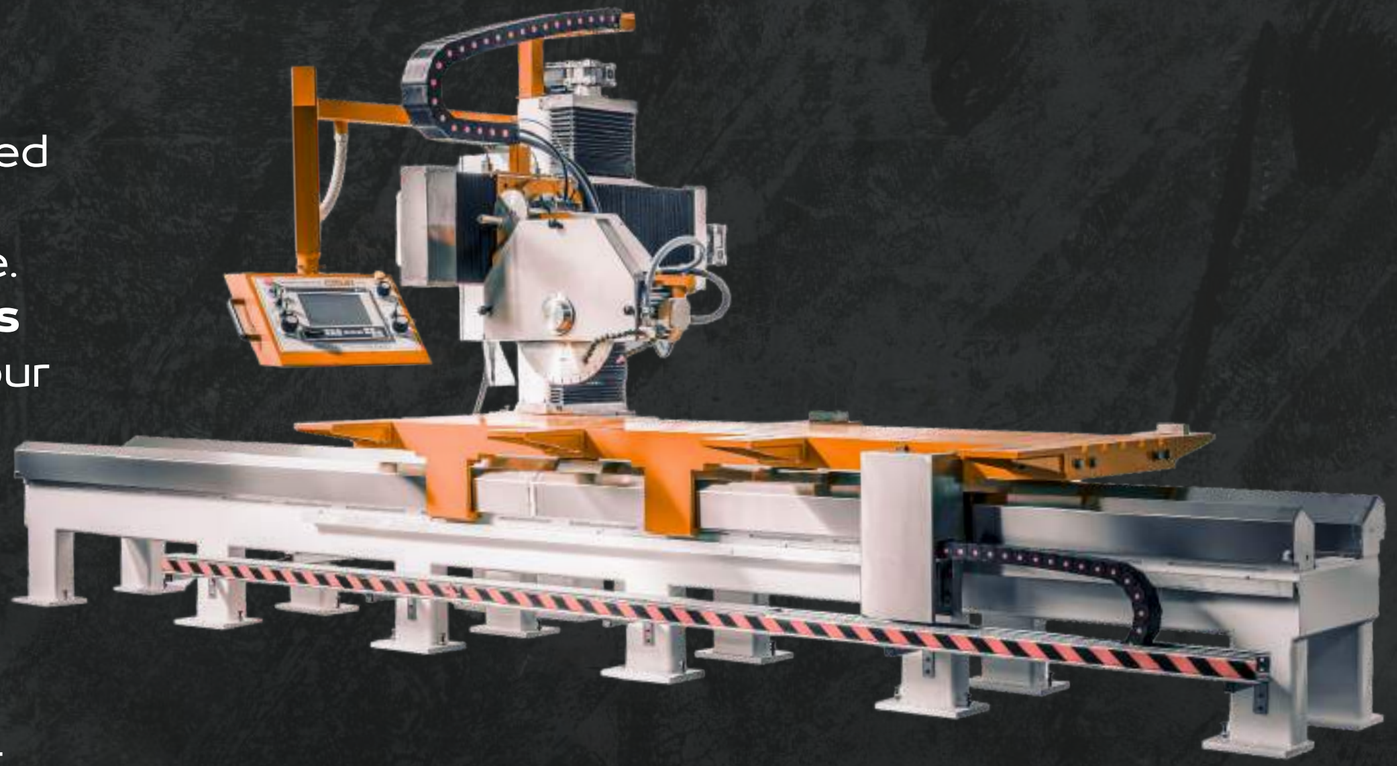


- X/Y/Z AXIS TRAVEL : 1,500 / 750 / 500 MM
- BLADE MOTOR : 15 HP; 3,000 RPM
- MAX BLADE DIAMETER : 500 MM
- WEIGHT: 2.5 T

TECHNICAL DATA SHEET: KUT 3 / KUT 3 MAGNUM

KUT 3

The same simplicity as the KUT 1, with extended travel for workshops handling **longer slabs** without moving up to a bridge-type machine. The built-in CAD-CAM also imports **drawings from external systems**, freedom to work your way from day one.



KUT 3 MAGNUM

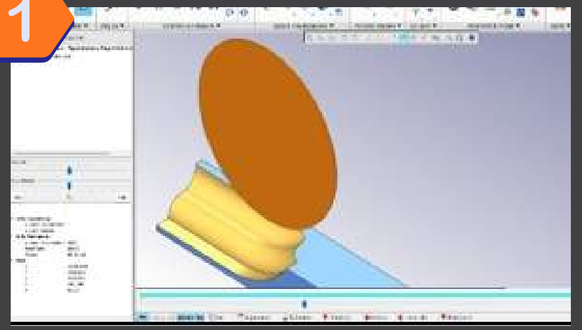
The MAGNUM version adds Z-axis travel, a longer bench and the ability to mount larger blade, for those working greater thicknesses or more demanding materials, within the same compact concept.

COMPARISON TABLE KUT 3 / KUT 3 MAGNUM

TECHNICAL SPECIFICATIONS	KUT 3	KUT 3 MAGNUM
Vertical blade travel (Z)	500 mm	600 mm
Transverse blade travel (Y)	750 mm	1,100 mm
Work bench dimensions	3,000 x 900 mm	3,000 x 1,200 mm
Rail length	6,000 mm	6,000 mm
Max blade diameter	625 mm	725 mm
X/Y/Z axis motor power	1.5 HP	1.5 HP
Blade motor power	20 HP	20 HP
Vertical head motor power (optional)	5 HP 8,000 RPM	5 HP 8,000 RPM
Machine weight	3.5 ton	6.5 ton
Max machine dimensions	5,800 x 2,500 mm (height 2,300 mm)	5,800 x 2,500 mm (height 3,500 mm)

OPTIONAL FOR OPTIONS FOR KUT SERIES

1



SHAPING SOFTWARE

Dedicated CAD for generating ISO shaping programs.

Imports, draws and optimizes cutting profiles, automatically generating the ISO code (G-code) the machine needs to run. Handles complex geometries, optimizes tool paths and cuts programming time.

2



ELECTRO-SPINDLE

Adds a router bit and drill point to the machine, ½" gas connection.

Engraving, chamfering, grooving and marking directly on the piece, no need for a separate machine.

3



AUTOMATIC SWIVEL HEAD

(AVAILABLE ONLY ON PLC VERSION)

0°-90° rotation with mechanical locking: angled cuts and chamfers without repositioning the piece by hand.

Designed for 45° chamfers and variable-angle machining.

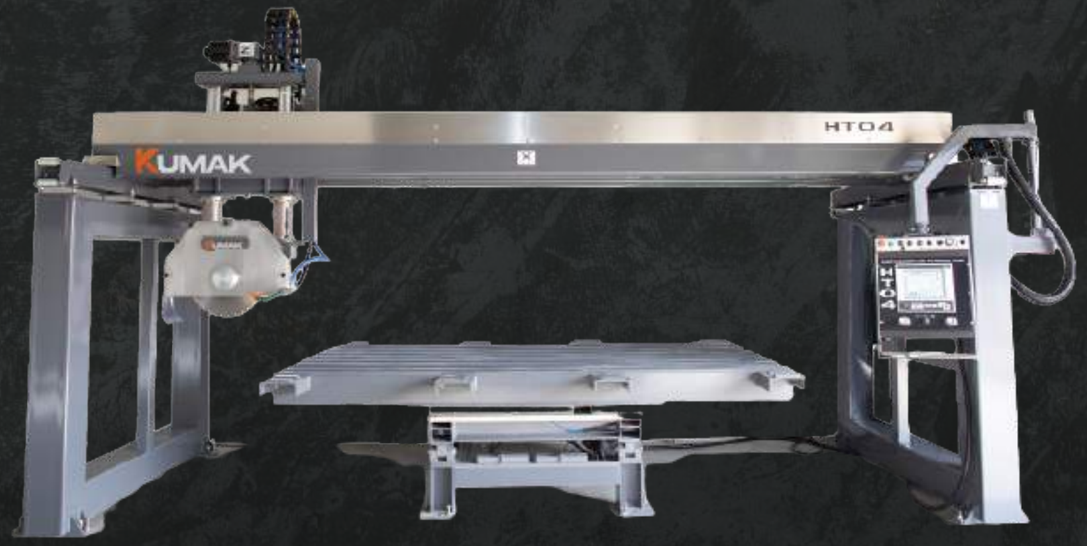
TECHNICAL DATA SHEET: HTO 4 / HTO 4JS

HTO 4

The quintessential bridge CNC machine, historically the most widely used in marble workshops. The **indexed rotating bench** and **tilting system** make slab loading fast and safe, day after day.

HTO 4JS

The JS version has extended X-axis travel to work jumbo-size slabs in engineered stone and quartz (3,800x2,000mm format), with no compromises on the machine.



- X/Y/Z AXIS TRAVEL: 3,500 / 3,500 / 400 MM
- BLADE MOTOR: 24 HP IN S6, WITH INVERTER
- MAX BLADE DIAMETER: 625 MM
- INDEXED ROTATING BENCH (0°-45°-90° ETC.), TILTING

COMPARATIVE TABLE HTO 4 / HTO 4JS

TECHNICAL SPECIFICATIONS	HTO 4	HTO 4JS
Vertical blade travel (Z)	400 mm	400 mm
Transverse blade travel (Y)	3,500 mm	3,500 mm
Longitudinal travel (X)	3,500 mm	3,900 mm
Blade motor	24 HP in S6, with inverter	24 HP in S6, with inverter
Max blade diameter	625 mm	625 mm
Spindle speed	960–4,500 RPM	960–4,500 RPM
Head (base version)	0°-45° swivel, manual gearbox	0°-45° swivel, manual gearbox

TECHNICAL DATA SHEET: HTO 4 MAXI

HTO 4 MAXI

The choice for machining **very large blades** and **substantial thicknesses**: the **automatic rotating bench** speeds up production on demanding pieces, without repeated manual intervention from the operator.



— X/Y/Z AXIS TRAVEL: 3,000 / 3,500 / 600 MM

— BLADE MOTOR: 20 HP S1 / 24 HP S6, WITH INVERTER

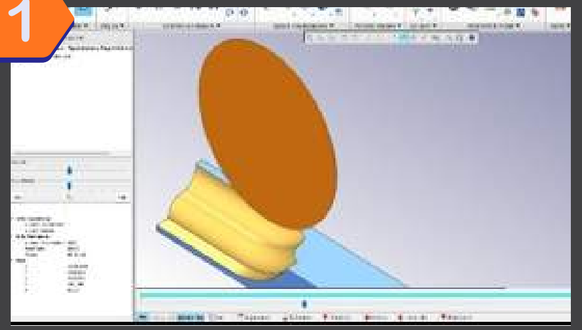
— HEAD: FIXED

— MAX BLADE DIAMETER: 1,200 MM

— AUTOMATIC ROTATING BENCH, NON-TILTING (OPTIONAL)

OPTIONAL FOR HTO SERIES

1



SHAPING SOFTWARE

Dedicated CAD for generating ISO shaping programs.

Imports, draws and optimizes cutting profiles, automatically generating the ISO code (G-code) the machine needs to run.
Handles complex geometries, optimizes tool paths and cuts programming time.

2



ROTATING BENCH

Rotates the work bench, allowing multiple sides of the piece to be machined without manual repositioning.
A single reference point means less setup time and more precision.
Rotation is managed electronically by the numerical control, ideal for milling, engraving and profiling at different angles.

3



AUTOMATIC SWIVEL HEAD

(AVAILABLE ONLY ON THE HTO 4 AND THE HTO 4JS VERSIONS)

0°-90° rotation with mechanical locking: angled cuts and chamfers without repositioning the piece by hand.
Designed for 45° chamfers and variable-angle machining.

TECHNICAL DATA SHEET: KUBE HXL / KUBE-S

KUBE HXL

The premier machine in the lineup: it cuts, mills, drills, shapes, and, with the optional lathe, turns columns and statues, **all on the same sheet without requiring any movement**. Ideal for those seeking a singular machine that can substitute for multiple workstations.



KUBE - S

The KUBE HXL offers the same versatility—cutting, milling, drilling, shaping, and optional turning, within a **more compact design** and at a **more accessible price point**. It is perfect for individuals looking to embark on 5-axis machining without the commitment of a full-size HXL.

TECHNICAL DATA SHEET: KUBE HXL

KUBE HXL SPECIFICATIONS



- X/Y/Z AXIS TRAVEL: 3,800 / 2,800 / 600 MM
- BENCH SIZE: 3,800 X 2,500 MM (TILTING SECTION 3,800 X 1,700 MM)
- HEAD ROTATION: 0°-365°
- BLADE TILT: 0°-90°
- BLADE MOTOR: 20 HP S1 (25 HP S6), MAX 6.000 RPM
- BLADE DIAMETER: 350-725 MM
- MAX CUTTING THICKNESS: 250 MM
- WEIGHT: 6,000 KG
- TOUCHSCREEN CONSOLE, USB, LAN WITH REMOTE ASSISTANCE

OPTIONAL FOR KUBE

1



SLAB DETECTION CAMERA

Mounted on the rear wall, it automatically detects the slab's dimensions and position for piece nesting.

The high resolution image also highlights defects, flaws and veining, as well as optimizing the slab and reducing waste.

2



AUTOMATIC HANDLING SUCTION CUPS

2 independent, programmable double-stage suction cups lift and move cut pieces without manual intervention.

A fully automatic machine, making the most of the slab surface and minimizing waste.

3



LATHE FOR COLUMNS AND STATUES

External rotation axis for producing columns, capitals and 3D sculptures (available with interpolated 6th-axis version, "Lathe" program).

Available in two diameters: 800mm (front of the machine) or 1,000mm (rear of the machine).

OPTIONAL FOR KUBE

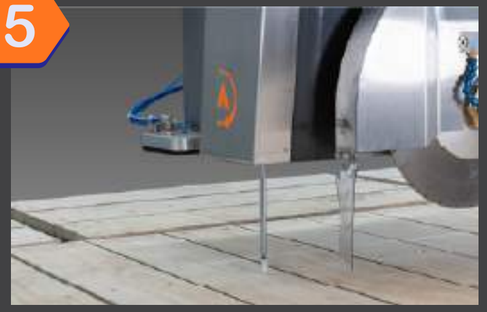
4



DISK PRESETTING UNIT

Automatically detects the blade diameter and the length of the tool mounted on the main spindle, via dedicated management software.

5

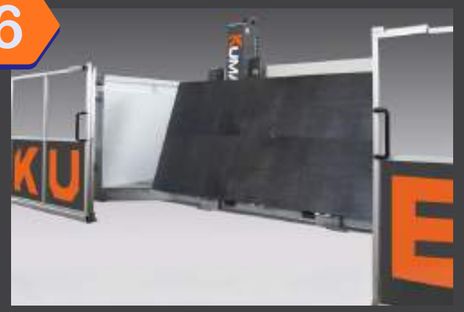


SLAB THICKNESS DETECTOR

Automatically scans the slab's surface before machining, adapting the operations to the actual thickness variations.

Essential for consistent results in 45° machining.

6



POLYURETHANE WORK BENCH

High-density polyethylene, 30mm thick: unaffected by humidity and mold.

Milled to maintain flatness over time, covered with a high-friction rubber mat.

7



ELECTRO-SPINDLE

Adds a router bit and drill point to the machine, ½" gas connection.

Engraving, chamfering, grooving and marking directly on the piece, no need for a separate machine.

WARRANTY, DELIVERY, CERTIFICATIONS

DELIVERY

120 DAYS FROM ORDER CONFIRMATION

WARRANTY

12 MONTHS AGAINST MANUFACTURING DEFECTS

SUPPORT

REAL-TIME REMOTE DIAGNOSTICS + ON-SITE MECHANICAL TECHNICIANS

CERTIFICATION

UL/CSA COMPLIANCE AVAILABLE FOR THE US AND CANADIAN MARKET (OPTIONAL)

TRAINING

3–6 DAY COURSE, 2 OR MORE OPERATORS TRAINED PER INSTALLATION

ABOUT US

WE BUILD CNC MACHINES FOR PROCESSING MARBLE, GRANITE, NATURAL STONE, QUARTZ, PORCELAIN STONEWARE, CERAMICS AND ENGINEERED STONE.

OUR ROOTS ARE IN TIVOLI TERME, IN THE HEART OF ROME'S TRAVERTINE DISTRICT. TODAY OUR PRODUCTION IS BASED AT VIA VICENZA 30, VEDELAGO, IN THE PROVINCE OF TREVISO.

40 YEARS OF EXPERIENCE IN THE INDUSTRY: OUR MACHINES ARE OPERATING IN ITALY, SPAIN, SANTO DOMINGO AND THE UNITED STATES (FLORIDA), FOR CLIENTS SUCH AS THE VATICAN AND CLAX ITALIA.

KUMAK®
ITALIAN MADE QUALITY
PRECISE CUTTING SOLUTION

EMAIL
INFO@KUMAK.IT

PHONE
+39 348 320 3823

WEBSITE
WWW.KUMAK.IT

KUMAK®

ITALIAN MADE QUALITY

PRECISE CUTTING SOLUTION

OUR MACHINERY