HOYUN
MACHINERY

Technology achieves design
科技让设计成为现实

水刀复合机

WATERJET COMPOSITE MACHINE

MÁQUINA COMBINADA DE CHORRO DE AGUA

آلة مدمجة بنفث الماء

19 Years of Building Materials Deep-Processing Equipment Manufacturer
十九年建材深加工设备制造商

Foshan Nanhai HoYun Ceramic Machinery Co., Ltd.
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5 Axis CNC Saw Jet
5轴数控桥切水刀一体机



Front-and-Rear Head Structure
前后刀头结构



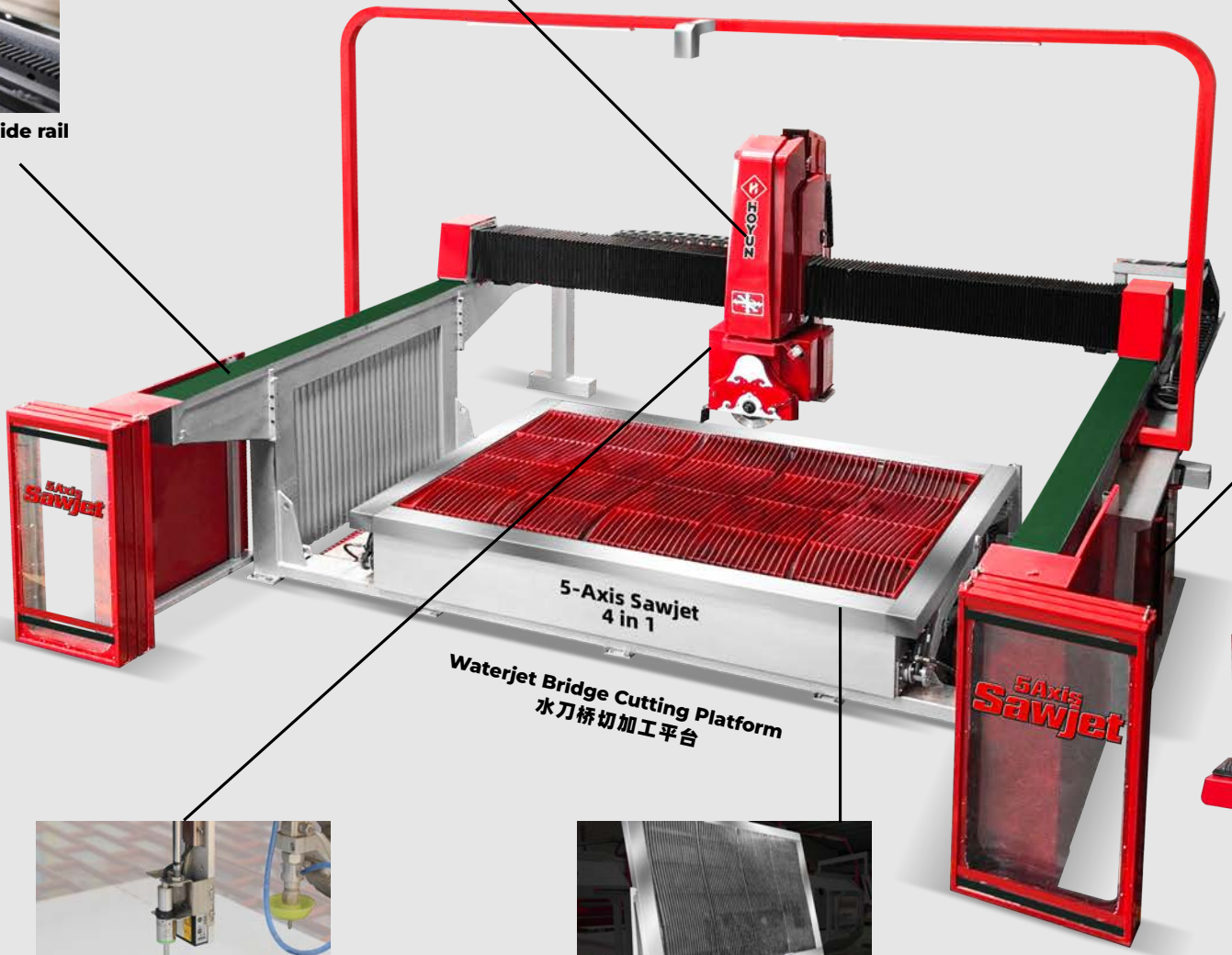
EtherCAT bus
ETHERCAT总线



International Brand Bus-Type Absolute Servo Motor
国际品牌总线绝对值伺服电机



Oil-immersed linear guide rail
油浸式直线导轨



Ultra-high Pressure Booster Assembly
超高压增压总成



Auto sand supply barrel
自动供砂桶



Waterjet Bridge Cutting Platform
水刀桥切加工平台

Laser height measurement & probe detection
激光测高&探针探测

Dual Hydraulic Cylinder Tilting Platform
双液压缸翻转平台



CNC control cabinet
CNC控制柜

4-IN-1 全能王





5 Axis Waterjet
5轴水刀

It processes various materials including stone, glass, metal and ceramics, enables 0–60° angle and complex curve cutting, and is ideal for intricate tasks like parquet, artistic shaping and inlaying with high precision, narrow kerf and improved material utilization.

可加工石材、玻璃、金属、陶瓷等多种材料，实现 0–60° 角度及复杂曲线加工，适合拼花、艺术造型、镶嵌加工等高难度工艺，加工精度高、切缝小、材料利用率高。



5 Axis Bridge Saw
五轴桥切

Lower consumable cost than water jet. Ideal for standardized and mass plate cutting.Powerful spindle ensures high cutting efficiency, suitable for thick plates like granite, marble and sintered stone.

相比水刀耗材成本更低，是标准化、大批量板材开料的主力加工单元。搭载大功率主轴，切割速度快、加工效率高，可轻松应对花岗岩、大理石、岩板等厚板。。



Independent Milling Cutter
独立铣刀

It can process special-shaped contours, inner holes and countertop openings, realize customized and complex patterns based on CAD drawings, and support multi-functional processing like slotting and engraving.

可完成异形轮廓、内孔开槽、台面开孔等复杂结构制作，能依据 CAD 图纸满足各类定制化与复杂图形加工需求，支持开槽、局部雕刻等多功能复合加工。



Profiling
磨边/造型

It can process various edges such as round edge, bevel edge and European edge, with uniform polishing and no chipping.Automatic continuous operation, widely used for countertops and decorative lines processing.

可加工圆边、斜边、欧式边等多种边型，抛光均匀、无崩边；自动化连续作业，广泛用于台面、装饰线条等加工。

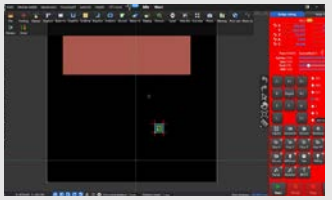
5 Axis Waterjet & Engraving Cutting Machine
5轴水刀雕刻一体机



Oil-immersed linear guide rail
油浸式直线导轨



Engraving Waterjets integrated
水刀雕刻一体



CNC Control System
CNC操作系统



Auto Sand Supply Barrel
自动供砂桶

Waterjets Engraving Platform
水刀雕刻加工平台

Ultra-high Pressure Boosting Assembly
超高压增压总成



Laser height measurement & probe detection
激光测高&探针探测



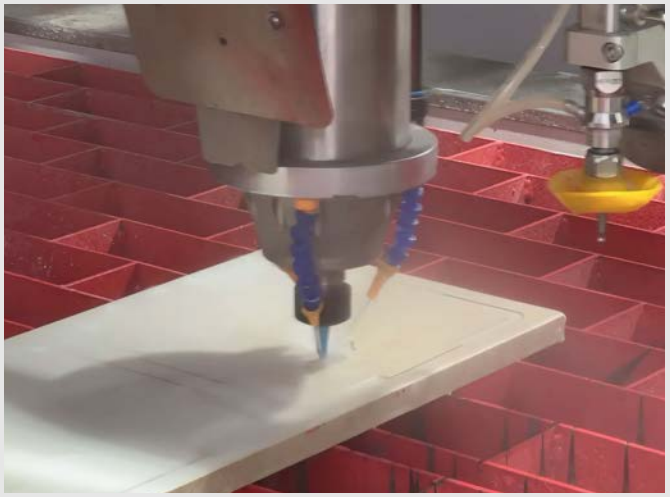
Absolute-value servo motor with memory function
带记忆功能的绝对值伺服电机



EtherCAT bus
ETHERCAT总线

WATERJET & ENGRAVING INTEGRATED
水刀雕刻一体





Engraving
雕刻

Integrated engraving function expands processing possibilities. It can independently perform relief engraving, pattern/text engraving, and contour cutting. When combined with the waterjet system, it enables integrated, efficient machining of functional components such as undermount sink cutouts, drainage grooves, and counterbore holes.

集成雕刻功能，拓展工艺边界。既可独立完成浮雕、图文雕饰及轮廓切割，更可与水刀系统联动，实现台中盆、沥水槽、沉头孔等功能性构件的一体化高效加工。



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5轴水刀

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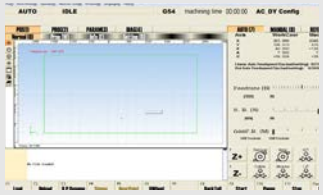
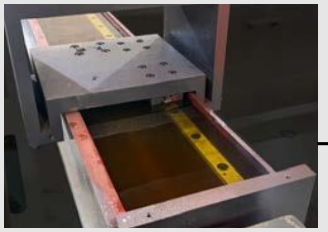
5 Axis Waterjet & Hydrofinish Cutting Machine
5轴水刀拉毛一体机



CNC Operating System
CNC操作系统



Hydrofinish Waterjets integrated
水刀拉毛一体



Cast iron beam / Oil immersed linear guide
铸铁横梁/油浸式直线导轨



CNC Control Cabinet
CNC控制柜



Waterjet Hydrofinish Platform
水刀拉毛加工平台



Ultra-high Pressure Boosting Assembly
超高压增压总成



EtherCAT Bus
EtherCAT总线



Laser Height Measurement & Probe Detection
激光测高&探针探测



0.15mm Aperture Nozzle *4
0.15mm孔径喷嘴*4

WATERJET & HYDROFINISH INTEGRATED
水刀拉毛一体







Hydrofinish
拉毛

Hydrofinish head: Adopts a four-nozzle design with a fine nozzle aperture of 0.15mm, delivering finer and more concentrated jetting. The entire pattern processing procedure uses only pure water, requiring no sandblasting. It is eco-friendly and effectively reduces pollution. Compared with traditional sandblasting machines, it completely eliminates dust pollution and safeguards the health of operators.

拉毛头：采用四喷嘴设计，喷嘴孔径精细至 0.15mm，喷射更细密、集中。拉毛加工全程采用纯水，无需喷砂，绿色环保，有效降低污染。相较于传统喷砂机，彻底解决粉尘污染问题，守护操作人员的身体健康。

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5轴水刀

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TECHNICAL PARAMETERS 技术参数

Machine 机器	5 Axis CNC Saw Jet	5 Axis Waterjet & Engraving	5 Axis Waterjet & Hydrofinish
Model 型号	3220	3418	3418
With Saw Blade 是否有锯片	✓	/	/
With Milling 是否有铣刀	✓	✓	/
With Hydrofinish 是否有拉毛	/	/	✓
Cutting Size 切割尺寸	3200*2000mm	3400*1800mm	3400*1800mm
XY Axis Working Size XY 轴工作行程	4500*3200mm	4000*2200mm	4000*2200mm
Working Water Pressure 工作水压	300Mpa	300Mpa	300Mpa
Max. Water Pressure 最高水压	420Mpa	420Mpa	420Mpa
Cutting Accuracy 切割精度	±0.1mm	±0.1mm	±0.1mm
Max. Cutting Thickness 最大切割厚度	100mm	100mm	100mm
Power Supply 电源参数	220V/380V/415VAC,50/60HZ	220V/380V/415VAC,50/60HZ	220V/380V/415VAC,50/60HZ
Water Consumption 用水量	15L/min Saw Blade 锯片 3.7L/min Waterjet 水刀	15L/min Engraving 雕刻 3.7L/min Waterjet 水刀	3.7L/min
CAD / CAM Software CAD/CAM 软件	AutoCAD / ArtCAM	AutoCAD / ArtCAM	AutoCAD / ArtCAM
Spindle Power 主轴功率	15KW (Saw Blade 锯片)	5.5KW (Engraving 雕刻)	/
Total Power 总功率	62KW	47.5KW	42KW
Weight 重量	6000KG	4000KG	3700KG
Machine Size 机器尺寸	5800*4800*3850mm	5500*3200*2400mm	5500*2800*2200mm

OPTIONAL CONFIGURATIONS
可选配置







Cooling System (Air Cooling / Water Cooling / Oil Cooling)
散热系统（风冷/水冷/油冷）

The cooling system offers three configurations—air-cooled, water-cooled, and oil-cooled—allowing flexible selection based on regional climate and operating conditions to ensure reliability while achieving optimal energy efficiency.

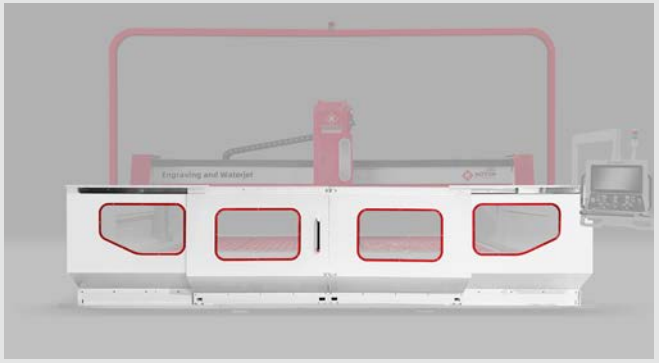
散热系统提供风冷、水冷、油冷三种配置，可根据不同地域气候与工况灵活选择，在确保可靠性的同时实现最优能效。



Dual Hydraulic Cylinder Tilting Platform
双液压缸翻转平台

The tilting platform is driven by dual hydraulic cylinders, enabling 90° flipping of the entire worktable for easy sheet loading / unloading and thorough bottom sand cleaning.

翻转平台配备双液压缸驱动，可实现整个工作台面90°翻转，既便于板材上下料，也易于彻底清理底部积砂。



Safety guards
防护门

The protective door combines high safety with clear visibility, effectively blocking debris splashes to ensure operator protection.

防护门具备优异的安全防护性能与开阔的操作视野，能有效阻挡加工中产生的碎石碎屑飞溅，为操作人员提供可靠保护。



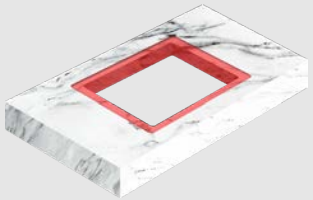
Camera
相机

Optional camera function. Eliminates manual origin setting before cutting, improves positioning accuracy and efficiency.

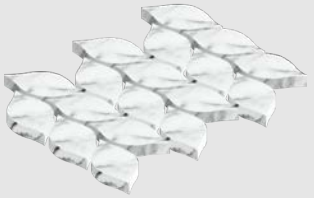
可选配相机拍摄功能。省去每次切割前需要手动设置原点的步骤，提高定位精度和加工效率。

MACHINE PROCESSES
机器工艺

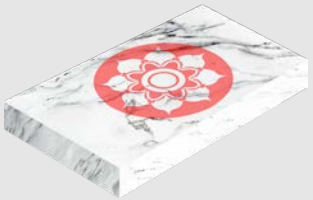
The 5 Axis CNC Saw Jet is suitable for processing materials such as stone, granite, marble, tiles, slabs, and glass, enabling a wider range of machining processes.
5轴桥切水刀一体机适用于石材、花岗岩、大理石、瓷砖、岩板及玻璃等材料，可实现更多工艺加工。



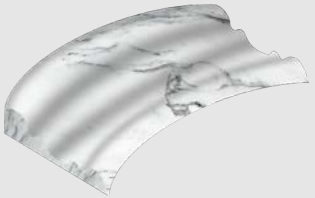
Undermount Sink
台中盆



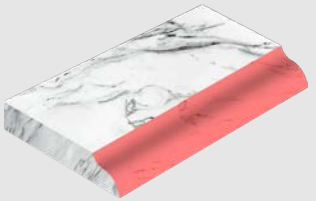
Mosaic
马赛克



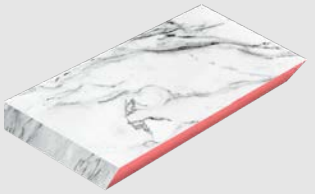
Waterjet Medallion
水刀拼花



Profiling
仿形

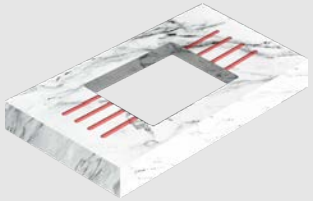


Edge shape
磨边造型

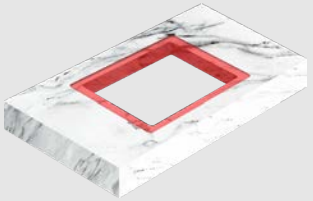


Chamfer
倒角

Engraving and Waterjet Cutting Machine: Versatile material processing. Waterjet cutting for marble, sintered stone, glass, metals; engraving for stone and marble.
水刀雕刻一体机适用于广泛材料加工。其中，水刀切割涵盖大理石、岩板、玻璃及金属等；雕刻功能则针对石材、大理等。



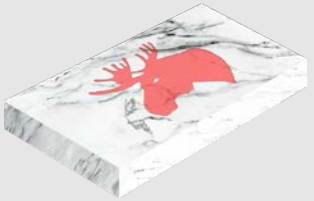
Drainage Tray
沥水槽



Undermount Sink
台中盆

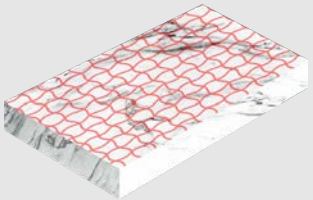


Letter Engraving
文字雕刻

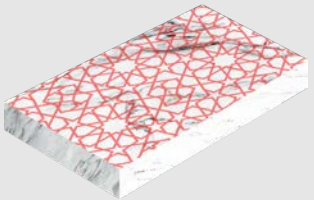


Graphic Engraving
图形雕刻

Hydrofinish and Waterjet Cutting Machine: Versatile material processing. Waterjet cutting for marble, sintered stone, glass, metals; hydrofinish for surface treatment of ceramic tiles, stone and marble.
水刀拉毛一体机适用于广泛材料加工。其中，水刀切割涵盖大理石、岩板、玻璃及金属等；拉毛功能则针对瓷砖、石材、大理石等表面加工。



Hydrofinish
拉毛



Hydrofinish
拉毛

APPLICATIONS
应用场景



Sintered Stone Integrated Basin
岩板一体盆



Undermount Sink
台中盆



Undermount Sink
台中盆



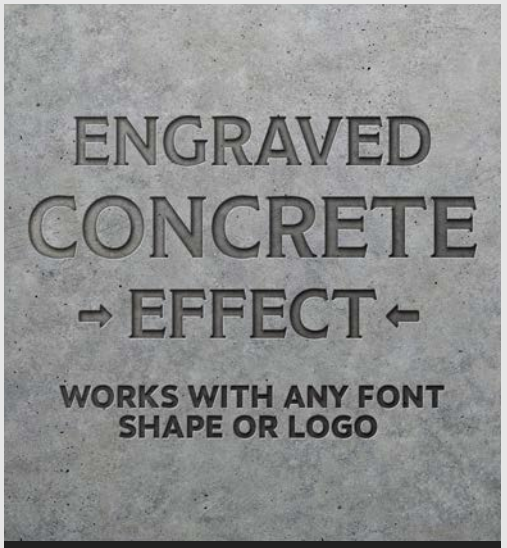
Drain Trough
沥水槽



Mosaic
马赛克



Engraving
雕刻



Engraving
雕刻



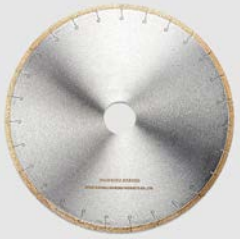
Hydrofinish
拉毛

MATCHING TOOLS
配套工具

BLADE SERIES 刀具类



Sintered Saw Blade
岩板锯片



Marble Saw Blade
大理石锯片



Granite Saw Blade
花岗岩锯片



Milling Cutter
铣刀



Engraving Cutter
雕刻刀



Edge Grinding Knife
磨边刀



Profile Grinding Knife
异形磨边刀



Profile Grinding Knife
异形磨边刀



Profile Grinding Knife
异形磨边刀



Hydrofinish Head
拉毛刀头

TOOL SERIES 工具类



Piston Air Compressor
活塞空压机



Vacuum Pump
真空泵



Sewage Pump
污水泵



Heavy-duty Slate Clamp
重型大板夹



Stone Transport Cart
石材运输车



Vacuum Suction Plate
真空吸盘台板器



Pneumatic Swing-Arm Loader
气动摇臂上料机

MATCHING TOOLS
配套工具

WATERJET CONSUMABLES 水刀耗材



Sand Blasting Head
砂管



Gem Stone
宝石



Switch Repair Kit
水开关维修包



Flat Spool
平面阀芯



Valve Pad
阀垫



Sand Pipe Clamp
砂管夹



Filter Core
滤芯



Cylinder O-ring
油缸O型圈



AC 5-axis Toolholder
AC 5轴刀杆



3/4 High Pressure Pipe
3/4高压管



1/4 High Pressure Pipe
1/4高压管



Water jet guide ring
水刀导向环



AC High-pressure Pipes
AC轴高压管



Cutter Head Link
刀头连接杆



Straight Connector
直通接头



Nozzle Kit
喷头体



Sensor
传感器



Water switch seal kit
水密封圈



Oil Seal
油封



Right Angle Elbow
直角二通



Reducer Elbow
变径直角二通



Right Angle Tee
直角三通