

# ROBO SAWJET

Combine waterjet with saw in a small space



Farnese and BACA Systems introduce the most reliable and lowest cost SawJet Cutting System to the stone industry. Robo SawJet is a high-production dual table SawJet that integrates both a high-pressure abrasive waterjet and 20HP direct-drive saw. Robo SawJet can save customers 70% on labour and 20% on material cost.



Robo SawJet is waterproof and dustproof. That makes it maintenance proof in the harsh environment of the stone manufacturing. By placing the robot between the two tables, Robo SawJet provides a small footprint for a busy granite fabricators production floor.

The ROBO SAWJET is our Saw and Abrasive WaterJet programmable cutting system. ROBO SAWJET combines traditional stone processing technology with lean industrial machine technologies allowing you to fit your cutting needs with an affordable and reliable system.



At its core, Robo SawJet utilizes a 6 axis robot in combination with the flexibility of abrasive waterjet technology and the cost efficiency of the Robo Saw. The benefits of this system include but are not limited to: Easy-to-use programming and operator interface simply with a few clicks of the mouse; Reduction in Floor Space required for traditional gantry or bridge style machines; Maximizing Job-to-Job machine up-time for maintaining or improving heavy workloads; Minimizing the maintenance requirements of the ROBO SAWJET system with state of the art components.



[www.farnese.com.au](http://www.farnese.com.au)

Owing to the constant updating of our designs, descriptions and technical data shown in our drawings and folders are not binding. Possible alterations deemed by the makers as convenient will be effected at any time without previous notice.

# ROBO SAWJET

Combine waterjet with saw in a small space



## Robo System Rs202

The Robo System is the Industry's only Robotic solution for high production stone cutting. This innovative system approach offers a number of advantages to stone processing facilities. This is the industry's first Affordable, Reliable and ONLY Upgradable system from a single table to a dual table.

### 1. Robo System is a flexible solution for your production requirements which include:

- 1.1 KUKA QUANTEC KR210 Robot with controller. Robot features include: Foundry variant for environmental protection (sealed); 3,100mm reach; 210kg payload.
- 1.2 Cutting System End of Arm Tooling (SawJet Technology)
- 1.3 Cutting System Platform (Dual Tank)
- 1.4 Cutting System Software (RoboCommander Software & VeinMatch Software)
- 1.5 Operating Control System Operational Safety System

## Robo SawJet

The Robo SawJet cutting system is designed to meet the demands of stone processing facilities. Robo SawJet is our Saw and Abrasive WaterJet CNC cutting system. Robo SawJet combines the flexibility of abrasive waterjet technology with industrial saw cutting technology to Maximize production cost efficiencies as well as limiting maintenance requirements.

### 2. Robo SawJet is a complete CNC cutting system featuring:

- 2.1 Heavy Duty Industrial Asynchronous E Motor (480v/60hz/1715rpm)
- 2.2 Aluminum Alloy Casting Body designed for the market of stone processing plants
- 2.3 Sealed for life ball bearings requiring, no additional maintenance
- 2.4 Blade diameter: 16" Robo Saw complete CNC saw cutting system features H2O Jet Pump (50hp/480v/60hz)
- 2.5 Maximum Water pressure 60,000 psi
- 2.6 Microprocessor controls with diagnostics
- 2.7 IDE Cutting Head
- 2.8 Abrasive Feed System with Bulk Hopper

## Cutting Platform

The cutting platform consists of Dual Tank support system. Each Cutting platforms are ergonomically designed to optimize the loading and unloading of the stone products.

### 3. Cutting Platform Dual Tank support system featuring:

- 3.1 Tank Size of 90" X 144"
- 3.2 Internal Support Frame with 4" replaceable slats

### 4. Robo Operation

Robo Operation is an Easy-to-use operator interface designed for stone processing professionals. The control system is designed and installed with quick change communication cabling for complete system communication. The Robo Operation system interconnects the Robo System from all points of required communication (camera, robot, device control, and operator interface).

- 4.1 Robo Operation features include:
- 4.2 Main Industrial Control Enclosure for system device requirements
- 4.3 Operator Station (HMI Stand) for Operator Interface with the system
- 4.4 Robot Industrial Control Enclosure for Robot system support
- 4.5 PC Based Windows Operating Support System
- 4.6 Dual Visual Verification Camera System

### 4.7 RoboSoftware Suite Including

- 4.7.1 Robo Saw Software
- 4.7.2 VeinMatch Software
- 4.7.3 VeinMatch is a great sales tool to show customers their layout in advance.
- 4.7.4 VeinMatch allows users to match veins from different parts of the same slab without utilizing a second slab. VeinMatch aligns two pieces that come together to form the best seams.
- 4.8 Nest DXF files across multiple slabs
- 4.9 Preview, print and save the layout image
- 4.10 Easy alignment over photo of actual slab
- 4.11 Runs on Windows
- 4.12 Easy to use tool functions
- 4.13 Lowers operator setup time
- 4.14 Maximizes material usage
- 4.15 Perfect Seam Alignment
- 4.16 Complex layouts done in minutes

### 5. Sequence of Operations - 5 Easy Steps

- 5.1 Measure the Countertops and save to a DXF file
- 5.2 Send the DXF file to AutoCAD or similar CAD program
- 5.3 Send the CADed DXF file either to RoboCut or VeinMatch software
- 5.4 Review tool paths for the Saw and the WaterJet
- 5.5 Send to Robot



[www.farnese.com.au](http://www.farnese.com.au)

Owing to the constant updating of our designs, descriptions and technical data shown in our drawings and folders are not binding. Possible alterations deemed by the makers as convenient will be effected at any time without previous notice.