

SWISS PRECISION
FOR A STRONGER
TOMORROW

WATERJET
TECHNOLOGY
SOLUTIONS

Aquajet TECHNIK

Die Marke für Qualität bei jeder Dicke!

SCHNEIDEN | FORMGEBEN | AUTOMATISIEREN



HÖCHSTE
GENAUIGKEIT



ZUVERLÄSSIGE
TECHNOLOGIE



SCHWEIZER
QUALITÄT



VIELSEITIGE
MATERIALBEARBEITUNG

info@aquajettechnik.ch | www.aquajettechnik.ch

WATERJET TECHNOLOGIES | SWISS MADE FOR GLOBAL INDUSTRIES



VISIT OUR WEBSITE

About Us

AquaJet Technik Swiss GmbH is a young yet experienced company based in the Canton of Thurgau, Switzerland.

We specialize in waterjet cutting technologies, service and spare parts solutions, as well as customized mechanical engineering projects.

Our team combines more than a decade of experience in mechanical engineering and high-pressure technology – both in engineering and production. Quality, precision and reliability are at the heart of everything we do.



Our Vision

Our vision is to become a leading European brand for precise and reliable waterjet cutting technology, with a strong focus on quality, innovation and sustainability.



Our Mission

We combine our expertise in mechanical engineering with a selected network of ETH Zurich graduates, bringing together technical know-how, innovation and a passion for continuous development.



Seyit Kaan Pekmezci

Founder & Managing Director

Active in mechanical engineering, design and engineering since 2011. Over the past 10 years, specialized in CNC waterjet cutting systems, high-pressure pump technologies and project-based custom solutions.



EXPERIENCE
SINCE 2011



INNOVATION
& SOLUTIONS



QUALITY
& RELIABILITY



STRONG
PARTNERSHIPS

WATERJET
TECHNOLOGY
SOLUTIONS

AquaJet
TECHNIK 

PRECISION
POWER
PARTNERSHIP



5-AXIS WATERJET CNC MACHINE

PRECISION FOR YOUR HIGHEST DEMANDS



HIGHEST
PRECISION



RELIABLE
TECHNOLOGY



SWISS
QUALITY



VERSATILE
MATERIAL PROCESSING

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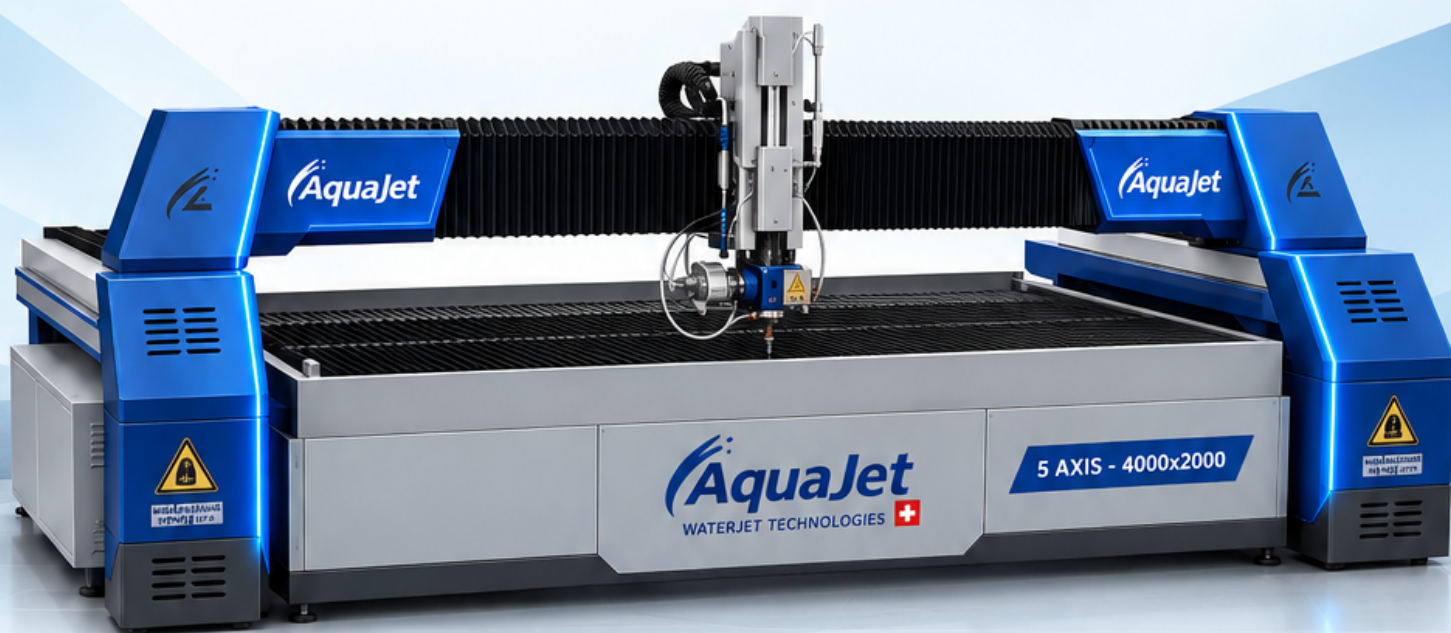
AquaJet
TECHNIK 

5-AXIS WATERJET CNC MACHINE

HIGHEST PRECISION FOR COMPLEX GEOMETRIES

*Swiss
Engineering*

FOR A STRONGER
TOMORROW



TECHNICAL SPECIFICATIONS

PERFORMANCE IN EVERY DIMENSION



Working Range

X-Axis	4000 mm
Y-Axis	2000 mm
Z-Axis	250 mm
Cutting Area	4000 x 2000 mm



Dynamic Speeds

Max. Speed X-Axis	20 m/min
Max. Speed Y-Axis	20 m/min



Cutting Tolerance

± 0.3 mm

Highest precision for
demanding applications.



Control System (Options)

1000 x 2000
3000 x 2000
2000 x 4000
2000 x 6000
3000 x 8000

Further table sizes
and customer-
specific solutions
available on request.



PRECISION
IN EVERY CUT



PRODUCTIVITY
AT THE HIGHEST LEVEL



RELIABILITY
FOR YOUR SUCCESS



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5-AXIS CUTTING HEAD

MAXIMUM FLEXIBILITY
FOR COMPLEX GEOMETRIES

More possibilities.
Highest precision.



UP TO 55° BEVEL CUTTING

Perfect for complex bevel
and angular cuts.



HIGHEST PRECISION

Exact cutting quality
even for complex contours.



ROBUST CONSTRUCTION

Developed for long-term
industrial use.

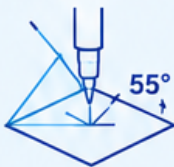


INCREASED PRODUCTIVITY

Less rework, fewer errors,
faster delivery.

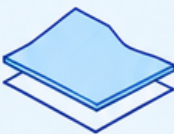


TECHNOLOGY IN DETAIL



5-AXIS MACHINING

Cutting of complex 3D geometries
and bevel cuts up to 55° –
in a single work step.



MAXIMUM FLEXIBILITY

Ideal for demanding applications
and a wide range of materials.



RELIABLE TECHNOLOGY

Proven AquaJet quality – precise,
durable and low maintenance.



WATERJET
TECHNOLOGY
SOLUTIONS

PRECISION
POWER
PARTNERSHIP

AquaJet

TECHNIK

SWISS ENGINEERING
FOR A STRONGER TOMORROW



3-AXIS WATERJET CNC MACHINE

PRECISION. PERFORMANCE. RELIABILITY.



HIGHEST
PRECISION



MAXIMUM
PERFORMANCE



SWISS
RELIABILITY



VERSATILE
APPLICATIONS



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SWISS QUALITY
FOR GLOBAL INDUSTRIES



3 AXIS – 4000 x 2000

WATERJET CNC MACHINE

Precision. Performance. Reliability.



**HIGHEST
PRECISION**

Perfect results even
for complex cuts.



**MAXIMUM
PERFORMANCE**

Efficient technology
for highest productivity.



**SWISS
RELIABILITY**

Robust. Durable.
Trustworthy.



Technical Specifications



Working Area

X-Axis	4000 mm
Y-Axis	2000 mm
Z-Axis	250 mm
Cutting Area	4000 x 2000 mm



Traverse Speeds

Max. X-Axis Speed	20 m/min
Max. Y-Axis Speed	20 m/min



Cutting Tolerance

± 0.3 mm



Control (Options)

1000 x 2000
3000 x 2000
2000 x 4000
2000 x 6000
3000 x 8000

CUSTOM SIZES AND
SPECIAL SOLUTIONS ON REQUEST.



AQRO S50C HP+

KMT-TYPE HIGH PRESSURE PUMP

Maximum performance.
Reliable technology.
For industrial waterjet applications.

*Swiss
Engineering*



EXTREMELY HIGH PRESSURE

Up to 4000 bar for
maximum cutting performance.



ROBUST CONSTRUCTION

Developed for industrial
continuous operation.



PROVEN TECHNOLOGY

KMT-type pump –
reliable and durable.



EASY MAINTENANCE

Service-friendly design
for minimum downtime.



INTENSIFIER (PRESSURE BOOSTER)

KMT technology for highest performance.

TECHNICAL SPECIFICATIONS

Model:	AQRO S50C HP+
Category:	KMT-type pump
Outlet pressure:	4000 bar
Max. operating pressure:	3800 bar
Motor power:	37 kW (50 HP)
Flow rate:	3.8 l/min
Accumulator volume:	1 liter
Control valve:	Pneumatic (optional)
Soft start:	45 kW
Intensifier configuration:	Single



INTENSIFIER (PRESSURE BOOSTER)

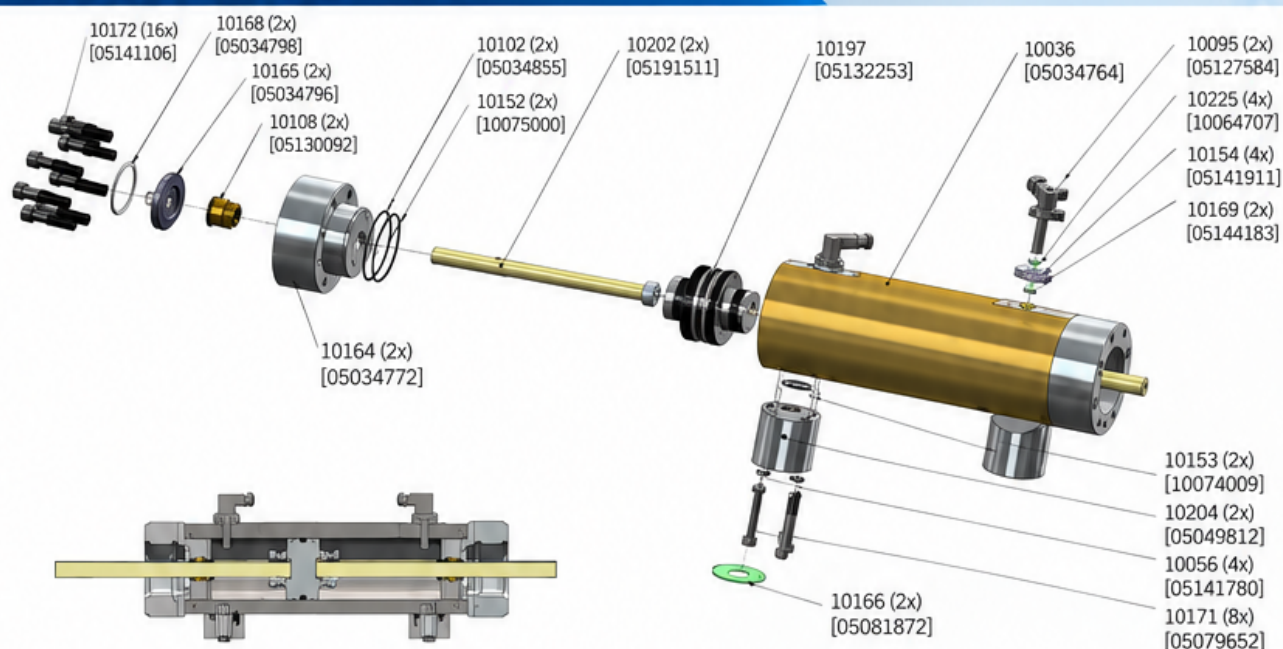
DETAILED DRAWINGS AND COMPONENTS

High-precision components for maximum reliability and long service life.

*Swiss
Engineering*

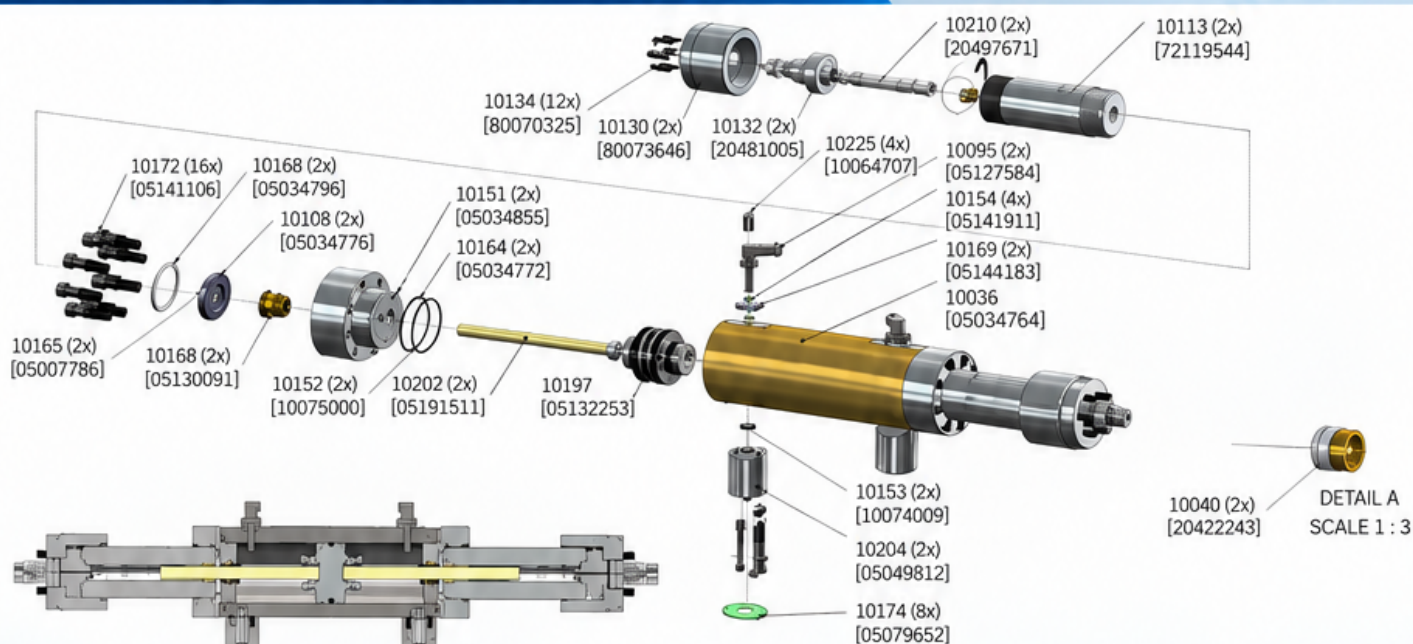
EXPLODED VIEW – INTENSIFIER

FIGURE 1



EXPLODED VIEW – COMPLETE INTENSIFIER SLV

FIGURE 2



SPARE PARTS

FOR YOUR WATERJET SYSTEM

Fast availability. Expert support.
For maximum uptime.

*Fast Service
Quick Support
with our Spare Parts Catalog!*

*Keep
Your Production
Running!*



FAST DELIVERY

So your production keeps running.



TECHNICAL SUPPORT

Competent, personal and solution-oriented.



ORIGINAL PARTS & COMPATIBLE COMPONENTS

For highest safety and performance.



LARGE STOCK

Many parts available for short lead times.



INTENSIFIER PARTS



- High-pressure seals
- Ceramic plungers
- Piston rods
- Support rings
- Valves and seats
- Complete kits

HIGH-PRESSURE COMPONENTS



- High-pressure fittings
- HP pipes (1/4" – 3/8" – 9/16")
- Couplings and adapters
- Check valves
- Pressure gauges
- HP threaded connections

PUMP SPARE PARTS



- Inlet/outlet valves
- Seals and O-rings
- Pistons and bushings
- Vent valves
- Springs and small parts
- Service kits

WEAR PARTS



- Cutting nozzles (Ruby/Sapphire)
- Focusing tubes
- Mixing chambers
- Abrasive inlets
- Seals
- Accessories



Steel



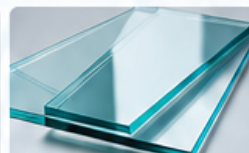
Stainless Steel



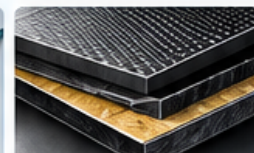
Aluminum



Stone / Marble



Glass



Composites



WATERJET
CLEAN. PRECISE. POWERFUL.



SWISS ENGINEERING
FOR HIGHEST QUALITY.



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**GET IN
TOUCH NOW**



AQROSAND

ABRASIVE EXTRACTION SYSTEM

Clean Cutting Tables. Higher Availability.

The AquaJet AgroSand Abrasive Extraction System efficiently and reliably removes used abrasive from the cutting tank of your waterjet system. Thanks to two air-operated diaphragm pumps, powerful and continuous extraction is ensured – for clean operation and minimal downtime.



*Cleaner
Operation.
Maximum
Performance.*



TWO AIR-OPERATED DIAPHRAGM PUMPS

Powerful and reliable
extraction of used abrasive.



FLEXIBLE APPLICATION

Can be automatically integrated
into CNC systems or used
manually with a suction lance.



CLEAN WORKING ENVIRONMENT

Reduces downtime and increases
system availability.



ROBUST AND FIELD-PROVEN

Designed for continuous
industrial operation.

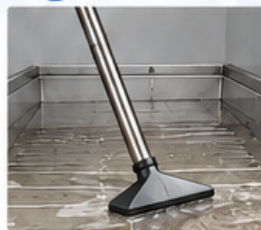
TWO APPLICATION OPTIONS

1 AUTOMATIC INTEGRATION (CNC)



The system can be
integrated directly
into the CNC control
and automatically
cleans the cutting tank
after the cutting process.

2 MANUAL CLEANING



Alternatively, the
abrasive can be
removed directly
from the tank using a
suction lance – similar
to an industrial
wet vacuum cleaner.



TECHNICAL DATA

Drive	Compressed air (2 x diaphragm pumps)
Air Pressure	6 – 7 bar
Flow Rate	Up to 200 l/min (depending on application)
Tank Capacity	Approx. 100 – 150 l (customer-specific)
Connections	Suction lance / CNC integration
Mobility	Mobile, with swivel casters
Material	Robust stainless steel / steel, industrial design

YOUR BENEFITS AT A GLANCE



Clean
Cutting Tables



Higher
Productivity



Less
Downtime



Cost-
Effective



Reliable
Solution



WATERJET
CLEAN. PRECISE. POWERFUL.



SWISS ENGINEERING
FOR HIGHEST QUALITY.



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POWER IN WATER. SOLUTIONS IN MOTION.

ABRASIVE FEEDER

WITH THE ADVANTAGE
OF A STEPPER MOTOR

The AquaJet Abrasive Feeder enables precise and controlled dosing of the abrasive – for maximum cutting quality, efficiency and process reliability.



PRECISE ABRASIVE DOSING

Consistent and exact
material feed.



CONTROLLED CONSUMPTION

Optimised abrasive usage
and lower costs.



MORE FLEXIBILITY IN CUTTING

Adjustable feed rate for
different materials and
applications.

Increase or reduce your
abrasive consumption as needed.

**More efficient, economical
and controlled cutting.**



*Precision
in Every
Cut*



WATERJET
CLEAN. PRECISE. POWERFUL.



SWISS ENGINEERING
FOR HIGHEST QUALITY.



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AgroSoft

WATER SOFTENING SYSTEM

**Softer water. Longer service life.
Higher operational reliability.**

Hard water ingredients such as calcium and magnesium can cause deposits, increased wear and blockages in your waterjet system. Our AgroSoft water softening system provides an efficient solution – as an ideal complement to your existing water treatment – for reliable and continuous operation.



PROTECTS YOUR SYSTEM

Prevents scale buildup in high-pressure pumps, nozzles and piping.



LONGER SERVICE LIFE

Reduces deposits and maintenance requirements.



CONSTANT WATER QUALITY

For stable processes and best cutting results.



EFFICIENT AND RELIABLE

Proven technology for industrial continuous operation.

*The smart addition
for your waterjet system.*

HOW IT WORKS



YOUR BENEFITS AT A GLANCE

- ✓ Fewer scale deposits
- ✓ Higher system availability
- ✓ Lower maintenance costs
- ✓ Optimal water quality
- ✓ Perfect complement to existing water treatment
- ✓ Individual design and expert consultation



LET US ADVISE YOU

We will find the right solution for your requirements.



WATERJET
CLEAN. PRECISE. POWERFUL.



SWISS ENGINEERING
FOR HIGHEST QUALITY.



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CONTACT

WE ARE HERE FOR YOU!

AquaJet Technik Swiss GmbH –
Your reliable partner for waterjet
technology, spare parts, service
and consulting.



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Technical Service Partner

Mr. S. Pekmezci
Technical & Customer Service
support@aquajettechnik.ch



*Your Projects.
Our Passion.*



REGIONAL. FAST. RELIABLE.

From consulting to technical
service – we are close to you
and provide fast, professional
support.



CONSULTING

Professional
and personal



SERVICE

Fast and
reliable



SPARE PARTS

Original parts
from stock



SUPPORT

Long-term
support at your side

Thank You!
FOR YOUR TRUST.



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FOR THE HIGHEST QUALITY.



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