



environment & cleaning solutions

GREEN LIGHT MACHINING MiJet PRODUCTS



OPTIMIZATION OF THE MACHINING PROCESS.

A safe investment for every size of company.

www.samsys.eu

PHILOSOPHY

At SAMSYS, we are committed to manufacturing innovative products of the highest quality. Together with our partners, we provide innovations distinguished by their precision and cost effectiveness. Our approach is based on close cooperation with clients, which has ensured our long-term success as a company.

We live with by the following motto: "Exceeding the customer's requirements and producing top-quality products. Serving satisfied clients of all sizes and in all branches of industry."



Jo Braun
Geschäftsführer

QUALITY, INNOVATION & SERVICE = MAXIMUM PRODUCTIVITY

The SAMSYS complete solution consisting of development, design and service combined with the most modern environmental protection and occupational safety guarantee our customers a range of benefits:

- ▶ smooth workflows and high productivity
- ▶ an image of sustainability with excellent external impact
- ▶ personal service provided by experienced specialists
- ▶ continuous quality improvement and further development of our products
- ▶ training of your employees in the use of our products for maximum efficiency, profitability and sustainability

HIGHER PRODUCTIVITY –

OUR COMPANY

SAMSYS GmbH - the pioneer in short bar feeders break new ground

Consistently high product quality and a wealth of ideas in development and problem solving combined with extensive experience are features that have characterized our bar feeders and bar guides from the very start.

SAMSYS products are known for their reliability and are used by demanding manufacturers of high-quality turned parts. SAMSYS customers rely on the high degree of automation of their machines and economic production processes. SAMSYS bar feeders increase productivity and reduce unit costs.

"SAMSYS products make customers more competitive!" (Jo Braun, CEO)

For even more sustainability SAMSYS GmbH has expanded its portfolio in the field of clean and environmentally friendly metal machining by adding Green Light Machining products. Mobile workpiece cleaning devices and stationary extraction systems increase quality, occupational safety and environmental protection at our customers' machining stations.

All Samsys Green Light Machining products have been specially developed for new CNC turning and machining centers. They can be installed on both newly purchased machines and on existing systems - thus increasing profitability in production and delivering a productivity increase of 10 to 15% in practice.



ENVIRONMENTAL SYSTEMS - TOP PRODUCTS AT A PREMIUM QUALITY LEVEL

OUR SERVICE PARTNER

Alzeyer
Werkzeugmaschinen
Service GmbH



— MORE QUALITY

LESS DOWNTIME • HIGHER
PRODUCTIVITY • CONSISTENT QUALITY

Optimising the machining process with Green Light Machining

Serious manufacturers aim to maximise their spindle hours: the green light on the three-colour signal lamp must be lit as much as possible. Green Light Machining stands for process optimisation in machining production. That calls for systems that ensure that the process continues uninterrupted (less downtime), the number of spindle hours increases, the quality is maintained at a consistently high level and productivity rises!

Green Light Machining systems lead to a rise in your machining productivity both for small and (medium) large series.

The result: a rise in billable hours and profitability. Green Light Machining can yield productivity gains of 10 to 15% for an investment that can be recouped within a year. We deliver the equipment needed for this, and it can be installed with both new and existing machines (retrofit) by well-established machinery suppliers.

Who interesting?

The Green Light Machining systems are intended mainly to optimise the machining process on modern CNC lathes and machining centres.

The benefits are found specifically in fast and precise machining on high-tech machines.

What kind of systems will I need for this?

1. High pressure pumping systems

High pressure pumping systems direct cooling water straight against the tool tip at 70 bars, so that chips break off sooner, chip curls no longer interrupt the process, tools last longer and the machining capacity greatly improves.



2. Coolant-based cooling systems

Coolant-based coolers increase thermal machining stability, which not only improves repetition precision but also greatly improves productivity.



3. Spray filters

By removing oil and emulsion spray from the machine, spray filters create a healthy working environment, effectively channel off heat and unpleasant smells and make it possible to reuse emulsion.



4. Oil and emulsion filter systems

Regularly cleaning and separating oil and emulsion prevents health problems, badly-smelling cooling water, tool corrosion, blocked cooling channels and excess wear in machine components.



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Collant-based coolind systems

The precision and dimensional accuracy of metal machining equipment is largely determined by the thermal stability aspect.

The ambient temperature of the machine and the heat released by the cutting tool and the chips raise the cooling water temperature, which ultimately heats up the machine itself.

Cooling systems maintain the coolant at a constant temperature, which results in:

- ▶ Consistent accuracy
- ▶ Optimum heat transfer and dimensional stability
- ▶ Less evaporation
- ▶ Higher productivity

Units are supplied:

- ▶ As standalone units or plug-in modules
- ▶ With their own basic control systems
- ▶ Filled with environmentally-friendly coolant (R407C)
- ▶ Including supply pump



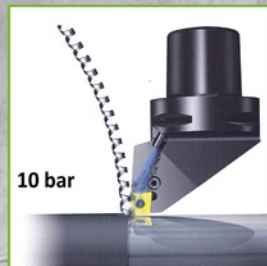
Retain the precision of your machines by maintaining the cooling water at a constant temperature.

Did you know that a 1°C increase in the temperature of steel results in an expansion of 12µm /m!

(Source: 'Tabellenboek mechanische techniek', (mechanical technology tables) A.C. Bruinshoofd")

Machining under high pressure

High pressure pumps are used to direct the water at the tool tip at 70 bars. This improves the heat discharge directly on the cutting edge, so that chips break off more quickly. These shorter chip curls are removed faster, but there is also an improvement in product quality, the cycle times are reduced and there is a drastic reduction in tool wear. High pressure cooling systems can yield productivity gains of 10 to 15%.



High pressure units (> 70 bars) lead to:

- ▶ Improved machining control (no chip curls)
- ▶ Longer tool life
- ▶ Higher machining capacity
- ▶ Improved surface quality
- ▶ Less burr formation



High pressure units are available with:

- ▶ 20, 30, 70 and 100 bar pumps
- ▶ Capacity of 10 - 30 litres/minute
- ▶ Frequency regulators
- ▶ Filters and supply pumps
- ▶ Retrofit sets for existing machines
- ▶ Integrated cooler

High pressure pumps



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Air filtering

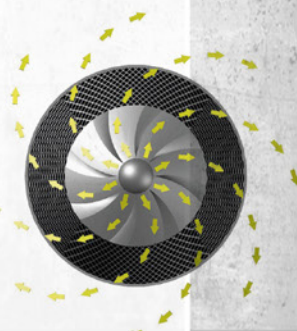
With our Air Cleaners, supplies we spray filters for the effective extraction and filtering of emulsion spray, oil spray, smoke and unpleasant smells produced by lathes, milling machines and machining centres. That enables you to provide your employees with a healthy working environment, heat and unpleasant smells are effectively channelled off and emulsion can be reused. The filters feature a multi-stage filtration system, with cleanable and reusable elements, that effectively (99.97%) removes harmful emissions, substances and aerosols from the air.

What are the benefits of spray filtering?

- ▶ Prevents health problems
- ▶ Minimises cleaning costs
- ▶ Facilitates the reuse of emulsion
- ▶ Reduces the risk of accidents
- ▶ Discharges heat from the machine
- ▶ Prevents hotbeds

Our spray filters stand out for:

- ▶ Substantial savings on maintenance and operational costs
- ▶ Low-energy motors
- ▶ Cleanable elements
- ▶ High Efficiency
- ▶ Odour Removal
- ▶ Compact design
- ▶ Low noise level
- ▶ Filterindicator



The units are available in three different models and feature low-energy motors with high extraction power and a compact construction method. The units can be installed directly on or next to the machine.

Oil separators

Our Profluid oil separators clean the cooling water of your metal processing machine in approximately 2 hours. These oil separators are very easy to operate and maintain.

The oil separators use a porous filter to separate the oil from the cooling water. The porous filter has a highly effective separating capacity without quickly getting blocked up. The difference in viscosity causes the oil to rise to the surface so that it can easily be separated and disposed of.



Benefits of using oil filters:

- ▶ Separate oil from cooling water in approx. 2 hours
- ▶ No more foul-smelling cooling water
- ▶ Prevents (and aids recovery from) coolant-related health problems
- ▶ Prevents work piece corrosion
- ▶ Less wear in machine components

Filter-pots



Belt filters



CLEAN PARTS, CLEAN AIR.

✓ Air driven - no electricity needed

✓ Lubricants and scraps can be recycled

✓ One-Touch operation

✓ MiJET saves money



MiJet 8-ANG-34-35-39

MiJet 12-ANG-35-70-110



8-ANG-34-35-39
Combination Kit with fine mesh parts basket and dolly

MiJET®, Angled 8" dia. Model with Silvent Low Noise Nozzle, Dolly, and Fine Mesh, Single Handled Parts Basket

Includes Part Numbers: **14-8FL-545, 13-034, 13-035 and 13-039**



13-039:

Fine mesh parts basket for 8" dia. MiJET® angled top



13-035:

Low noise nozzle by Silvent



13-034:

Dolly for 8" dia. MiJET® model



12-ANG-35-70-110
Combination Kit with fine mesh parts basket and dolly

MiJET®, Angled 12" dia. Model with Low Noise Nozzle, Dolly, and Fine Mesh, Single Handled Parts Basket

Includes Part Numbers: **15-12SX-20ANG, 13-035, 13-070 and 15-110**



13-070:

Fine mesh parts basket for 12" dia. MiJET® angled top



13-035:

Low noise nozzle by Silvent



15-110:

Dolly for 12" dia. MiJET® model

*„MiJET protects the environment and
the health of your employees.“
Jo Braun, CEO, Samsys GmbH*



MiJET zum Patent angemeldet

MiJet Wash Station 16-08-WSH-SS-LN

16-08-WSH-SS-LN MiJet Wash Station

8" dia. MiJET® Wash Station - with Solvent Container & Parts Basket Table with butcher block top and wheels (2 locking), Loc-Line nozzle, flow control, pneumatic fluid pump, fluid filter, and hand-held air nozzle. Enclosed on three sides with retainer hook for easy removal of container for emptying

Dimension:

H 35" / 88,9 cm | L 24,25" / 61,59 cm | T 24,25" / 61,59 cm

14-8FL-545-LN 8" dia. MiJET® - Angled Top with Low Noise Nozzle

15-08-2BB Wash Station for 8" dia. MiJET® model - double cutout

16-028-AS Stainless steel container with integrated fluid spout in lid held open with a pneumatic spring designed to close completely to minimize evaporation when not in use, 5.5 gal (20,8 L)

15-109 Parts Basket, Small, bent handle - 7.25" OD (184mm), Fine Mesh (for 8" model)



16-12-WSH-SS-LN MiJet Wash Station

12" dia. MiJET® Wash Station - with Solvent Container & Parts Basket Table with butcher block top and wheels (2 locking), Loc-Line nozzle, flow control, pneumatic fluid pump, fluid filter, and hand-held air nozzle. Enclosed on three sides with retainer hook for easy removal of container for emptying.

Dimension:

H 35" / 88,9 cm | L 36" / 91,44 cm | T 25,50" / 64,77 cm

14-12SX-20ANG-LN 12" dia. MiJET® - Angled Top with Low Noise Nozzle

15-12-2BB Wash Station for 12" dia. MiJET® model - double cutout

16-029-AS Stainless steel container with integrated fluid spout in lid held open with a pneumatic spring designed to close completely to minimize evaporation when not in use, 9.0 gal (40,9 L)

15-107 Parts Basket, Large, bent handle - 10.13" OD (257mm), Fine Mesh (for 12" model)





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