

HAMMELMANN®

CALDER



HAMMELMANN MASTERJET VERSATILE AND EFFECTIVE

The rotor jet with patented HPS sealing technology

High work ergonomics

High energy efficiency

Versatile in use

Outstanding performance

Long service life

Flexible speeds



THE
MASTERJET

THE MASTERJET ROTOR JET - YOUR ADVANTAGES AT A GLANCE

Rotor jets convert the high effectiveness of round jet nozzles into area performance through rotating nozzle heads. Various nozzle configurations and adjustable speeds open up many possibilities for surface treatment. The lightweight and compact design also enables work in areas that are difficult to access.





OUTSTANDING PERFORMANCE

Operating pressures up to 3200 bar.




HIGH WORK ERGONOMICS

Due to the very low weight (~ 1.0 kg), compact design and low-vibration operation.



GREAT ENERGY-EFFICIENCY

The optimum internal flow allows the pump's total performance to be used without loss of energy.



VERSATILE IN USE

Many configuration options guarantee optimal design for a wide variety of applications.



MANUAL SPEED CONTROL

Full control over the speed by simply sliding the protective cover. No tools required!



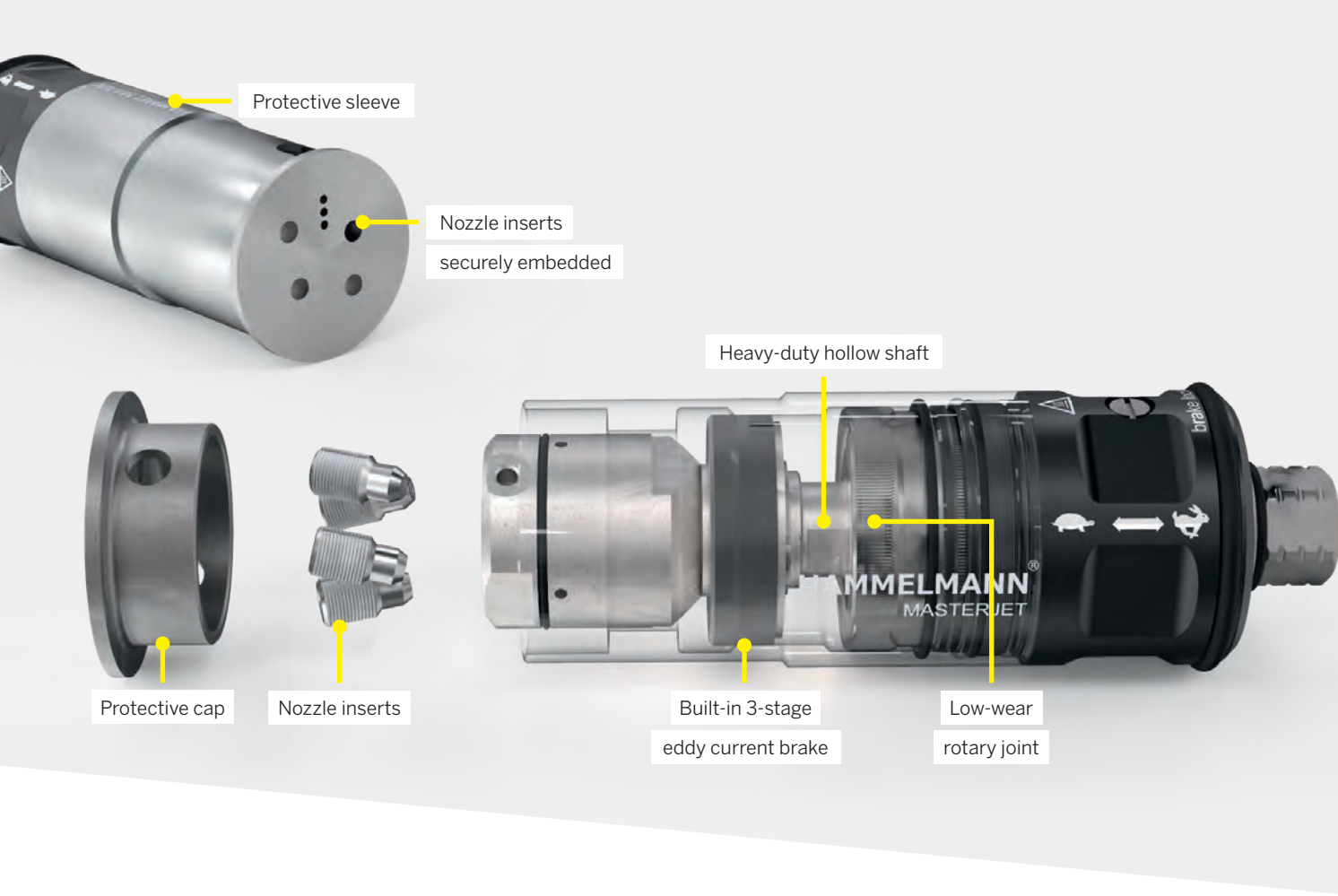
UNSURPASSED SERVICE LIFE

HPS (High Performance Sealing) is a patented sealing system for MASTERJET rotor jets that work with the highest operating pressures.



EASY MAINTENANCE

Service friendly design with few components.



OVERVIEW OF MASTERJET MODELS
(OTHER MODELS ON REQUEST)

Version		Operating pressure	Flow rate
2/4 nozzles		up to 1800 bar	up to 60 l/min.
2/4 nozzles		up to 3200 bar	up to 50 l/min.
2/4 nozzles "ATEX"	⚠	up to 3200 bar	up to 50 l/min.
2/4 nozzles "Low Flow"		up to 3200 bar	up to 20 l/min.
5 nozzles		up to 3200 bar	up to 50 l/min.
3/6 nozzles		up to 1800 bar	up to 60 l/min.
3/6 nozzles		up to 3200 bar	up to 50 l/min.
3/6 nozzles "Pipe"	✓	up to 1800 bar	up to 60 l/min.
3/6 nozzles "Pipe"	✓	up to 3200 bar	up to 50 l/min.
8 nozzles "Pipe"	✓	up to 3200 bar	up to 50 l/min.
10 nozzles "Pipe"	✓	up to 3200 bar	up to 50 l/min.

⚠ Zone 1/21, 2/22
Explosion proof

✓ Versions for
pipe cleaning

🔥 All MASTERJETS are also
available as a hot water version

AFFECT THE REMOVAL RESULT

The great advantages of the MASTERJET can be seen in the ability to adapt quickly to changing work situations as well as in the controlled influence on the removal results. From gentle cleaning to strong removal, everything is possible. In order to adapt the removal result to the job requirements, two different work steps can be followed, which can be carried out independently of one another.

Option 1: Hammelmann offers various nozzle holders with different configurations and designs. The rotor jet can then be equipped with 2 or 4, 3 or 6 or 5 nozzles, depending on the nozzle holder. **Option 2:** The rotational speed can be adjusted independently of the nozzle configuration simply by moving the outer sleeve (magnetic brake).

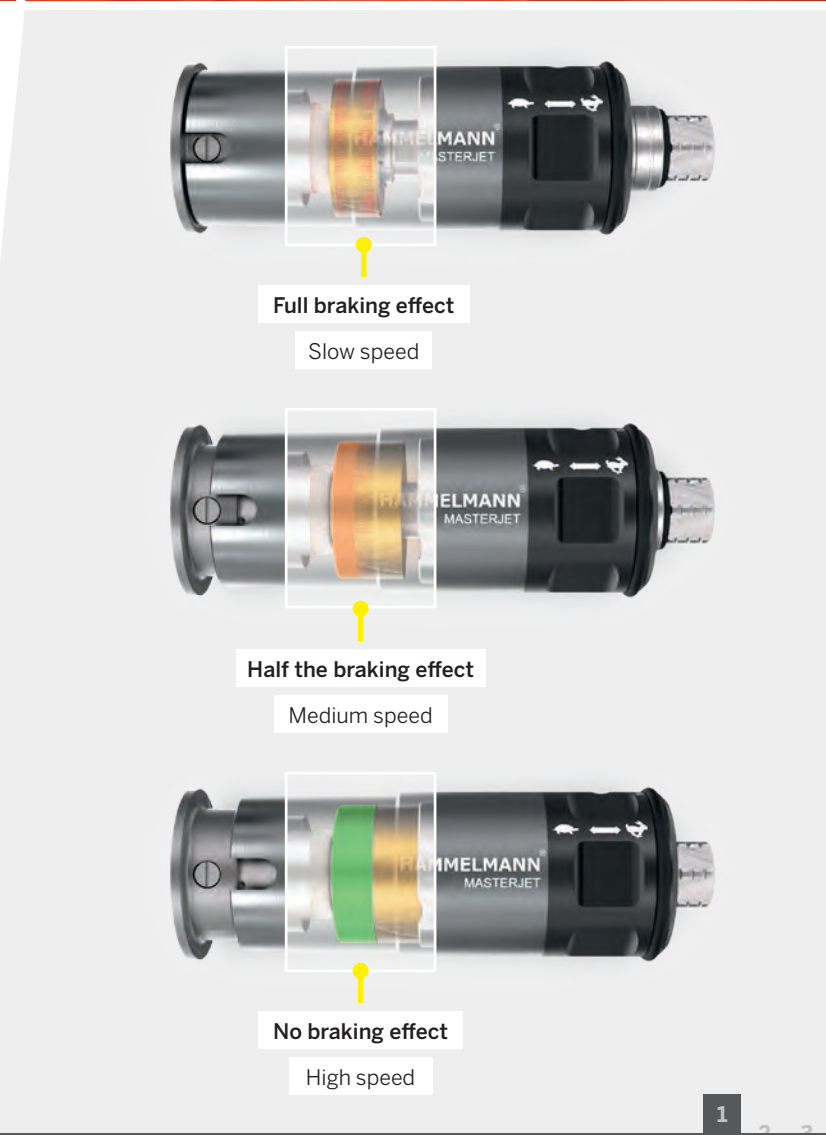


THE RIGHT NOZZLE CONFIGURATION

The different nozzle configuration of the MASTERJET allows the use of 2, 3, 4, 5 or 6 nozzle inserts. The MASTERJET rotor jet thus offers a wide range of possible uses and proves to be a unique all-rounder in practice. The following rule applies here: the more nozzles there are, the more the force is distributed over the surface being processed. The force acting on the surface is therefore less with a 6-jet application than with a 2-jet application. With just one MASTERJET, sensitive surfaces can be gently cleaned and concrete surfaces in need of renovation can be roughened and removed.

SIMPLY ADJUST THE
SPEED BY HAND

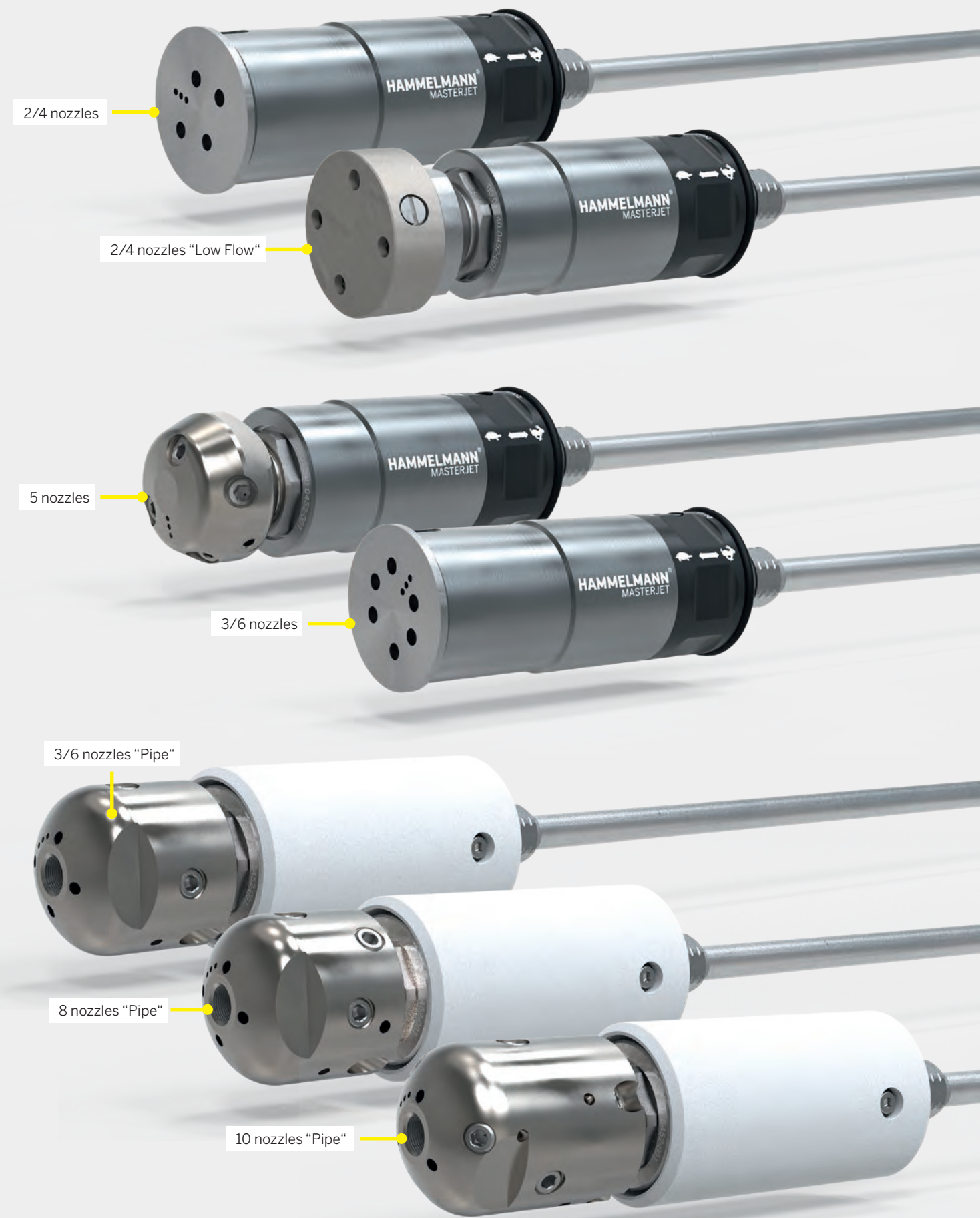
The speed is set by simply moving the outer sleeve. A copper strip in the outer sleeve then overlaps a rotating magnet inside either completely (high braking effect 🛑), halfway (medium braking effect 🚦) or not at all (no braking effect 🏎️). With this simple movement, the speed can be adjusted quickly and easily, regardless of the nozzle hub. The further the outer sleeve is pulled towards the nozzle hub, the slower the nozzle holder rotates and the more the surface is processed, as the water jets stay longer in one place.





MASTERJET
with 6 active nozzle inserts
Roughening concrete

MASTERJET VERSIONS



2/4 nozzles

2/4 nozzles "Low Flow"

5 nozzles

3/6 nozzles

3/6 nozzles "Pipe"

8 nozzles "Pipe"

10 nozzles "Pipe"

MASTERJET SERVICE UND CONFIGURATION

MAINTENANCE AND CARE OF A MASTERJET ROTOR JET

Hammelmann products are subject to the highest quality standards and guarantee outstanding performance as on the first day, even after long, intensive use. A general rule is that regular maintenance and care helps to extend the service life of the product and guarantee operational safety.

In our MASTERJET service video you will find useful tips on maintaining the rotor jet, on assembling, installing and removing various parts and on the professional replacement of wear components.



Calculator app for rotor jets

Free app for iOS, Android, and your browser

Water Jetting Calculator: hammelmann.com/app

SLEDGE FOR ROTOT JETS

With the help of the sledge, rotor jets with extension lances are drawn centrally into the tubes to be cleaned. Thanks to the infinitely adjustable scissor arms of the spreading device, pipes with a diameter of 450 - 1400 mm can be cleaned; a conversion kit for Ø 250 - 400 mm is also available as an option.



MASTERJET Servicevideo
www.hammelmann.com/masterjet



Sledge for rotor jets
for pipe diameters
from 250 - 1400 mm

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TYPICAL APPLICATIONS
AND AREAS OF USE



**EFFICIENT RENOVATION AND MAINTENANCE
OF CONCRETE WITH THE MASTERJET**

- THOROUGH AND QUICK
CLEANING OF SMALL AND LARGE
CONCRETE SURFACES
- ROUGHEN CONCRETE SURFACES
FROM FINE TO COARSE
- REMOVAL OF INDIVIDUAL
LAYERS OF CONCRETE
- COMPLETE SYSTEMS, DESIGNED
FOR MAXIMUM FLEXIBILITY AND
MOBILITY
- RENOVATE, MAINTAIN,
REMOVE, PREPARE

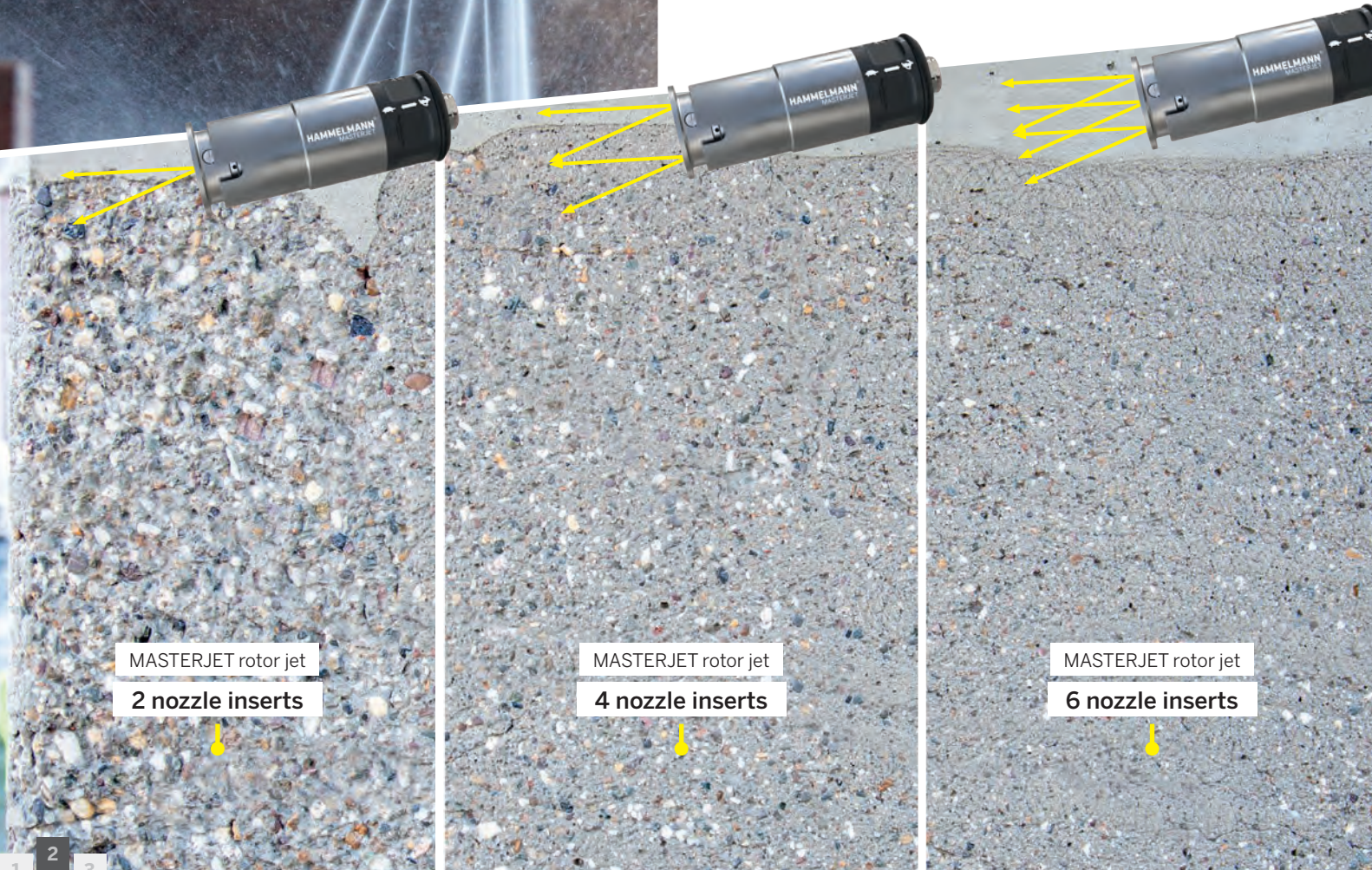


**THOROUGH AND QUICK
CLEANING OF SMALL AND
LARGE CONCRETE SURFACES**

Sometimes it can be enough to thoroughly clean concrete surfaces in the course of a renovation if they are neither damaged nor weathered. We have developed product solutions to treat both small and large areas thoroughly and safely. The product range extends from hand-held high-pressure blasting guns to ergonomic work aids and high-pressure surface cleaners.

**ROUGHEN CONCRETE SURFACES -
FROM FINE TO COARSE**

A high-pressure blasting gun can be used in combination with a rotor jet for roughening different concrete surfaces. Equip your MASTERJET with 2, 3, 4, 5 or 6 inserts and decide the degree of roughening yourself. The amount of water is evenly distributed over the number of nozzle inserts. With 6 inserts, the individual jet exerts significantly less force on the target surface than with 2 nozzle inserts. According to this rule, you can decide for yourself how you want to roughen the surface.





Effective graffiti removal

Thorough but **gentle** treatment
without damaging the base material

Available as a hot water version

TREAT A WIDE VARIETY OF SURFACES GENTLY AND THOROUGHLY

Cleaning surfaces of all kinds gently and thoroughly is one of the regular tasks in a wide variety of industries. The removal of dirt, residues and deposits with high-pressure water offers many advantages. The process low impact on the surfaces and is environmentally sound, and cleaning with high-pressure water in combination with our manually operated rotor jets offers more application options than almost any other system.

- ENVIRONMENTALLY FRIENDLY CLEANING WITHOUT CHEMICAL ADDITIVES OR CLEANING AGENTS
- FROM HEAVY CLEANING TO STRIPPING AND ROUGHENING
- A HIGHLY FLEXIBLE AND ADAPTABLE SYSTEM, EVEN FOR PLACES THAT ARE DIFFICULT TO ACCESS
- CLEANING OF ALL TYPES OF SURFACES, FLANGES AND SMALL PARTS, COLUMNS AND GRATING AS WELL AS GRAFFITI REMOVAL
- ERGONOMIC WORK AIDS AVAILABLE



Thorough cleaning of various surfaces

DECOATING AND STRIPPING

Effective removal of paint layers of various qualities with high-pressure water has become more and more established over time, as it is an extremely gentle yet thorough process that does not damage the base material. This work can be mastered excellently with MASTERJET rotor jets. The pressure and the removal rate can be easily and quickly adapted to the hardness and nature of the coating (see page 6). Thanks to the adjustable working pressure, water is completely sufficient as a medium without the need of adding abrasives. In connection with high-pressure pumps from Hammelmann you get an unbeatable system!

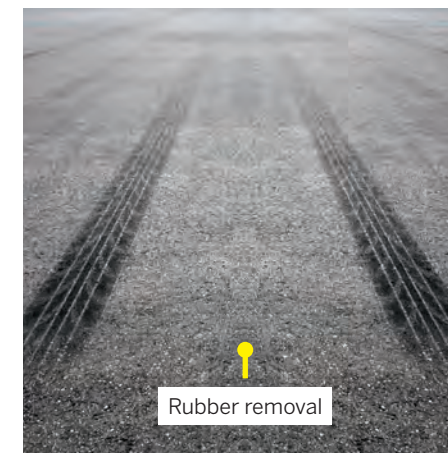


Hammelmann Test Area

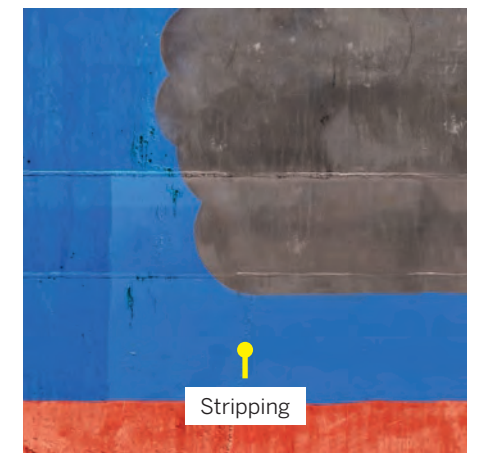
MANY MORE APPLICATIONS



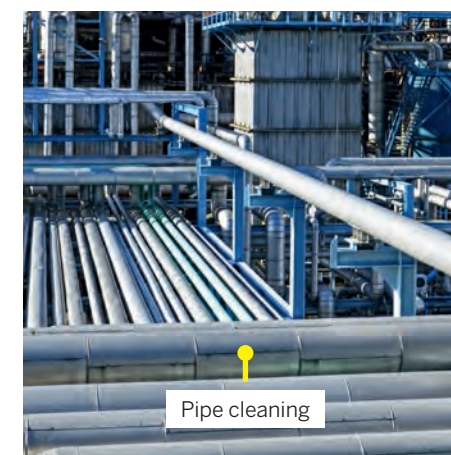
Derusting



Rubber removal



Stripping



Pipe cleaning



Cleaning of formwork elements



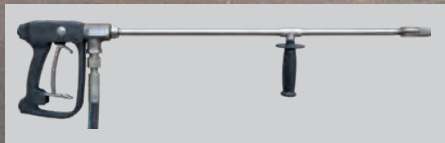
Cleaning of small parts

3

A COMPLETE SYSTEM
FROM A SINGLE SOURCE

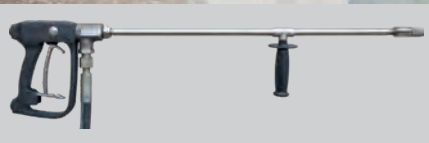
HIGH-PRESSURE BLASTING GUNS UP TO 3200 BAR

Configure your high-pressure blasting gun for your daily challenges.
Available in mechanical, electrical and bypass versions.



SP 400 M
Mechanical

Operating pressure: up to 400 bar
Weight: 3,2 kg



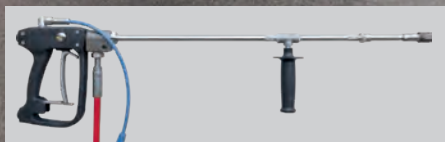
SP 1000 M
Mechanical

Operating pressure: up to 1000 bar
Weight: 3,6 kg



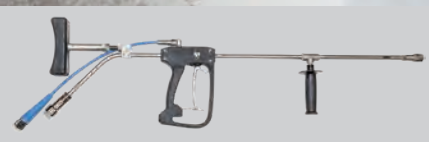
SP 1000 ME
Mechanical/Electrical

Operating pressure: up to 1000 bar
Weight: 4,6 kg



SP 3200 E
Electrical

Operating pressure: up to 3200 bar
Weight: 3,5 kg



SP 3200 EH
Electrical / With continuous flow channel

Operating pressure: up to 3200 bar
Weight: 5,0 kg



SP 3200 MB
Mechanical bypass

Operating pressure: up to 3200 bar
Weight: 3,7 kg



SP 3200 MBE
Electrical

Operating pressure: up to 3200 bar
Weight: 4,2 kg



SP 3200 MB - 2H
Mechanical bypass/Two-hand operation

Operating pressure: up to 3200 bar
Weight: 6,5 kg



SP 3200 E - 2H
Electrical/Two-hand operation

Operating pressure: up to 3200 bar
Weight: 4,6 kg

**A SMALL LEVER
WITH A GREAT EFFECT**

A simple lever mechanism makes the trigger of our blasting guns child's play to operate. The operator can use the gun without feeling strain and physical stress which enables longer, more concentrated working periods.

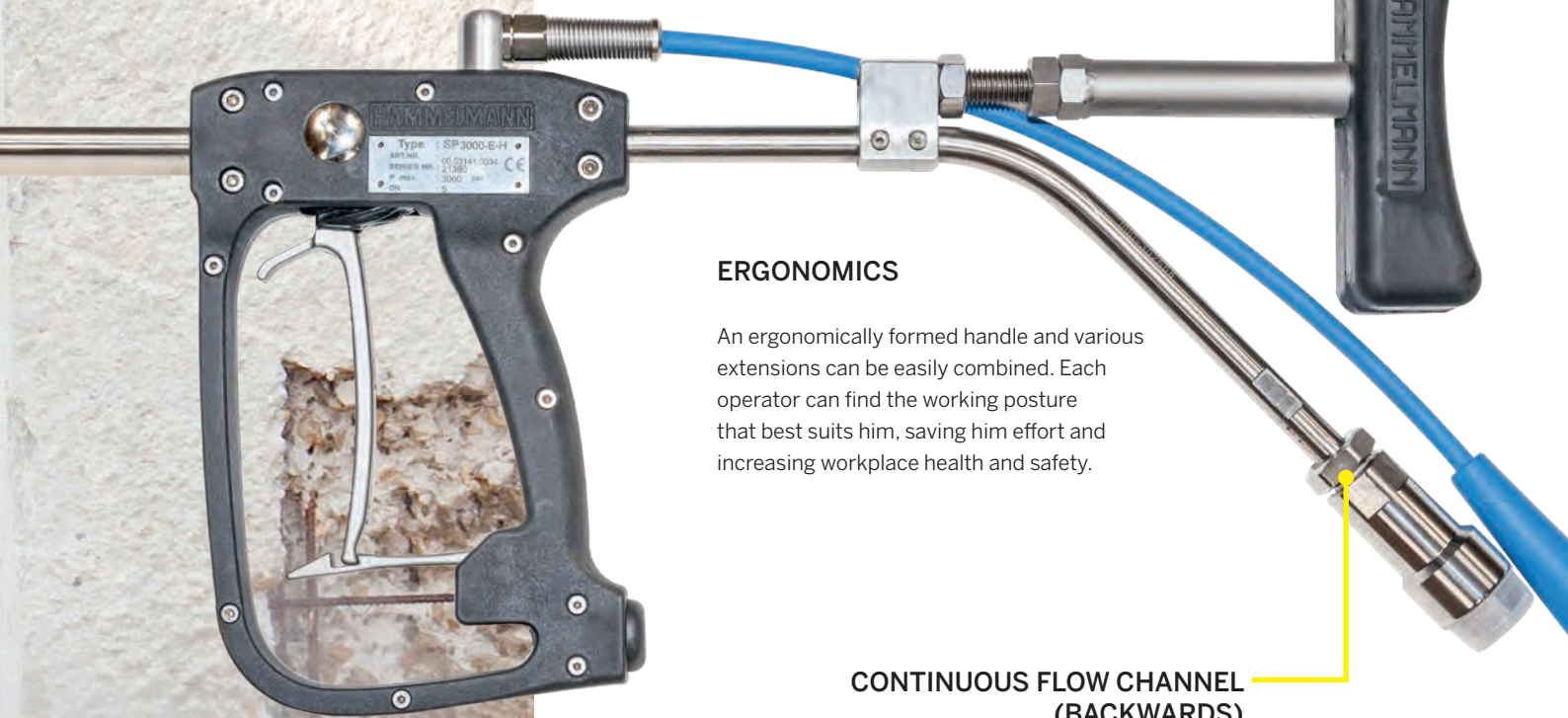


**SHOULDER STOCK -
CAN BE ADJUSTED TO INDIVIDUAL
REQUIREMENTS**



ERGONOMICS

An ergonomically formed handle and various extensions can be easily combined. Each operator can find the working posture that best suits him, saving him effort and increasing workplace health and safety.



**CONTINUOUS FLOW CHANNEL
(BACKWARDS)**

JETBOY WORK AIDS FOR
SUPPORT IN ALL POSITIONS

The ergonomic work tools of the JETBOY series offer fatigue-free water jetting for a wide variety of working positions.



JETBOY L



JETBOY S



JETBOY XL

Hammelmann Test Area

JETBOY S

JETBOY S is an ergonomic water tool with an adjustable handle and a variable working height for a secure standing position when working overhead

JETBOY L

You can adapt the JETBOY L to a wide range of different work positions. For cleaning ceilings, floors, and corners.

JETBOY XL

JETBOY XL allows virtually effortless work. This results in a significantly greater area performance.

JETMATE FREE-HANGING WORKING
TOOLS FOR SURFACE PREPARATION

JETMATES are ergonomic, free-floating work aids that absorb recoil forces from all directions. They enable safe and body-friendly work.

MASTERJET FLANGE CLEANER
FOR USE WITH ROTOR JETS

Our flange cleaner makes work safety and quality when cleaning flanges a simple and quickly repeatable task.



JETMATE
with MASTERJET



MASTERJET flange cleaner



MASTERJET flange cleaner
www.hammelmann.com/flange-cleaner

TECHNICAL DETAILS - FLANGE CLEANER

Operating pressure	Flow rate	Weight	Width (outer)	Manhole inside diameter
up to 3200 bar	up to 30 l/min.	~ 40 kg	up to 1406 mm	up to 750 mm

**HAMMELMANN - DISCOVER
THE MARKET LEADER**

Hammelmann has been a successful manufacturer of high-pressure systems for over 70 years, which are used for cleaning and cutting purposes as well as in production processes. With over 500 employees in the Hammelmann Group, in Oelde and the subsidiaries in the USA, Australia, Spain, China, France and Switzerland as well as 40 other agencies, we are a company that operates worldwide.

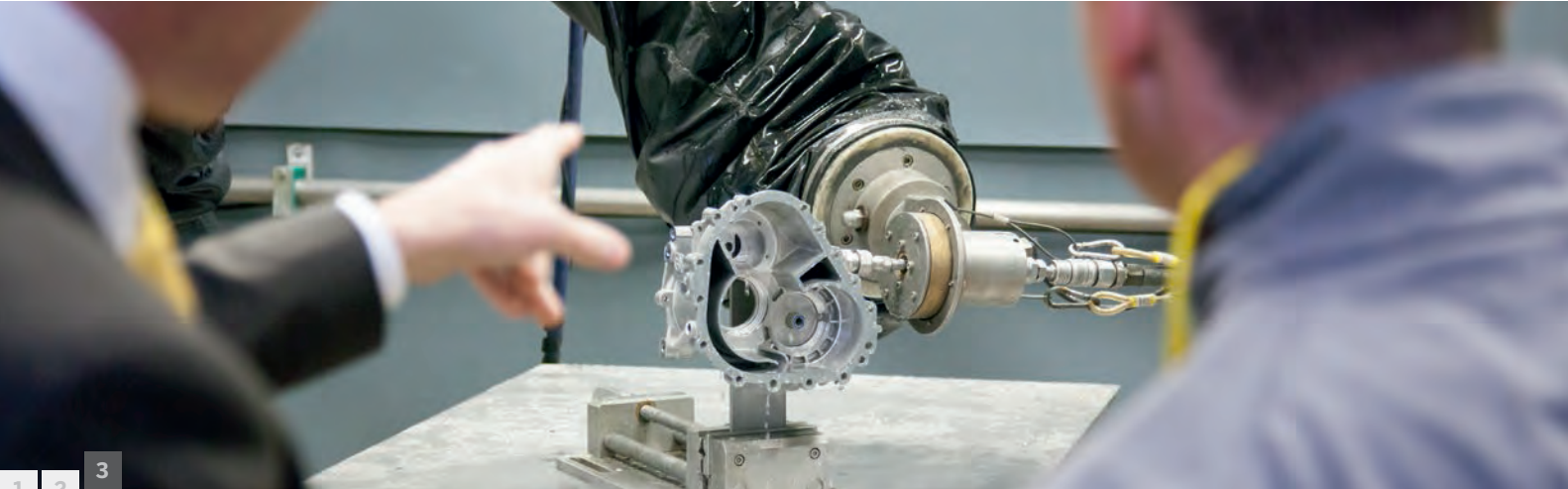
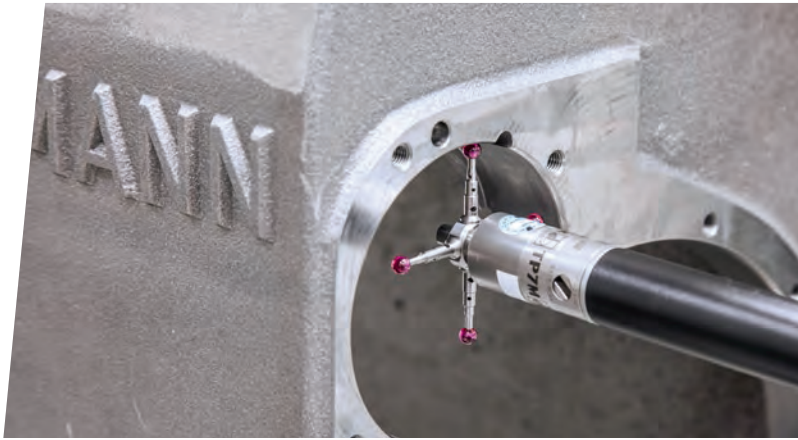
**STATE-OF-THE-ART
TECHNOLOGY CENTER**

For you and for our own R&D we run extensive tests in our modern Technology Center to see how and where water jet technology can be used in an economical, beneficial and ecological way. This is where modern technology and our innovative spirit go hand in hand to test product developments, new ideas, and specific customer requests in a practical setting and to put them through their paces.

Product quality and customer satisfaction are most important to Hammelmann. For this reason, products are not only tested under ideal conditions and then sold, but put to the test under extreme conditions.

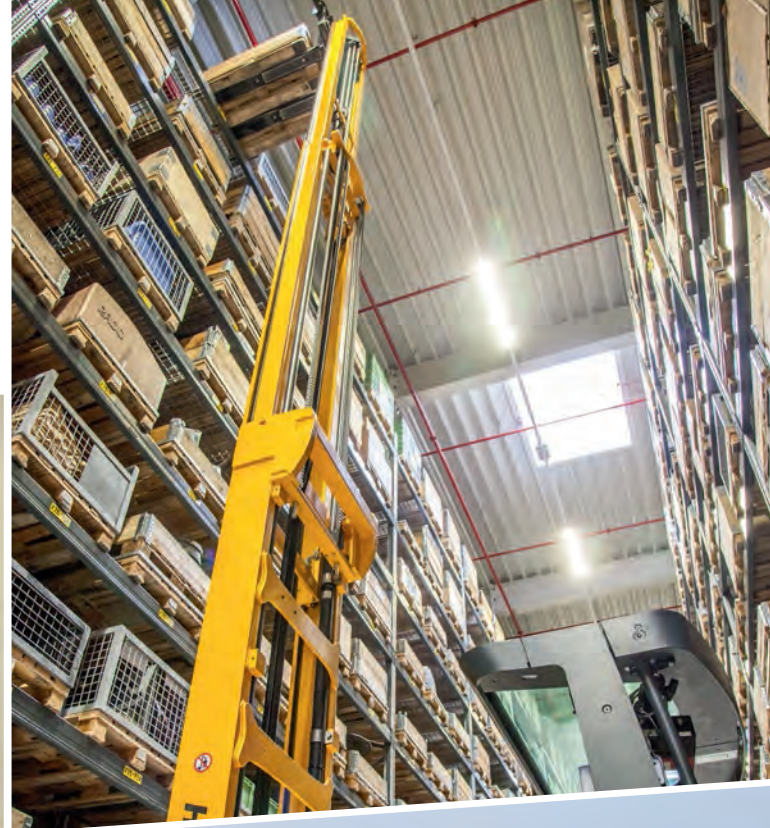
In order to simulate the toughest and most demanding conditions possible at your site, we have a number of tanks and containers, concrete and metal walls, pipes, lines and components that we prepare and then process accordingly. The extensive tests can be carried out indoors with the help of automated robots and systems, or outdoors.

If desired, simulations can also be developed in cooperation with you. Together we will examine possible solutions for your particular application and provide you with fully documented test protocols and reproducible results. We are looking forward to your challenge.



**SPARE PARTS SERVICE IN A CLASS OF ITS
OWN, AVAILABLE AROUND THE CLOCK**

Hammelmann's unique spare parts service offers you many advantages - a state-of-the-art logistics center, same-day dispatch and short delivery times.



SAME DAY DISPATCH

of spare parts



23.000 STORAGE SLOTS

in a fully automated storage system



500 EMPLOYEES

in the Hammelmann Group

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HAMMELMANN®

for over 20 years