

Welcome to the future of
***ultra-high-pressure
water blasting technology***



Developing new innovations with ultra-high-pressure

We set standards worldwide with innovative ultra-high-pressure water blasting systems for cleaning surfaces, marking removal and road engineering. We are constantly breaking new ground with our passion for modern technologies and work on developing the next big idea that will inspire our customers every day.

We set ourselves ambitious goals and grow with every challenge we face and master. Our claim: Deliver innovations with added value - for you and your company!

Welcome to **traffic-lines**

Clean, remove markings and optimise surfaces with *traffic-lines* ultra-high-pressure water blasting systems



Due to their innovative mode of operation, traffic-lines ultra-high-pressure water blasting systems can be used for many different applications. Thanks to their modular design, they can be adapted to specific requirements. Even individual retrofitting is possible at any time, so that traffic-lines ultra-high-pressure water blasting systems always remain at the cutting edge of development.

Rubber removal

- Runways
- Aerodrome aprons
- Race and test tracks

Marking removal

- Road markings
- Airport markings
- Special surfaces

Cleaning

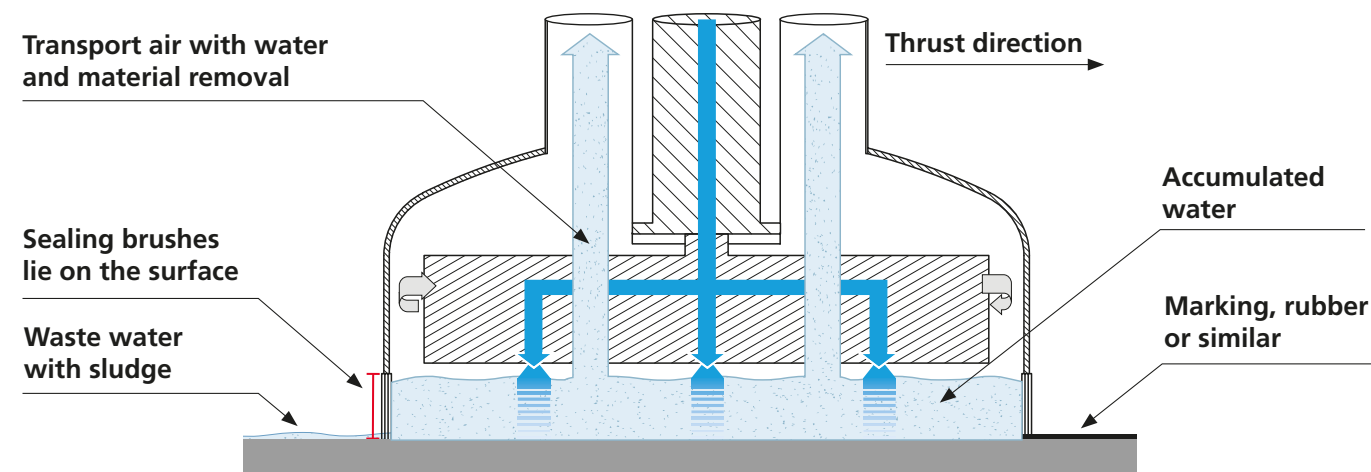
- A wide range of surfaces: porous asphalt, concrete, bituminous pavements, anti-skid pavements, noise-reducing pavements
- Removing oil and kerosene contamination, concrete sludge, particulate matter

Surface improvement

- Optimising the grip and homogenisation of surfaces

More efficient, cleaner and with greater care - thanks to the *traffic-lines* annular gap suction system

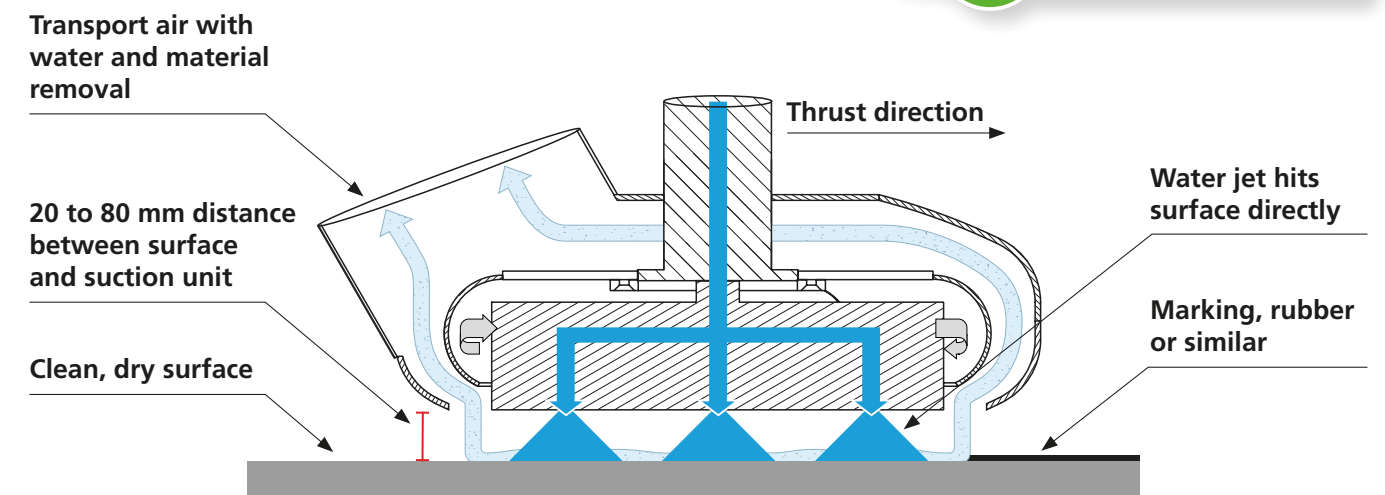
Conventional high-pressure water blasting hood



With conventional technology, the milling hood usually lies firmly on the surface to be cleaned with sealing brushes - a closed system is created. During the blasting process, this causes the jet water to accumulate with silt and solids under the hood and the water jet must first penetrate the accumulated water before it hits the surface. This means loss of performance.

When moving forward, the sealing brushes then brush the sludge back into the previously cleaned surface, which must then dry and be cleaned again if necessary.

traffic-lines annular gap suction



With the patented *traffic-lines* annular gap suction system, the suction hood does not lie directly on the surface. The resulting air curtain continuously extracts water jets, loosened rubber particles, marking residues and dirt and transports this past the spray bar into the waste water tank.

The result: No water accumulates in the suction hoods and the water jet generated at ultra-high-pressure hits the surface directly and can develop its optimum cleaning power.

Loose dirt particles are also already absorbed before the water jet. At the same time, the generated air flow volume cools the system during the entire process and absorbs even the smallest liquid particles. The surface is almost dry after cleaning.

Benefits

- **Significantly more effective cleaning performance**
- **Reduced wear on nozzles and spray bars**
- **Clean, virtually dry surface**

For you this means

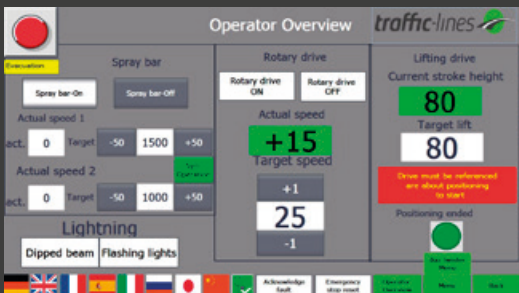
- **Shorter cleaning times**
- **Touch-up work is avoided**
- **Lower maintenance and repair work**
- **Immediate commissioning or further processing of the cleaned surfaces**

Greater efficiency via touchscreen -
the traffic-lines controller and
telemetry system

Surface protection "at the touch of a button" -
electric height adjustment

The intuitively designed traffic-lines controller system gives the driver access to all relevant functions during operation. The system has **various automatic settings** and can be programmed to the customers preferences.

Important process variables such as speeds, pressures, water levels and temperatures are permanently recorded and are thus also available for long-term monitoring.



The traffic-lines duo twister® is equipped with an electric height adjustment function. It is controlled by the driver via the controller system and makes it possible to **compensate for unevenness** during operation. The careful cleaning of **markings and landing lights at airports** is also made possible, as the width and force of the water jet and thus the cleaning performance can be regulated together with the height.



Benefits

- No tool change required
- Convenient to operate via the controller system
- The surface is treated gently

For you this means

- Reduction of set-up and downtimes
- Rubber can be removed and landing lights cleaned in a single operation

Benefits

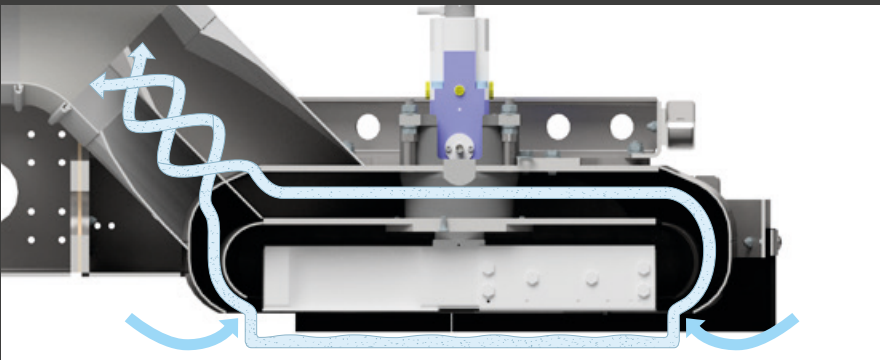
- Access to all relevant functions
- Automatic systems make setting parameters easier
- Proactive long-term monitoring of all relevant process variables
- Remote maintenance via GSM network
- Predictive maintenance

For you this means

- Shorter set-up times
- The process is optimised thanks to the analysis of long-term values
- Fast troubleshooting and recommissioning



Keeps it cool, even when the heat is on -
the active cooling system



Especially when the temperature is high outside, the ultra-high-pressure water blasting system has to perform at its best. Whereas with conventional blasting machines this can lead to overheating of the system, with traffic-lines the air cooled by the **annular gap suction system** cools the entire system during the work process.

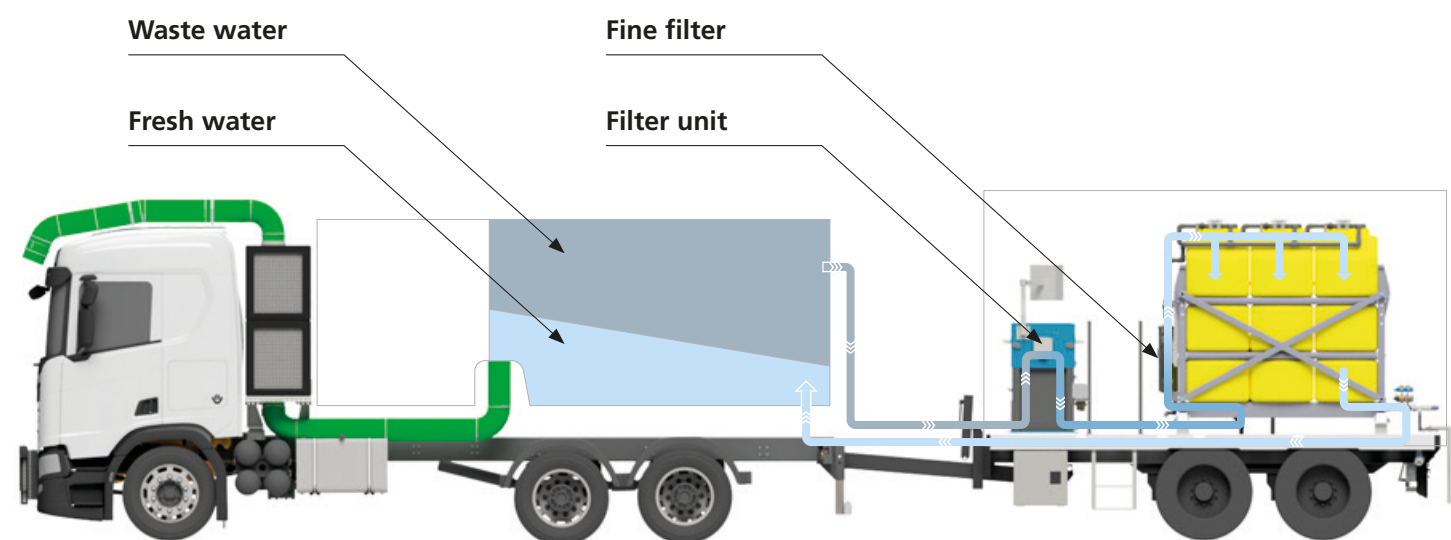
Benefits

- The system is continuously cooled
- The water temperature is lowered for optimal pump operation

For you this means

- Longer operation hours even when the temperatures are extreme outside

Working without interruption - traffic-lines water loop



Maximum return on your investment with ultra-high-pressure

Significantly higher cleaning performance

Clean, virtually dry surface

Low material wear

Maximum protection of the surface

Less time-consuming water refilling*

Environmental protection and resource conservation

Benefits

- Reduces fresh water consumption and waste
- Water refilling is less time-consuming
- Environmental protection and resource conservation

For you this means

- Shortened cleaning time
- Reduced operating costs

With the optionally available traffic-lines water loop water treatment system, the waste water is treated by an efficient **filter and recirculation unit** and available again for the next cleaning process or optionally stored for the next use. Due to particularly powerful annular gap suction, almost residue-free water recirculation is guaranteed.

The innovative technology of our ultra-high-pressure water blasting system offers decisive benefits where it matters: **Cleaning performance and cleaning time**. Both reduce your operating costs and increase your productivity. All in all, this results in a convincing **cost-benefit ratio in every respect**.

For you this means

- Shorter cleaning times
- Higher area performance
- Lower maintenance time and costs
- Rework and touch-up work is avoided
- Reduction of fresh water consumption*

= Reduction of operating costs per hour and m²

*if optionally equipped with water loop

Module overview

dynamic twister



telescope twister



dynamic double twister



duo twister®



Application

Brief description	The specialist for all types of cleaning small areas and marking removal	Its telescopic arm makes it ideal for cleaning small areas and marking removal, especially in hard-to-reach places	With a functional arm that can be moved in all directions and individually controllable hoods, it is multi-talented for a wide range of applications	With a working width of up to 4.20 m, it is the ideal solution for cleaning large areas
Areas of application	Airport: Removing rubber on runways, AGL and apron cleaning Race/test tracks: Removing rubber and optimising grip Roads: Marking removal All types of dirt can be removed	Airport: Removing rubber on runways, AGL and apron cleaning Race/test tracks: Removing rubber and optimising grip Roads: Marking removal All types of dirt can be removed Cleaning and marking removal in hard-to-reach or elevated places	Airport: Removing rubber on runways, AGL and apron cleaning Race/test tracks: Removing rubber and optimising grip Roads: Marking removal All types of dirt can be removed from large surfaces Cleaning vertical surfaces	Airport: Removing rubber on runways, AGL and apron cleaning Race/test tracks: Removing rubber and optimising grip Roads: Porous asphalt cleaning, marking removal on large areas All types of dirt can be removed from large surfaces grip optimising and homogenisation of surfaces

Technology

Working width	Up to 0.5 m	Up to 0.5 m	Up to 1 m	Up to 4.20 m
Nozzle type	Round or flat jet	Round or flat jet	Round or flat jet or combination	Round or flat jet
Nozzle quantity round jet	20-22 pieces	20-22 pieces	40-44 pieces	40-44 pieces
Nozzle quantity flat jet	10-12 pieces	10-12 pieces	20-24 pieces	20-24 pieces
Special features	Mobility multifunctional arm 180° in all directions Working radius up to 4.50 m	Mobility multifunctional arm 360°, working radius telescopic arm up to 8.00 m	Mobility multifunctional arm 180° in all directions Working radius up to 4.50 m	Electrical height adjustment Evacuation mode



traffic-lines is a member of the German Research Association for Road Markings e.V. (DSGS) and is a certified member of the GATE Alliance.

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