

State-of-the-art in  
*marking removal,  
surface cleaning  
and retexturing*



# 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**

## Remove markings and clean surfaces more efficiently with *traffic-lines* ultra-high-pressure water blasting systems



traffic-lines ultra-high-pressure water blasting systems remove markings and clean surfaces with greater care than conventional systems, even on heavily frequented and stressed surfaces. Thanks to our **patented technology** and a coordinated water treatment system, our process is more environmentally friendly and has significantly lower operating costs.

### Marking removal

- Road markings
- Airport markings
- Special surfaces

### Cleaning

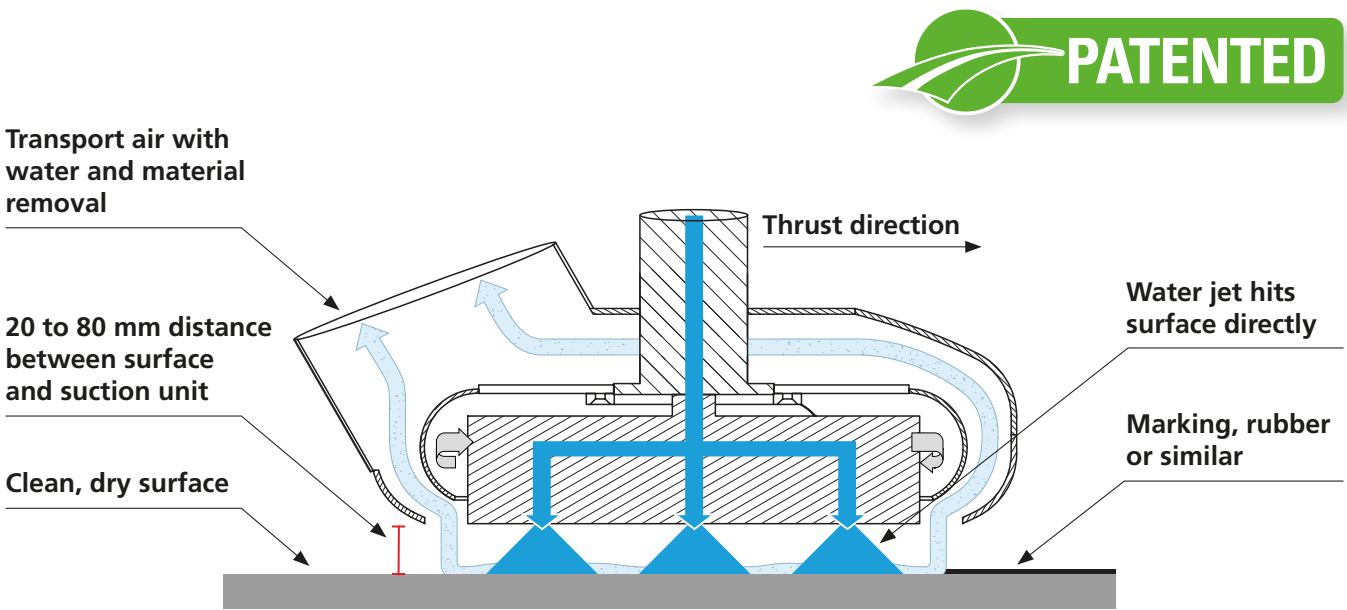
- Porous asphalt
- Concrete
- Bituminous pavements
- Anti-skid pavements
- Road markings

### Removing

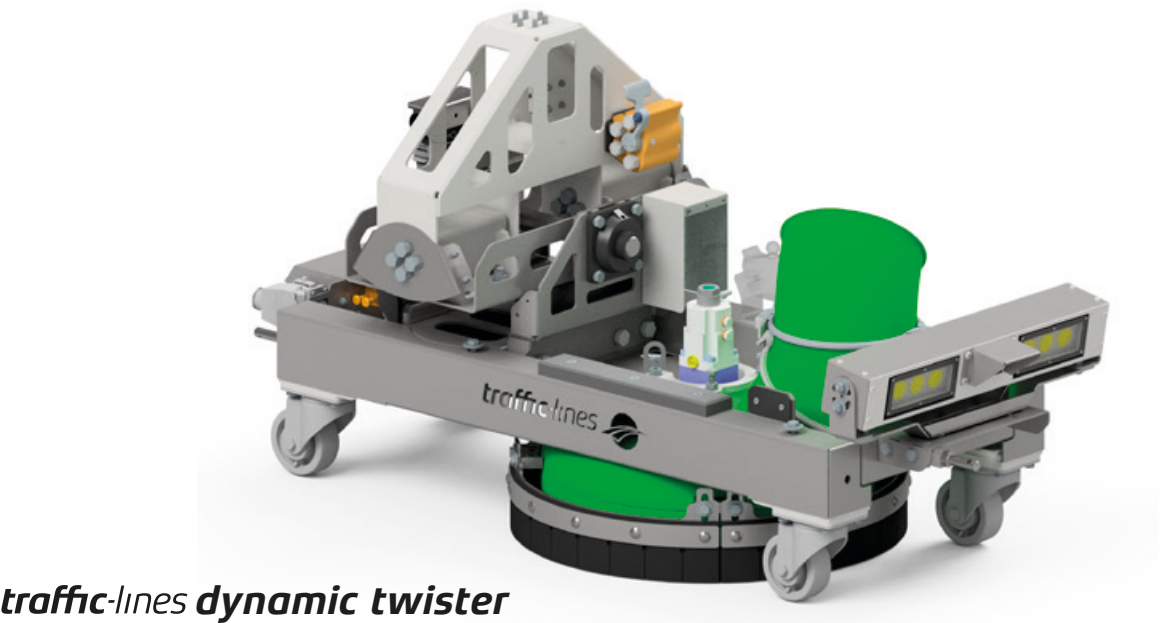
- Oil and kerosene contamination
- Concrete sludge
- Particulate matter



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



# Compact and versatile - *traffic-lines* dynamic twister



## 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 time and costs
- Immediate commissioning or further processing of the cleaned surfaces

The patented traffic-lines annular gap suction system forms the technical heart of our ultra-high-pressure water blasting systems: Jet water, dissolved rubber particles and dirt are **continuously absorbed** and transported past the spray bar into the waste water tank.

**The consequence: In contrast to conventional blasting hoods, there is no accumulation of water in the suction hoods.** The high-pressure water jet 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.

The traffic-lines dynamic twister is perfectly suited for cleaning surfaces with a width of 30 – 50 cm. With his dynamic arm the suction hood can be moved by 180° in all directions and within a working radius of 4.50 m.

Therefore it is the ideal solution for the removal of markings. The traffic-lines dynamic twister is most effective in removing paint, thermoplastics, film and cold plastic agglomerates. But also small areas can be properly cleaned from all types of dirt.

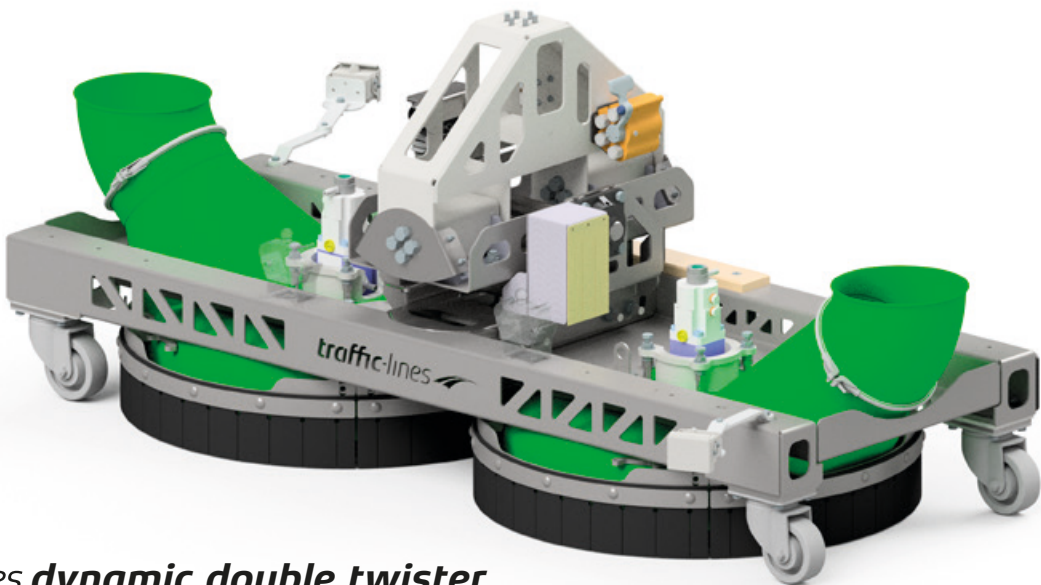
Aside from that the removal of marking or substrate is faster, saves water and is deployable in a cost-effective fashion. Thanks to its compact design, the traffic-lines dynamic twister can be flexibly adapted to any condition and is thus versatile in its usage.

**Working width:** up to 0.52 m  
**Range:** up to 4.50 m

## Areas of application

- Marking removal
- Cleaning of porous asphalt, concrete, bituminous pavements, anti-skid pavements, noise-reducing pavements
- Removal of oil and kerosene contamination
- Removal of concrete slurries, particulate matter
- Cleaning of road markings

# Maximum flexibility - *traffic-lines dynamic double twister*



*traffic-lines dynamic double twister*

Two suction hoods with the patented traffic-lines annular gap suction system can be rotated and swivelled by 180 degrees: The design of the dynamic double twister offers maximum flexibility for cleaning surfaces and removing markings.

The dynamic double twister can process both horizontal and vertical surfaces. The dynamic arm is easily adjusted from the driver's cab during operation using a joystick. The driver can also control the two hoods separately if required.

The spray bars in the two suction hoods can be equipped with either round jet or flat jet nozzles - or with a mix of both nozzle types. The best possible combination is therefore used depending on the cleaning requirement.

**Working width:** up to 1 m  
**Range:** up to 4.50 m

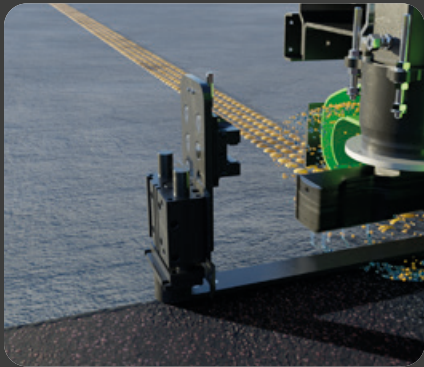
### Other areas of application

- Rubber removal
- Marking removal
- Cleaning of the most varied types of surface: porous asphalt, concrete, bituminous pavements, anti-skid pavements, noise-reducing pavements
- Removal of oil and kerosene contamination, concrete slurries, particulate matter
- Grip optimisation
- Homogenisation of surfaces
- Cleaning of road markings

# Innovative, useful and unique - *traffic-lines special features*

### Joint covering

Joints are vulnerable during the working process. The traffic-lines joint covering prevents them from being damaged by water jets. Useful: our joint covering is an automated system that can be operated out of the drivers cabin.

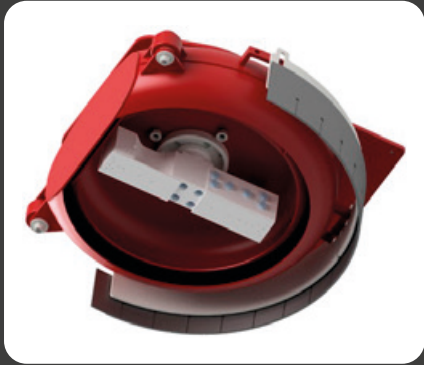


### Benefits

- Prevents joints from damaging
- Automated system operated out of drivers cabin

### traffic-lines twister edge

The traffic-lines twister edge is equipped with a side shield that allows moving the twister hood close along a boundary. Thus marking removal is feasible up to 50 mm to the edge. Thanks to a suited adapter conventional traffic-lines hoods can easily be substituted by the traffic-lines twister edge.

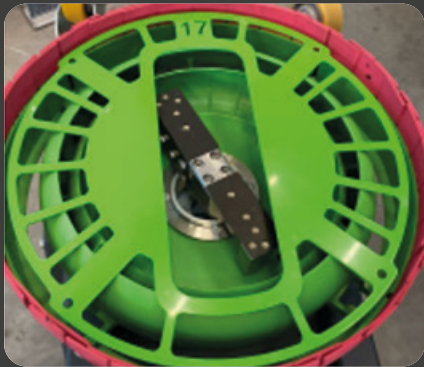


### Benefits

- Marking removal close to the edge
- Easy hood change

### Surface protection tool

The traffic-lines limitation of water jet pattern ensures that water jets only hit the marking and no surface besides, thus preventing damages or unwanted surface treatments. The patterns are available in different sizes for perfect fitting to your requirements.



### Benefits

- Most precise working
- Any size available

### Hydraulic arms

The traffic-lines twister hood as well as the traffic-lines double twister hoods can be equipped with a hydraulic arm allowing fast and easy repositionings of the hood in current work processes. These arms can easily be operated with a joystick out of the drivers cabin.

- Moveable 180/360° in all directions
- Working radius up to 4.50 m / 8 m

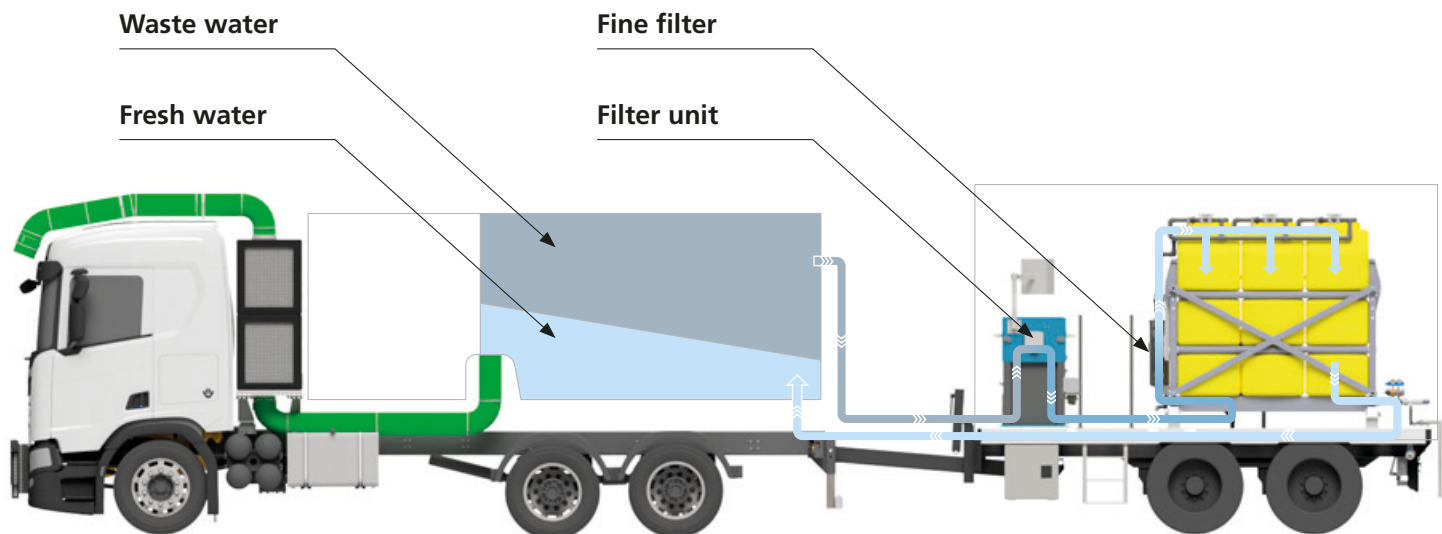


### Benefits

- Easy and fast repositioning of hoods
- Operating out of drivers cabin
- Vertical cleaning possible

# 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 traffic-lines water loop



# System overview

compact 40



compact 50



compact 100



compact 125



System Parameters				
Operating pressure	1,000-2,800 bar / 14,000-40,610 PSI	1,000-3,000 bar / 14,000-43,511 PSI	1,000-3,000 bar / 14,000-43,511 PSI	1,000-3,000 bar / 14,000-43,511 PSI
Flow rate	10-40 l/min	25-50 l/min	25-100 l/min	25-125 l/min
Suction capacity	18,000-32,000 m³/h	18,000-32,000 m³/h	18,000-32,000 m³/h	18,000-32,000 m³/h
Operation time without interruption	Up to 9 hours*	Up to 7 hours*	Up to 7 hours*	Up to 7 hours*
Fresh water capacity	5,500 l	7,500-10,000 l	7,500-10,000 l	7,500-10,000 l
Waste water capacity	11,000 l	8,000-12,000 l	8,000-12,000 l	8,000-12,000 l
Number of HP-pumps	1	1	2	2
Pump drive systems	Hydraulic drive 182 KW for stepless control of the water flow rate	Hydraulic drive 272 KW for stepless control of the water flow rate	Hydraulic drive 272 KW for stepless control of the water flow rate. Diesel drive 345 KW	Hydraulic drive 272 KW for stepless control of the water flow rate. Diesel drive 566 KW
Sweeping working width	2,900-4,100 mm	Upon request	Upon request	Upon request
Controller system	Siemens Touchpanel 19", Siemens SPS, Industry 4.0	Siemens Touchpanel 19", Siemens SPS, Industry 4.0	Siemens Touchpanel 19", Siemens SPS, Industry 4.0	Siemens Touchpanel 19", Siemens SPS, Industry 4.0
Truck diesel tank capacity	300-500 l, additional tanks optional	300-500 l, additional tanks optional	300-500 l, additional tanks optional	300-500 l, additional tanks optional
Cleaning area rubber removal	Up to 2,000 m²/h	Up to 3,000 m²/h	Up to 5,000 m²/h	Up to 6,000 m²/h
Water consumption	0.3 l/m²	0.5 l/m²	0.3 l/m²	0.25 l/m²



Module traffic-lines dynamic twister				
Working width	up to 520 mm	up to 520 mm	up to 520 mm	up to 520 mm
Nozzle types and quantity	10 - 12 flat jet nozzles or 16 - 22 round jet nozzles	10 - 12 flat jet nozzles or 16 - 22 round jet nozzles	10 - 12 flat jet nozzles or 16 - 22 round jet nozzles	10 - 12 flat jet nozzles or 16 - 22 round jet nozzles
Rotation speed spray bar	1,500 – 3,000 rpm	1,500 – 3,000 rpm	1,500 – 3,000 rpm	1,500 – 3,000 rpm

Module traffic-lines dynamic double twister				
Working width	Up to 1,000 mm	Up to 1,000 mm	Up to 1,000 mm	Up to 1,000 mm
Nozzle types and quantity	16-24 flat jet nozzles or 32-44 round jet nozzles or 10-12 flat jet nozzles + 16-22 round jet nozzles	16-24 flat jet nozzles or 32-44 round jet nozzles or 10-12 flat jet nozzles + 16-22 round jet nozzles	16-24 flat jet nozzles or 32-44 round jet nozzles or 10-12 flat jet nozzles + 16-22 round jet nozzles	16-24 flat jet nozzles or 32-44 round jet nozzles or 10-12 flat jet nozzles + 16-22 round jet nozzles
Rotation speed spray bar	1,500 - 3,000 rpm	1,500 - 3,000 rpm	1,500 - 3,000 rpm	1,500 - 3,000 rpm

\* extendable with optional traffic-lines water loop

Further configurations on request



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.

tl traffic-lines GmbH  
Robert-Bosch-Straße 12  
56410 Montabaur  
Germany  
Tel.: +49(0)2602/94920-0  
[info@traffic-lines.de](mailto:info@traffic-lines.de)  
[www.traffic-lines.de](http://www.traffic-lines.de)