



Catalogue of machines for road construction, repair and maintenance

Build your road to success



About the company

HYDROG ZBM is a Polish manufacturer of machinery based in Łódź. We have existed since 1989 and are currently the largest manufacturer of specialist road, as well as municipal, airport and railway machinery in Poland and one of the largest in Europe.

HYDROG brand's priority is the highest quality at an affordable price. As a result, HYDROG machines have for years been the most recognized and most frequently chosen by road investment contractors, and our logo can be seen on most road construction sites. Our products are delivered to the largest construction companies from Poland and Europe, including Germany, Austria, France, Sweden, Spain, Portugal - as well as thousands of smaller companies from all over the world. On all markets where we supply our products we provide professional and substantive technical advice as well as effective service support, either directly from the factory or through an organized and constantly expanding dealer network.

The HYDROG factory currently consists of six production and warehouse halls and office buildings with a total area of over 10 thousand m². The production infrastructure consists of CNC machining centres, CNC presses, CNC laser and plasma cutting machines, automatic and manual shot-blasting machines, painting booths, automatic powder paint shop, modern crane equipment, as well as measurement and laboratory equipment.

HYDROG designers create modern designs using the latest 3D CAD software. The company has also implemented a modern ERP management support system and a quality management system. The organization of the factory allows for serial, repeatable production of individual machines, and all this to ensure faster delivery.

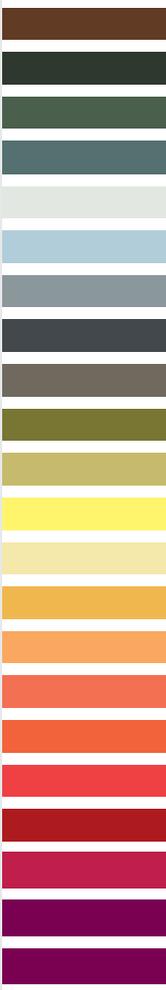
Let's do business together!



HYDROG

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Road wideners

HYDROG DG-3000



Machine characteristics

The main use of road wideners Hydrog DG-3000 Premium is efficient paving of all constructional layers of road shoulders or road widenings using cold materials or hot asphalt. The machine is attached to a carrier (loader, backhoe loader, tractor, grader, Unimog etc.).

The connection of the road widener to the carrier is made by a special adapter plate. The machine works in conjunctions with tipper truck based on its front bumper. The material is thrown to the side with a conveyor belt, where it is then formed by a spreading blade.

Hydrog DG-3000 Premium is the only attachable machine on the market, which in addition to the conventional control system from the operator seat, can also be controlled by the carrier operator.

Materials used:

- cold (aggregate, rubble, concrete for stabilization and others)
- hot bituminous mass up to 200°C

Kinds of work performed by HYDROG road wideners



- road shoulder paving and widening
- dispensing of bituminous masses into the paver on the bike path using an optional second side conveyor belt
- filling the spaces between road barriers
- laying drainage ditches of hot bituminous mass laying materials behind a curb
- laying materials 2m behind the road edge (e.g. behind the drainage trench)



Technical data

Laying width:	0.1 ÷ 1.5 / 2.0 / 3.0 m (depending on equipment version)
Width adjustment:	hydraulic and using extension units
Laid layer height:	+ / - 30 cm from the road level (other values possible)
Slope (drop) of the laid layer:	+ / - 15% adjusted hydraulically
Laying speed:	up to 50 m / minute
Laying performance:	up to 300 tons / hour
Controls:	from operator seat on the machine and from the carrier's cabin
Combustion engine:	Perkins diesel 34 HP, liquid cooled, 3-cylinder
Optional additional equipment:	disc brush, spreading blade vibrator, additional side conveyor, spreading blade TV monitoring, operator's cabin protecting against atmospheric conditions
Working dimensions:	2 820 x 5 970 mm (with the spreading blade at maximum extension)
Weight without the adapter plate bracket:	2 700 kg

Special versions

- Road widener without dedicated combustion engine, powered by the carrier's hydraulic system.
- Road widener towed by a tipper with the material (does not require dedicated carrier)

Road shoulder cutters

HYDROG SP-1200



Machine characteristics

The road shoulder cutter is intended for cutting profiling of road shoulders, to ensure proper road surface drainage and increase its usage safety. The machine is attached to an agricultural tractor, driven by PTO shaft and tractor's hydraulic system. The machine is controlled from the cab.

Rotation of auger, the rotor loading the excavated material onto the conveyor belt, profiling plate and conveyor belt as well as width and depth adjustment are provided by power hydraulics. The independent hydraulic system of the HYDROG cutter is driven by the tractor's PTO shaft. It is an energy-efficient smart system that automatically adjusts the hydraulic power to the type and hardness of the material cut.



Technical data

Cutting width:	max. 1 200 mm adjusted hydraulically
Cutting depth:	max. 120 mm adjusted hydraulically
Road shoulder slope:	adjusted hydraulically
Working speed:	200 ÷ 1 600 m/h
Cutting tool:	profiling plate and cutting auger with replaceable blades
Drive of the cutter's components:	hydraulic from own independent hydraulic system, powered by the tractor's PTO shaft, overload protection, when blade blocks on an obstacle
Performance:	up to 100 m ³ /h
Transportation of the excavated material:	by a front belt conveyor
Control:	from an operating panel in the carrier's cabin
Weight of the shoulder cutter:	3.0 ÷ 3.3 tons (depends on configuration)
Additional equipment:	rear cylindrical brush TV monitoring system for the cutting auger

Requirements concerning the agricultural tractor

- combustion engine power: at least 110 HP
- crawler gearbox
(ability to drive with the speed from 350 m/h)
- recommended tractor weight: at least 5 000 kg

The hydraulic pump of the tractor is used for the linear hydraulics – i.e. to change the cutting width and omit obstacles (trees, poles), as well as to allow the cutting head change from the transport position to working position.

The working width and depth are adjustable steplessly – hydraulically. The performance of the machine depends on the height of the shoulder, the desired working width, the type of soil, the volume of tipper bodies or tractor trailers and the mobility of their placement. Downtime can be caused by the transportation of cut material over a long distance and too little tipper. Depending on the above mentioned parameters, the productivity of the cutter is up to 1600 m/h, and the cubic capacity of collected soil - up to 100 m³/h.



Bitumen emulsion sprayers

HYDROG SH PREMIUM



You can afford PREMIUM Class as well

SH PREMIUM is the highest and most prestigious class of HYDROG emulsion sprayers. It was created in response to the needs of the most demanding customers expecting the highest precision of emulsion dosing and uniformity of spraying, as well as for those who use their equipment intensively under extreme conditions. SH PREMIUM sprayers are characterized by an unparalleled in its price range performance quality, technical capabilities (e.g. the biggest spraying width and output range) as well as proven reliability.

Emulsion sprayers HYDROG SH PREMIUM meet rigorous requirements of investors for emulsion dosage per square meter and uniformity of emulsion surface coating - both in the execution of the so-called tack coats spraying and in the technology of road surface dressing.



Spraying parameters

Spraying bar hydraulically extended up to 5 m
Equipped with a hand lance
Spraying efficiency: from 0.10 to 2.55 kg/m²
Automatic control of spraying performance depending on the sprayer speed
Automatic cleaning of the spray bar after every spraying

Emulsion tank

3 000 – 5 000 – 6 000 – 8 000 – 10 000 – 12 000 l
(depending on type)
CLEAN PUMPING – system of non-filtered absorption of pure emulsion by the pump
Filling by own pump or by top filling

Control and reports

Intuitive desktop with colour 12" touch panel in the driver's cab
Automatic, intuitive control minimising the risk of operator mistakes (without manual valves)
CCTV system for the bar during spraying
Records of every spraying in memory with the possibility to print it out on an in-built printer.

Emulsion heating system

One of the most efficient systems available on the market
Automatic maintenance of the emulsion operating temperature
Supports internal power supply of AC 230 V 50 Hz

Emulsion pump

Rotary displacement pump dedicated for bitumen emulsions
EASY START system – automatic heating supporting the pump start-up

Components' drive

The Customer may choose from a PTO attachment or own Perkins diesel engine - 3-cylinder, liquid cooled with a power of 44 HP

Selected additional equipment

Technical water tank with 140 l/min pump
Lime slurry tank with spraying system
Pressure washer for easier cleaning of the machine
Additional heating systems
Front brush - sweeper



Unique on the market, innovative solutions make SH PREMIUM class sprayers more environmentally friendly and economical. For example, when heating a full emulsion tank, the burner will consume about 10 litres less oil than other brands of machines. After spraying, the machine will automatically clean the pump and spray bars from emulsion residues.



Bitumen emulsion sprayers

HYDROG SR KOMPAKT



Sometimes easier means better

HYDROG SR KOMPAKT sprayers are designed for spraying hot bituminous emulsion onto the surface using the rear spray bar or a hand lance. They are equipped with a modern combustion engine, a heating system with automatic temperature control and a pneumatic system with an automatic compressor. Most of the offered versions of SR KOMPAKT sprayers are equipped with an automatic emulsion dosing system, the operation of which depends, among other things, on the changing driving speed of the vehicle. The sprayer then has a modern control panel, a control computer with memory of spraying parameters and a report printer for individual spraying operations.

The modern and efficient emulsion pump is heated together with the emulsion, so it is easy to start up. The pump is equipped with an overload protection. Optionally, there is a system of aspiration of emulsion by a sprayer pump from an external tank.



Available tank capacities are 2 000, 4 000, 6 000 and 8 000 litres.

The sprayer can be mounted on a chassis frame, on a tipper, on a hooklift frame or on a trailer.



Technical data

Fuel tank capacity:	2 000 l / 4 000 / 6 000 / 8 000 l (depending on type)
Ramp spraying width:	4.5 m (2.5 m + 2 extensions, 1 m each)
Spraying efficiency:	1 – 1.2 kg/m ² at a speed of 3-8 km/h, adjusted automatically
Controls:	from the driver's cabin
Heating:	automatically controlled oil burner with optional external power supply AC 220 V 50 Hz
Combustion engine:	diesel Yanmar 3TNM68-AS liquid cooled, power of 19.0 HP
Standard equipment:	automatic emulsion dosing system, air compressor lance for manual spraying, emulsion temperature indicator, emulsion pressure gauge
Additional equipment:	system of filling the emulsion tank with a sprayer pump TV monitoring of the spraying ramp technical water tank with 140 l/min pump front brush - side sweeper

Asphalt sprayers and sealers

HYDROG SA-3000



Machine characteristics

The main working element is a spraying ramp equipped with 3 nozzles, regulated hydraulically in 3 plains. Optionally, the sprayer is equipped with a hand lance.

All movements of the spraying ramp and the activation of spraying nozzles are controlled from the control panel in the driver's cabin. The heating system allows the operator to fully control the temperature of the medium in the tank and at the same time eliminates the possibility of local overheating. Asphalt is heated indirectly through thermal oil in the tank coat. Oil is heated by a modern and safe oil burner with closed combustion chamber and automatic control.

Inside the tank there is a hydraulically driven agitator. It supports the process of asphalt heating and melting. The operator has the possibility to optimise the rotation speed to the type of medium. The speed is adjustable steplessly.

The machine is equipped with a pneumatic system with its own compressor independent of the chassis. Sprayer and sealer HYDROG SA-3000 is mounted on a truck chassis – directly on the frame or on a platform.



Technical data

Asphalt tank:	capacity of 3 000 litres, equipped with a coat with thermal oil and mineral wool insulation
Asphalt working temperature:	150°C ÷ 220°C
Heating the asphalt in the tank:	indirectly through thermal oil
Type of heating burner:	oil, automatically controlled, with a controller for regulating the temperature of thermal oil and asphalt
Asphalt mixing:	with a hydraulically driven vertical agitator
Asphalt filling:	with an upper hatch by an external pump or with a connection on the side with own pump (suction)
Combustion engine:	Perkins diesel, 3-cylinder, liquid cooled, power of 34HP
Asphalt pump:	toothed dedicated to asphalt, equipped with a heating coat
Main working element – side ramp:	mounted behind the front axis of the chassis equipped with 3 independently controlled nozzles
Side ramp spraying width:	50 cm
Side ramp position adjustment:	hydraulic adjustment of the vehicle's outline extension hydraulic height adjustment hydraulic slope (angle) adjustment
Ramp heating:	supply lines with an electrical heating system to prevent solidification of the mass
Optional equipment:	hand lance with electric heating Side ramp area TV monitoring system with a monitor in the driver's cab

The main function of the machine is to spray hot asphalt on the road edge in order to close the structure of the asphalt concrete surface.

Other uses include:
spraying and sealing of seams
repair of cracks in road surfaces



Cracksealing machines

HYDROG ZSK-500



Operating principle

- sealing compound is loaded into the tank via an ergonomic and safe top hatch.
- the mass tank has a coat of thermal oil; the mass is heated indirectly and digested into the working form without the risk of overheating or burning.
- when the mass is heated, the manual lance with a hose is also heated up to working temperature – by means of an electric automatic heating system.
- heated sealing compound is fed to a gap by a hand lance; the machine is equipped with own pump
- amount of mass flowing out of the lance is smoothly adjusted with a valve

Versions

- on its own frame (for permanent installation on a truck or as a mobile version)
- on a trailer
- on a trailer with its own drive to move the machine around the construction site

Intended use

- filling expansion gaps
- filling edges of road surfaces
- performing “seams” between stripes of bituminous masses
- repair of cracks in hardened road surfaces
- sealing the edges of road-integrated components





Technical data

Mass tank capacity:	500 litres
Tank insulation and pump chamber:	50 mm, mineral wool with a reduced coefficient of thermal transmittance
Tank casing:	aluminium - steel
Tank filling:	through the upper hatch with safety cover
Mass heating:	indirect – thermal oil
Heating:	oil-electric burner, which may be connected to external AC 230 V 50 Hz mains
Burner control:	automatic – with a thermostat
Maximum mass heating temperature:	240°C
Mass mixing:	vertical agitator with hydraulic drive with a smooth speed adjustment
Mass feeding:	hydraulically driven pump
Sealing:	hand lance with electric heating
Combustion engine:	Diesel Yanmar 3TNV76–CS, liquid cooled, power of 25 HP
Source of compressed air:	compressor with disconnectable drive + compressed air tanks
Self-supporting construction:	equipped with a frame for mounting e.g. on a truck box or trailer
Working lights + flashlight:	yes
Optional equipment:	trailer without a drive additional hot air lance for cleaning and gap heating
Dimensions without chassis [l x b x h]:	2 608 x 1 450 x 1 750 mm
Weight without chassis:	1 600 kg

Cracksealing machines

HYDROG ZSK-40



Operating principle

The sealing compound or other binder loaded into the tank is heated up to working temperature indirectly through a plate heated by exhaust gases from the main burner. The burner fuel is a propane-butane gas from a cylinder. The temperature in the tank can be regulated and maintained up to 240°C. The heated up binder in liquid state is fed through the discharge nozzle heated by an auxiliary burner, exactly where it is needed – into the gap or on the edge. The nozzle is controlled manually.

Intended use

- filling cracks of road surfaces
- closing the bitumen structure by covering the edge with a sealing compound, bitumen, Biguma, etc.
- performing “seams” between stripes of bituminous masses.
- filling expansion gaps on roads, airports, bridges, overpasses
- repair of cracks of bituminous and concrete surfaces
- sealing tram induction loops etc.

Technical data

Tank capacity of sealing compound:	40 l (approx. 45 kg)
Mixing:	manual agitator
Burners:	main burner under the tank and auxiliary manual burner
Heating method:	indirect
Burner fuel:	propane-butane
Dimensions:	1 260 x 550 x 1 020 mm
Sealer weight:	95 kg
Standard equipment:	<ul style="list-style-type: none">• mass temperature indicator• 11 kg gas cylinder• nozzle tip for edge coating• nozzle tip for seam making

Asphalt crack routers

HYDROG MS-60



Technical data

Max. milling width (drum with fork milling cutters):	up to 40 mm
Max. milling depth (drum with fork milling cutters):	35 mm (type A cutter); 55 mm (type B cutter)
Milling cutters used:	octagonal widia type A \varnothing 120 (6 pcs.) octagonal widia type B \varnothing 160 (3 pcs.)
Max. milling depth (cutting discs – max. 5 pcs. or diamond cutters):	56 mm
Max. milling width (cutting discs – max. 5 pcs. or diamond cutters):	38 mm
Diameter of discs:	400 mm
Drive:	Kohler 25HP petrol engine
Voltage in the electrical installation:	12 V
Dimensions [l x b x h]:	1 780 x 890 x 1 060 mm
Weight:	220 kg

Intended use

- curvilinear milling of cracks by means of octagonal widia milling cutters
- rectilinear milling of joints (e.g. expansion) with diamond discs and cutters

Mastic asphalt boilers

HYDROG KA-4400



Intended use

Construction of new mastic asphalt and hard gussasphalt surfaces on bridges, viaducts, multi-storey car parks, tramways, bicycle paths, etc.

- 1) delivery of mastic asphalt and hard gussasphalt from the factory to the construction site without changing its structure and at a sufficiently high temperature,
- 2) dosing of asphalt before mastic asphalt finisher or levelling blade

Surface repairs

- 1) the use of ready-made asphalt masses loaded in the factory
- 2) production of mastic asphalt from individual ingredients according to the recipe
- 3) precise dosage of asphalt for defects in surfaces



Technical data

Asphalt tank:	vertical cylindrical, 4.4 m ³ capacity, with mineral wool insulation and aluminium casing
Loading opening:	1 100 x 800 mm at the tank's top
Agitator:	Inside the tank, 6-arms, with adjustable and interchangeable blades, with stepless rotational speed adjustment
Agitator drive:	Chain transmission + super-efficient hydraulic system with reverse for proper operation with the densest polymer modified asphalt
Asphalt heating:	safe automatic oil burner (for diesel and fuel oil) with closed combustion chamber, labyrinth exhaust gas circuit ensures even heating of asphalt without the effect of local overheating
Temperature regulation:	digital controller
Combustion engine:	STRONG version: Perkins diesel 4-cylinder with 44 HP BASIC version: Perkins diesel 3-cylinder with 34 HP electric start up hour counter
Asphalt pouring:	on the rear side hydraulic opening optional dosing trough on the turn-table optional additional side discharge
Controls:	system intuitive control panel
Chassis:	truck, tractor trailer, car trailer
Dimensions [l x b x h]:	4 500 x 2 500 x 2 100 mm
Boiler weight without frame:	4 650 kg

Experience = high quality

Over the last dozen or so years, many road companies from the private and public sector have participated in the development of HYDROG boilers on various construction sites, often in extremely difficult conditions, e.g. in low ambient temperatures, using super thick polymer mastic asphalt requiring efficient mixing and super-precise temperature control. Hydrog boilers have successfully participated in the construction of engineering structures on many important construction sites, e.g. in Poland on the S8 and S3 expressways.



Mastic asphalt finishers

HYDROG RAL-5500 / RAL-7500



Mastic asphalt finishers HYDROG RAL-5500 and RAL-7500 are used for machine spreading, levelling and compaction of layers of mastic asphalt with a heated bar (blade) during the execution of

After feeding from the boiler, the mastic asphalt is spread out with a gas-heated blade. The blade shape is optimised so that the machine is pressed against the ground by the asphalt. Optional augers evenly distribute the asphalt in front of the blade, eliminating the need for manual operation. The augers are height-adjustable and hydraulically driven with stepless speed control.

- bridge and other road surfaces,
- bicycle paths,
- alleyways in parks,
- surface between rails in tram tracks, railway tracks, etc.



Technical data

Machine type:	Hydrog RAL-5500 (A and B)	Hydrog RAL-7500
Laying width:	max. 5.5 m	max. 7.5 m
Module configurations:	1 470 mm main module + 4 modules, 1 018 mm each	1 470 mm main module + 4 modules, 1 018 mm each
Laying height:	from -300 to + 200 mm from wheels level	from -300 to + 200 mm from wheels level
Combustion engine:	version A: 1-cylinder diesel Hatz 1D81C Silent Pack, power of 9.6 kW version B: 2-cylinder diesel Hatz 2L41C Silent Pack, power of 22 kW	2-cylinder diesel Hatz 2L41C Silent, air-cooled, power of 22 kW
Asphalt spreading augers:	optional	
Drive:	hydraulic, independent for right and left side	
Working speed:	steplessly adjustable from 0.15 to 5.0 m/minute	
Working wheels:	inside the lateral driving elements, 130 mm wide with full tyres	
Blade heating:	strip burner along the entire length of the blade	
Heating:	spot burners	
Burner fuel:	propane butane gas, in standard equipment bottles 2 x 11 kg (optional 2 x 33 kg)	

Finishers have modular design. The desired spreading width is obtained by adding the widening segments to the base bar.

Maximum blade width with limiting sides 5500 mm (for RAL-5500) and 7500 mm (for RAL-7500). On both types of machines, the lateral limiting spreading modules can be moved smoothly.



Blow Patchers

HYDROG PA-5000 / PA-6000



Blow patcher Hydrog PA-5000 / PA-5000 is intended for repair of bituminous surfaces by filling and sealing potholes with mineral aggregate coated by bitumen emulsion. The aggregate is fed in a stream of air generated by a blower through a flexible hose to the working head, in which it is coated with bitumen emulsion.

The Blow patcher in a version with two aggregate tanks may work simultaneously with two different sizes of aggregate.

Stages of surface repair with the HYDROG blow patcher

- cleaning - blowing of the pothole with compressed air
- spraying of the pothole with bitumen emulsion
- filling of the pothole with aggregate coated by bitumen emulsion
- strewing of the repaired surface with dry aggregate



Technical data

Total capacity of aggregate tanks	5 m ³ / 6 m ³ (depending on version)	5 m ³ / 6 m ³ (depending on version)
Number of chambers in a tank:	1	2
Division of capacity for chambers:	not applicable	50% / 50% (others possible)
Number of aggregate feeders:	1	2
Feeder drive:	hydraulic with stepless output regulation - control from the console on the jib.	
Emulsion tank:	1,500 litres insulated with mineral wool 100 mm, with aluminium casing	
Emulsion pump drive:	hydraulic with stepless output regulation - control from the console on the jib.	
Emulsion heating:	oil burner with a closed combustion chamber automatically controlled, possibility to connect to an external AC 230 V 50 Hz mains	
Heating temperature:	up to 85°C	
Jib with a working head:	length of 4.3 m (other possible), with pneumatically adjustable height, equipped with control panel	
Location of working jib:	at the rear of the vehicle - controlled by a separate operator at the front of the vehicle - controlled by a separate operator at the front of the vehicle - controlled by a driver	
Combustion engine:	Perkins diesel, 4-cylinder, liquid cooled, power of 44 HP electric start up, service meter	
Blower:	max. output 10 m ³ /min. mechanical drive with reinforced belt transmission output smoothly adjustable from the console on the jib suction air filter	
Controls:	a control panel controlling all functions of the blow patcher, located at the operator's workstation next to the working head	
Optional equipment:	LED light arrow at the back of the blow patcher additional hand lance for spraying with bitumen emulsion	



Asphalt hot boxes with auger discharge

HYDROG TR-4H / TR-6H



Intended use of hot asphalt boxes

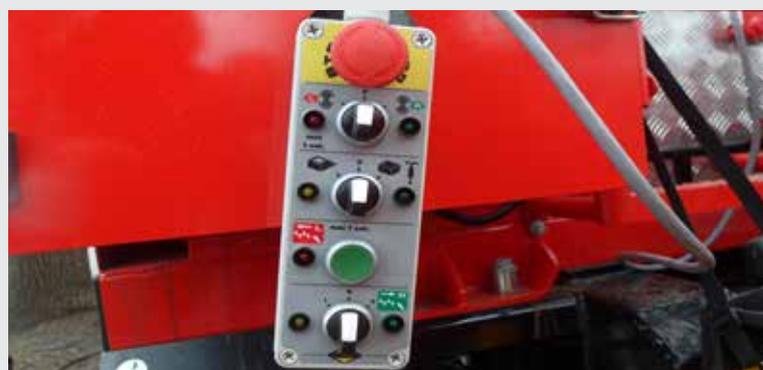
HYDROG TR-H hot boxes are used to repair road and asphalt surfaces. After being upgraded with a compactor, they become a complete machine for repairs of road surfaces machine for repairs of road surfaces.

1. Pothole preparation with a hammer or a saw driven by a built-in hydraulic power unit oil tank
2. Spraying of the pothole with a bitumen emulsion with a built-in sprayer
3. Dosing of a hot bituminous mass with an auger feeder and a chute on a turntable
4. Compacting of the surface



Thanks to the speed control, the operator can optimise the performance of the auger feeder. The largest loading hole on the market enables asphalt concrete to be loaded in every asphalt plant,

The upper cover does not significantly enlarge the size of the hot box after opening. HYDROG TR-H hot boxes can be mounted on a truck frame, on a trailer or in a tipper body or on a vehicle platform.



Technical data

Type:	Hydrog TR-4H	Hydrog TR-6H
Tank capacity of asphalt concrete mass:	4,5 m ³	6 m ³
Auger feeder drive:	right / left hydraulic with overload protection	
Upper backfill hole:	hydraulically opened, dimensions 1 680 mm x 1 900 mm	
Tank casing:	corrugated aluminium	
Heating:	oil burner in a closed chamber, automatically controlled with thermostat, possibility to connect an external power supply of AC 230 V 50 Hz	
Emulsion sprayer with a hand lance:	optional	
Compressor with pneumatic installation:	optional	
Combustion engine:	34 HP, 3-cylinder liquid-cooled Perkins diesel, or 23 HP, 2 cylinder, air-cooled Briggs & Stratton Vanguard petrol engine	
Hydraulic output to drive external tools:	yes - flow of 20 l/min, pressure of 140 bar	
Possible tools to use:	demolition hammer, disc cutter, diamond drill, water pump, others	
Working lights + flashlight:	standard	
Dimensions [l x b x h]:	4 135 x 2 200 x 1 954 mm	4 760 x 2 200 x 2 300 mm
Curb weight:	2 700 ÷ 3 000 kg (depending on equipment)	3 200 ÷ 3 600 kg (depending on equipment)

Asphalt hot boxes with gravity discharge

HYDROG TR-2G / TR-4G / TR-7G



Intended use

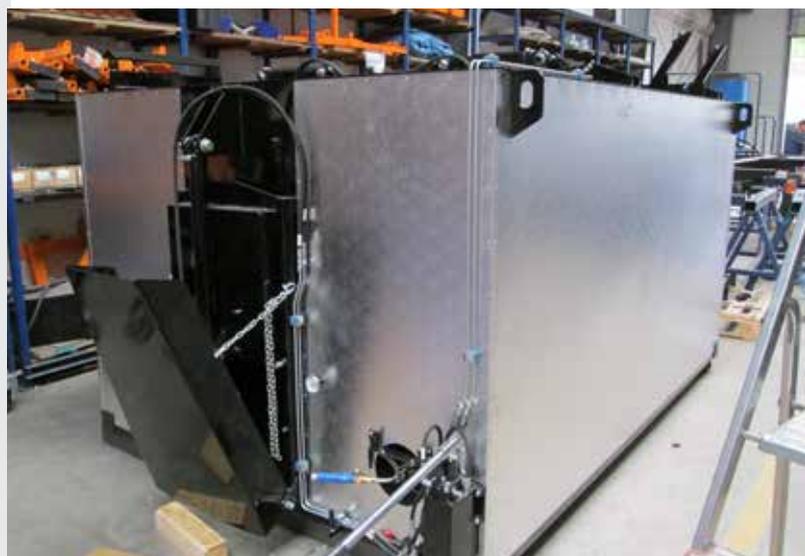
Dosing of a hot bituminous mass through a rear dispensing outlet with manual or hydraulic cover. Mass discharge is done gravitationally after lifting the tipper body – or by its own frame with hydraulic lift (option).

Features of HYDROG TR-G hot boxes with gravity discharge

A large loading hole makes it possible to work with any asphalt plant. The heating system is equipped with a gas burner and 33 kg bottles as well as mass temperature indicator. The system ensures that the mass temperature is maintained at a constant working level. The tank is insulated with mineral wool on each side including the top cover. The outer casing of the tank is made of aluminium. At the back, there is an anti-slip ladder for safe operation of the hot box.

Possible carriers of HYDROG TR-G hot boxes

Truck chassis – tippers. Safe installation of the hot box by means of adjustable quick release chain locks (or in other manner)





Technical data

Machine type:	HYDROG TR-2G / TR-4G / TR-7G hot box with gravity discharge
Capacity:	2.0 / 4.5 / 7.0 m ³ (depending on type)
Filling:	through the upper hole with hydraulic lock
Opening of top covers:	hydraulic
Emptying:	via rear discharge opening with feeding chute
Opening of rear cover:	manual or hydraulic (depending on version)
Lifting:	by tipping trailer or own hydraulic cylinder (depends on version of execution)
Heating:	propane gas burner - butane with replaceable cylinders (optional oil burner)
Lighting:	working and warning
Chassis:	tipper or trailer



Chip spreaders for road surface dressing

HYDROG RPU-3000 / RPU-3500



Road surface dressing

RPU-3000 chip spreader together with the emulsion sprayer forms the set for performing road maintenance operations, by the so-called method of surface dressing with bitumen emulsion and mineral aggregate. Tank of the spreader is being consistently filled by the tipper body. Chip is spread by a rotating, rifled roll located below the tank. The width of a gap above the roll, i.e. spreading width - is adjusted with a step of every 250 mm pneumatically. Each spreading section is controlled independently. The source of compressed air in this case is the pneumatic system of the emulsion sprayer or its chassis. The feeding roll is driven from the machine's running wheels by means of a gearbox with a disconnecting clutch. Auger is an optional equipment that scrapes the aggregate inside the tank - above the gap of the feeding roll. It has the ability to switch on rotation in both directions.

Additional information

- Mounting to the sprayer is done by towbar (emulsion sprinkler shall be equipped with a hitch)
- Spreader is equipped with two platforms for operators - on the right and left side of the machine.
- The machine can be transported by a vehicle - sprinkler on dedicated trailer (optional).



Technical data

Type:	HYDROG RPU-3000	HYDROG RPU-3500
Capacity of aggregate tank:	1,7 m ³	2,0 m ³
Spreading width:	3,0 m	3,5 m
Width adjustment:	every 25 cm (12 spreading sections)	every 25 cm (14 spreading sections)
Adjustment method:	pneumatic actuators on individual sections	
Power supply for actuators:	from the sprayer pneumatic installation or from its chassis	
Aggregate fraction:	up to 48 mm	
Feeding roll drive:	from spreader running wheels	
Support wheels:	2 pcs. double on both sides of the machine, with full tyres	
Optional equipment:	aggregate scraper auger above the feeding roll	
Dimensions [l x b x h]:	2 900 x 3 300 x 2 000 mm	2 900 x 3 800 x 2 000 mm
Weight:	1 500 kg	1 700 kg



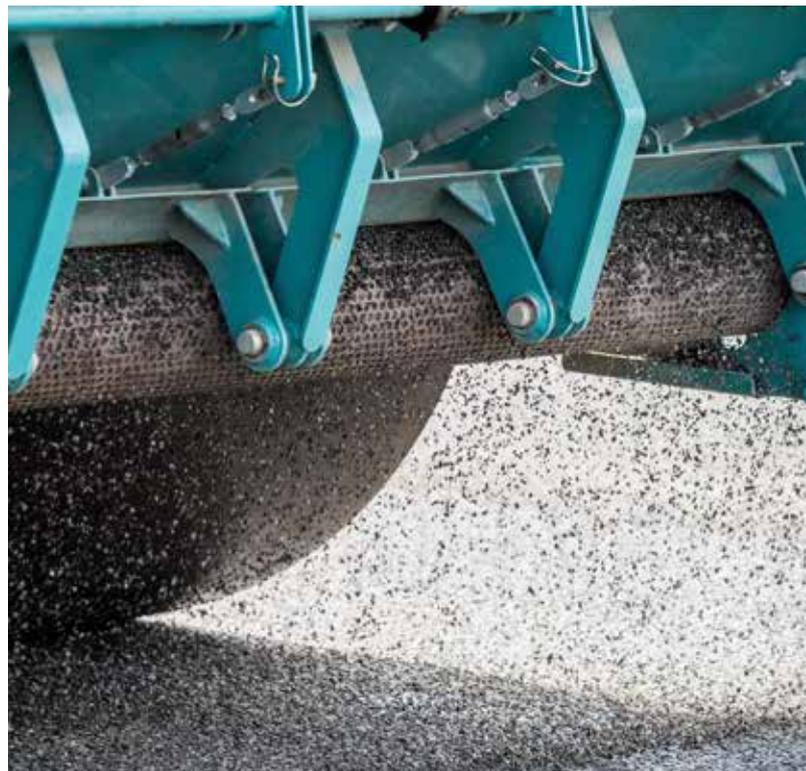
Chip spreaders for road rollers

HYDROG RG-1700 / RG-2000 / RG-2100



Precise and aesthetic finishing of surfaces

HYDROG RG is used for spreading mineral chips on the top abrasive bitumen mastic layer (e.g. SMA technology). Roller feeder ensures uniform spreading output along the entire width. Spreading width can be reduced by closing selected sections. Control of the chip spreader is performed from the road roller cab. RG spreader is offered in versions dedicated for specified road rollers models: Hamm, Ammann, Dynapac, Bomag, Cat and Volvo. Installation of spreader and hydraulic supply system does not void the road roller warranty.



Additional equipment of HYDROG spreaders

- roller for loosening chips inside the tank
- vibrator
- rain cover
- digital spreading output indicator



Technical data

Spreading width:	1 680 / 2 000 / 2 100 mm
Spreader drive:	hydraulic from a roll
Number of spreading sections:	from 4 to 6 pcs.
Spreading output:	0.5 ÷ 15 kg / m ²
Output adjustment:	smooth, with a feeding roll speed
Chip tank capacity:	0.7 / 0.9 / 0.95 m ³
Lighting:	road, front and rear
Spreader colour:	in accordance with the factory colour of the roller
Mounting to road roller:	on the quick-release frame by means of suspension brackets
Spreader handling:	by forklifts or backhoe loaders

Asphalt and concrete hydraulic millers

HYDROG FA-300 / FA-450



Intended use of the FA miller

These machines are used for precise milling of:

- asphalt and concrete surfaces
- cracks, holes, hump, ruts
- carrying out partial repairs

Mounted on: arm of excavator, backhoe loader, in place of the excavator bucket. The maximum milling depth can be reached after only 2-3 passes of the milling machine.

Milling output can be variable, will depend on the processing depth in one pass and type of surface.

Technical data

Miller type:	FA-300	FA-450
Milling width:	300 mm	450 mm
Milling depth:	0 ÷ 130 mm	0 ÷ 130 mm
Drive:	hydraulic	hydraulic
Oil flow:	80 ÷ 120 l/min	100 ÷ 150 l/min
Oil working pressure:	190 ÷ 220 bar	190 ÷ 220 bar
Maximum oil pressure:	240 bar	240 bar
Dimensions [l x b x h]:	980 x 910 x 630 mm	980 x 910 x 720 mm
Miller weight without the adapter:	530 kg	650 kg
Suggested carrier weight:	4 ÷ 10 t	5 ÷ 12 t

Diamond cutters

HYDROG Honda Sharky

Type:	Sharky-350	Sharky-351	Sharky-400	Sharky-500
Disc diameter:	350 mm	350 mm	400 mm	500 mm
Cutting depth:	115 mm	115 mm	135 mm	180 mm
Depth adjustment:	smooth	smooth	smooth	smooth
Disc revolutions:	3 100 RPM	3 100 RPM	2 800 RPM	2 200 RPM
Honda engine:	GX-160	GX-200	GX-270	GX-390
Power:	4,8 KM	5,5 KM	8 KM	11 KM
Weight:	54 kg	54 kg	85 kg	90 kg
Water tank:	15 l	15 l	35 l	35 l



Diamond drills for samples

HYDROG WH

Type:	WH-160	WH-300
Max. diameter:	160 mm	300 mm
Max. drilling depth:	400 mm	400 mm
Drive:	hydraulic	hydraulic
Oil flow:	20-26 l/min	20-30 l/min
Oil pressure:	150 bar	150 bar
Hydraulic connections:	Flat Face 3/8"	Flat Face 3/8"
Drill clamping:	1 1/4"	1 1/4"
Dimensions:	790x280x1020 mm	860x240x1020 mm



Combustion pumps for emulsions

HYDROG ASE-50

Type:	ASE-50
Drive:	Briggs & Stratton 9 HP combustion engine
Start-up:	manual
Pump type:	rotary displacement
Performance:	up to 250 l/min
Self-suction height:	inflow
Medium pumping:	bitumen emulsion / up to 85°C
Transmission:	precise and durable gears, bearing in oil bath



Hydraulic double function sweepers

HYDROG OKP DUO



Flagship type of HYDROG sweepers

OKP-DUO machines are at the top of the market in terms of durability of the entire construction and of individual components. They are designed for cleaning even and uneven surfaces, and for reliable continuous operation with high performance, even under difficult construction conditions. They are used by demanding individual customers and in reputable rentals of construction machines. They can be attached to all popular models of loaders, backhoe loaders and tractors available on the market.

Two working modes - depending on your needs

- collection of impurities into the tank,
- sweeping of impurities to the side - reservoir raised and rotating the sweeper to the right or left



Reinforced construction enables operation under difficult conditions

OKP-DUO sweepers work on construction sites and during repairs of road surfaces during summer season but also during winter maintenance of roads, e.g.: at snow removal. Hydraulic motors are adapted for hydraulic systems of backhoe loaders (larger oil flows and pressures). Their frames are blasted, professionally protected against corrosion and painted in special painting booths.



Technical data

Sweeper type:	OKP-600/2100	OKP-600/2400	OKP-600/2750
Width of cylindrical brush:	2.10 m	2.40 m	2.75 m
Diameter of cylindrical brush:	600 mm	600 mm	600 mm
Capacity of the tank for impurities:	240 dm ³	270 dm ³	300 dm ³
Sweeper working modes:	1) collection of impurities into the tank - reservoir lowered, sweeper set straight 2) sweeping of impurities to the side - reservoir raised, sweeper set to the right or to the left		
Raising the impurities tank:	hydraulic, by means of an actuator (operated from operator's cab)		
Support wheels:	4 pcs., with increased load capacity, swivel, with height adjustment		
Brushes drive:	hydraulic from the carrier system		
Demand for hydraulic oil:	40 ÷ 70 l/min	50 ÷ 80 l/min	60 ÷ 100 l/min
Optional equipment:	water sprinkling system (with tank, sprinkler and electric water pump) right side brush left side brush		
Possible fixing brackets:	for loader for existing quick coupler for loader on pins for tractor for UNIMOG and similar vehicles		
Dimensions:	1 700 x 2 300 x 1 200 mm	1 700 x 2 600 x 1 200 mm	1 700 x 2 950 x 1 200 mm
Weight without fixing bracket:	440 kg	540 kg	680 kg

Hydraulic sweepers

HYDROG OCP



Hydrog sweepers - they will sweep you away!

HYDROG OCP sweeping machines have been very popular among road and municipal construction companies for decades, both throughout Europe and in several Asian and African countries. These machines collect impurities such as: sand, gravel, stones, mud, slag, soil etc. from roads, squares, sidewalks, alleys and other surfaces. These impurities are collected into the built-in tank with hydraulic opening. The machine is controlled from the driver's cab.

Possible carriers

Hydrog OCP sweepers can be fitted to most carriers equipped with a hydraulic system, e.g.:

- agricultural tractors: Ursus, Zetor, MF, SAME,
- backhoe loaders: Caterpillar, JCB, Volvo, Case,
- loaders: JCB, Caterpillar, Liebherr, Bobcat,
- forklifts: Toyota, Jungheinrich, Zreimb,...
- utility trucks: Unimog, Hansa,



Features of Hydrog sweepers

- extremely solid and rigid steel body of the sweeper - blasted, professionally protected against corrosion and painted in special painting booth,
- the most durable cylindrical and disc brushes made of wear-resistant wire on the market,
- power hydraulics of renowned world producers,
- reinforced support wheels,
- efficient sprinkling system with electric water pump, water tank.



Technical data

Sweeper type:	OCN-600/1500	OCN-600/1800	OCN-600/2100	OCN-600/2400
Length of cylindrical brush:	1.5 m	1.8 m	2.1 m	2.4 m
Diameter of cylindrical brush:	600 mm			
Capacity of the tank for impurities:	170 dm ³	200 dm ³	240 dm ³	260 dm ³
Tank emptying:	hydraulic			
Support wheels:	3 pcs.	3 pcs.	4 pcs.	4 pcs.
Brushes drive:	hydraulic			
Power supply:	from the hydraulic system of the carrier			
Min. oil flow:	20 l/min	20 l/min	30 l/min	40 l/min
Max. oil pressure:	150 bar	150 bar	150 bar	150 bar
Sprinkling:	water tank on the machine, water pump, sprayers on the machine body			
Side brush:	right - option, left - option			
Sweeper dimensions[l x b x h]:	1 700 x 1 500 x 1 200 [mm]	1 700 x 1 500 x 1 200 [mm]	1 700 x 2 300 x 1 200 [mm]	1 700 x 2 600 x 1 200 [mm]
Sweeper weight without the bracket:	330 kg	390 kg	440 kg	540 kg

Hydraulic side sweepers

HYDROG OCN

The most powerful machine for demanding customers

Sweeper in a special reinforced and rigid construction. Designed for cleaning road surfaces from asphalt and other “difficult” impurities.



Possible carriers of HYDROG OCN sweepers

- agricultural tractors
- loaders, backhoe loaders
- trucks (e.g. with development such as sprayer)
- forklifts and other.



Technical data

Machine type:	OCN-600/1500	OCN-600/1800	OCN-600/2100	OCN-600/2400
Length of cylindrical brush:	1.5 m	1.8 m	2.1 m	2.4 m
Diameter of cylindrical brush:	600 mm			
Revolutions of cylindrical brush:	150 ÷ 450 RPM			
Controls:	from the carrier's cabin			
Brush lifting and lowering:	hydraulic			
Brush rotation angle adjustment:	manual or hydraulic			
Required min. oil flow:	20 l/min	20 l/min	30 l/min	40 l/min
Optional equipment:	pressure water spraying system, support wheels, road lighting additional intermediate front panel for moving the sweeping machine to the right / left			
Dimensions:	1 000 x 1 700 x 750 mm	1 000 x 2 000 x 750 mm	1 000 x 2 300 x 750 mm	1 000 x 2 600 x 750 mm
Weight of base version without bracket:	178 kg	190 kg	205 kg	290 kg

Hydraulic weed brush

HYDROG SCZ-900

Intended for

- mechanical removal of weeds growing into paving stones, pavements, trills, etc.,
- road cleaning after the winter season - at curbs from dried mud, sand, roughening aggregate,
- sweeping the so-called road bands.

Possible carriers

- agricultural tractors (hitch for front 3 point linkage lifter or to the tractor frame)
- UNIMOG and similar (hitch for the front panel or other standardised system)
- backhoe loader (hitch for the excavator arm)



Technical data

Machine type: HYDROG SCZ-900

Reach adjustment: hydraulic (telescopic arm)

Switching left/right: manual

Drive: hydraulic from the carrier pump

Hydraulic supply: 55-80 l/min - 160 bar

Diameter of brush: 960 mm

Revolutions of brush: right / left

Controls: from the carrier's cabin

Options: sprinkling system with water pump and tank

Weight: 160 ÷ 330 kg (depending on configuration)



HYDROG ZBM
Manufacturer of machinery
for construction and maintenance
of roads, railways and airports

119 BC Demokratyczna Street
93-348 Lodz, Poland

tel.: +48 42 645 77 42
fax: +48 42 645 87 42
hydrog@hydrog.com

Find us also on:



www.hydrog.com

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