



The benefits of a concept the mechanical-vacuum system



The advantages of an innovative system

The combined mechanical and vacuum collection system is the only true solution to the most demanding cleaning requirements. Unmatched cleaning standards, protection of the environment and maximum productivity combined with low operating costs are the amazing results.



Sweeping speed The large dimensions of the debris loading door and refuse conveyor, together with the width of the central brush, allows the Dulevo 200 quattro to work at up to three times the rate of traditional, non-combined, sweepers.

Load capacity The original design concept of the waste hopper, aimed at optimal use of internal space, and the "dry" collection system allow a huge load capacity which reduces emptying frequency and increases productivity.



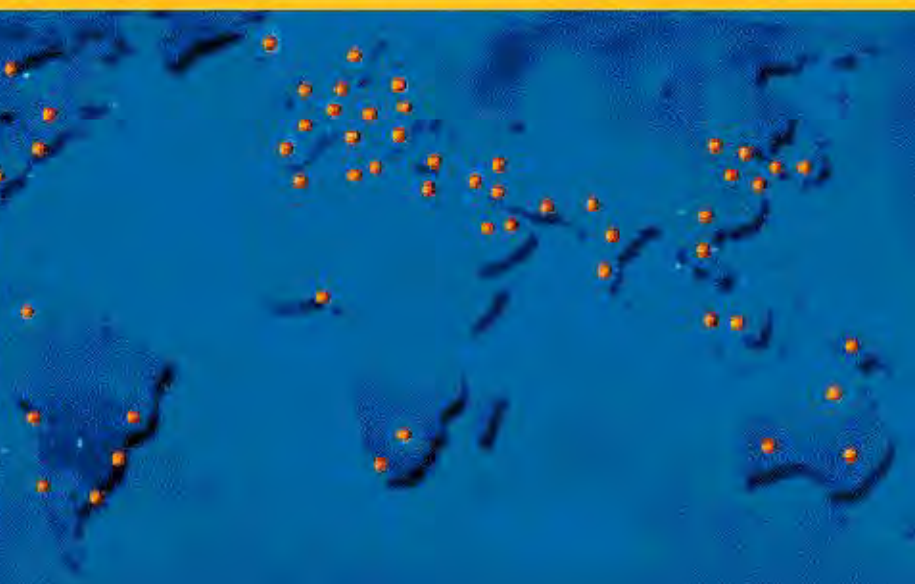
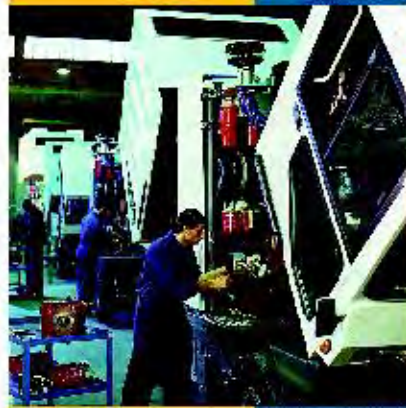
Productivity The high working speed combined with infrequent emptying result in unbeatable operating costs.



STREET CLEANING EQUIPMENT



A wide range of sweepers, from the model with a sweep path of 1500 mm. to the sweeper with a 5 m³ hopper. The street washing machine with tanks capacity from 2600 lt. up to 6000 lt., to the 10 m³ compactor.



Dulevo, design and technology for a cleaner world.

DULEVO is acknowledged as a leading international manufacturer of a wide range of industrial sweepers, street cleaning equipment and scrubber driers and is a force in all major market sectors. The company's continual dedication to quality has made it possible to obtain the prestigious UNI EN ISO 9001 certification from Det Norske Veritas. Over 30 years of design and manufacturing experience have enabled Dulevo to remain at the forefront of technology and to consolidate its position as a world-wide market leader. A network of importers and authorised dealers provides sales and service support for Dulevo products in Italy and all major countries of the world. Every day hundreds of people work to ensure that Dulevo is a prime force in all of its chosen markets.



INDUSTRIAL SWEEPERS



AUTO SCRUBBER-DRIERS



COMMERCIAL SPRINT



DULEVO INTERNATIONAL S.p.A.
Via G. Guareschi, 1 - Fontanello PARMA - Italia
tel. +39.0521.827711 - fax +39.0521.827795
www.dulevo.com - info@dulevo.com

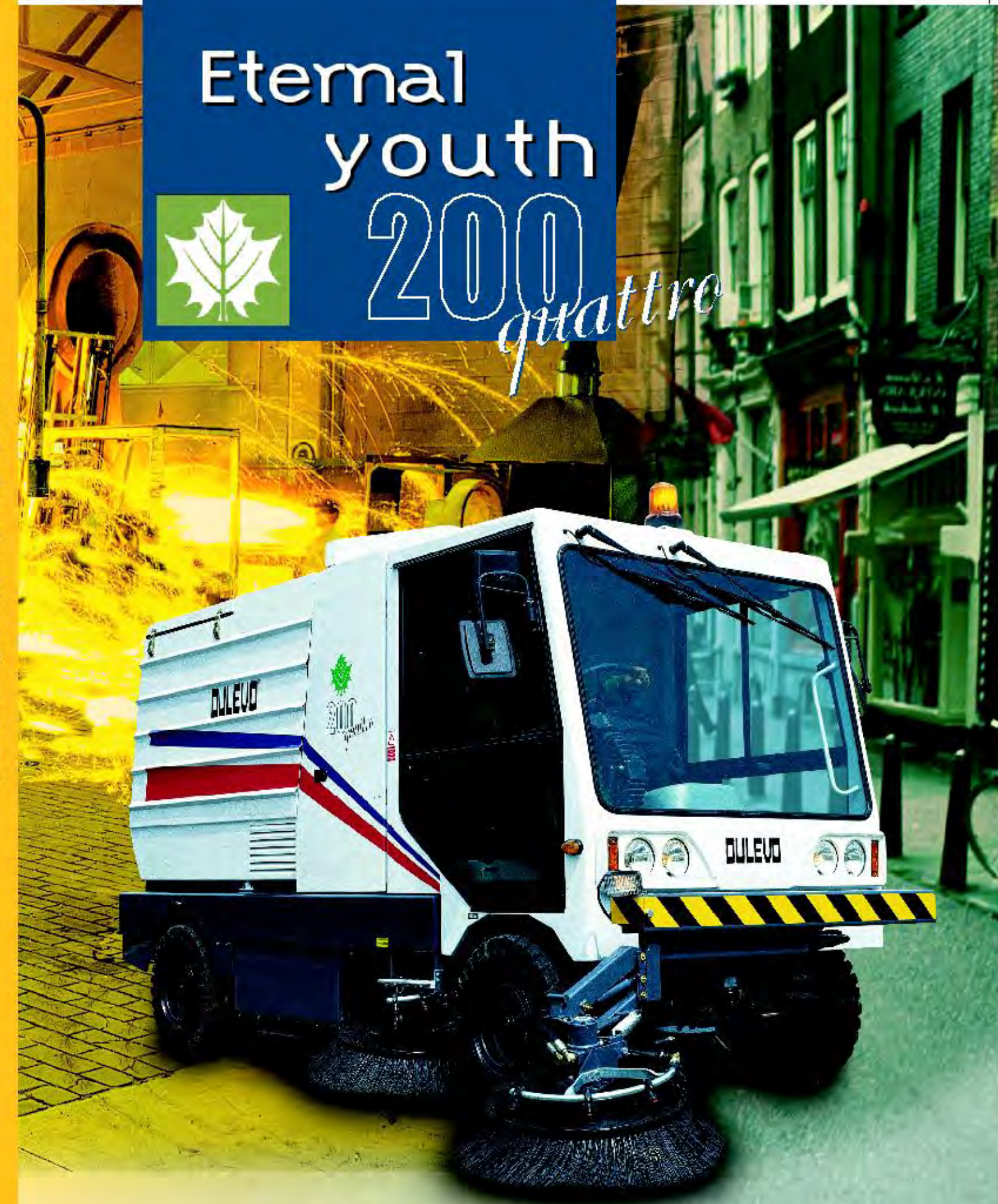
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* Specifications are not binding for our company and subject to change at any time without notice.

Eternal youth 200



quattro



So versatile. The 200 quattro is a unique machine in its field, the combination of the best features of various collection systems results in optimum sweeping performance and makes it the ideal solution for any type of cleaning problem in the cities and in industry.



Ecological

To respect the environment in which we live, the Dulevo 200 quattro uses unique solutions such as total dust filtration and the ability to work without the use of water as a means of dust control.

It gets everywhere

If rubbish is not within the brushes' reach, the Dulevo 200 quattro offers the possibility to use a powerful refuse suction pipe. During this operation the exclusive Dulevo filter system continues to capture even the finest particles and emits only perfectly clean air into the surrounding environment.

Tireless

Originally designed for cleaning large areas within heavy industry, the 200 quattro is able to operate for long periods regardless of how heavy the application. When the dust present in the environment prohibits the use of even the smallest amount of water (e.g. in a cement works) the use of a special skirt includes the side brooms.

Manoeuvrability

The compact size and tight turning circle make the Dulevo 200 quattro the ideal machine in any situation where the space is limited.



Quiet

In order to minimise noise during operation the highly efficient suction turbine has been kept as small as possible and is also positioned and shielded in such a way as to reduce the sound levels even further. But that's not all! The minimum possible noise level for operators and pedestrians have also been achieved by the use of sound-absorbent material and specific tests have been carried out to limit all possible sources of vibration.



Comfortable

Designed to ensure maximum levels of operator comfort the 200 quattro cab also has simple and intuitive controls and excellent visibility. A comfortable, clean working environment is maintained within the cab by means of a pressurised filtered air system.



The combined mechanical-vacuum system

The collection system starts with one or more **SIDE BRUSHES 1** which transfer dust and debris into the centre of the machine where a large diameter **CYLINDRICAL MAIN BRUSH 2** throws everything forward onto a high speed **VERTICAL CONVEYOR 3**.

The conveyor in turn transfers the collected materials into the top of the **WASTE HOPPER 4**, thereby optimising the load capacity of the vehicle.

The waste hopper, built from AISI 304 stainless steel, is equipped with a totally hydraulic dumping system which allows emptying at a height of between 800 and 1600 mm. (SA version).

The dust lifted by the main brush during its mechanical working phase is drawn into the hopper by the vacuum created in the hopper by a powerful **VACUUM FAN 5**. The reduced fan dimension and its position minimise the suction noise even at maximum speed.

The Dulevo patented **DUST FILTER 6** system, made from polyester-cotton fabric, traps the finest dust and completes the sweeping cycle ensuring that only clean air is exhausted into the environment.

The side brushes which are positioned outside the vacuum system, only require a small quantity of water sprayed onto them to control the dust.

The water spray system consists of a fibreglass **WATER TANK 7** which, via a membrane pump, sends water to the **NOZZLES 8** positioned near the side brushes and the **FRONT EXTENDING BRUSH 9**.

The 200 quattro is equipped with hydrostatic transmission on the rear wheels.

Main cylindrical brush

The **MAIN BRUSH** assembly 2 is suspended from its central point and perfectly balanced, this allows it to "float" and therefore to follow the road surface whatever the conditions.

The ground pressure is adjustable and kept constant thanks to an efficient hydraulic system that allows the brush to "read" the surfaces configuration. This system is particularly efficient for uneven surfaces.

Extending front brush

The **EXTENDING FRONT BRUSH 9** ensures efficient cleaning of side walks and difficult to reach areas not normally accessible with the normal side brushes. The brush movement is operated by a joy-stick placed on the cab door, in a position that avoids distracting the operator whilst driving. The front brush is hydraulically adjustable to obtain optimum performance.

In case of impact, efficient magnetic sensors operate the withdrawal of the brush, which is also fitted with additional mechanical protection against damage.

200 quattro so compact yes so large !



SWEEPING WIDTHS:		
- MAIN BROOM ONLY	mm	1.300
- WITH RIGHT HAND SIDE BROOM	mm	1.700
- WITH RIGHT AND LEFT HAND SIDE BROOMS	mm	2.100
- WITH SIDE AND FRONT EXTENDABLE BROOMS	mm	2.600
- FILTER RING SURFACE	m²	19
WASTE HOPPER VOLUME	m³	2,5
WATER TANK VOLUME	lit	400
MAXIMUM DUMP HEIGHT	mm	1.500

MAXIMUM SPEED	Km/h	30
UNLADEN WEIGHT	Kg	4.000
TOTAL WEIGHT	Kg	6.000
HOMOLOGATED PAYLOAD	Kg	2.000
ENGINE	EURO 3	
MANUFACTURER AND TYPE	VM H3 494 HT3/64B	
MAXIMUM POWER	59 kW a 2600 rpm	
FUEL	diesel	
SERVICE BRAKE	hydraulic	
PARKING BRAKE	mechanical	

*HEIGHT WITH OPTIONAL:		
- VORTEX FILTER	mm	2400
- DOUBLE TURBINE	mm	2450
- PREFILTER VORTEX	mm	2700

Dust Control Filter

The **DUST FILTER 6** has a large surface area of over 19m² which allows long working periods without the danger of becoming clogged.

The DULEVO filter is manufactured from a rot-proof polyester (73%) and cotton (27%) fabric, is practically indestructible and ensures filtration of even the finest and impalpable dusts. The filtration system also includes an effective **FILTER SHAKER 10** controlled directly from the driver's position. Operated hydraulically before dumping the hopper, the filter shaker vigorously strikes the metal filter tensioning rods, shaking the elements in all directions, and ensuring the complete separation of the dust from the fabric. The loosened dust then falls inside the hopper.

