# **ABOUT TRENT**

widely regarded as the 'Cleaning Solutions Company', Trent International is a professionally managed company engaged in the manufacture and marketing of hygiene & cleaning chemicals, janitorial products and professional cleaning equipment. Set up by a group of professionals with years of experience in the industry, Trent originated in Ajman, UAE in 2003 as a trading company dealing in chemical raw materials. With the establishment in 2006 of Trion Surfactants, its own manufacturing & blending unit for liquid detergents, the company set out on the path to become a full-fledged manufacturer / marketer of a diverse range of cleaning products. Soon it set up Vet-Care International, another fully owned subsidiary, for production of hygiene chemicals for the animal husbandry industry. Both Trion & Vet-Care units are equipped with modern testing and manufacturing facilities to maintain consistently high quality standards. In tune with its vision and with alacrity, Trent graduated to producing a full range of hygiene & cleaning chemicals and today it manufactures & markets more than 100 products in this category. An achievement few companies can boast of Raw materials & intermediates for production are procured from the finest sources, local as well as overseas including Europe. Trent's range of hygiene & cleaning chemicals now sell across the GCC and some countries of Africa. To realise its goal of becoming a one-stop source for everything in cleaning solutions, Trent has drawn on the experience and expertise of its team of professionals and continuously evolved.

Not just by producing an ever-widening range of hygiene & cleaning chemicals that spans varied hygiene and cleaning needs of numerous customer segments. But also by adding to its portfolio a set of world-renowned brands that offer a wide range of janitorial products and professional cleaning equipment to complement its range of cleaning products. The company now offers professional cleaning equipment from Dr.Gansow-Gmatic AG, TREO, Mazzoni, Idropavase, Kemak, KlinMak & VIP Clean and janitorial products from Filmop, Cappah and CT Corporation. Sanitisers from Sagewash (jv) and Composters from Smart Enviro Systems (jv). Trent has also added its own range of quality janitorial products under the brand T Line. A full-fledged sales & service network supports Trent's initiatives in janitorial products and professional cleaning equipment, including trained sales personnel in all markets of UAE and a showroom & service centre in Ajman that not just displays the entire product range but is also equipped with ample stock of spare parts & trained service personnel to provide after-sales service. With its over 300 strong portfolio of products, Trent caters to a diverse range of customer segments. From dairies & poultry farms to hospitality & healthcare industries; bakeries & beverage plants to petroleum & marine industries; cleaning & maintenance service providers to electrical & heavy industries; offices, showrooms & educational facilities to warehouses & airport hangers; gated communities & tower blocks to construction & automotive industries. The company's offerings have gained reputation for quality, performance & reliability and are well-accepted in all markets in which they are sold.

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#### **HAND CREAM SOAP**

Pearlised hand soap with creamy luxurious lather for perfect cleaning. It has skin compatible pH that is mild and gentle on the skin. Non-perfumed and non-colored variants are also available.

#### **HAND SOAP - LEMON**

A lemon scented clear hand soap with copious foam. It has skin compatible pH that is mild and gentle on the skin.



#### **TRIOSOAP**

Pleasantly scented and pearlised, this soft hand cream soap has skin compatible pH formula. Ideal for use in soap dispensers.

# **FOAM SOAP**

A mild, pleasantly scented soap designed for use in foam soap dispensers. Gives rich moisturizing lather and contains skin compatible pH to suit even the most sensitive skins.



# **HAIR & BODY SHAMPOO**

A clear liquid cleansing shampoo with a fresh luxurious apple fragrance enriched with vitamins and a re-fatting agent. It has skin compatible pH properties and contains moisturizing agents.

# **HAND SANITIZER**

Alcohol based sanitizing gel that kills 99.9% bacteria instantly and leaves hands refreshed without a sticky residue. Perfumed and Vitamin E enriched varieties also available.



### **ANTI-BACTERIAL SOAP**

This anti-bacterial, anti-microbial hand cleaning lotion is ideal for use in hospitals or food preparation areas where excellent germicidal properties are required.

# **HEAVY DUTY HAND SOAP**

Pleasantly scented and pearlised, this specially formulated industrial hand cleaner is highly viscous and removes all types of dirt and soil from hands. It is suitable for dispensing through direct fill type soap dispenser.





A concentrated, lemon scented, high foam, general purpose detergent suitable for cleaning all types of washable surfaces like floors & walls, kitchens, bathrooms and hard surfaces.

#### **BRITE CLEAN**

A low active, medium foaming cleaning detergent that is fully bio-degradable. It has a pleasant lemon scent and is suitable for all washable surfaces.



#### **TRIOCLEAN**

A medium active, apple scented all-purpose foaming detergent. It is fully bio-degradable and suitable for all washable surfaces.

# **MULTICLEAN**

A high performance, alkaline multipurpose cleaner suitable for all hard surfaces. Helps remove oil, grease, grime, etc. and effective against stubborn dirt. Contains bio-degradable ingredients.



# **WINDOW CLEANER**

A highly active cleaner for all glass surfaces which quickly removes grease, oil, dust, etc. and gives a sparkling, streak-free finish.

# T-TOUCH

A quaternary ammonium compound based detergent, disinfectant and deodorant suitable for all washable surfaces. It is a light yellow liquid with a pleasant oriental smell.



# **GROUT CLEANER**

A highly effective grout cleaner with a blend of alkaline builders, chelating agents and sequestrants. Removes dirt without deteriorating the texture and shine of the floor.

# **TOILET CLEANER**

A quick acting toilet cleaner and descaler, highly effective in removal of scales in toilets. Contains powerful surfactants and anti-corrosion agents for scum and scale removal.





It is a milky white, non-viscous, bio-degradable descaler that can be used for removal of all stains from toilet bowls and other ceramic surfaces. Heavy duty and quick active, it contains an effective bactericide.

# **TOILET BOWL CLEANER**

This thickened, bactericidal, highly viscous acidic cleaner adheres well to the vertical surfaces and removes deep rooted stains and scales from toilets and urinal bowls. Helps revive the porcelain and ceramic shine.



# TRENT LIQUID BLEACH

This high active hypochlorite based liquid formulation cleans, whitens, disinfects and removes stains and scales from kitchens, floors and bathrooms.

# TRIOX LIQUID BLEACH

This medium active hypochlorite based bleaching liquid is a unique product which whitens, cleans, disinfects and removes stains from almost any surface.



# **AUTOMATIC DISHWASH**

A high active, low foam detergent for automatic dishwashers. Removes tannin and food stains leaving crockery bright and shining. Suitable for soft and hard water.

#### **RINSE AID**

An effective rinse additive for automatic dishwashing machines. It ensures excellent wetting and draining properties. Enhances rapid drying, eliminates spotting and provides streak-free shine.



#### **DISHWASH**

A high power, concentrated, viscous, lemon scented dishwashing liquid. It is tough on grease and dirt and gentle on skin. Suitable for use in kitchens, hotels and hospitals.

# **TRIOWASH**

A medium active, lemon scented dishwashing liquid. It is fully bio-degradable and effective in grease and oil removal.



### **BRITE WASH**

A low active, fully bio-degradable dishwashing liquid. It is suitable for use in soft to hard water and is tough on grease and dirt but gentle on skin.

# **OVEN CLEANER**

A highly concentrated alkaline degreaser effective in removing heavy grease and carbon deposits from ovens, grills, fryers, hot plates, utensils and cooking range. It has low odor and is fully bio-degradable.



# **LOW FOAM DETERGENT**

An optimized blend of non-ionic, non-toxic and non-flammable low foam detergents. Helps remove oil, grease and dirt from a wide range of surfaces. It neither contains phosphates nor acids.



# **CARPET CARE PRODUCTS**



### **CARPET SPOT & STAIN REMOVER**

A new generation, concentrated, dry foam detergent designed to remove both water and oil based stains. Pleasantly perfumed and effective in removal of carpet, upholstery and floor stains.



# **CARPET SHAMPOO**

A high powered, pleasantly perfumed, high foam carpet shampoo designed for use on all types of carpets and upholstery. It emulsifies dirt and stains leaving the carpet fresh and dries to a fine powder which can be vacuumed off.

# **CARPET DETERGENT**

This low foaming carpet cleaner is designed for use with spray extraction machines. It can be used as a pre-spotter for heavily soiled areas before general cleaning.





# **TRIOSOL**

A green colored disinfectant, detergent and deodorant based on quaternary ammonium compound. It is a powerful disinfectant suitable for use in kitchens, toilets and floors.

# PHENOLIC DISINFECTANT

A high grade general purpose antiseptic disinfectant based on phenols that conform to BS 5197. It kills pathogenic micro-organisms and helps clean, deodorize and sanitize drains, sinks and public utility areas in hospitals, schools, hotels, etc.



#### **TRIOLEMON**

An opaque lemon scented disinfectant, detergent and deodorant based on quaternary ammonium compound. It is a powerful general purpose disinfectant suitable for use in kitchens, toilets and floors.

# **PINE DISINFECTANT**

This quaternary ammonium compound based pine formulation is a powerful disinfectant, detergent and deodorant that kills bacteria. Suitable for disinfection in kitchens, drains, toilets and floors.



# LAVENDER DISINFECTANT

Pleasant lavender scented quaternary ammonium compound based formulation. This deodorant, disinfectant is suitable for all washable surfaces.

### **D-LEMON**

It is a lemon scented clear disinfectant that kills bacteria. A disinfectant and deodorant designed for use in kitchens, drains, toilets and floors.



# ANTISEPTIC DISINFECTANT

A high performance, DCMX based antiseptic disinfectant that conforms to Rideal-Walker coefficient of 3/5 for medical and personal hygiene. Effective in disinfection of floors, hard surfaces, bathrooms and household laundry. PCMX based variant also available.



# LAUNDRY PRODUCTS



### **FABRIC SOFTENER**

An exclusive softening agent for cotton, viscose and polynosic fabrics and their blends with synthetic fibres. It's fairly stable in washing and can be applied along with resins to improve drape and sewability. Does not cause shade change or dulling effect.

# **LAUNDRY DETERGENT**

A lemon scented laundry detergent that leaves clothes smelling fresh. It effectively removes common stains on all fabrics and is suitable for hot or cold water washing. It is fully bio-degradable.



#### **EMULSIFIER**

A unique emulsifying, wetting and dispersing agent based on high foaming surfactants. It improves contrast in case of denims by avoiding re-deposition of indigo colour from the dye bath back on to the fabric.







### **CAR SHAMPOO**

A highly concentrated blend of anionic, non-ionic surfactants, hydrotrope, preservative, water soluble dyestuff and inorganic thickener. Ideal for both manual and automatic car wash. The surfactants used are fully bio-degradable.

### **ANTIFREEZE**

A concentrated blend which is added to the cooling water of internal combustion engines in cases where the coolant needs to be protected from freezing. It affords excellent protection against cavitations and corrosion of all metals and alloys which are used in cooling systems.



### **TYRE POLISH**

A special blend of silicone oils and anti-static agents, this polish is highly resistant to water resulting in tyre gloss even in stormy weather condition. It rapidly evaporates leaving a shiny protective film.

### **RADIATOR COOLANT**

A low viscosity coolant with buffered inhibitors that helps prevent corrosion and cavitation. It is compatible with all cooling system components, including hoses, gaskets and anti-freeze /coolant solutions. Safe for rubber hoses and all metals including aluminium.





# **WATER BASED DEGREASER**

This is a special blend of fully bio-degradable surfactants, metal silicates and sequestrants. It is non-caustic, non-phosphate and non-glycol and is highly effective in degreasing and removal of soil from metal, plastic, cement, marine & heavy industrial areas.

# **SOLVENT BASED DEGREASER**

It is a heavy duty solvent based degreaser to remove oil, grease & grime deposits and heavy encrustation in marine & industrial areas. Works well in hard, soft, ambient and hot water.



# **TRIO STRIP**

This is a fully water soluble tyre mark remover that is non-flammable and non-toxic. It removes tyre marks from various surfaces without damaging the floor.

# **CEMENT SCALE REMOVER**

A powerful mineral acid based concentrate that effectively removes lime, plaster and cement residues from bricks, mosaic tiles, glazed stoneware, etc.



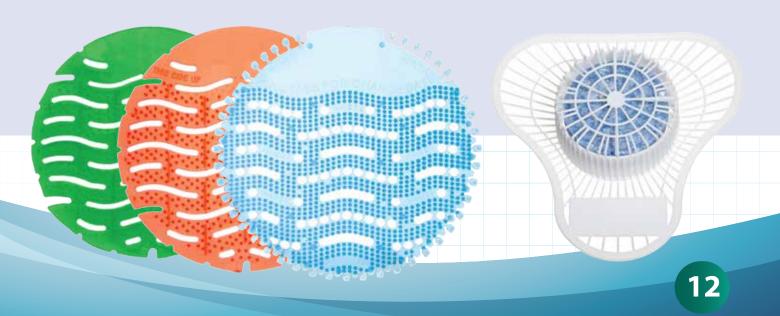
# **INDUSTRIAL HAND CLEANER**

It is a heavy duty, waterless hand cleansing gel for use in workshops, garages, etc. for the removal of oil, grease, grime and dirt. The organic solvent enhances the degreasing properties without having any adverse impact on the skin.

# DEODORANT BLOCKS\_FOR URINALS & WASH ROOMS



# **URINALS SCREENS**



# JANITORIAL PRODUCTS FLOOR CLEANERS & TOILET CLEANERS



# **BROOMS AND BRUSHES**





# **GLOVES & FACE MASKS**





PBT INDUSTRIAL BROOM (HACCP)

PLASTIC FLOOR SQUEEGEE



EQUODOSE MOP SOAKING DOSING SYSTEM



JANITORIAL TROLLEYS
SINGLE & DOUBLE BUCKET TROLLEYS







# HOTEL TROLLEYS





# ANTI BACTERIAL TROLLEYS





**DELTA TROLLEY** 

# **WASTE BINS**





# WHEELED WASTE BINS

These robust wheeled German & Turkish made waste bins are easy to handle and low in maintenance. They can be used in combination with all standard collection and lifting technologies. Comes with specific compartments for paper, glass, etc. Available in 120L and 240L waste holding capacity.







# **GARBAGE BAGS**



Garbage bags are strong and durable enough to hold up to your toughest clean-up projects. With different sizes, you can be sure you are getting the right bag for the right job.

Whether you're cleaning out your garage or basement or tackling a home improvement project or working on the job at a construction site, you can trust our garbage bags to get the job done!



# PAPER DISPENSERS & PAPER PRODUCTS











# PAPER PRODUCTS



# KITCHEN ROLL

Embossed double-ply tissue rolls for use in kitchen.

# **FACIAL TISSUE**

Embossed or plain, double-ply tissues for general purpose.

# INTERFOLD HAND TOWEL

Embossed hand towels for kitchen and toilet use.

# **TOILET ROLL**

Embossed or plain, double-ply tissue rolls for toilet use.

# **MAXI ROLL**

Embossed or plain, double-ply tissue rolls for kitchen and toilet use.

**SMILE** 

# COLD WATER HIGH PRESSURE WASHER 220V







# COLD WATER HIGH PRESSURE WASHER 400V





# COLD WATER HIGH PRESSURE WASHER - FUEL









IPL-C



# Wet/Dry



Class M Series & H Series









# Kemak

SmartLine - Hotel Series



Aero Series



Sani Series

















# **OUTDOOR MACHINES**

- OUTDOOR WINDOWS CLEANING
- PHOTOVOLTAIC PANELS CLEANING

WITH PURE WATER



INDOOR CLEANING SOLUTIONS

OUTDOOR CLEANING SOLUTIONS

PHOTOVOLTAIC PANELS CLEANING SOLUTIONS

**DETERGENTS** 

FACADES CLEANING
OUTDOOR WINDOWS AND SURFACES CLEANING
PV AND SOLAR PANELS CLEANING











# OUT COMPACT PRO



UP TO 250 I/h CONSTANT PRODUCTION OF PURE WATER

UP TO 20 m

PERFECT FOR WINDOWS AND **FACADES AND FOR PV PLANTS** UP TO 1 Mw

1 WORKER

# OUT 1800



UP TO 300 I/h CONSTANT PRODUCTION OF PURE WATER

UP TO 20 m

PERFECT FOR WINDOWS AND FACADES AND FOR PV PLANTS UP TO 1 Mw

2 WORKERS AT THE SAME TIME

# OUT 3600



UP TO 600 I/h CONSTANT PRODUCTION OF PURE WATER

UP TO 20 m

PERFECT FOR WINDOWS AND FACADES AND FOR PV PLANTS FROM 1 Mw

4 WORKERS AT THE SAME TIME

# **BRUSHES**















- · STANDARD PV BRUSH 35 cm
- ANGLED BRISTLES BRUSH FOR WINDOWS
- · XXL PV BRUSH FOR BIG PLANTS
- · DOODLEBUG BRUSH 27 cm AND 40 cm FOR INCRUSTATIONS
- · SEMICIRCULAR SPECIAL BRUSH
- PV BIG BRUSH 800 XXXL
- · BRUSH WITH NATURAL BRISTLES







- STANDARD AND STRONG VERSION MODULAR FIBER CARBON POLES
- TELESCOPIC ALUMINUM POLES 4,5 m WITH EVERY TYPE OF BRUSH
- TELESCOPIC CARBON POLES 5,5m, 7,9 m and 15 m WITH EVERY TYPE

OF BRUSH









- 200 m HOSE
- CHEMICAL INJECTOR
- · OUT SUITE: PORTABLE **PUMPING UNIT**
- · RADIO CONTROL





# INDOOR MACHINES COVER 8.16

 INDOOR WINDOWS AND SURFACE CLEANING WITH

WITH PURE WATER





UP TO 10m WITH EXTRA POLES

80 cm VERSION FOR SMALL SPACES

160 cm VERSION

FOR CONTINUOS AND HIGHER WINDOWS



EXTRA POLES 150 cm (max 5 poles, 10 mt including worker) for cleaning difficult areas, surfaces and high windows.



ACCESSORY COVER 8.16 MULTI for floors.

De-dusting operations and semi-dry cleaning only with pure water.



Cover 8.16 has a wide range of pads suitable for every type of cleaning problems.









SCRUBBERS LINE

**M**360 **M**460

SMALL ENCUMBRANCE,

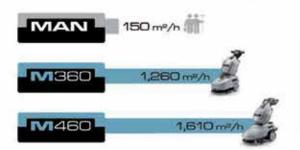
# FIELDS OF APPLICATION

Restaurants, kitchens, swimming pools, locker rooms, cafes and bars, hospitals, clubs, small factories, supermarkets, drugstores and many more small to medium size areas.

# SUITABLE CLEANING SURFACES

Ceramic tiles, marble, cement, linoleum, porcelain tiles, rubber floors, on any kind of dirt.

	TECHNICAL SPECIFICATIONS	M360B	M360C	M460B	M460C
	Cleaning path	360 mm	360 mm	460 mm	460 mm
	Cleaning capacity	1.260 m²/h	1.260 m <sup>2</sup> /h	1.610 m²/h	1.610 m²/h
	Fresh water tank capacity	14 lt	14 lt	28 lt	28 lt
	Recovery tank capacity	16 lt	16 lt	30 lt	30 lt
	Drive	brush drive	brush drive	brush drive	brush drive
	Forward speed	3.5 km/h	3.5 km/h	3.5 km/h	3.5 km/h
	Power	12V	230V	24V	230V
J	Standard battery	1 x 12V		2 x 12V	(4
	Battery charger	on-board	(*)	on-board	35
	Weight (inclusive of battery & charger)	63,5 kg	41 kg	106,5 kg	50 kg
	Size (without squeegee)	680x450x1.000h	680x450x1.000h	830x540x1.000h	830x540x1.000h
	Squeegee width	450 mm	450 mm	540 mm	540 mm





- M360B
- M350C
- M460B
- · M460C









Cut down the danger of slip-and-fall accidents in tight areas with excellent water pick up.



Ergonomic handles and grips eliminate weariness and boost operator satisfaction. Powerfully scrub around obstacles with the M360/ M460 highly manoeuvrable handle.



Easy accessible tanks offer remarkable ease of filling, emptying and cleaning, even in the most awkward locations.





SCRUBBERS LINE



SMALL ENCUMBRANCE, EXCEPTIONAL PRODUCTIVITY

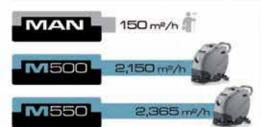
# FIELDS OF APPLICATION

Restaurants, kitchens, swimming pools, locker rooms, cafes and bars, hospitals, clubs, small factories, supermarkets, drugstores and many more small to medium size areas.

# SUITABLE CLEANING SURFACES

Ceramic tiles, marble, cement, linoleum, porcelain tiles, rubber floors, on any kind of dirt.

	TECHNICAL SPECS	M500B	M500B TRAC	M500C	M550B	M550B TRAC
	Cleaning path	500 mm	500 mm	500 mm	550 mm	550 mm
	Cleaning capacity	2150 m <sup>2</sup> /h	2150 m <sup>2</sup> /h	2150 m²/h	2365 m²/h	2365 m <sup>2</sup> /h
1	Recovery tank capacity	501	501	501	501	501
	Solution tank capacity	401	401	401	401	401
	Power	24V	24V	230V	24V	24V
	Drive	brush assist	fully automatic	brush assist	brush assist	fully automatic
	Brush pressure	35 Kg	34 Kg	34 Kg	44 Kg	45 Kg
	Brush motor hp	0.8	0.8	0.55	1	1
	Brush motor rpm	180	180	150	180	180
	Vacuum motor hp	0.64	0.64	0.70	0.64	0.64
	Sealed waterlift	1250 mm	1250 mm	2100 mm	1250 mm	1250 mm
1	Sound level	68 dBA	68 dBA	68 dBA	68 dBA	68 dBA
1	MSCS system + water filter	optional	standard	optional	optional	standard
	Size Ixwxh (with squeegee)	1.200x830x960	1.200x830x960	1.200x830x960	1.200x830x960	1.200x830x960
	Weight (without batteries)	73 Kg	78 Kg	71,8 Kg	78.5 Kg	83.5 Kg



# VALUE ADDED OPTIONS

- · Brushes & Pads
- Batteries
- Hour meter
- MDS Mach Dosing System
- MSCS Mach Solution Control Stop-Valve

MSOO & MSSO are equipped with an efficient anti-foam device to prevent any damage to the vacuum-motor.



- Built-in storage compartment on hood is a clever way to maximise the use of available space, and help operators to focus only on their cleaning environment.
- Mach's tilting feature makes transporting & storing these scrubbers simple and easy.



- The scrub deck includes an adjusting knob, to adjust the brush angle thus counterbalancing the sense of direction of the machine.
- Additionally, the brush can be quickly connected/ disconnected, without need for tools.

### MDS

The optional state-of-the-art MDS (Mach Dosing System) enables the use of up to 50% less chemicals, saving money, improving productivity, and reducing environmental impact. The amount and type of solution can be adjusted immediately to any specific type of dirt and floor, thus reducing the excess waste usually involved with conventional machines.

Additionally, the MDS system eliminates operator contact with chemicals, thus improving safety issues



# HIGH PERFORMANCE SQUEEGEE AND LARGE WHEELS

Even around 180-degree turns, the M500/M550 equal-pressure, fast airspeed parabolic squeegee recovers all cleaning solution from the floor. The squeegee is made of steel, rather than plastic, and fully hits protected. It can be adjusted "tool-free" to reach the optimum water pick-up angle.

Blades are in Lynatex, reversible, "tool-free" removable or replacable. The most powerful suction motor in its class (0.64 hp): cleaned spaces ready for pedestrian traffic immediately.

Large diameter wheels, non-marking & anti-skid: it means increased manoeuvrability and productivity on all type of floors.





#### FIELDS OF APPLICATION

Industrial sites, communities and vicinities, schools, offices, religious buildings, hospitals, public buildings, airports, ports, shopping malls, logistical depots, cleaning companies, and multi services. **SUITABLE CLEANING SURFACES** 

Ceramics, marble, cement/concrete, linoleum, non-slip surfaces, porcelain tiling, and many other dirty conditions.

	TECHNICAL SPECIFICATIONS	M510	M610	M710	M810
	Cleaning path	510 mm	610 mm	710 mm	810 mm
	Cleaning capacity	2.200 m <sup>2</sup> /h	2.440 m <sup>2</sup> /h	3.200 m²/h	3.650 m <sup>2</sup> /h
J	Fresh water tank capacity	40 lt	40 lt	75 lt	75 lt
	Recovery tank capacity	56 lt	56 lt	80 lt	80 lt
	Drive	electronic assisted	electronic assisted	electronic assisted	electronic assisted
	Forward speed	4 km / h	4 km / h	4,5 km / h	4,5 km / h
	Power	24V	24V	24V	24V
J	Standard battery	2 x 12V	2 x 12V	4 x 6V	4 x 6V
/	Battery charger	on-board	on-board	on-board	on-board
	Weight (inclusive of battery & charger)	198 kg	206 kg	303 kg	308 kg
	Size (without squeegee)	1.317x555x1.110 h	1.301x630x1.110 h	1.550x710x1.110 h	1.555x820x1.110 h
	Squeegee width	830 mm	830 mm	995 mm	995 mm



# **VALUE ADDED OPTIONS**

- Brushes & Pads
- Batteries
- · Battery charger

**DUST FILTER** MADE OF STAINLESS STEEL It protects the vacuum-motor against dust/debris to ensure more durability and lasting



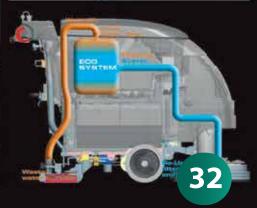
MULTI FUNCTION DISPLAY With intuitive controls.

ROBUST

paint.



STRUCTURE Made from a durable sanded chassis, treated with Zinc Phosphate and finally coated with thermo-hardened





ECONOMY + ECOLOGY HIGHER PRODUCTIVITY & LESS WATER AND DETERGENTS IN LESS WATER AND DETERGENTS
With the eschalar Eco options,
we have a varyour method to utilize
water in such a way that you will increase
productivity and thus reduce time
squeecland in emplying/infilling operation
Additionally, this permits you to minimize
the quantity of both cleaning detergined
and water necessary for performing
the tank. Hence a wast increase
to productivity and a mobiotical
in telecur costs.





# HILO WHEN COMPACT BO65 SMALL

**™**KlinMak

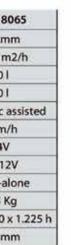


Restaurants, kitchens, swimming pools, locker rooms, cafes and bars, hospitals, clubs, small factories, supermarkets, drugstores and many more small to medium size areas.

### **SUITABLE CLEANING SURFACES**

Ceramic tiles, marble, cement, linoleum, porcelain tiles, rubber floors, on any kind of dirt.

	TECHNICAL SPECIFICATIONS	HILO 8065
	Cleaning path	650 mm
	Cleaning capacity	3.900 m2/h
١.	Fresh water tank capacity	801
1	Recovery tank capacity	801
	Drive	electronic assisted
	Forward speed	6 km/h
	Power	24V
J	Standard battery	2 x 12V
	Battery charger	stand-alone
	Weight (inclusive of battery & charger)	215 Kg
	Size (without squeegee)	1.320 x 660 x 1.225 h
	Squeegee width	750 mm













# MAIN FEATURES

Build up for any kind of cleaning in high traffic.

Perfect front visibility.

Clean the corners and close to the wall, minimizing manual steps.

Safety: wheels always on dry floor and high stability in any conditions.

Power steering (ca. 3 turns) and high manoeuvrability in narrow spaces.

Adjustable pressure (0-38 kg) with display control for deep and daily cleaning.

Low noise (< 64 dBA)

Incredible runtime (up to 4 h)

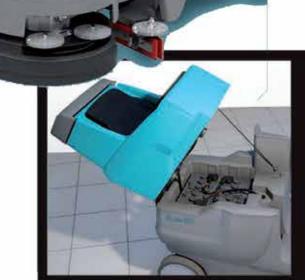
Fast payback of the investment

Low cost / sqm cleaned

Low service cost (electronic free, only traction)



The unique transmission of the movement of the two geared brushes with a single motor, eliminates all moving parts (belts, pulleys) reduces the batteries consumption









Industrial sites, communities and vicinities, schools, offices, religious buildings, hospitals, public buildings, airports, ports, shopping malls, logistical depots, cleaning companies, and multi services.

#### SUITABLE CLEANING SURFACES

Ceramics, marble, cement/concrete, linoleum, non-slip surfaces, porcelain tiling, and many other dirty conditions.

	TECHNICAL SPECIFICATIONS	M650	M750	M830
	Cleaning path	650 mm	760 mm	830 mm
	Cleaning capacity	3.900 m²/h	4.560 m²/h	4.980 m <sup>2</sup> /h
	Fresh water tank capacity	110 (	110 t	110 t
	Recovery tank capacity	125 (	125 (	125 (
	Drive	electronic assisted	electronic assisted	electronic assisted
	Forward speed	6 km/h	6 km/h	6 km/h
	Power	24V	24V	24V
j	Standard battery	4 x 6V	4 x 6V	4 x 6V
/	Battery charger	on-board	on-board	on-board
	Weight (incl. of battery & charger)	343 Kg	350 Kg	357 Kg
	Size (without squeegee)	1.425 x 690 x 1.243 h	1.425 x 790 x 1.243 h	1.425 x 840 x 1.243 h
	Squeegee width	920 mm	980 mm	1.040 mm



150 m²/h 🥼



3.900 m²/h



4.560 m²/h



4.980 m²/h

# VALUE ADDED OPTIONS

- Brushes & Pads
- Batteries
- · Battery charger
- · Flashing light
- Hour meter



SCRUBBERS LINE

THE DRIVE MOTOR is completely sealed and protected by a strong, tubular bumper. Additionally, the machine is equipped with an antititing device for increased safety.





THE SCRUB DECK is equipped with a self-adjusting splash-skirt which, besides preventing the dirt water to splash during the cleaning session, allows for water leaking prevention.



AUTOMATIC SQUEGEE UNCOUPLING when accidentally impacted avoids damage to the machine or to the environment.





THE VACUUM-MOTOR is silenced, and guarantees a very low acoustic pressure level which is particularly appreciated in noise-sensitive environments such as nursing homes and hospitals.







# **ECO RECYCLING SYSTEM** QUALITY, PRODUCTIVITY, INNOVATION AND LOWER MAINTENANCE COSTS.

#### FIELDS OF APPLICATION

Industrial sites, communities and vicinities, schools, offices, religious buildings, hospitals, public buildings, airports, ports, shopping malls, logistical depots, cleaning companies, and multi services.

#### SUITABLE CLEANING SURFACES

Ceramics, marble, cement/concrete, linoleum, non-slip surfaces, porcelain tiling, and many other dirty conditions.

TECHNICAL SPECIFICATIONS	M850 / M1000
Cleaning path	810 mm / 1.000 mm
Cleaning capacity	6.075 m²-h / 7.500 m²-h
Fresh water tank capacity	120 It (between 360 it and 600 it usage with #COSYSTEM)
Recovery tank capacity	135 It (between 405 it and 675 it usage with ECOSYSTEM)
Drive	electronic assisted
Forward speed	7,5 km/h
Power	24V
Standard battery	1 x 24V
Battery charger	on board
Weight (inclusive of battery & charger)	630 kg
Size (without squeegee)	1.532 x 820 / 1.010 x 1.450 h
Squeegee width	995 mm / 1.185 mm





W1000





# VALUE ADDED OPTIONS

- Brushes & Pads
- Batteries
- Battery charger
- Flashing light

THE DRIVE MOTOR IS PROTECTED AGAINST SHOCKS AND HUMIDITY Installed vertically nside the nose of the machine, it drives the front wheel via a tubricated gearbox, thus remaining in a protected position.





OUST FILTER MADE OF STAINLESS STEEL It protects the vacoum-motor against dust/debris to ensure more. durability and lasting life.



MPRESSIVE SUCTION POWER Equipped with a powerful three-stage vacuum motor that delivers excellent suction on all surfaces. STAINLESS STEEL DEBRIS COLLECTION BASKET It retains all bolky waste collected during the drying phase, allowing for a diversified and ecological disposal.



TOOL-FREE ADJUSTABLE SQUEEGEE it can be easily adapted to any type of floor to guarantee optimum water.

#### REVERSIBLE BLADES

The reversible squeegee blades coupled with the "quick-change" system reduce maintenance costs and downtime.



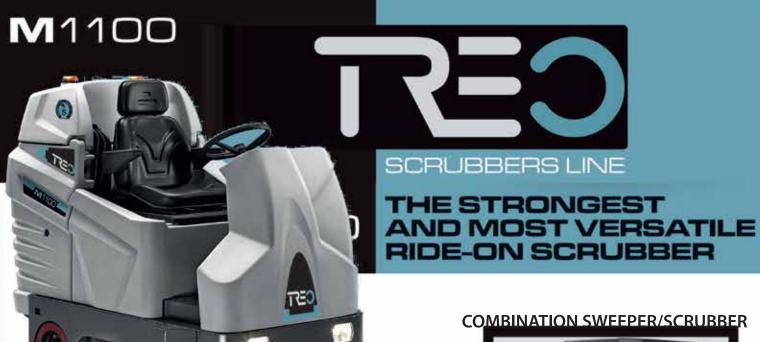
RUSH'O MATIC SYSTEM: with his exclusive system brushes can be connected and release automatically (TOOL-FREE)

ADJUSTABLE PRESSURE OF THE BRUSHES



ECONOMY + ECOLOGY +
HIGHER PRODUCTIVITY
& LESS WATER AND DETERGENTS
With the exclusive Eco typtom,
we have a unique method to utilize
whater in such a way that you will increase
productivity and thus veduce time
squandered in emptying/infilling operations
Additionally, this permits you to minimize
the quantity of both dowing debegged
and water necessary for performing
the task: Hence a valid increase
in productivity and a reduction
in book crossly.





#### FIELDS OF APPLICATION

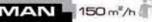
Industrial sites, communities and vicinities, schools, offices, religious buildings, hospitals, public buildings, airports, ports, shopping malls, logistical depots, cleaning companies, and multi services.

#### SUITABLE CLEANING SURFACES

Ceramics, marble, cement/concrete, linoleum, non-slip surfaces, porcelain tiling, and many other dirty conditions.

	TECHNICAL SPECIFICATIONS	(round brushes)	(cylindrical brushes)
	Cleaning path	110 cm	110 cm
	Cleaning capacity	8.800 m <sup>2</sup> /h	8,800 m²/h
	Fresh water tank capacity	220 It (between 660 it and )	100 It usage with ECOSYSTEM)
	Recovery tank capacity	240 It (between 720 it and 1	200 It usage with ECOSYSTEM?
	Drive	electronic assisted	electronic assisted
	Forward speed	8 km/h	8 km/h
	Power	36V	36V
J	Standard battery	1 x 36V	1 x 36V
/	Battery charger	on board	on board
	Weight linclusive of battery & charger!	1.160 kg	1.205 kg
	Size (without squeegee)	1.940x1.150x1.640 h	1.940x1.150x1.640 h
	Squeegee width	1.260 mm	1.260 mm









# VALUE ADDED OPTIONS

- · Brushes & Pads
- Batteries
- Battery charger
- Flashing light

**COMBINATION SWEEPER/SCRUBBER** 



The M1100C (cylindrical brushes) can be equipped with:

- a third scrubbing side arm/brush, to scrub even the deepest angles
- a third sweeping side arm/brush, which transforms this heavy duty machine in a practical combined machine



SELF-LEVELLING SPLASH GUARD WITH PREWASHING SETTINGS: the skirt adapts to the floor surface automatically, avoiding leakage of solution as, well as ensuring a perfect water suction. BRUSH'O MATIC SYSTEM: with

this exclusive system brushes can be connected and release automatically (TOOL-FREE)

ADJUSTABLE PRESSURE OF THE BRUSHES



HIGHER PRODUCTIVITY B LESS WATER AND DETERGENTS

LESS WATER AND DETERGENTS with the includer Etio glatimi, whose a unique modified to utilize index in such a way that you will increase positioned by and thus reduce terms positioned, if his permits you to minimize in quantity of both channing detergent and other nationally so performing will task. Hence a water carmine productivity and a reduction is about casts.









Central electrication of Drive system protection water





Extra weight available: Adjustable handle its addition enhance this scrubbing performance.



Large optional tank (15) Lt.) Free-book installation Free-standing tank, easy filing / re-filing operation









Bet drive

DESCRIPTION		TP43 180	TP 43 400	TP 43 DS	TP 43 1500
Drive		Belt	Belt	Belt	Direct
Rated power	(W)	1100	1400	1250/1700	1100
Number of revolutions	(rpm)	180	400	180/400	1500
Brush	(Ø mm)	430	430	430	(8)
Pad holder	(Ø mm)	430	430	430	430
Tank capacity	(i.)	15		15	107.0
Weight	(Kg)	35	35	35	33
Extra weight	(Kg)				
Size	(cm)				
Length		46	46	46	66
Height		120	120	120	120
Width		56	56	56	56









Nylon gear drive

	The second second	Lekin Librar (1970)	
DESCRIPTION		TP43 G	
Drive	7.50	Nylon gear	
Rated power	(W)	1100	
Number of revolutions	(rpm)	160	
Brush	(Ø mm)	430	
Pad holder	(Ø mm)	430	
Tank capacity	(1)	15	
Weight	(Kg)	35	
Extra weight	(Kg)	10	
Size	(cm)		
Length		46	
Height		120	
Width			









			See gear arive	
DESCRIPTION		TF 33	TS 43 PLUS	TS 50 PLUS
Drive	tation.	Nylon gear	Steel gear	Steel gear
Rated power	(W)	1100	1100/1800/2200	1100/1800/2200
Number of revolutions	(rpm)	160	160	160
Brush	(Ø mm)	330	430	500
Pad holder	(Ø mm)	330	430	500
Vacuum system	- 52		184	-
Tank capacity	0.0	15	15	15
Weight	(Kg)	32	42	45
Extra weight	(Kg)	-	8	8
Size	(cm)			
Length	A	46	46	<b>37</b>
Height		120	120	
Width		50	56	56



# ORBITAL SCRUBBER



TOR is the new concept of a single disc machine, particularly suitable for the toughest jobs. It works through a roto - orbital movement that amplifies the final result of your job compared to a traditional single disc. Using the principle of high - frequency oscillations, you get a very good stability and maneuverability, even if having a total weight of 65 kg (excluding accessories).

DESCRIPTION		TOR 43
Drive	V/Hz	Direct
Rated power	W	10-120-220 / 50-60
Power	mm	1100
Working width	mm	430
Vibrations per minute	n.	1400
Machine weight	Kg	65
Brush pressure	Kg	50
Wheels diam.	mm	200
Noise level	dB (A)	62
Perceived vibration level	m/s²	2.71
Lenght	mm	700
Height	mm	493
Width	mm	1200



Direct drive





ideal for deep accutting, stripping, prystalitation, polithing, operations of micro - amoothing, on merbla, stones, concrete and wood



DESCRIPTION		T UHS 1500 S	T UHS 15000 V
Drive		Direct	Direct
Rated power	(W)	1100	1100
Number of revolutions	(rpm)	1500	1500
Brush	(Ø mm)	4.	
Pad holder	(Ø mm)	480	480
Vacuum system	8	9	
Tank capacity	0.)	J.	
Weight	(Kg)	38	38
Extra weight	(Kg)	(*)	57
Size	(cm)		-
Length		54	54
Height		126	126
Width		61	61



Direct drive



Early moving sharks to the additional when







Industrial sites, communities and vicinities, schools, offices, religious buildings, hospitals, public buildings, airports, ports, shopping malls, logistical depots, cleaning companies, and multi services.

#### SUITABLE CLEANING SURFACES

Ceramics, marble, cement/concrete, linoleum, non-slip surfaces, porcelain tiling. and many other dirty conditions.



TECHNICAL SPECIFICATIONS	TRS MAN	TRS MAN+
Sweeping path with side brush	730 mm	730 mm
Sweeping path only main brush	500 mm	500 mm
Cleaning capacity	2.190 m²/h	2,190 m²/h
Capacity of main dirt container	26 L	26 L
Capacity of rear dirt container	4 L	4 L
Patented vacuuming/filtering system		yes
Filter type	¥2	washable cartridge
Weight	24,5 Kg	25,5 Kg
Size	1.296 x 824 x 937 h	1.296 x 824 x 937 l















Adjustable side brush mounted on shock-absorbers



Can sweep in both forward and reverse





### **AVAILABLE VERSIONS**

TRS01P – with gas engine, Honda TRS01B – battery driven

### FIELDS OF APPLICATION

Industrial sites, communities and vicinities, schools, offices, religious buildings, hospitals, public buildings, airports, ports, shopping malls, logistical depots, cleaning companies,

### SUITABLE CLEANING SURFACES

Ceramics, marble, cement/concrete, linoleum, non-slip surfaces, porcelain tiling, and many other dirty conditions.

#### TRS01B TRS01P TECHNICAL SPECIFICATIONS Sweeping path with side brush 780 mm 780 mm Sweeping path only main brush 550 mm 550 mm 40 L 40 L Capacity of dirt container 4,5 km/h 4,5 km/h Forward speed Cleaning capacity 3.510 m2/h 3.510 m2/h Filter type polyester bag polyester bag Drive self-traction self-traction 1 x 12V - 600 W Honda 4 hp Motor/Engine Battery system 12V 127 kg 98 kg Weight (with battery) 1.555 x 835 x 980 h 1.555 x 835 x 980 h Size (with brushes)



Fine dust is filtered through a polyester bag filter, which allows for an excellent filtering rate (99,9%) and has a much longer lasting life than traditional filters. The filter can be cleaned thanks to an efficient mechanical shaker.



The body of the machine is made-up with a special anti-shock material to protect the TRSO1 from unwanted damage.



The large capacity rear container reveals minimum time loss for emptying it is mounted on wheels, and it's equipped with a combittable handle to allow for easier emptying.



Traction can be activated by means of a comfortable lever positioned on the operator's handle.



The adjustable handle allows for improved working confoct and greater maneuverability, as it can be adapted to the height of the operator.





The main and side brush can be quickly replaced.



The machine is equipped with a front flap lift device to allow for easier pick up of bulky debris.

**VALUE ADDED OPTIONS** 

Reduction refuse boxes
 Carpet cleaning kit

Class M filter

Hour meter



- · Metal panel protection kit
- · Class M filter
- Left side brush kit
   Reduction refuse box
- Hour meter
- 24V vacuum-cleaner
- Carpet cleaning kit

TECHNICAL SPECIFICATIONS	TRS02			
Sweeping path with side brushes	1.055 mm			
Sweeping path only main brush	650 mm			
Capacity of dirt container	63 L			
Forward speed	5,5 km/h			
Cleaning capacity	5.800 m²/h			
Filter type	polyester bag			
Drive	electronic assisted			
Drive motor	24V - 400W			
Main motor	1 x 24V - 600W			
Battery system	2 x 12V			
Weight (with battery)	232 kg			
Size (with brushes)	1.055 x 1.380 x 1.215 h			







Visibility is excellent from the operator's position



and all controts are simple and ergonomically located for easy operation.



Thanks to the position of the hopper, the TRS02 offers better visibility and filling capacity. The container has a real capacity of 17 gal (or 176 lb) and is on wheels. It also has a convenient transport handle that allows the entire hopper to be rolled to the dump site.



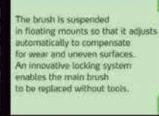
shopping malls, logistical depots, cleaning companies,

Ceramics, marble, cement/concrete, linoleum, non-slip surfaces,

SUITABLE CLEANING SURFACES:

porcelain tiling, and many other dirty conditions.

Fine dust is filtered through a polyester bag filter (class L), which allows for an excellent filtering rate (99,9%) and has a much longer tasting life than traditional filters. The filter can be cleaned thanks to an efficient mechanical shaker.







#### VALUE ADDED OPTIONS

- · Metal panel protection kit 24V vacuum cleaner kit
- Reduction refuse boxes
- Left side brush kit
- Catalytic converter
- Reverse speed beeper Additional bumper
- · Class M filter
- · Carpet cleaning kit.
- · Hour meter

#### **AVAILABLE VERSIONS**

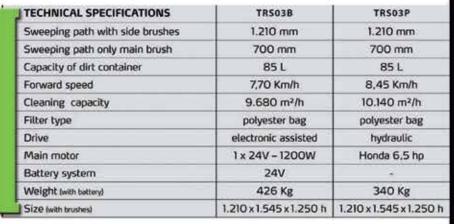
TRS03P with gas engine, Honda TRS03B battery driven

#### FIELDS OF APPLICATION

Industrial sites, communities and vicinities, schools, offices, religious buildings, hospitals, public buildings, airports, ports, shopping malls, logistical depots, cleaning companies, and multi services.

#### **SUITABLE CLEANING SURFACES**

Ceramics, marble, cement/concrete, linoleum, non-slip surfaces, porcelain tiling, and many other dirty conditions...





The exclusive AFC system (centrifugat friction) allows for easier, quicker and safer engine start.



and ergonomically located for easy operations. One single pedal controls forward and reverse speed, the levers to lower or raise the mai and side brushes are located on the dashboard, as well as the filter-shaker control and the vacuum cut-off device, which can be engawhen sweeping on wet areas.



A bulk waste flap is installed in front of the brush and easily opened from the driver's seat. it allows the broom to pick up even bulkier

The optional, on-board vacuum cleaner, enables the cleaning of ledges and other areas inaccessible to the main



The retractable. enti-shock side brushes (AMSD system - a tent) enable the TRS03 to sweep into



The TRSO3 is equipped with a polyester bag filter which is particularly efficient for the returning of five dust. It is artistatic and weakable, and has a much longer landing life than other traditional filters. A highly efficient dust filter-stoker principles without cleaning without the need for filter removes.









#### VALUE ADDED OPTIONS

- Complete head/tail lights package
- Audio/visual back-up alarms
- Overhead guard
- PVC windscreen
- · Left side brush kit
- Automatic filter-shaking system
- Flashing lights (standard in UE countries)
- · Class M filter

#### **AVAILABLE VERSIONS**

TRS05DK with liquid cooled, twin cylinder diesel engine TRS05B battery powered, 24V

#### FIELDS OF APPLICATION

Industrial sites, communities and vicinities, schools, offices, religious buildings, hospitals, public buildings, airports, ports, shopping malls, logistical depots, cleaning companies, and multi services.

#### **SUITABLE CLEANING SURFACES**

Ceramics, marble, cement/concrete, linoleum, non-slip surfaces, porcelain tiling, and many other dirty conditions.

TECHNICAL SPECIFICATIONS	TRS05B	TRSOSDK
Sweeping path with side brushes	1.400 mm	1.400 mm
Sweeping path only main brush	800 mm	800 mm
Capacity of dirt container	150 Kg	150 Kg
Dumping height, hydraulic lift	1.360 mm	1.360 mm
Forward speed	8,00 km/h	9,00 km/h
Cleaning capacity	11.200 m <sup>2</sup> /h	12.600 m <sup>2</sup> /h
Filter type	polyester bag	polyester bag
Drive	electronic assisted	hydraulic
Drive motor	24V - 900W	hydraulic
Main motor	1 x 24V - 2.000W	Kubota 14 hp
Battery system	1 x 24V	577
Weight (with battery)	920 kg	785 kg
Size (with trushes)	1.400 x 1.695 x 1.480 h	1.400 x 1.695 x 1.480 h



The brush pressure on the floor can be adjusted while working. This is done thanks to an exclusive, precise control positioned on the dashbaard



Easy to use controls enable the operator to focus on sweeping to get the job done rapidly and efficiently



Strong hydraulic drive system, variable speed controlled up to 5.5 mph, by means of two pedals flwd & rev)



The main bruth can be rapidly replaced without tools. The dust filter can be replaced in a few seconds. All parts, motors, engines etc. are swifty accessible for servicing, as side, upper and rear panels can be botally opened.



The multi-level-dump hopper, equipped with hydraulic flag, to located in the rear of the machinitican be hydraulically raised up to 53 in from the floor, and has a volume capacity of 44 pd (33) to).



MACHS is equipped with a polyester bag fitter which is particularly efficient for the retaining of fine that, and has a much longer sacing life than other traditional filters. A highly efficient dust filter shakes provides axtreme cleaning without the need for filter



**ON-SITE ESCALATOR &** TRAVELATOR DEEP CLEANER

# MA FAST, SIMPLE,

# **VERSATILE & RELIABLE**







DOES THE APPEARANCE OF YOUR ESCALATORS ADD VALUE TO YOUR **BUSINESS?** 

YES! A dirty escalator or travelator will detract from the overall appearance of your facility. On the contrary, keeping escalators and travelators looking good by regular cleaning, helps not only to improve the overall appearance of your business, but can also dramatically reduce maintenance costs.

> EC510 quickly and efficiently cleans dirty escalators and travelators in just minutes, with very little human labour involved.

EC510 effectively removes grease, spillages, stones, foreign objects, hardened sand and grinding, which could damage the escalator combs and steps, improving the overall appearance of your facility and prolonging your escalator durability.

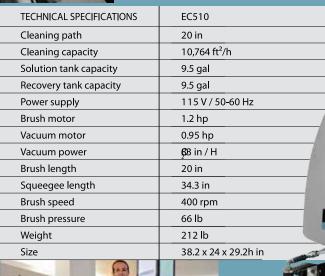
ONE MACHINE DOES IT ALL! EC510 is amazingly versatile and value efficient as it can also be used as a traditional scrubber-dryer for the cleaning of large hard floor areas.

FIELDS OF APPLICATION: shopping malls, retail stores, subways, train stations, airports, casinos, hotels & resorts, office buildings. SUITABLE CLEANING SURFACES: escalator, travelator and hard floor areas.

# **VALUE ADDED FEATURES**

- EC510 BOASTS A **REVOLUTIONARY DOUBLE ROLLER BRUSH** CLEANING SYSTEM, WHICH **AGGRESSIVELY LIFTS** AND REMOVES ALL DEBRIS FROM THE STEPS.
  - THE EXCLUSIVE BRUSH- **HEAD ROTATES 180°** TO CLEAN BOTH SIDES OF THE ESCALATOR, INDEPENDENTLY FROM THE WIDTH OF THE STEPS.
  - EC510 CAN WORK AUTOMATICALLY, THUS GUARANTEEING A PERFECT RESULT **EVEN IF THE OPERATOR** IS BUSY WITH OTHER APPLICATIONS.
- EC510 IS SUPPLIED AS STANDARD WITH A GREAT ARRAY OF CLEANING ACCESSORIES, WHICH MAKE THE MACHINE THE MOST COMPLETE, VERSATILE AND COST EFFECTIVE ON THE











# **SCRUBBERS**



Gmatic® Scrubber Driers are made and tailored of non-magnetic stainless steel 1.4301 (Aisi 304). The even high-grade surface is improved by our electrolytic polishing process. This process transforms the structure of the surface into shiny chrome(VI)-oxide - an outstanding passive, hard and closed molecular structure extremely resistant to chemical and mechanical attacks. This material is not subject to any wear and tear. Its inherent corrosion resistance gives all Gmatic® products their longevity and stability of value as well.

The combination of special welding techniques and riveted joints stands for Gmatic® scrubber driers' exceptional strength. Each Gmatic® cleaning machine and vehicle is handmade - Made in Germany. We guarantee highest quality in floor cleaning machines.









# OUSTANDING CLEANING POWER

The Gmatic® Cleaning System by Dr. Peter Gansow - comprising cleaning machine, detergent and several floor treatment tools - follows the theory of Herbert Sinner: Brush preasure and speed of rotation, temperature of cleansing agent and time in a well balanced ratio providing a deep effect cleaning. Separate tanks for clean and dirty water made of stainless steel Aisi 304 permit to use hot water and any cleansing agent (pH 1 to pH 14) thus intensifying the Gmatic® cleaning result tremendously.

Bundling all aforementioned active components this ensures cleaning performances exceeding all expectations - both on hard and resilient floorings. Gmatic®'s material resistance to any kind of cleansing agent allows refining processes with sour lime breakers, i.e. acid based power cleansers or high-tech alcaline cleansers for intensive maintenance cleaning. Large overhanging brush decks left and right allow operators scrubbing with and sucking off the cleansing agent close to shop windows, furniture and under





# LASTING EFFECT RECONDITIONING

The reprocessing of Gmatic® machines and vehicles in our Gmatic® works is unproblematic due to the electrolytic polished material - even after decades. A special mordanting agent blend for stainless steel allows deep cleaning and renewed passivation of all surfaces (see picture on the right, machine manufactured in 2009, reconditioned in 2015). The modular design allows easy access to each module for their problem-free controls. Welding seams can be renewed, warped components can be straightened and all other parts will be serviced and up-dated.

Your Bonus: An almost new Gmatic® with a 12 months extended warranty, irrespective of machine's age, at unique moderate prices.





# REMARKABLE MACHINE RUN TIMES

Gmatic® components' combination of performance and effectiveness results in an exceptional grade of operational efficiency, i.e. exceptional long run times with one single battery charge - not least because of 3 individual switchable speed settings for brushes and vacuum. The XFC-battery-technology (Xtra Fast Charge, invented by Enersys, supported by US Air Force) used in Gmatics® provides a 30 % higher energy density. Moreover this technology allows spectacular fast charging times of only 3 to 6 hours. A Gmatic® is a highly efficient power pack, which is always available for use in multi-shift operation.

# INTUITIVE HANDLING

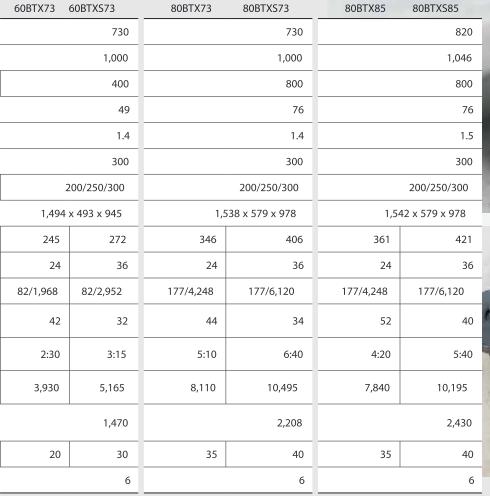
Gmatic®'s intuitive operation and manoeuvrability gives the operator a feeling of safety, handling and logical functional sequences. The logical layout of all operating elements as well as machine's immediate and linear reaction to user's operational commands in combination with its excellent maneuvrability and its ability to clean all surfaces even on the edge eases a harmonic communication between a Gmatic® and its operator.





		40BX60	40BTX60	60BX67	60BTX67 6	0BTXS67	60BX73	60BXS73
Working Width	mm		600			670		
Squeegee Width	mm		886			925		
Differential Axle	W	n/a	200	n/a		400	n/a	
Fresh Water	liter		43			49		
Water Consumption	l/min		1.3			1.4		
Brush Motor	W		300			300		
Brush Speed	rpm	0-300	200/250/300	0-300	2	200/250/300	0-300	
Dimensions (L x W <sub>Chassis</sub> x H)	mm	1,375	x 440 x 945		1,461 x 493 x 945			
Weight (gross)	kg	223	231	236	241	268	240	267
Battery Voltage	V		24		24	36	24	36
Battery Amps	A/W		82/1,968		82/1,968	82/2,952	82/1,968	82/2,952
Current Consumption (medium power level)	А	33	30	34	41	31	35	27
Battery Range (gross, approximately)	h:min	3:10	2:40	3:05	2:35	3:25	3:00	3:55
Battery Range (run speed Ø 4.0 km/h)	m²	3,970	3,360	4,400	3,640	4,820	4,720	6,120
Tank Range (run speed Ø 4.0 km/h)	m²		1,100			1,330		
Charger	A <sub>Sec.</sub>		20		20	30	20	30
Charging Time	h		6			6		









# RoVan

# **ELECTRIC TRANSPORTER**





# Electro transport concept

Transportation jobs especially in the infrastructural building management place a strain for the service companies and the internal transport departments with regard to demanding assignments: mechanical strength of sensitive floorings of natural stone, the rules of HACCP, sufficient battery capacities providing reserves even for peak loads, possible intermediate recharging of the batteries in cases of frequent rides on ramps, gradients of 15% or even more, transport bins following a system including special designs, implemented system safety and reliability of all components...

# Vehicle/Trailer combination

The RoVan  $^{\text{TM}}$  electric transporter recommends itself for demanding jobs. Made of polished stainless steel for a long life and for HACCP requirements, impressive PUR tires on seawater proof aluminium rims measuring 360mm Ø x 110 mm being good for low base compression (< 0.5 N/mm²), comfortable driver's seat with backrest extension and arm rests for long working periods, large battery capacities for shift operation, particular feature for quick recharging within 3 hours, system controller with retrieval of braking energy, lighting installation from the car sector and many others...





# Transporter concept

Infrastructural airport logistics means a large number of transport jobs. Especially the supply and disposal of restaurants and fast food facilities under HACCP aspects is a demanding job. Special wastes require special waste containers which have to be transported in closed trailers. The supply of newspapers and books, textiles, leather ware, drink boxes and the disposal of the packing materi-al sum up to remarkable volumes. Even smaller electrical hand tools for trade and contract cleaning require adequate transport to the assignment location be-cause the distances at the inter-national airports are very long.



# The Esthetics

The elegant Rotan<sup>™</sup> family presents itself lithe and lissome in pure polished stainless steel. Pure trust is the feeling of a self contained observer watching a Rotan<sup>™</sup> driving by. Watching

the first meters of drive of a Rotan™, a contract cleaner grown up in the present world of plastic machines will react with infidel astonishment. Is all of this affordable? Does it turn out to be economical? Yes! 35 years of experience of Dr. Peter Gansow in manufacturing heavy ride-on scrubber driers stand behind this Gmatic® concept.



# The Ambience

Nodal points of passenger traffic, shopping malls, logistic centers and upper production facilities having sufficient time slots for facility management services are the pitches of the Rotan fleet of vehicles. Whether shiny floor coatings of granite or coverings of epoxy resin, whether fine stoneware or polished floor finish, whether PVC or caoutchouc or even electrically discharging coverings of polymers, the Rotan vehicles will do their excellent cleaning job without leaving moisture behind. Rotan's do not only look good, they work as good as...





er Circuit means: Chemistry, mechanic, time and temperature are the four component parts of the Sinner circle. All four factors are dependent from each other, but independent variable in their size: the time influences the chemistry, the temperature influences the chemistry, the time influences the mechanic, the temperature influences the mechanic and the chemistry influences the mechanic. The Sinner circle displays these factors by way of a circle diagram showing how a single factor may be compensated by the other factors. Pressure and high turning speeds of the brushes ensure a thorough cleaning at a reduced use of time and chemistry. The result: the new Gmatic® efficiency with full reserve of high standards.



# **Basic Equipment**

The type designation "Gmatic® basic" means: 750W differential gears for traction, direct steering w/o any steering gear, no controller for the brush and vacuum speed, a plain garden seat, no

head and side lights, and no signal lights for indicating water levels inside of the tanks — but still an excellent cleaning performance.



Electrostatic discharge is a spark created in or on a piece of non conducting material causing a very high but short electric current impulse. Reason is almost always a charging due to friction or influence (electrostatic induction). Electricity by friction is even caused by walking on a carpeted floor. All surfaces of scrubber driers being safe against electro static discharge, likely to come in touch with surrounding subjects must be prepared in that way that their bleeder resistance against ground is  $10^5$  to  $10^{11}$   $\Omega$  to manage a discharge via the wheels into the ground within 0,2 to 2 seconds.

# **ESD Equipment**

A type designation of Rotan<sup>TM</sup> machines including ESD equipment means: DIN 61340-5-1 defines the standards for the electrical surface condition of all elements so that no electrostatic discharge onto objects or people will be possible. The outer materials must be electrically conductible; a possible electrostatic charge will be discharged onto the ground underneath the machine not too fast and not too slow. Accordingly sensitive facilities are electronic industry, chemistry, pharmaceutical industry, wards for intensive care in hospitals and many others. The stainless steel of the Gmatic<sup>®</sup> machines and vehicles make them predestined for such purposes.







# Haute Ecole of the Mechanical Components

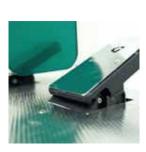
The vehicle construction in the field of scrubber driers has reached some kind of crossroads. Whilst the majority of the branch, still depending on and maintaining the plastic material, follows

the motto: "cheap, cheap..." Gmatic® maintains the complete opposite philosophy. Rotan™ vehicles are the energy efficient realization of the postulate: more is not possible!" Hand-picked suppliers make a pack of highly developed components available. The Gmatic® procurement network is characterized by best cooperation and mutual trust up to the highest management levels



### Dr. Peter Gansow's Generation

The robust platform strategy follows the principle of equal parts, enabling a large variety. Well dimensioned components can be produced in interesting quantities. Experience, quality and top performance enter into an alliance. Stock keeping for production and with the distributors is reduced to a minimum. The small Gmatic® machines benefit from the parts of the larger sisters — an efficient consequence. Proper dimensioned Rotan $^{\text{TM}}$  components are manufactured in interesting quantities. Experience, quality and top performance result in a Gmatic® alliance. Stock keeping of parts for production and at our distributors is reduced to a minimum. A further strategic consequence: small Rotan $^{\text{TM}}$  vehicles benefit from the larger ones.







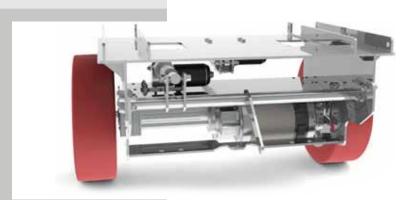
# Materials Polished Stainless

steel is the top level of surface processing. The uppermost layer is pure Chrome Oxide (Cr6), highly resistant, hard and crystalline closed. Silvery gloss spreads elegance combined with absolute hygiene (HACCP EU - regulation 582-584/2004, section 5). Stainless steels of the quality 1.4301 and 1.4509 with minimum 18% Chrome and further additives against inter -crystalline gap corrosion will be manufactured. The used plastic materials are chemically and shock resistant PMMA/ABS plates (sanitary acryl) in pearl opal green (RAL 6036) which even overcome a fall off a ramp without any break.



# **Drive Axle**

The rear-wheel drive by means of a differential axle coming with a solenoid brake and equipped with PUR covered special wheels  $\emptyset$  360 mm x 110 mm grants a very soft rolling especially



on sensitive floorings. These wheels fulfill even the requirements of DIN 18032 for spot elastic gymnasium floors with a well balanced load on the flooring and do an excellent climbing on slopes. The electrical brake feeds the braking energy back into the batteries (recuperation) extending thereby the work time of the machine. 750 Watts respectively 1.500 Watts motor power makes sure for a powerful drive. Best maneuverability due to well dimensioned steering gears of the Rotan™ vehicles ease the operator`s job.

# Recuperation

Mechanical brakes are energy prodigals par excellence since they always destroy motion energy to zero. The fleet of Rotan™ machines uses the braking energy by means of recuperation (retrieval due to generator function of the traction motor) for recharging the batteries. Breaking in this case means the reversal of the traction motor into a generator, which, driven by the kinetic push of the Rotan movement, feeds the produced energy into the batteries. Polarity and voltage level are being controlled. The result: worn out brake pads, leaking brake cylinders or wheel bearings washed out by cleaning solutions are relicts of the past.

# Floor Processing

Basis of the short lengths of the Rotan™ machines is the flat, V-shaped triple brush head with its three brush drive assemblies. The steered front wheel moves inside the V-opening resulting in a short distance to the rear axle which justifies the maneuverability. The shorter the rear axle

is placed to the front wheel the narrower will be the turns of the machine. In case of Rotan™ this means: turns nearly on the spot. This way of design results in a further advantage: these machines will not tilt in turns, meaning Rotan™ vehicles will not fall over when driving speedy turns.





# Chassis

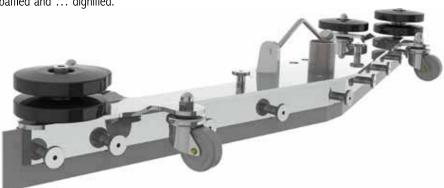
Does a stainless steel chassis have always to be heavy? No! This question includes a prejudice. Would the Eiffel tower be designed with all the knowledge of today it would have 2/3 less weight.

Modern 3D CAD-systems calculate the static requirements of each part, thereby consiering even the quality of the chosen connector technology like screws, rivets or type of welding seams. This complies exactly with the Gmatic® procedures using the SolidWorks $^{\text{\tiny TM}}$  application.



# **Vacuum Performance**

What only counts is cleanliness free of stripes. Intensive scrubbing is just the start of any cleaning procedure. The final result is determined by the very special squeegee device. The word "squeegee" is in fact too "poor" for the suction tool of a Rotan™. Four caster wheels 50 mm x 20 mm using a housing of stainless steel grant due to the always correct distance to the floor an always correct bending of the rubber blades. They further enable the suction device to precisely follow and swivel in turns by means of a turn-swing movement around the center point of the rear axle, baffled and ... dignified.



Stainless steel welding 3 assemblies are being electrolytic polished in our own plant whereby the surfaces are converted into resistant Chrome Oxide VI (35, 13% Chromium, 64,87% Oxygen) by means of Oxygen. Due to the electrolytic polish the nickel and iron atoms are preferably dissolved out from the surfaces. The structural components shine in a silvery Chrome look and the edges are deburred at the same time. The surface, the micro throatiness of which has been reduced and passivated, is now homogenous and protected against any debris. Since crusts of debris are only on (not in) the surfaces such parts may be cleaned without any mechanical effort but just by use of a gloss cleanser and a paper cloth.



		145BTX85	145BTX95 14	45BTX105	195BT95	195BT105	195BT125
Working Width	mm	850	950	1.050	950	1,050	1,250
Squeegee Width	mm	1,100	1,200	1,300	1,200	1,300	1,450
Differential Axle	W			750			1,500
Fresh Water	liter			136			179
Water Consumption	l/min	2.25	2.55	2.85	2,55	2.85	3.45
Brush Motors	W			430			600
Brush Speed	rpm			180/240/300			180/240/300
Dimensions (L x W <sub>Chassis</sub> x H)	mm		1,730	x 730 x 1,590	1,730 x 850 x 1,		
Weight (gross)	kg	1,095	1,100	1,105	1,340	1,350	1,360
Battery Voltage	V			36	36		
Battery Amps	A/W			354/12,744	4 420/15		
Current Consumption	А	64	67	70	69	72	75
Battery Range (gross, approximately)	h:min	7:55	7:35	7:15	8:45	8:25	8:05
Battery Range (Run Speed Ø 8.0 km/h)	m²	19,900	21,600	23,000	24,800	26,600	30,900
Tank Range (Run Speed Ø 8.0 km/h)	m²	4,500					5,970
Charger	A <sub>Sec.</sub>	70 (230V)			70 (23		
Charging Time	h			6			12



245BT95	245BT105	245BT125
950	1.050	1,250
1,200	1,300	1,450
		1,500
		239
2.55	2.85	3.45
		600
		180/240/300
	1,889	x 850 x 1,590
1,625	1,635	1,645
		36
		525/18,900
70	73	76
10:45	10:20	9:55
26,800	32,800	38,100
		7,970
		115 (400V)
		12

The Eu Regulation 852/2004 dedicates obligatory the use of the HACCP concepts in all enterprises dealing with production, handling and distribution of foodstuff. It is the responsibility of such enterprises to analyze the dangers within their area of responsibility for the safety of foodstuff, to investigate the for the safety of foodstuff relevant critical points, to define action plans for the critical points, to implement procedures for the permanent monitoring of the critical points of control, to define correction procedures for the case of deviations from the standards, to check whether the system for the seizure of the foodstuff safety is appropriate and finally to document all measures properly.

# STEAM MACHINES





# 300 GRAMS OF A TABLET & EFFICIENT ENOUGH TO ...

Deliver up to 2000 L (528 USG) of Sanitizer Solution Continuous Spray: Min. 2 hours up to 2 ½ \* Hours

Sanitize up to 6000\*Square Meter Surface

& this is at least 3 times higher efficient than any other liquid disinfectant

# PERFORM ALL MOST EVERYWHERE.. AND MANY MORE...

































# GAINED VICTORY OVER THESE ENEMIES:

Legionella MRSA E.coli Salmonella Listeria

Staphylococcus Norovirus

HIV Parvovirus , Giardia ,

Canine , FCV

Feline Bird Flu

Influenza H1 N1 Bovine Coronavirus

Hepatitis

Candida Herpes

Swine

Rabies

AmphlobaterS treptococcus

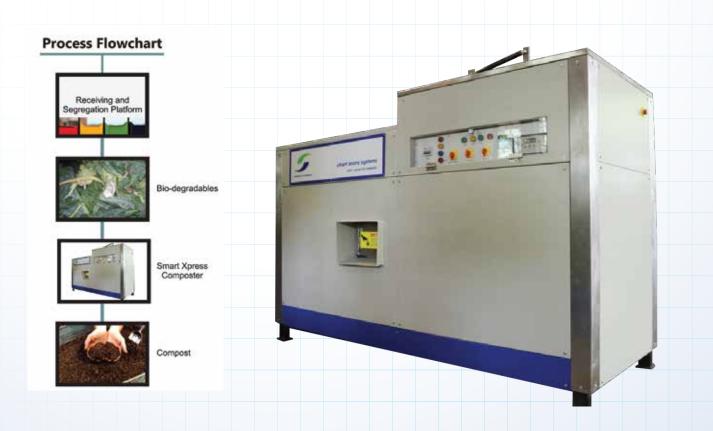
Clostridium

Distemper

# **COMPOSTERS**

# **Smart Xpress Composter**

A Mechanical Composting is the most efficient and effective mode of solid waste disposal, carried out through a built der & a cylindrical container. Xpress is developed with the principle of providing complete composting system in a single an compact machine for processing 50 KG up to 500 KG/Day, Xpress Composter has churning system working simultaneously to crush and mix the waste matter so as to cut down on the volume and to achieve faster decomposition. The Xpress composter is also equipped with thermic fluid heating mechanism to indirectly achieve required temperature of 595 degree which optimizes the performance on the microorganism and accelerates the composting process in just 24 hours & this compost can directly be used for field applications.



Model	Dimension ( Meters )	Capacity KG/Day	Power (HP)	Unit Consumption / Day
Xpress-50	2.3 x 1.0 x 1.7	50	5	10
Xpress-100	2.6 x 1.0 x 1.8	100	6	15
Xpress-200	3.6 x 1.3 x 1.9	200	13	22
Xpress-300	3.9 x 1.3 x 2.1	300	18	38
Xpress-500	4.0 x 1.9 x 2.2	500	20	100

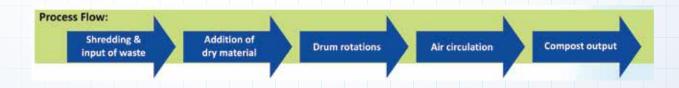
We can offer an END -TO—END solution of operating the machine, handling waste and managing compost

# **Smart Xpress Drum Composter**

The Xpress Drum is designed to process large quantity of waste (up to 2 Ton / Day ) by natural process along with economicall efficient way of using very less energy to operate.

Only organic and biodegradable segregated waste along with a spoon full of Thermophilic Microorganism is first shredded to reduces volume of material size & maximize surface area available to contact with micro organisms for quick composting. & pushed through a screw conveyer into the drums for curing. Then it is mixed & aerated by air blower which exchanges air from the composting chamber to ensure adequate availability of air is maintained for aerobic composting. Aerobic composting being exothermic reaction generates heat which further helps in removing the moisture by evaporation and renders dry, ready to use organic compost in a few days. The first batch of compost is ready within 10 to 12 days and then on a daily base as per input. The compost can be off loaded at uniform interval from the discharge end.





Model	Dimension ( Meters )	Capacity KG/Day	Power (HP)	Unit Consumption / Day
Xpress-Drum-250	4.3 x 2.7 x 2.9	250	4	5
Xpress-Drum-375	5.7 x 2.7 x 2.9	375	4	6
Xpress-Drum-500	9.5 x 5.0 x 4.0	500	6	8
Xpress-Drum-600	10.0 x 2.7 x 2.60	600	6	8
Xpress-Drum-750	11.0 x 3.0 x 3.00	750	10	10
Xpress-Drum-1000	12.0 x 5.0 x 4.0	1000	12.5	15
Xpress-Drum-1500	14.5 x 5.0 x 4.0	1500	15	20
Xpress-Drum-2000	17.0 x 5.0 x 4.0	2000	17.5	40

We can offer an END -TO—END solution of operating the machine, handling waste and managing compost

# CHEWING GUM REMOVAL HAS EVOLVED



The solution to removing chewing gum litter in any place and at any time is a battery powered chewing gum removal machine – the **STEAM-E**!



