

FLOORCARE EQUIPMENT



TWINTEC VARIO: ONE SIZE FITS ALL

KEY FEATURES

- Three sizes, one machine.
- Fully adjustable flow rate from 0.25 gpm to 1 gpm.
- Patented pop-on/pop-off brushes and pad drivers.
- Adjustable brush pressure and speed.
- 6 gel batteries are standard.
- low-voltage shut off.
 - Quick release squeegee blades for easy cleaning.
 - Tear-away squeegee.
 - Two squeegee sizes come with each machine.
- Onboard chemical dispensing system allows for 32:1, 64:1, 96:1 and 128:1 chemical metering.
- Will accept optional off aisle kit.



PRODUCTIVITY CHART in sq. ft/hr.

| | COMPETITIVE MACHINES | | | TTV678 | |
|-------------|----------------------|--------|--------|---------------|--|
| | 24" | 26" | 32" | 26", 30", 34" | |
| THEORETICAL | 42,200 | 45,700 | 56,300 | 59,800 | |
| PRACTICAL | 21.900 | 23.760 | 29.700 | 31.100 | |

| MODEL | TTV 678 | |
|-------------------------------|----------------------------|---|
| | | |
| CLEANING PATH | 26", 30", 34" | |
| PAD OR BRUSH SIZES | 3 x 12" | |
| SOLUTION/RECOVERY TANK | 32 gal. | |
| CHEMICAL CAPACITY | 1 gal. | |
| CHEMICAL MIXTURE RATES | 32:1, 64:1, 96:1, 128:1 | |
| WATER FLOW RATE | 1.0 / 0.8 / 0.5 / 0.25 gpm | |
| BRUSH PRESSURE | 160 lbs. max | |
| BRUSH SPEED | 125-200 rpm | |
| BRUSH MOTOR | 3 x 24V, 400W | 2 |
| TRACTION MOTOR | 600W | |
| WORKING SPEED | 0.3 - 4.3 mph | |
| MAXIMUM GRADIENT | 110 | |
| VACUUM MOTOR POWER | 24V, 400W | |
| WORKING CAPACITY (sq. ft/hr.) | 59,800 sq. ft/hr. | 1 |
| RUN TIME | 4 hrs. | 1 |
| BATTERIES (gel) | 6 x 12V, 100 Ahr. | |
| WEIGHT (including batteries) | 850 lbs. | |
| DIMENSIONS (LxWxH) | 66" x 26" x 56" | 1 |



TWINTEC VARIO: ONE SIZE FITS ALL

The TTV 5565 is the next generation in walk behind auto-scrubbers!

The brush deck adjusts from 22" to 26" without tools and the on-board chemical dilution system ensures precise metering without the need for mixing. Our solution flow rate is adjustable from .25 to 1 gpm ensuring the right amount of water and chemical are being applied to the surface being cleaned.

The main control panel continuously provides the operator with the status of the vacuum, solution flow, brush pressure and the battery level. With 4 - 100 AH gel batteries as standard (100% maintenance free - **SEE BACK COVER FOR DETAILS**) a run-time of 3.5+ hours is achieved on a single charge while the built in charger permits the unit to be charged anywhere.



KEY FEATURES

- Two sizes, one machine.
- Patented pop-on/pop-off brushes and pad drivers.
- 4 maintenance free gel batteries are standard.
- Quick release squeegee blades for easy cleaning.
- On-board chemical dispensing system allows for 32:1, 64:1, 96:1 and 128:1 chemical metering.
- Will accept optional off aisle kit.

- Fully adjustable flow rate from 0.25 gpm to 1 gpm.
- Adjustable brush pressure and speed.
- · Low-voltage shut off.
- Tear-away squeegee.



The brushes are adjustable from 22" to 26" with no tools required.



Easy to use control panel makes for simple operation of the machine.



| CLEANING PATH | 22", 26" |
|-------------------------------|----------------------------|
| PAD OR BRUSH SIZES | 2 x 11" / 2 x 13" |
| SOLUTION/RECOVERY TANK | 22.5 gal. |
| CHEMICAL CAPACITY | 1 gal. |
| CHEMICAL MIXTURE RATES | 32:1, 64:1, 96:1, 128:1 |
| WATER FLOW RATE | 1.0 / 0.8 / 0.5 / 0.25 gpm |
| BRUSH PRESSURE | 80 / 120 lbs. |
| BRUSH SPEED | 200 rpm |
| BRUSH MOTOR | 2 x 24V, 400W |
| TRACTION MOTOR | 600W |
| WORKING SPEED | 0.3 - 4.3 mph |
| MAXIMUM GRADIENT | 110 |
| VACUUM MOTOR POWER | 24V, 600W |
| WORKING CAPACITY (sq. ft/hr.) | 28,000 sq. ft/hr. |
| RUN TIME | 3.5 hrs. |
| BATTERIES (gel) | 4 x 12V, 100 Ahr. |
| WEIGHT | 632 lbs. (With batteries) |
| DIMENSIONS (LxwxH) | 55" x 23" x 45" |





GEL BATTERY AUTOMATIC SCRUBBERS

TTB 3450 - TTB 3450C- TTB 4550 - TTB 4550 T - TTB 4552

The Twintec family of walk-behind scrubbers are compact and so easy to use anyone can operate them. They follow one standard design where each unit has the same great features as the rest.

STRUCTURAL AND MECHANICAL FEATURES:

The fully adjustable handle provides proper ergonomics for any operator.

Three position adjustable pad pressure (simply slide the battery tray) allows for scrubbing or stripping.

A semi-parabolic squeegee with linatex blades pivots from side to side providing excellent water recovery on turns and it's easily removed for cleaning.

The patented flip-up head eliminates the need for crawling on the floor to change the brushes or pads.

The float shut-off and an inline filter ensures debris doesn't reach the vacuum motor.

The stainless steel frame will never rust and the structural foam brush deck is not only rust proof and durable, it carries a 10 year warranty.

CONSOLE AND ELECTRICAL FEATURES

The LED control panel continuously provides the operator with the status of the vacuum, water flow, brush pressure and the batteries. In the event the brushes overload they automatically shut down protecting the motor(s).

All units come with a key allowing them to be safely stored or charged just about anywhere.

With the environmental and safety benefits of maintenance free gel batteries (SEE BACK COVER FOR

DETAILS) and a 3 hour run time these units have

it all!



Console informs operator on pad pressure and battery status.



Inline filter protects motor from debris



GEL BATTERY AUTOMATIC SCRUBBERS

TTB 4550 T

Along with all the other great Twintec features we've now added traction drive with variable forward speed control and single reverse speed.

Like all Twintecs it's compact and exceptionally easy to use while the drive system enhances productivity allowing a small machine to do a big job.

The stainless steel frame is not only durable it's rust free.







Patented Flip Up Head - Standard on all 3 and 4 series Twintecs.





Adjust the pad pressure simply by sliding the battery tray.

CYLINDRICAL SCRUBBERS

TTB 3450 C

Encompassing all the features on the Twintec line the TTB 3450 C fills the gap when a cylindrical unit is needed. The Tynex Grit Brushes handle even the toughest jobs while it's a quick change to softer nylon brushes when the situation demands it.

The cylindrical brush and semi-parabolic squeegee with Linatex blades provides excellent scrubbing and water recovery on grouted surfaces.

TTQ 3035

While the Tynex Grit Brushes can handle even the toughest of grouted floors it's a quick change to softer nylon ones when required.

The squeegee blades on either side of the brush allow multi directional operation – important when cleaning narrow aisles and walkways.

Whether operating forwards or backwards, there is no loss in scrubbing or pick-up performance.

The pump feeds the cleaning solution on to the brushes ensuring consistent water flow and the easy to reach on/off water switch allows for double scrubbing.

The large rear wheels make transport a breeze while the adjustable handle is ergonomic and folds over taking up minimal space for transport.



ELECTRIC AUTOMATIC SCRUBBERS

TT 3450, TT 4550

So compact and easy to use, anyone can operate them.

A fully adjustable handle ensures comfort for any operator. The pad pressure is sufficient enough for both scrubbing and stripping - and with 100" waterlift and 95 CFM of airflow, it will dry your floors like nothing else.

The semi-parabolic squeegee pivots to ensure excellent water recovery on turns and it can be easily removed for cleaning. In fact, the entire unit can be broken down into sections for manual transport up and down stairs or from job to job.

The patented flip up head eliminates the need for crawling on the floor to change the brushes or pads.

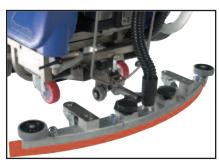
The TT 3450's lightweight twin recovery tanks make emptying dirty water simple and its stainless steel chassis will never rust.

The structural foam brush deck is rust proof, durable and carries a 10-year warranty.





Multi-position adjustable handle.



Linatex blades for excellent water recovery.

TWINTEC TTB 1840

With 45 - 60 minutes of run time, interchangeable battery pack and a 5 gallon solution capacity the TTB 1840 is the professional choice in compact auto-scrubbers. The TTB 1840 features a pivoting squeegee coupled with a 300 watt vacuum motor for excellent water recovery. The recovery drain hose makes it easy to drain the tank without the need for lifting.

The indicators located on the handle show you the status of the water, vacuum, brush motor and battery all in one convenient place. The battery pack consists of 1 x 12V 18AH environmentally preferred gel battery. The included charger will charge the battery pack in 5 hours or less.

The TTB 1840 will get in to all of those tight areas that other auto-scrubbers cannot. Essentially, it is a complete replacement for a mop and bucket system.



MODEL TTB 1840

| CLEANING PATH | 16" |
|------------------------|------------------------------|
| BRUSH SIZE | 16" |
| SOLUTION/RECOVERY TANK | 5 gal. |
| BRUSH PRESSURE | 55 lbs. |
| BRUSH SPEED | 200 rpm |
| BRUSH MOTOR | 1 x 24V, 400W |
| VACUUM MOTOR POWER | 24V, 300W |
| RUN TIME | 45 - 60 minutes |
| BATTERIES (gel) | 1 x 12V, 18 Ahr. |
| WEIGHT | 115 lbs. (Including battery) |
| DIMENSIONS (LxwxH) | 18" x 18" x 33.5" |





CYLINDRICAL BRUSH SCRUBBERS

MOST VERSATILE - FROM WALL TO WALL AND INTO THE TIGHTEST CORNERS.

Cleans virtually any floor surface. Not only carpets, hardwood, and profiled ceramics but grouted tile, rubberized floors – including uneven floors and escalators – are no obstacle for the Duplex.

Especially effective in cleaning tile grout and non-slip floors and carpet, the Duplex is incredibly light and maneuverable – no hard pushing, pulling and lifting.

Simply fill the solution tanks and squeeze the trigger to feed cleaning solution onto the twin counterrotating brushes that scrub the surfaces with aggressive action. Twin conveyors lift the dirt-filled solution from the brushes to a central recovery tank or you can choose to double scrub the area and pick up the water later. The brushes and drive unit are offset, so they work right to the edge of the machine and into difficult areas.

Duplex's remarkable performance is the result of its unique 800,000 bristle design. Its brushes, counter-rotating at 780 rpm, actively lift dirt, water and grime from the floor surface.

Brush options include 2 grades of black brushes for regular or aggressive scrubbing. Grey is the standard all-purpose brush and yellow is for sensitive carpet areas.

• EFFICIENT • HYGIENIC • LESS EFFORT •

THE HEART OF DUPLEX

At the squeeze of the trigger, dual large capacity clean solution tanks dispense liquid evenly along the full length of both agitator brushes.

Simultaneously, twin conveyors lift the dirt filled solution from the brushes to a central recovery tank. The Duplex system washes,

scrubs and dries all floor surfaces in a single pass, replacing mops, buckets, scrubbers, polishers and carpet extractors with a single compact unit.

> All tanks are easily accessible and removable to make filling, emptying and cleaning, simple and easy.





DP 340 AND DP 420 HARD FLOOR VERSION



Clean right to the edge of walls



Optional escalator kit for the DP 420



| MODEL | DP 340 | DP 420 |
|----------------------|---------------|---------------|
| | | |
| CLEANING PATH | 11" | 14" |
| SOLUTION TANK | 1.1 gal. | 1.6 gal. |
| RECOVERY TANK | 0.75 gal. | 1 gal. |
| BRUSH SPEED | 780 rpm | 780 rpm |
| BRUSH PRESSURE (max) | 48 lbs. | 57 lbs. |
| BRUSH MOTOR | 1000W / 1.3hp | 1000W / 1.3hp |
| POWER CORD | 35 ft. | 35 ft. |
| WEIGHT | 48 lbs. | 57 lbs. |

FLOOR MACHINES

LL 316 STRUCTURAL AND MECHANICAL FEATURES

With a 13" deck, 200 rpm of muscle and a weight of only 40 pounds, the 316 is compact enough to handle just about any job, anywhere.

NS 17 - NS20 STRUCTURAL AND MECHANICAL FEATURES

With a 1.5 hp. motor, triple planetary gears and over 90 pounds of weight, our NS series provides everything the most demanding commercial user requires. And the convenient cord restraint is the icing on the cake.



FLOOR MACHINES



NA 17SS / NA 20SS

All steel construction and dual planetary steel gears make these tough enough for the heaviest of jobs. Shown with optional shampoo tank.



NA 20 DS

All steel construction, a 1.5hp DC rectified motor and dual planetary gears. It has the option of running at 175 RPM or 300 RPM allowing it greater versatility in use.



NA 1520/1520 DC / NA 2020*

The all steel construction and 1.5hp DC rectified motor ensure these units can handle the toughest of jobs. Multi-grooved drive belts provide efficient power transfer. Our dust control (DC) model has a unique filter system that is easily cleaned and easily changed.

* NA 2020 available in U.S. only

| MODEL | LL 316 | NS 17 SS NS 20 SS | NA 17 SS NA 20 SS | NA 20 DS | NA 1520/1520 DC NA 2020 |
|---------------|----------------------|----------------------|----------------------|------------------------|----------------------------|
| BRUSH MOTOR | 0.5hp | 1.5hp, AC | 1.5hp, AC | 1.5hp, DC Rectified | 1.5hp, DC Rectified |
| WEIGHT | 40 lbs. | 90/92 lbs. | 91/96 lbs. | 108 lbs. | 112 lbs. |
| POWER CORD | 50 ft. | 50 ft. | 50 ft. | 50 ft. | 50 ft. |
| VOLTAGE | 115V, 60hz | 115V, 60hz | 115V, 60hz | 115V, 60hz | 115V, 60hz |
| PAD SIZE | 13" | 17" / 20" | 17" / 20" | 20" | 20" (19" for 1520 DC) |
| SPEED | 200 rpm | 175 rpm | 175 rpm | 175 / 300 rpm | 1500 / 2000 rpm |
| TANK CAPACITY | 1 gal. (included) | 2 gal. (optional) | 4 gal. (optional) | 4 gal. (optional) | N/A |

BATTERIES

FEATURES

NaceCare provides 100% gelled electrolyte batteries with all our Twintec scrubbers. They save time because they're totally maintenancefree with no terminal corrosion, ever.

They provide the operator with a high degree of safety - sealed in a spill-proof enclosure, no acid can spill due to improper maintenance or handling and no emergency spill kit is needed. With the fully self-diagnostic, on-board charging system they can be charged anywhere, without special ventilation, because minimal hydrogen gas is given off during charging. And they are completely explosion proof - making them the safest battery available anywhere.

BENEFITS

- Both Economically and Environmentally safer to use.
- Completely spill proof with no emergency spill kit or safety goggles required.
- Will not leak acid if damaged. The internal liquid is a thixotropic paste - when the battery is not charging, the paste is a solid gel.
- They are considered non-hazardous materials to transport.
- They are completely explosion proof.
- Guaranteed longer life than wet batteries less waste to dispose of.
- Can be charged anywhere without special ventilation.
- Give off 1/40 the hydrogen of wet batteries when charging.
- Totally maintenance-free. No terminal corrosion ever.

RECYCLING

NaceCare offers a complete Gel or Wet Lead Acid battery recycling program. Virtually 100% of the returned battery is re-used. Ask your NaceCare representative for details.

| MODEL | TT 3450/4550 | TTB 3450/3450C | TTB 4550 (T)/4552 | TTQ3035 |
|-----------------------------|-------------------------|--------------------|---------------------|---------------|
| | | | | |
| CLEANING PATH | 17" / 20" | 17" / 18" | 20" / 21" | 15" |
| PAD SIZES OR BRUSHES | 17" / 20" | 17" / 18" | 20" / 2-11" | 15" |
| SOLUTION TANK | 8 / 11 gal. | 8 gal. | 11 gal. | 8 gal. |
| RECOVERY CAPACITY | 8 / 11 gal. | 8 gal. | 11 gal. | 8 gal. |
| BRUSH PRESSURE (low) | NA | 58 lbs. / NA | 61 / 91 lbs. | NA |
| BRUSH PRESSURE (med.) | NA | 65 lbs. / NA | 68 / 98 lbs. | NA |
| BRUSH PRESSURE (high) | 80 / 105 lbs. | 72 lbs. / 30 lbs. | 75 / 105 lbs. | 27 lbs. |
| BRUSH SPEED | 180 rpm | 150 rpm / 1000 rpm | 150 rpm | 1200 rpm |
| BRUSH MOTOR | 1000W-1.3 / 1200w-1.6hp | 400W-0.5hp | 400W-0.5hp | 400W-0.5hp |
| TRACTION MOTOR | NA | NA | NA / 250W-0.3hp (T) | NA |
| TRACTION SPEED | NA | NA | NA / 0-2.5mph (T) | NA |
| VACUUM MOTOR - POWER | 1000W-1.3hp | 400W-0.5hp | 400W-0.5hp | 1200W - 1.6hp |
| POWER CORD | 65 ft. | NA | NA | 65 ft. |
| WORKING CAPACITY(sq.ft/hr.) | NA | 13,000 | 15,000 | NA |
| RUN TIME | NA | 2.5 - 3.5 hrs. | 2.5 - 3.5 hrs. | NA |
| BATTERIES - GEL | NA | 2 x 100ah | 2 x 100ah | NA |
| WEIGHT (with batteries) | 125 / 150 lbs. | 268 lbs. | 320 / 277 lbs. | 90 lbs. |

NaceCare carries a full range of cleaning solutions to meet your needs. Ask your NaceCare representative for the latest catalogues.

- Commercial Cleaning Equipment
- Janitorial Carts and Restroom Care
- Carpet Maintenance Systems
- Floorcare Equipment
- Hospitality

