

# *R30/28* *SERIES*



**HILLYARD**  
The Cleaning Resource®

**TRIDENT®**

Better Built. Better Equipment.

# Better Built. Better Equipment.

Our Trident Brand of equipment starts from the ground up - at a place where intelligent design intersects with innovative technology and exceptional engineering to deliver superior cleaning equipment. Cleaning equipment that lowers your total cost of ownership, reduces your cost to clean and improves cleaning results. It's what you expect out of your equipment investment, and it's what we deliver. We're Hillyard, The Cleaning Resource, since 1907.



Intelligent  
Design



Exceptional  
Engineering



Innovative  
Technology



R30SC / R30SC Plus - Disc



R28SS Plus - Cylindrical



R28SC Plus - Orbital



The compact height provides easy access to the tanks simplifying maintenance.

Productivity: Up to 48,000 Sq. Ft. per hour

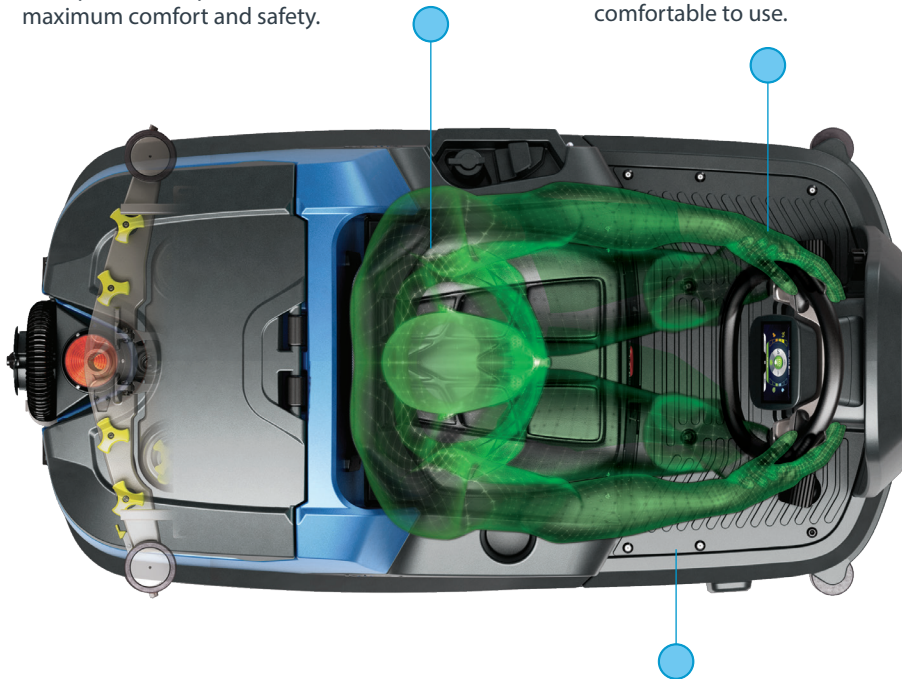




## Comfort

Ergonomically designed, adjustable padded seat delivers hours of stress-free operation. The operator can position the seat for maximum comfort and safety.

Maximum leg room and a steering wheel that's closer to the operator makes the machine even more comfortable to use.



The foot rest zone is designed to offer ample space for the feet within the compact dimensions of the machine.



The lateral paddles provide greater control over the machine for total peace of mind and a comfortable, safe driving experience.



The lowered footboard facilitates easy access from both sides and allows the operator to sit comfortably.

## Ease-Of-Use



### Yellow Color-Coded Parts

Parts that should be cleaned daily are color-coded in yellow. This saves time and makes sure your scrubber is kept in perfect condition at all times.



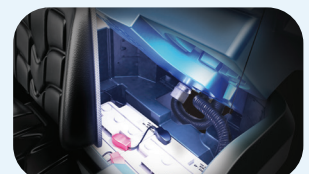
### Service Light System

LEDs light up the areas that may require operator inspection.

Squeegee Assembly



Battery Compartment



Brush Assembly

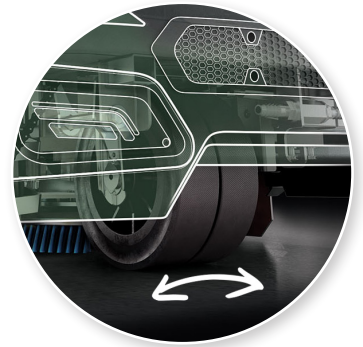
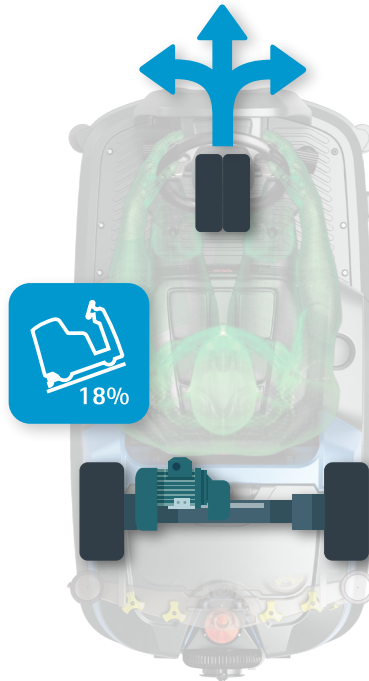


## Performance

### Outstanding Traction, Maneuverability and Cleaning

The Hillyard Trident R30/28 Series is engineered with dual rear-wheel drive while other manufacturers use single front wheel pull systems. Rear-wheel drive comes with a host of advantages like:

- Battery and tank weight is evenly distributed over the heavy-duty rear axle providing more drive wheel traction.
- Easily climb ramps with an 18% slope.
- Better traction enhances safety and reduces potential for slipping.
- Frees up the dual front-wheel to deliver precise steering to turn and clean in any direction.



#### Dual Front-Wheel Steering

The dual front-wheel reduces the specific pressure exerted on the floor, making the steering action lighter. It also increases maneuverability and prevents marking, even on the most delicate floors.

#### Power Mode For Heavy Soil



Activate the Power Mode to increase the delivery rate of detergent solution, boost brush pressure, and increase vacuum power to tackle heavy duty cleaning. Let Power Mode run for the full length of its 60-second countdown clock, or stop it with a touch at anytime.

#### Start & Stop Technology

When the machine is idle, the brush motor, vacuum motor, traction and detergent pump will turn off automatically, reducing costs and environmental impact. All the functions are reactivated automatically as soon as the operator accelerates.



#### Applying Pressure To Clean

Electronic tri-level pressure tackles even the most stubborn soils by applying up to 243 lbs. of brush pressure.







## Safety



### Anti-Collision System

The anti-collision system detects obstacles when reversing, helping the operator work in complete safety and protects the machine.



### Emergency Stop

By pressing a single button the machine stops immediately.



### LED Lighting

Front and rear LED headlights maximize work safety in all conditions.



### Steering Wheel Controls

The steering wheel controls offer the operator even greater control when cleaning. Also improves safety by eliminating distractions and letting the operator keep his or her eyes on the path ahead.



### Rear-View Camera

Rear-view camera lets the operator monitor cleaning results in real time from the display, without taking his or her eyes off the direction of travel.



### Stop & Go Control

The traction control system, which brakes and holds the machine when the accelerator pedal is released, provides assistance on both uphill and downhill gradients.



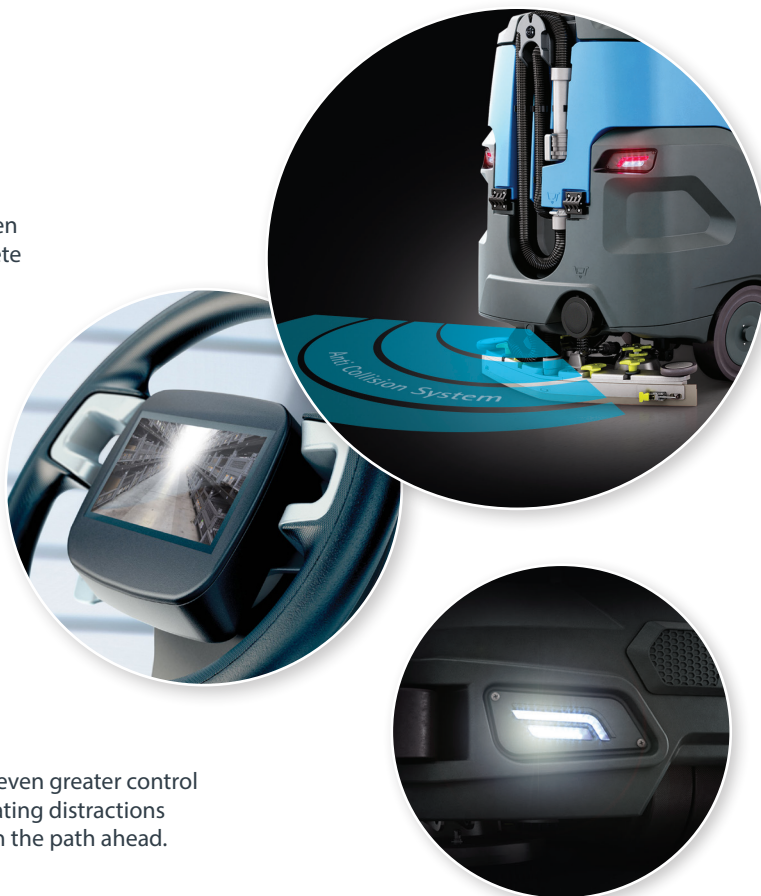
### Descent Control

Maintains a constant speed and prevents a sudden increase in speed when driving downhill.



### ESC - Electronic Stability Control

Automatically reduces speed when turning without the operator using the brake.



## Eco Mode For Conservation

The Eco Mode function helps conserve water, detergent and energy by using only the quantities you need and nothing more.



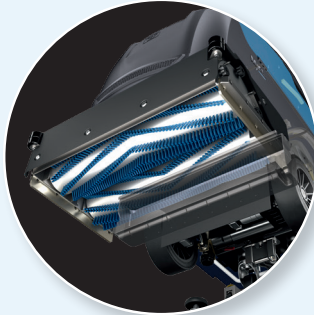
## Scrubbing Technologies

Disc



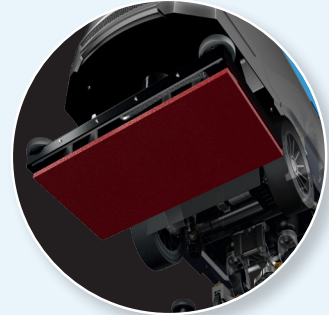
Two disc brushes efficiently clean all hard floors, smooth or irregular, in any setting, effortlessly removing stubborn dirt with higher downpressure.

Cylindrical



Cylindrical brushes scrub and sweep simultaneously, collecting debris in a removable hopper at the rear of the brush head for easy emptying.

Orbital



Orbital scrub decks on provide superior cleaning performance, effectively removing stubborn dirt while minimizing water usage.



**R30/28SC PLUS**



## Advanced Technology A Fingertip Touch Away



TOUCH SCREEN  
DISPLAY



LOG-IN WITH  
PASSWORD



PERSONALIZED  
WORK ZONE  
PROGRAMS



CRUISE  
CONTROL



SUSTAINABLE  
CLEANING



TOUGH  
CLEANING



REAR-VIEW  
CAMERA



ANTI-COLLISION  
SYSTEM



VIDEO  
TUTORIALS





# Simplified Cleaning and Control

The operator is the center of a high-tech universe, where everything is easy and intuitive.

All functions and activities are managed from a single interface, where a mere touch of the finger offers access to an extraordinary choice of customizable features that satisfy all types of requirements with effortless simplicity.

The high-definition color display offers the same intuitive experience as a smartphone.



#### LOG-IN WITH PASSWORD

Protect your investment and personalize the settings.



#### CUSTOM WORK ZONE PROGRAMS

One-touch equipment settings for area types or different operators.



#### ONBOARD DIGITAL INSTRUCTIONS

Giving you all the information you need exactly when you need it.



#### REAR-VIEW CAMERA

Keep everything under control.



#### ECO MODE

Sustainable, cost-effective cleaning.



#### POWER MODE

Maximum power for tough cleaning.

Standard  
Configuration

**R30**SC



# Join The Connected Cleaning World\*

Keep tabs on your machines remotely whenever you want and from wherever you want!



HFM

Hillyard Fleet Management



## GEOLOCATION

Know where your machines are.



## USAGE DATA

Know who's using your machine and how it is being used.



## MAINTENANCE

Know the health status of machines.



## TELEMETRY

Critical machine data is always being monitored for peak performance.



An authorized Hillyard Trident Service Center can view real-time telemetry data, diagnose systems, and update settings over the internet - keeping your equipment running at peak performance - and minimizing downtime.

\* Requires optional Hillyard Fleet Management module and subscription.





## Knowledge Is Power

Making technology available to improve efficiency is one of the core missions of Hillyard. It gives you the power to make the right decisions for your cleaning program.

HFM, the Hillyard Fleet Management system collects data sent by connected cleaning machines. When the machines are operating, valuable machine information is transmitted and easily accessible in real time, 24/7, from your smartphone.

Being constantly connected to your machines will help you operate them even more efficiently and effectively. Know where your machines are, and if the operation is being carried out according to plans at the scheduled time.

Machine health is constantly monitored. In the unlikely event of a breakdown, you'll receive an alert notification directly on your smartphone, allowing you to promptly take corrective action and immediately call technical support.

Easily check the battery conditions and the quality of the charges in order to optimize battery endurance and life cycle.

The sensors provide hard impact feedback. Now you will know how the equipment is being used.

It's time to get your cleaning world connected with Hillyard Fleet Management.



## Sustainable Technologies



**TES**

Trident Energy Saver

Reduces energy consumption by up to 35%.

LED technology consumes much less - up to 80% less energy - than conventional headlights, offering a longer lifespan and illuminates with a brilliant natural daylight.



**TDC**

Trident Dosing Control\*

Water and detergent are dosed separately, optimizing cleaning and reducing chemical and water consumption by up to 50%.



**TFC**

Trident Flow Control

Engineered water flow system that delivers equal solution to both scrub brushes ensuring proper coverage to deliver consistent cleaning quality.



\* Optional System

being

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Standard and Optional Equipment

• STANDARD    ○ OPTION    - NOT AVAILABLE

User Experience		R30SC	R30SC Plus	R28SC Plus - Orbital	R28SS Plus - Cyl
Intelligent Drive	- 5 Inch High-Resolution Color Touch Screen	-	•	•	•
	- Log-In With Password	-	•	•	•
	- "Zone" Program	-	•	•	•
	- Cruise Control	-	•	•	•
	- Eco Mode	-	•	•	•
	- Power Mode	-	•	•	•
	- Rear-View Camera	-	•	•	•
	- Anti-Collision System	-	•	•	•
	- Video Tutorials	-	•	•	•
Comfort					
	Hour Meter	•	•	•	•
	Cleaning Solution Level Indicator	•	•	•	•
	Water And Detergent Empty Tank Lights	-	•	-	-
	Onboard Battery Charger	○	○	○	○
Productivity					
	Pressure Adjustment	-	•	-	-
	Extra Pressure	•	-	•	•
	3-Stage Vacuum Motor	-	•	•	•
	HFM - Hillyard Fleet Management	○ - HIL227524	○ - HIL227524	○ - HIL227524	○ - HIL230081
Safety					
	Blinking Light	•	•	•	•
	Driving (Front - Rear) And Service LED Light Pack Kit	-	•	•	•
	Ramp Up	•	•	•	•
	Stop & Go	•	•	•	•
	Descent Control	•	•	•	•
	ESC (Electronic Stability Control)	•	•	•	•
	Emergency Stop	•	•	•	•
Environment					
	TDC - Trident Dosing Control	○ - HIL227527	○ - HIL227527	○ - HIL227527	-
	TES - Trident Energy Saver	•	•	•	•
	TFC - Trident Flow Control	•	•	-	-
	Start & Stop	•	•	•	•





Better Built. Better Equipment.

## Power Options

### Maintenance Free



- The ultimate solution for simplicity and durability.
- Virtually maintenance free. Just plug in the charger when not in use.
- Full replacement three-year warranty with use of the included Protection from Overdischarge (POD) device.



### Flooded Lead Acid



- Conventional deep-cycle battery for cleaning equipment.
- High quality, lower-cost alternative to maintenance-free batteries.
- Requires routine maintenance to maintain electrolyte levels and warranty. Pro-rated one-year warranty.



## Battery Charger - Lester Summit Series II



Full replacement 3-year warranty



### BLUETOOTH®

Featuring Bluetooth wireless communication with apps for Apple® and Android® phones and tablets. View charge cycle status, select the active battery profile, upload new profiles, change between on-board and off-board and download charge history records anytime using just a smart phone or tablet.



### PERFORMANCE

Our Summit Series® II provides industry leading charging performance and intelligence. Our proprietary Progressive DV/DT charge algorithm ensures a precisely charged battery every time. The chargers are tested in extreme temperatures and operating conditions and built to last.



### EFFICIENCY

Our switch mode (high frequency) chargers have best-in-class efficiency and are compliant with the latest DOE and CEC standards. We operate a CEC approved laboratory in our Lincoln, NE manufacturing plant.



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## Specifications

		R30SC	R30SC Plus	R28SC Plus - Orbital	R28SS Plus - Cyl
Hillyard Item Number		HIL56009	HIL56011	HIL56012	HIL56044
Cleaning Path	In	30	30	28	28
Squeegee Width	In	31.6	31.6	31.6	34.5
Disc Brushes	(No.) In	(2) 15	(2) 15	n/a	n/a
Rectangular Pad	In	n/a	n/a	(1) 10 x 28	n/a
Oscillations Per Minute	(No.)	n/a	n/a	2000	n/a
Solution Tank	Gal	27.8	27.8	27.8	29.0
Recovery Tank	Gal	29.0	29.0	29.0	29.0
Supply/Traction	V	24/Automatic	24/Automatic	24/Automatic	24/Automatic
Acoustic Level (Iso 11201)	Db (A)	<70	<70	<70	72.2
Brush Motor(s)	(No.) V/W	(1) 24/500	(1) 24/500	(2) 24/600	(2) 24/450
Vacuum Motor	V/W	24/410	24/600	24/600	24/680
Traction Motor	V/W	24/600	24/600	24/600	24/520
Brushes RPM	RPM/Min.	140	150	n/a	550
Brush Pressure - Variable Range	Lb	77-243	77-243	66-220	66-88
Forward Speed	MPH	0 - 5	0 - 5	0 - 5	0-5
Minimum Aisle Turn	In	76.77	76.77	76.77	82.0
Gradeability - (Working, Transport Gross Wt., Transport Net Wt.)	%	7 / 10 / 18	7 / 10 / 18	7 / 10 / 18	7 / 10 / 18
Productivity	Sq.ft/Hr	52,800	52,800	49,300	41,700
Battery Compartment Dimensions (L,H,W)	In	15.0, 11.8, 20.6	15.0, 11.8, 20.6	15.0, 11.8, 20.6	15.0, 12.0, 21.0
Machine Dimensions (L,H,W)	In	62.8, 48.9, 31.6	62.8, 48.9, 31.6	62.8, 48.9, 31.6	63.0, 49.0, 35.0
Machine Weight (Without Battery)	Lb	591	591	591	606
Contents		1 - Machine 2 - Nylon Brushes 2 - Pad Holders 1 - Owners Kit	1 - Machine 2 - Nylon Brushes 2 - Pad Holders 1 - Owners Kit	1 - Machine 1 - Owners Kit	1 - Machine 1 - Owners Kit



R30SC / R30SC Plus - Disc



R28SC Plus - Orbital



R28SS Plus - Cylindrical



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# Battery Options

## ORDER WITH FACTORY INSTALLED BATTERIES

Equipment purchased with factory installed batteries include batteries, cables, and a shelf charger. TPPL machines are equipped with the required Protection From Overdischarge (POD) device.

Model	R30SC		R30SC Plus	
Hillyard Item Number	HIL56009SLA	HIL56009WET	HIL56011SLA	HIL56011WET
Battery Type	Maintenance Free (TPPL)	Flooded Lead Acid	Maintenance Free (TPPL)	Flooded Lead Acid
Quantity	2	4	2	4
Voltage / Capacity	12 V / 157 AH	6 V / 240 AH	12 V / 157 AH	6 V / 240 AH
Dimensions LxWxH (in)	17.5 x 7 x 10.5	10.3 x 7.1 x 10.9	17.5 x 7 x 10.5	10.3 x 7.1 x 10.9
Weight, Each (lbs)	117	66	117	66
Includes	Machine, batteries, cables, shelf charger, POD device	Machine, batteries, cables, shelf charger	Machine, batteries, cables, shelf charger, POD device	Machine, batteries, cables, shelf charger

Model	R28SC Plus - Orbital		R28SS Plus - Cylindrical	
Hillyard Item Number	HIL56012SLA	HIL56012WET	HIL56044SLA	HIL56044WET
Battery Type	Maintenance Free (TPPL)	Flooded Lead Acid	Maintenance Free (TPPL)	Flooded Lead Acid
Quantity	2	4	2	4
Voltage / Capacity	12 V / 157 AH	6 V / 240 AH	12 V / 157 AH	6 V / 240 AH
Dimensions LxWxH (in)	17.5 x 7 x 10.5	10.3 x 7.1 x 10.9	17.5 x 7 x 10.5	10.3 x 7.1 x 10.9
Weight, Each (lbs)	117	66	117	66
Includes	Machine, batteries, cables, shelf charger, POD device	Machine, batteries, cables, shelf charger	Machine, batteries, cables, shelf charger, POD device	Machine, batteries, cables, shelf charger

Brush and Pad Guide	R30SC	R30SC Plus	R28SC Plus - Orbital	R28SS - Cyl
Brush(es) - Soft, 0.3MM PPL, Blue	HIL414272	HIL414272	n/a	HIL449785
Brush(es) - Medium, 0.6MM PPL, White (Standard)	HIL414270	HIL414270	n/a	HIL448012
Brush(es) - Stiff, 0.9MM PPL, Black	HIL414273	HIL414273	n/a	HIL448013
Brush(es) - Abrasive, 80 Grit, Gray	HIL414271	HIL414271	n/a	HIL448014
Pad - Red	HIL42215	HIL42215	HIL42228	n/a

Squeegee Replacement Guide	R30SC	R30SC Plus	R28SC Plus - Orbital	R28SS - Cyl
Front and Rear Squeegee Kit	HIL228561	HIL228561	HIL228561	HIL225737



**HILLYARD**  
The Cleaning Resource\*

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