

# CS7000



## Hybrid & Battery Drive Combination Sweeper-Scrubbers

### FACT SHEET



### GREENER. CLEANER. SMARTER.

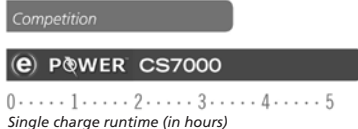
The industry's first Hybrid and ePower™ Drive Combination Sweeper-Scrubbers slash your total cost of ownership.

The new green class of industrial cleaning technology has arrived.

In a single broad stroke, the Advance CS7000 Combination Sweeper-Scrubber reinvents an entire class of equipment by reducing total cost of ownership — including operation, labor and maintenance, while effectively doubling fuel economy and runtime efficiency. Now, the most economical solution is also the most ecological.

The CS7000 is available in three configurations: LPG/Gas-Hybrid, Diesel-Hybrid and ePower™ Battery. They all deliver unparalleled performance, while replacing power-hungry, high-maintenance hydraulic systems with efficient, state-of-the-art Electric Drive technology. Whichever model you choose, the CS7000 delivers the lowest cost of ownership and the most sustainable cleaning solution in its class.

**ePower™ BATTERY EXTENDS RUNTIME BY 64%**



**HYBRID TECHNOLOGY DOUBLES FUEL EFFICIENCY**



### Dedicated dry sweep and wet scrubbing for one-pass cleaning.

Like other combination sweeper-scrubbers, the CS7000 lets you sweep and scrub in a single pass. But that's where the similarities end. Compared to competitive dual cylindrical sweeper-scrubber designs, the CS7000 utilizes a cylindrical sweeping system and a separate disc scrubbing system. Dedicated sweeping and scrubbing functions with one-pass cleaning power keep dry debris dry without introducing scrub solution into the debris hopper. This provides operators and equipment owners with increased productivity and reduced maintenance.

### Lower total cost of ownership.

The CS7000 dispels the complexity and high maintenance of hydraulic systems that power conventional sweeper-scrubbers. We've eliminated large hydraulic reservoirs, filters and oil coolers as well as 98% of the leak-prone hydraulic hoses, pumps, motors and valves. Hydraulic drives have been replaced with an intelligent system of electronically-controlled, low-maintenance electric drives. This technology shift alone will save the average owner thousands of dollars in reduced maintenance costs.

### STANDARD FEATURES INCLUDE

- 48 inch Pivoting Scrub Deck
- Breakaway Squeegee
- Ergonomic Operator Compartment
- High-capacity 75 gallon Tanks
- Rear Wheel Steer
- High-capacity Donaldson PowerCore® UltraWeb® Nanofiber Synthetic Media Filter with MERV 13 Rating
- Intuitive Controls with One-Touch™ Operation
- IP55-rated Electric Motors
- Tilt-out Recovery Tank

### OPTIONAL FEATURES INCLUDE

- EcoFlex™ System with Dual Detergent Cartridges
- Heated Water Supply
- Extended Scrub Recycling System
- Overhead Guard, Bumper Guards, Tail Lights
- Onboard Pressure Washer or Low Pressure Spray Hose

### EXCLUSIVE FEATURES INCLUDE

- MaxAccess™
- DustGuard™
- Clear-View™

### TYPICAL APPLICATIONS INCLUDE

- Warehouse / Distribution
- Manufacturing
- Parking Lots and Ramps
- Food and Beverage
- Transportation Facilities
- Stadiums and Arenas



# Advance CS7000

## Hybrid & Battery Drive Combination Sweeper-Scrubbers

### Industrial Strength Solutions...

- Our products are designed using innovative technology that increases productivity and drives down the cost to clean.
- You can get expert service and maintenance for your Advance machines from factory-trained personnel around the world. Fast parts delivery, too.
- Maintain peak performance with Nilfisk Parts.



#### ePower™ Battery

With an extended runtime rating up to 5.4 hours on a single charge, the CS7000 ePower model offers a new, low-noise, emission-free green solution for facilities once deemed too large to utilize a battery-powered sweeper-scrubber. The CS7000 ePower easily surpasses all other machines in its class offering one-pass sweeping and scrubbing of up to 640,000 ft<sup>2</sup> (60,000 m<sup>2</sup>) per charge.\*

\*Measured run time using low scrubbing and sweeping mode at normal operating speeds on smooth floors (actual results will be application dependent)



#### CS7000 LPG/Gas-Hybrid

For indoor and outdoor operational versatility with extended runtime and high efficiency, the CS7000 LPGHybrid can save you thousands in fuel costs alone. Expect unprecedented operational runtime of up to 5.5 hours per 32 lb (14.5 kg) LPG tank, up to 45% lower CO<sub>2</sub> emissions per square foot\*, and much lower operation costs compared to other machines in its class.

#### CS7000 Diesel-Hybrid

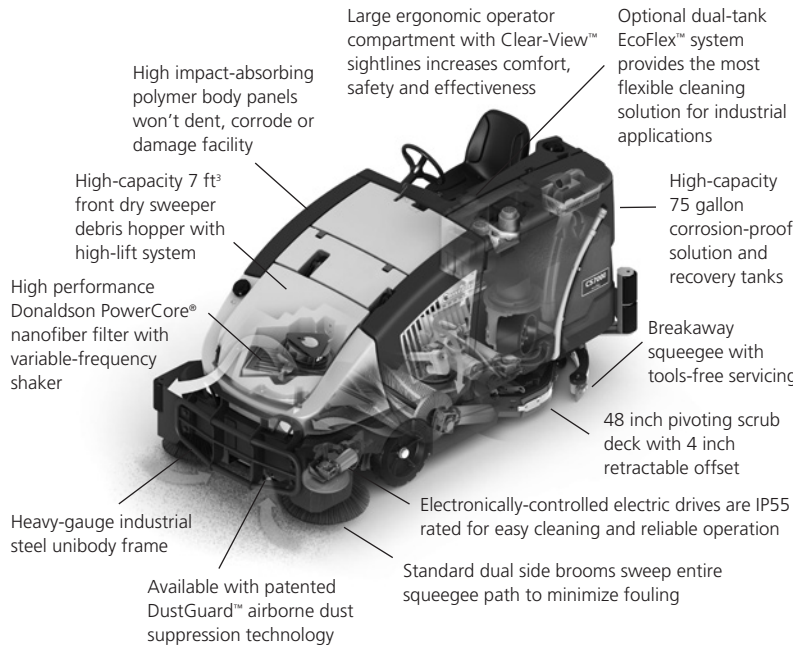
For demanding outdoor environments, the CS7000 Diesel-Hybrid offers superior performance with up to 45% fuel savings, up to 15 hours of operation per 9.2 gal (35 L) tank and up to 45% lower CO<sub>2</sub> emissions with nearly twice the productivity.\* The CS7000 makes an immediate impact by reducing your operational, labor and maintenance costs as well as your environmental footprint.

\*In specific tests vs. previous generation products



#### DustGuard™

Available as a popular option on the CS7000, our patented DustGuard™ technology is the only system of its kind, proven to reduce airborne dust generated by side broom sweeping by up to 85%. An ultra-fine fog suppresses fugitive dust particles which are redirected back into the brooms, greatly improving cleaning results and surrounding air quality.



## Technical Specifications

Models	CS7000 Battery	CS7000 LPG/Gas Hybrid	CS7000 Diesel Hybrid
<b>Configuration</b>	Independent front dry sweeping w/dust control and rear scrubbing functions Electronically controlled electric drives for all sweeping and scrubbing functions Electrically driven hydraulic power unit for hopper raise/lower functions		
<b>Sweeping System</b>			
Sweeping Path w/Dual Side Brooms	61 in (154 cm) - Squeegee path width is fully swept		
Main Broom	36 in (90 cm) x 12.2 in (31 cm)		
Sweeping Coverage Rate Per Hour	146,400 ft <sup>2</sup> (13,600 m <sup>2</sup> )		
Dust Control System	115 ft <sup>2</sup> (10.7 m <sup>2</sup> ) Donaldson high-capacity PowerCore® UltraWeb® filter w/synthetic media. Variable frequency automatic filter shaker		
Hopper Dump Height (Max.)	60 in (152 cm)		
Hopper Capacity	7 ft <sup>3</sup> (198 L) / 300 lb (136 kg)		
DustGuard™ Tank Capacity <sup>1</sup>	29 gal (110 L)		
<b>Scrubbing and Recovery Systems</b>			
Scrubbing Path and Brushes	48 in (122 cm) - 3 x 17 in (43 cm) disc		
Scrubbing Coverage Rate Per Hour	118,600 ft <sup>2</sup> (11,000 m <sup>2</sup> )		
Scrub Pressure	Three scrub pressure settings up to 400 lb (182 kg) of down force at maximum setting		
Recovery/Solution Tank Capacity	75 gal (285 L) each		
Recovery Vacuum	Dual vac fan motors capable of 48 in (122 cm) waterlift		
<b>Power and Propulsion Systems</b>			
Power System	Battery: 36 V/770 Ah	Kubota WG972: 3 cyl., 0.96 L 30 hp (22.0 kw)	Kubota D1305 <sup>2</sup> : 3 cyl., 1.26 L 29 hp (21.7 kw)
Propulsion System	Variable speed brushless A/C drive		
Propel Speed (Variable)			
Transport	5.5 mph (8.9 km/h)		
Sweeping/Scrubbing	3.5 mph (5.6 km/h) w/override capability		
Operational Run Time	5.4 hrs. w/770 Ah battery	LPG - 5.5 hrs. w/32 lb (14.5 kg) tank Gas - 5.9 hrs. w/9.2 gal (35 L) tank	15 hrs. w/9.2 gal (35 L) tank
Gradeability			
Transport @ Gross Weight	21% (12 deg.)		
Scrubbing/Sweeping	17.6% (10 deg.)		
<b>Dimensions/Weight/Sound/Environmental</b>			
Length	103 in (262 cm)		
Width	48 in (122 cm)		
Height	[59 in (150 cm)]	[82 in (208 cm) std. overhead guard]	[79 in (201 cm) low clearance overhead guard]
Minimum Aisle Turn	104 in (264 cm)		
Weight			
GW	5,716 lb (2,593 kg)	4,676 lb (2,121 kg)	4,537 lb (2,058 kg)
Empty	4,682 lb (2,124 kg)	3,636 lb (1,649 kg)	3,511 lb (1,593 kg)
Sound Level (IEC60335-2-72)	72 dB A	82 dB A	81 dB A
Water Ingression	All electric drive motors and actuators rated IP55 for water washdown		



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<sup>1</sup>DustGuard™ optional  
<sup>2</sup>Measured run time using low scrubbing and sweeping mode at normal operating speeds on smooth floors (actual results will be application dependent)  
<sup>3</sup>Meets EPA emission standards under 40 CFR 1039.625  
Note: Specifications are subject to change without notice  
CS7000 models shown in photos may feature optional accessories

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