














		Machine	S20	Tennant 6400	S30		Jonas 1450 V or D	Hako 1700	PowerBoss SW/6X	Proterra/SR1601	Nilfisk-Advance		Am Lincoln 6150	Kärcher		Dulevo 1300
System	Spec, Feature, Option															
													DISCONTINUED?			
Sweeping	Spec	Main Broom Length	36.0 in	36.0 in	45.0 in		36.2 in	48.8 in	36.0 in	35.5 in	Not Reported	50.0 in	Not Reported	33.5 in	43.3 in	35.4 in
		Main Broom Diameter	14.0 in	14.0 in	14.0 in		Not Reported	Not Reported	14.0 in	Not Reported	Not Reported	Not Reported	Not Reported	11.8 in	14.2 in	11.0 in
		Side Broom Diameter	23.0 in	23.0 in	26.0 in		23.6 in	Not Reported	24.0 in	21.7 in	Not Reported	24.0 in	Not Reported	23.6 in	21.6 in	21.7 in
		Cleaning Path	50.0 in	50.0 in	62.5 in		50.0 in	60.6 in	53.0 in	49.3 in	48.8 in	65.0 in	50.0 in	49.2 in	55.1 in	49.2 in
		Cleaning Path Dual Sidebrush	62.0 in	N/A	80.0 in		63.8 in	72.4 in	N/A	63.0 in	60.2 in	77.0 in	62.0 in	57.1 in	N/A	59.1 in
		Productivity														
		Single SB - Max	132,000 ft2	132,000 ft2	220,000 ft2		137,500 ft2	283,445 ft2	139,920 ft2	162,525 ft2	174,528 ft2	267,963 ft2	132,000 ft2	108,268 ft2	242,520 ft2	94,734 ft2
		Single SB - Avg (6" overlap, 4 mph)	77,440 ft2	88,000 ft2	99,440 ft2		77,440 ft2	96,149 ft2	82,720 ft2	76,120 ft2	75,361 ft2	103,771 ft2	77,440 ft2	76,054 ft2	86,448 ft2	76,054 ft2
		Dual SB - Max	163,680 ft2	N/A	281,600 ft2		175,394 ft2	338,661 ft2	N/A	207,900 ft2	215,344 ft2	317,625 ft2	163,680 ft2	125,591 ft2	N/A	113,681 ft2
		Dual SB - Avg (6" overlap, 4 mph)	98,560 ft2	N/A	130,240 ft2		101,692 ft2	116,936 ft2	N/A	100,320 ft2	95,456 ft2	124,960 ft2	98,560 ft2	89,912 ft2	N/A	93,377 ft2
		Main Broom Idler Arm Retention	T-Bolt, Twin Pin on Idler	T-Bolt, Twin Pin on Idler	Latch on Idler		Not Reported	Not Reported	Not Reported	Brush Door Latch	Not Reported	Brush Door	Brush Door	Belt Driven Brush	Toll	Not Reported
		Hopper Capacity														
		Volume: Plastic	11.0 ft3	11.3 ft3	14.0 ft3		N/A	N/A	N/A	11.0 ft3	N/A	14.0 ft3	N/A	6.4 ft3	4.6 ft3 Useable	N/A
		Steel	11.3 ft3	N/A	14.0 ft3		8.8 ft3	Not Reported	10.0 ft3	N/A	11.8 ft3	Optional Steel Liner	10.0 ft3	N/A	10.6 ft3	12.0 ft3
		Lift: Plastic	700 lb	700 lb	1080 lb		N/A	N/A	N/A	600 lb	N/A	Not Reported	N/A	Not Reported	Not Reported	Not Reported
		Steel	700 lb	N/A	1200 lb		Not Reported	1320 lb	650 lb	N/A	Not Reported	N/A	Not Reported	Not Reported	Not Reported	Not Reported
		Dump Height	60.0 in	60.0 in	60.0 in		59.8 in	61.0 in	60.0 in	62.0 in	58.3 in	60.0 in	60.0 in	59.0 in	63.0 in	53.1 in
		Dump Reach	14.0 in	14.0 in	30.0 in		Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported
		Hopper Location	Front	Front	Front		Rear	Front	Front	Front	Front	Front	Front	Rear	Front	Front
		Dump Type	Rear Dump	Rear Dump	Rear Dump		Rear Dump	Rear Dump	Forward Rool RTR	Rear Dump	Rear Dump	Rear Dump	Rear Dump	Rear Dump	Forward Roll	Rear Dump
		Ceiling Clearance Required to Dump Max Height	98.0 in	98.0 in	98.0 in		Not Reported	Not Reported	Not Reported	108.2 in	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported
		Hopper Door Design	Clam Shell Top/Down	Clam Shell Top/Down	Clam Shell Top/Down		Tip Forward	Clam Shell	Out the Top	Tail Gate, Bottom Up	Not Reported	Clam Shell	Clam Shell	None, Overthrow	Out the Top	Not Reported
	Feature	Direct Throw Sweeping	Yes	Yes	Yes		No	Yes	Yes	Yes	Yes	Yes	Yes	No, Overthrow	Yes	Yes
		Brush Motor String and Twine Guard	Yes	Yes	Yes		Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported
		Main Brush Wear Indicator	Yes	No	Yes		No	No	No	No	No	No	Not Reported	No	No	No
		No Tool Brush Change	Yes	Yes	Yes		Not Reported	Not Reported	Standard	Yes	Standard	Yes	Yes	Yes	No	Yes
		Spline Brush Drive	Yes	Yes	Yes		No	No	No	No	No	No	Yes	No	No	No
		Rear Suspended Brush	Yes	Yes	Yes		Not Reported	Not Reported	Yes	Yes	Yes	Yes	Yes	Not Reported	No, Front	Not Reported
		Side Broom Over Shoot Skirt	Yes	Yes	Yes		No	No	No	No	No	No	No	Wheel	No	No
		Retractable Sidebrush Front/Side	Yes	Yes	Yes		Not Reported	Not Reported	Minimal	Minimal	Not Reported	Minimal	Minimal	Not Reported	Not Reported	No
		7" Corner Reach Sidebrush (front/side)	Yes	Yes	Side Reach		No	No	No	No	No	No	No	No	No	No
		Replaceable Skid Plate Hopper Bottom	Yes	Yes	Yes		No	No, Steel Hopper	No	Optional	No	Yes	No, Steel Hopper	No	No	No
		Thermo-Sentry™	Yes	Yes	Yes		No	No	No	Hopper over temp sensor	No	Yes, Optional Sensor	Not Reported	No	No	No
		Floating Hopper	Yes	Yes	No		No	No	No	No	No	No	No	No	No	No
		Hopper Support Leg	Yes	Yes	Yes		Not Reported	Not Reported	Not Reported	Yes	Not Reported	Yes	Not Reported	Not Reported	Not Reported	Not Reported
		Prep'd for Vacuum Wand	Yes	No	No		No	No	No	No	No	No	No	No	No	No
		Restricted and Free Float Brush Modes	Yes	Yes	Yes		Auto adjusting	Not Reported	Not Reported	No, Free Float Only	Free Float	Yes	No	Not Reported	Not Reported	Free Float
	Option	Dual Side Brush	Yes	No	Yes		Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes
		Vacuum Wand	Yes	Yes	Yes		No	No	No	Yes	No	Yes	No	No	No	No
		Under Cover Storage	Yes	No	No		No	No	No	No	No	No	No	No	No	No
		Steel Hopper	Yes	No	Yes		Standard	Standard	Standard	No	Standard	No, Steel Liner Available	Standard	No	Standard	Standard
		Manufacturer Engineer Brushes	Yes	Yes	Yes		Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported
		Sand Wedge Main Brush	Yes	Yes	Yes		No	No	No	No	No	No	No	No	No	No
		Window Broom Main Brush	Yes	Yes	Yes		No	No	No	No	No	No	No	No	No	No
Dust Control	Spec	3 Stage System	Yes	No , Two	Yes		No	No	No	Claim 5 (1 is Optional)	No	Claim 5 (1 is Optional)	No	No	No	No
		Stage 1: Perma-Filter™	Yes	Yes	Yes		No	No	No	No	No	No	No	No	No	No
		Stage 2: Cyclone Prefilter	6 Cylones	N/A	8 Cylones		No	No	No	No	No	No	No	No	No	No
		Stage 3: Canister Filter	One	No, Panel	One		No, Panel	200 Cartridge Filters	No, Panel	No, Panel	No, Bag	No, Panel	No, Panel	Horizontal tri-canister	Horizontal Canister	No, Bag
		Filtration Media	Nano Fiber Surface Load	Paper	Nano Fiber Surface Load		Paper	Paper	Paper	Nano Fiber	Polyester Cotton	Nano Fiber	Paper or Synthetic	Synthetic	Synthetic	Polyester Cotton
		Filtration Level	0.5 Microns 99% Efficient	3 Microns 99% Efficient	0.5 Microns 99% Efficient		Not Reported	Not Reported	Not Reported	0.3 - 1 micron 99% efficient	Not Reported	0.3 - 1 micron 99% efficient	Not Reported	Not Reported	Not Reported	Not Reported
	Feature	3 Stage Filtration System	Yes	No, Two	Yes		No	No	No	Claim 5 (1 is Optional)	No	Claim 5 (1 is Optional)	No	No	No	No
		Patent Pending SweepMax™	Yes	No	Yes		No	No	No	No	No	No	No	No	No	No
		No Tool InstantAccess™ to Filter and Cyclonic Chamber	Yes	Yes	Yes		No	No	Yes	No	no	Yes	No	No	No Access	Yes
		No Tool Filter Change	Yes	Yes	Yes		Yes	No	Not Reported	Yes	Not Available	Yes	Yes	No	No	No
		Removeable Filtration System	Yes	No	Yes		No, Filter Only	No	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	No	No	No
		Complete Hopper Access from Above	Yes	No	Yes		No	No	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	No	No	No
		Canister Filter	Yes	No, Panel	Yes		No, Panel	200 Cartridge Filters	No, Panel	No, Panel	No, Bag	No	No, Panel	Horizontal	Horizontal	No, Bag
		Nano Fiber Filter Media	Yes	No	Yes		No	No	No	Yes	No	Yes	No	No	No	No, Gortex?
		Water Dust Control	NO	NO	NO		No	No	No	Yes, Dust Guard	No	Yes, Dust Guard	No	No	No	No
		ShakeMax™ 360 Filter Shaker	Yes	No	No		No, Electric	No, Electric	No, Electric	No, Liberator	No, Electric	No	No, Electric	No, Electric	No, Electric	No, Electric
		Dual Skaker Weights	Yes	No, Single	No, Single		No, Single	No	No	No, Single	No	No	No	No	No	No
		Shaker Recessed into Canister	Yes	N/A	No		No	No	No	No	No	No	No	No	No	No
		Shake Frequency	Clogged Filter Indicator	As Needed	Clogged Filter Indicator		Automatic	Manual	As Needed	Every 10 Minutes	Manual	Manual	Manual	Auto Shaker	Manual	Manual
	O	Side Brush Dust Control - Dry System	Yes	Yes	Yes		No	Optional	No	No	No	No	No	Yes	Yes	no
		Side Brush Dust Control - Wet System	No	No	No		No	No	No	Yes, Dust Guard	No	Yes, Dust Guard	No	No	No	No

		Machine	S20	Tennant 6400	S30		Jonas 1450 V or D	Hako 1700	PowerBoss SW/6X	Proterra/SR1601	Nilfisk-Advance		Am Lincoln 6150	Kärcher		Dulevo 1300
System	Spec, Feature, Option															
													DISCONTINUED?			
Propelling	Spec	Forward Speed - Max	6.0 mph	6.0 mph	8.0 mph		6.3 mph	10.6 mph	6.0 mph	7.5 mph	8.1 mph	9.4 mph	6.0 mph est	5.0 mph	10.0 mph	4.4 mph
		Speed Limiter When Dumping	1.5 mph	1.5 mph	1.0 mph		Not Reported	Yes	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported
		Engine Version														
		Engine Brand	Kubota 3cyl	Kubota 3cyl	Kubota 4cyl		2cyl	4 cyl	3cyl	Kubota 3 cyl	Lombardini 3cyl	Kubota 3 cyl & 4 Cyl	Kawasaki 2 cyl/Kubota 3cyl	Not Reported	Kubota	Briggs/Lambardini
		Engine Power: G	Gross Intermittent Power*: 32.5 hp Tennant Governed Power: 24.8 hp		Gross Intermittent Power*: 60.0 hp Tennant Governed Power: 50.0 hp		14.3 hp	67.1 hp	24.5 hp	32.5 hp	22.9 hp	3cyl: 31 hp, 4cyl 56hp	20.0 hp	15.8 hp	18.8 hp	7.8 hp Air Cooled
		Engine Power: LPG	Gross Intermittent Power*: 31.0 hp Tennant Governed Power: 24.5 hp		Gross Intermittent Power*: 60.0 hp Tennant Governed Power: 50.0 hp		14.3 hp	67.1 hp	24.5 hp	32.5 hp	22.9 hp	3cyl: 31 hp, 4cyl 56hp	20.0 hp	15.8 hp	18.8 hp	7.8 hp Air Cooled
		Diesel	Gross Intermittent Power*: 19.0 hp Tennant Governed Power: 18.5 hp	26.0 hp	Gross Intermittent Power*: 24.8 hp Tennant Governed Power: 24.8 hp		13.9 hp	36.2 hp	20.0 hp	26.0 hp	Not Reported	35.5 hp	20.0 hp	Not Reported	N/A	10.6 hp
		Battery version														
		Voltage	36V	36V	N/A		36V	36V	36V	48V	36V	N/A	36V	36V	N/A	36V
		Battery Capacity	315-440AH	315-440AH	N/A		325Ah/450Ah	Not Reported	295-440 Ah	400AH C6 Battery	400Ah	N/A	Not Reported	Not Reported	N/A	Not Reported
		Runtime	2 - 4.25 hr	3 - 4.25 hr	N/A		2-2.5hr/4hr	Not Reported	Not Reported	Not Reported	2.5hr	N/A	Not Reported	Not Reported	N/A	Not Reported
		Gradeability - Empty														
Operator Compartment	Feature	Engine Version	14.0 Deg/25%	10.0 Deg/17.6%	14.0 Deg/25%		18%	25%	Not Reported	Claim 11° (20%)	Not Reported	3cyl 11°/20% 4cyl 14°/25%	Not Reported	N/A	20%	Not Reported
		Battery Version	10.0 Deg/17.6%	10.0 Deg/17.6%	N/A		Not Reported	Not Reported	Not Reported	Claim 9.6° (17%)	Not Reported	N/A	Not Reported	12%	N/A	Not Reported
		*Per SAE J1995														
		ALL Levers Forward Operation	Yes	Yes	No		No	No	No	Analogic-Logic™ + button	No	No	No	No	No	No
		One Button Operation	No	No	Yes		Yes	No	No	No	No	Yes	No	Dial Controls	No	No
		Emergency Stop Button	EV Version	EV Version	No		Electric	Electric		Not Reported	N/A	Not Reported	Yes	N/A	Not Reported	Not Reported
		Seat Switch - 2 second Engine Shutdown	IC Version	No	IC Version		Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Yes	Not Reported	Not Reported
		Gauges/Indicator Lights														
		Fuel Level	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Not Reported	Yes	Not Reported	N/A	Yes	Not Reported
		Battery Charge Level Gauge (EV)	Yes	Yes	N/A		Yes	Yes	Yes	Yes	Not Reported	N/A	Not Reported	Yes	N/A	Not Reported
		Clogged Filter Indicator - Light	Yes	Option	Yes		Not Reported	Not Reported	No	Yes, Optional	Not Reported	Yes, Optional	Not Reported	Not Reported	Not Reported	Not Reported
		Clogged Filter Indicator - Chime	Yes	No	Yes		Not Reported	Not Reported	No	No	Not Reported	No	Not Reported	Not Reported	Not Reported	Not Reported
		Hopper Door Closed - Light	Yes	Option	Automatic		Not Reported	Not Reported	No	No	Not Reported	No, Automatic	Not Reported	Not Reported	Not Reported	Not Reported
Option	Option	Clogged Hydraulic Filter - Light	Yes	Option	Yes		Not Reported	Not Reported	No	No	Not Reported	No	Not Reported	Not Reported	Not Reported	Not Reported
		Parking Brake Engaged - Light	Yes	No	Yes		Yes	Yes	No	Yes	Not Reported	No	Not Reported	Not Reported	Yes	Not Reported
		Engine Oil Pressure - Light	Yes	Yes	Yes		Yes	Yes	Yes	No	Not Reported	Yes	Not Reported	Not Reported	Yes	Not Reported
		Engine Coolant Temp - Light	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Not Reported	Yes	Not Reported	Not Reported	Yes	Not Reported
		Battery Voltage	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Not Reported	Yes	Not Reported	Not Reported	Yes	Not Reported
		Hour Meter	Yes	Yes	Yes		Yes	Not Reported	Yes	Yes	Not Reported	Yes	Not Reported	Not Reported	Not Reported	Not Reported
		Thermo-Sentry™	Yes	Yes	Yes		No	No	No	Hopper over temp senso	No	Yes, Optional Sensor	Not Reported	No	No	No
		Horn In Center of Steering Wheel	Yes	No	Yes		No	No	No	No	No	No	No	No	No	No
		Tilt Steering	Yes	Yes	Yes		Not Reported	Yes, Optional	Not Reported	Yes, Optional	Not Reported	Optional	Not Reported	Not Reported	Not Reported	Not Reported
		Overhead Guard with:	Yes	Yes	Yes		Yes	Yes	Yes	Yes, OHG	No	Yes	Not Reported	Yes	Yes	No
		Rear View Mirror	Standard	Option	Option		No	No	No	No	No	Optional	Not Reported	No	No	No
		Entry Handle	Standard	No	Standard		No	No	No	No	No	No	Not Reported	No	No	No
		Open Grid Roof Construction	Standard	No	No		No	No	No	No	No	No	Not Reported	No	No	No
Construction	Feature	Soft Side Cab with:	Yes	Yes	Hard Cabin		No	Cab, Hard	No	Yes, Soft Side Cab	No	Cab, Hard	Not Reported	No	Yes	No
		Rear View Mirror	Standard	Option	Yes		No	Not Reported	No	Not Reported	No	Optional	Not Reported	No	Not Reported	No
		Fan	Standard	No	No		No	Not Reported	No	Not Reported	No	Optional	Not Reported	No	Not Reported	No
		Wiper	Standard, Engine Unit	No	Yes		No	Yes	No	Not Reported	No	Yes	Not Reported	No	Not Reported	No
		Entry Handle	Standard	No	Yes		Not Reported	Not Reported	No	Not Reported	No	Not Reported	Not Reported	No	Not Reported	No
		Heater	Option	No	Option		No	Optional	No	No	No	Yes	Not Reported	No	Yes	No
		AC	No	No	Option		No	No	No	No	No	Yes	Not Reported	No	No	No
		Pressurizer	No	No	Option		No	No	No	No	No	Yes	Not Reported	No	No	No
		Deluxe Seat	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Not Reported	Yes	Yes	Yes
		Seat Belt	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Not Reported	Yes	Yes	Yes
		Sound Level dB(A)	81 per ISO 11201	78 - 80	80 per ISO 11201		Not Reported	Not Reported	Not Reported	69.1 (Idling?)	Not Reported	81-83	Not Reported	92	83.5	Not Reported
		Head and Tail Lights	Yes	Yes, but on EV Opt	Yes		Yes	Yes	Headlights	Optional Head Lights\	Yes	Yes	Headlights	Yes	Yes	No
Weights/Dims	Opt	LED Tail Lights	Yes, IC Version	Bulb	No		No	No	No	No	No	No	No	No	No	No
		Hopper Safety Leg	Yes	Yes	Yes		Not Reported	Not Reported	Not Reported	Yes	Not Reported	Yes	Not Reported	Not Reported	Not Reported	Not Reported
		Wrap Around All Steel Bumper	Yes	Yes	Yes		Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes
		Complete Steel Frame - Entire Unit	Yes	Yes	Yes		Yes	Yes	Yes	Yes, covered w/Plastic	Yes	No	No	No	Yes	Yes
		Corrosion Proof Shrouding	Yes	Yes	Yes		No	No	No	Yes	No	Yes	No	Yes	No	Yes
		Tie-Down Positions	4	4	4		Not Reported	Not Reported	Yes	3, Center Rear	Not Reported	4	Not Reported	Not Reported	Not Reported	Not Reported
		4 Point Tie-Down Capable	Yes	Yes	Yes		Not Reported	Not Reported	Yes	No	Not Reported	Yes	Not Reported	Not Reported	Not Reported	Not Reported
		Outboard Side Positioned Tie-Downs	Yes	Yes	Yes		Not Reported	Not Reported	Yes	No	Not Reported	Yes	Not Reported	Not Reported	Not Reported	Not Reported
		SE Bumper Package	Tower Bumpers	N/A	Tower Bumpers		Not Reported	Not Reported	Not Reported	Sheet Metal Corner Guards	Not Reported	Sheet Metal Corner Guards	Not Reported	Not Reported	Not Reported	Not Reported
		Bolted on to Steel Frame	Yes	N/A	Yes		Not Reported	Not Reported	Not Reported	Bolts to Plastic	Not Reported	Bolts to Plastic	Not Reported	Not Reported	Not Reported	Not Reported
		Back Up Alarm	No	Yes	No		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Audio Visual Back Up Alarm	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Dimensions														
		Length	82.3 in	82.3 in	93.0 in		87.8 in	96.5 in	79.0 in	87.5 in	89.8 in	94.0 in	87.0 in	74.8 in	90.9 in	87.4 in
		Width	48.5 in	48.5 in	62.5 in		44.7 in	63.6 in	53.0 in	52.0 in	53.5 in	64.0 in	54.8 in	48.4 in	59.4 in	46.5 in
		Height	49.5 in	49.5 in	58.0 in		78.0 in	61.4 in	43.0 in	57.5 in	61.0 in	58.0 in	53.0 in	55.1 in	56.3 in	52.0 in
		Height w/OHG	82.1 in	82.1 in	82.5 in		78.0 in	90.2 in	79.5 in	79.0 in	N/A	82.0 in	Not Reported	79.1 in	84.1 in	N/A
		Turning circle	95.0 in	95.0 in	113.0 in		72.8 in	Not Reported	82.0 in	120.0 in	126.0 in	109.1 in	90.0 in	Not Reported	Not Reported	Not Reported
		Net Weight														
		Engine Version	2450 lb	2300 lb	3520 lb		2376 lb	3300 lb	2550 lb	2083 lb	1925 lb	2695 lb	2100 lb	N/A	2689 lb	1738 lb
		Battery Version (w/o Battery)	2300 lb	2050 lb	N/A		2319 lb	3223 lb	Not Reported	1389 lb	1540 lb	N/A	3420 lb w/Batt	2328 lb	N/A	2420 lb

Disclaimer: The information above is based on publicly available product literature, operator and parts manuals, photos and/or actual product observations as of July 31, 2009 or earlier. Changes made after that date are not reflected.