

DOTCO

Dotco® sanders, buffers and polishers are available in a variety of styles and power ratings to provide flexibility in choosing the best tool for the job. Disc sanding and polishing, wire brushes, buffing wheels, abrasive sheets, woven or non-woven belts. No matter the application, Dotco has a quality tool solution.

Motor ratings for sanders range from 0.6 – 1.6HP. All sanders feature composite, aluminum or steel housings to protect the internal parts as much as possible.

Dotco 12-18 Series Random Orbital & Orbital Sanders

The Dotco 12-18 Series random orbital and orbital sanders have a low profile design for better sanding control which improves finish quality. They are lightweight with low vibration to reduce operator fatigue and improve production levels.

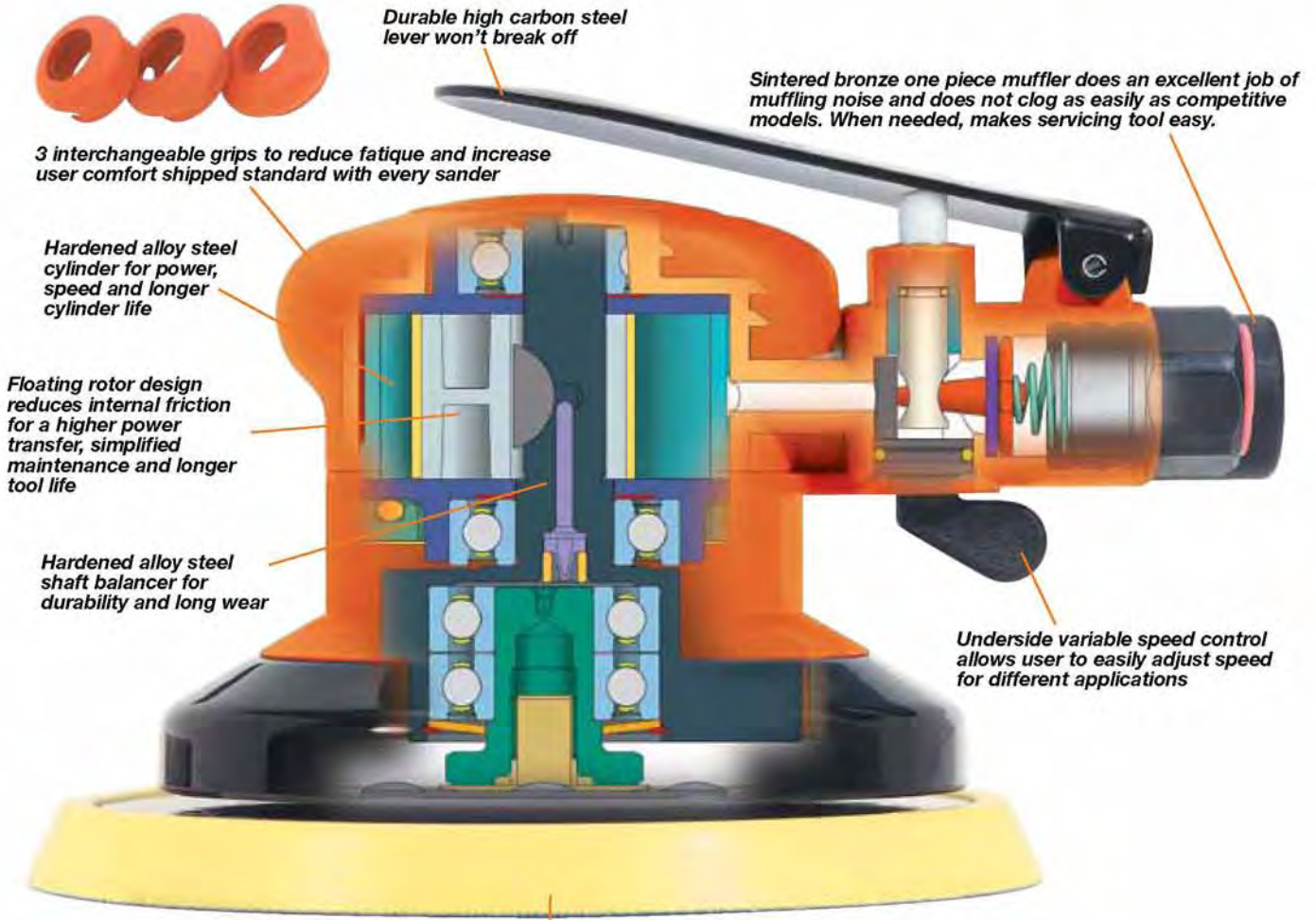
You can choose between models with either 3/16" (black lever) or 3/32" (chrome lever) random orbital pattern to best fit your application. All models are shipped with 3 interchangeable grips to comfortably fit any hand in your plant. Vacuum models are extremely efficient and are equipped with super vac for increased efficiency.

Dotco 12-23 Series Belt Sanders

The Dotco 12-23 Series belt sanders can grind corners, enter grooves, debur, strap polish or enter channels. The unique belt cover makes belt changes quick and easy. You can use non-woven nylon or coated abrasive belts on a variety of surfaces.

The unique sanding attachment pivots 360 degrees to allow user flexibility in reaching confined areas. The belt cover snaps on/off easily with no special tools needed allowing for quick belt changes. The arm itself is interchangeable to best suit a variety of applications.





Durable high carbon steel lever won't break off

Sintered bronze one piece muffler does an excellent job of muffling noise and does not clog as easily as competitive models. When needed, makes servicing tool easy.

3 interchangeable grips to reduce fatigue and increase user comfort shipped standard with every sander

Hardened alloy steel cylinder for power, speed and longer cylinder life

Floating rotor design reduces internal friction for a higher power transfer, simplified maintenance and longer tool life

Hardened alloy steel shaft balancer for durability and long wear

Underside variable speed control allows user to easily adjust speed for different applications

A wide range of industrial-quality PSA and hook and loop pads available in 3", 5" and 6" sizes



Belt Sanders
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Buffers/Polishers
Page 34

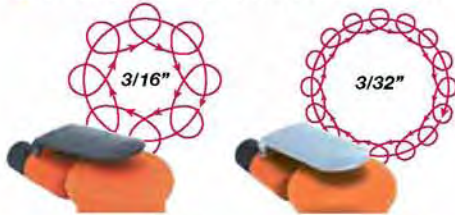
DOTCO

12-18 Series Random Orbital

Nominal Motor Power

0.24 hp 0.18 kW

- Low profile for more sanding control
- Lightest weight to reduce operator fatigue
- Extremely efficient built-in vacuum system with swivel hose fittings
- 3/16" & 3/32" random orbital pattern



- Lever allows users to visually see the difference between 3/16" and 3/32"
- 3 interchangeable grips to fit all hand sizes



12L1820-03



12L1820-05



12L1820-15

DOTCO

12-18 Series Orbital

Nominal Motor Power

0.24 hp 0.18 kW

- Lightest weight full size orbital sander in the world
- Full 10,000 OPM with more power and faster cutting than any equivalent machine
- Patent pending pad suspension system that produces unmatched performance
- 3 interchangeable grips to fit all hand sizes
- 3/16" orbital pattern



12L1850-09

12L1850-17

Model Number		Sanding Pad Size	Free Speed rpm	Weight		Height		Length	
3/16" Orbit	3/32" Orbit			lbs.	kgs.	in.	mm	in.	mm
12-18 Series – Random Orbital Sander – Non Vacuum									
12L1820-03		3.5"	12,000	1.56	0.71	3.33	84.58	5.11	129.79
12L1820-05+	12L1823-05+	5.0"	12,000	1.62	0.73	3.33	84.58	5.48	139.19
12L1820-06+	12L1823-06	6.0"	12,000	1.68	0.76	3.33	84.58	5.48	139.19
12-18 Series – Random Orbital Sander – Central Vacuum, Vacuum Attachment & Shroud									
12L1820-13		3.5"	12,000	1.60	0.73	3.33	84.58	6.98	177.29
12L1820-15+	12L1823-15	5.0"	12,000	1.73	0.78	3.33	84.58	7.75	196.85
12L1820-16+		6.0"	12,000	1.90	0.86	3.33	84.58	7.75	196.85
12-18 Series – Random Orbital Sander – Self-Generated Unit with Vacuum Hose & Floor Bag									
12L1820-25+		5.0"	12,000	1.73	0.78	3.33	84.58	8.33	211.58
12L1820-26+		6.0"	12,000	1.80	0.82	3.33	84.58	8.84	224.54

General:

Air Inlet: 1/4" NPT - Use 1/4" (6.4mm) I.D. Hose
 All tools performance rated @90 psi (620 kPa) air pressure
 Air Flow: 16 SCFM (453 LPM) Power: 0.24 hp (179 W)

Standard Equipment:

Operating instructions & parts manual.
 Random Orbital Models – 3/8" low profile medium density premium urethane back-up pad; Interchangeable grips (3)

Optional Equipment:

See page 36 for back-up pads.

Additional Models:

+ Add "HL" to end of model number to designate hook and loop pad.



Model Number			Abrasive Size	Speed orbits/minute	Weight		Height		Length		Width	
Clip	PSA	Hook & Loop			lbs.	kg	In.	mm	in.	mm	in.	mm
12-18 Series – 3/16" Orbital Sander – Non-Vacuum												
12L1850-09			3.66" x 9"	10,000	2.28	1.03	3.94	100.01	6.88	174.63	3.53	89.69
	12L1850-07	12L1850-07HL	3.66" x 7"	10,000	2.20	1.00	3.94	100.01	6.88	174.63	3.53	89.69
12-18 Series – 3/16" Orbital Sander – Central Vacuum												
12L1850-19	12L1850-17		3.66" x 7"	10,000	2.20	1.00	3.94	100.01	8.78	223.04	3.53	89.69
12-18 Series – 3/16" Orbital Sander – Self-Generated Unit with Vacuum Hose & Floor Bag												
	12L1850-27		3.66" x 7"	10,000	2.37	1.08	3.94	100.01	10.00	254.00	3.53	89.69

General:

Air Inlet: 1/4" NPT - Use 1/4" (6.4mm) I.D. Hose
 All tools performance rated @90 psi (620 kPa) air pressure

Air Flow: 16 SCFM (453 LPM) Power: 0.24 hp (179 W)

Standard Equipment:
 Operating instructions & parts manual.

Orbital Models – back-up pad.
 Interchangeable grips (3)

Optional Equipment:
 See page 36 for back-up pads.

Right Angle Sanders

For Disc Sanding & Polishing

直角型磨光機

DOTCO®

1,250 – 30,000 RPM

0.3 – 1.7 hp (0.22 – 1.27 kW)

- Suitable for a wide range of finishing and sanding applications
- Geared or gearless models
- Front, side, and rear exhaust models
- Composite or aluminum housing
- Choice governed or non-governed models



Model Number		Free Speed rpm	Disc Capacity	Type Housing	Weight		Length		Head Height*		Collet/Spindle Size	Air Inlet Size
Front Exhaust	Rear Exhaust				lbs.	kg	in.	mm	in.	mm		
12LF Series – 0.4 hp (0.29 kW) – 300 Series Collet												
12LF201-36	12LF281-36	20,000	2" Sanding/Polishing Disc	C	1.1	0.5	6.6	168	2.9	74	1/4"	1/4"
12LF200-36	12LF280-36	12,000	3" Sanding/Polishing Disc	C	1.1	0.5	6.6	168	2.9	74	1/4"	1/4"
10LF Series – 0.4 hp (0.29 kW) – 300 Series Collet												
10LF201-36	10LF281-36	20,000	2" Sanding/Polishing Disc	A	1.1	0.5	6.6	168	2.9	74	1/4"	1/4"
10LF200-36	10LF280-36	12,000	3" Sanding/Polishing Disc	A	1.1	0.5	6.6	168	2.9	74	1/4"	1/4"
12-12 & 10-12 Series – 0.3 hp (0.22 kW) – 1/4"-28 Internal Thread												
12L1201-32	12L1281-32	20,000	2" Sanding/Polishing Disc	C	1.1	0.5	6.3	160	1.9	48	1/4"-28	1/4"
12L1200-32	12L1280-32	12,000	3" Sanding/Polishing Disc	C	1.1	0.5	6.3	160	1.9	48	1/4"-28	1/4"
10L1200-32		12,000	3" Sanding/Polishing Disc	C	1.0	0.5	5.0	127	1.9	48	1/4"-28	1/4"
10B1200-32		12,000	3" Sanding/Polishing Disc	C	1.0	0.5	5.0	127	1.9	48	1/4"-28	1/4"
12-13 Series – 0.3 hp (0.22 kW) – Gearless – 300 Series Collet												
	12L1380-36	30,000	1" Sanding/Polishing Disc	C	1.1	0.5	7.1	180	3.9	99	1/4"	1/4"
	12L1381-36	25,000	2" Sanding/Polishing Disc	C	1.1	0.5	7.1	180	3.9	99	1/4"	1/4"
	12L1382-36*	20,000	2" Sanding/Polishing Disc	C	1.1	0.5	7.1	180	3.9	99	1/4"	1/4"
12-22 Series – 0.6 hp (0.45 kW) – 300 Series Collet – Heavy Duty Head												
	12L2218-36	18,000	3" Sanding/Polishing Disc	C	1.7	0.8	7.5	191	2.7	69	1/4"	1/4"
12-22 Series – 0.6 hp (0.45 kW) – 5/8"-11 Threaded Spindle – Heavy Duty Head												
	12L2251-80*	9,000	5" Sanding/Polishing Disc	C	3.2	1.5	9.3	236	3.9	99	5/8"-11"	1/4"
12-27 Series – 0.9 hp (0.67 kW) – 5/8" – 11 Threaded Spindle – Heavy Duty Head												
	12L2752-80	11,000	4" Sanding/Polishing Disc	C	3.4	1.5	9.8	249	3.9	99	5/8"-11"	1/4"
	12L2751-80	9,000	5" Sanding/Polishing Disc	C	3.4	1.5	9.8	249	3.9	99	5/8"-11"	1/4"
	12L2750-80	6,000	7" Sanding/Polishing Disc	C	3.4	1.5	9.8	249	3.9	99	5/8"-11"	1/4"
	12L2762-80*	4,500**	7" Sanding/Polishing Disc	C	3.3	1.5	10.5	267	3.9	99	5/8"-11"	1/4"
	12L2761-80*	6,000**	7" Sanding/Polishing Disc	C	3.3	1.5	10.5	267	3.9	99	5/8"-11"	1/4"
	12L2760-80*	3,300**	7" Sanding/Polishing Disc	C	3.3	1.5	10.5	267	3.9	99	5/8"-11"	1/4"
10-27 Series – 0.9 hp (0.67 kW) – 5/8" – 11 Threaded Spindle – Heavy Duty Head												
	10L2751-80	9,000	5" Sanding/Polishing Disc	A	3.1	1.4	8.5	216	3.9	99	5/8"-11"	1/4"
	10L2750-80	6,000	7" Sanding/Polishing Disc	A	3.1	1.4	8.5	216	3.9	99	5/8"-11"	1/4"

Housing Guide: A=Aluminum, C=Composite, S=Steel

* Over spindle

**Governor controlled speeds

• Oilless blades

General:

All tools performance rated @ 90psi (620 kPa) air pressure.

Minimum Hose I.D.– 12-12, 10-12, 12-13 Series: 1/4" (4.8mm)

12-22, 12-27, 10-27, Series: 5/16" (7.9mm)

12-42 Series: 1/2" (12.7mm)

Standard Equipment:

Applicable collet, collet wrenches

12-13 tools also include grease gun and gear lube

Extra Equipment:

Collets: See page 24

Overhose (rear exhaust): See page 61



12-22

Belt Sanders 皮帶磨光機

For Woven & Non-Woven Sanding Belts

DOTCO

12,000 – 20,000 RPM

0.3 – 0.5 hp (0.22 – 0.38 kW)

- Grind, debur, strap polish, blend
- Choice of geared or gearless
- Ergonomic housing reduces cold air transmission to operator
- 12-23 model accepts interchangeable arms



⚠ WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions. Tools must be equipped with lock-off lever to be CE compliant.

Model Number		Free Speed rpm	Belt Capacity	Type Housing	Contact Arm	Weight		Length		Air Inlet Size
Front Exhaust	Rear Exhaust					lbs.	kgs.	in.	mm	
12-12* Series – 0.3 hp (0.22 kW) – Sanding Belt										
	12L1281-36B2	20,000	1/2"W x 12"L Sanding Belt	C	Straight	1.4	0.6	11.3	287	1/4"
	12L1280-36B2	12,000	1/2"W x 12"L Sanding Belt	C	Straight	1.4	0.6	11.3	287	1/4"
12-13* Series – 0.3 hp (0.22 kW) – Gearless – Sanding Belt										
	12L1382-36B2•	20,000	1/2"W x 12"L Sanding Belt	C	Straight	1.4	0.6	11.3	287	1/4"
	12L1382-36B4•	20,000	1"W x 12"L Sanding Belt	C	Straight	1.7	0.8	11.3	287	1/4"
12-23 Series - 0.5 hp (0.38 kW) – Gearless – Woven or Non-Woven Belt										
	12L2384-B1	20,000	5/8" or 3/4"W x 18"L Belt	C	Straight	2.5	1.1	15.0	381	1/4"
	12L2384-K1 (Kit)	20,000	(See details below)	C	Straight/Offset	2.5	1.1	15.0	381	1/4"

Housing Guide: A=Aluminum, C=Composite, S=Steel

• Oilless blades

General:

All tools performance rated @ 90psi (620 kPa) air pressure.
Minimum Hose I.D. 1/4" (6.4mm)

Standard Equipment:

12-12, 12-13 series: No.80 and No.120 grit sanding belt or one medium grit non-woven belt, applicable wrenches, grease gun, gear lube
12-23 series: Tool and contact arm, adjustment wrench.

Extra Equipment:

For lock-off safety lever, substitute "S" for "L" in model number.
Overhose (rear exhaust): See pg. 61
Attachments: See pg. 38

Optional Equipment:

See pg. 36 for additional belts.

***Optional Terminations for 12-12 & 12-13 Series (All models may not be available):**

-32Bx 1/4"-28 Internal Thread; -36Bx 1/4" collet

Dotco 12L2384-K1 Kit

When you order the Dotco 12L2384-K1 kit you get the tool and all three interchangeable arms, belts and wrenches. You'll be ready for just about any finishing project using the Dotco 12L2384-K1 kit.



Kit includes the following:

- Tool with 3/4" wide straight arm (1)
- Additional Arms (2)
 - 1 – 1/2" wide straight arm
 - 1 – offset arm
- 1/4" x 18" Aluminum Oxide Belts (3)
 - 1 – 60 grit
 - 1 – 80 grit
 - 1 – 120 grit
- 1/2" x 18" Aluminum Oxide Belts (3)
 - 1 – 60 grit
 - 1 – 80 grit
 - 1 – 120 grit
- 3/4" x 18" Aluminum Oxide Belts (2)
 - 1 – 60 grit
 - 1 – 80 grit
- 3/4" x 18" Non-Woven Belt (1)
 - Medium
- Wrenches & Misc. Items
 - 1 – 3/4" open end wrench
 - 1 – 9/16" open end wrench
 - 1 – 9/64" hex wrench
 - 1 – 3/16" hex wrench
 - 1 – 1/4" collet
 - 1 – collet cap
 - 1 – chuck body
- Carrying Case w/Foam Inserts (1)

Buffers/Polishers 擦光及拋光機

For Wire Brushes, Buffing Wheels and Abrasive Sheets

DOTCO

2,200 – 6,200 RPM

0.3 – 1.7 hp (0.22 – 1.27 kW)

- Many models to choose from to meet your application needs
- Front, side, and rear exhaust



Model Number			Free Speed rpm	Capacity		Type Housing	Weight		Length		Height**		Collet/ Spindle Size	Air Inlet Size
Front Exhaust	Side Exhaust	Rear Exhaust		Wire Brush	Buffing Wheel		lbs.	kgs	in.	mm	in.	mm		
12-10 Series – 0.3 hp (.22 kW) – 200 Series Collet														
		12L1093-01	5,000	3"	3"	C	1.6	0.7	7.2	183			1/4"	1/4"
		12L1092-01	3,200	3"	3"	C	1.6	0.7	7.2	183			1/4"	1/4"
12- 25 Series – 0.9 hp (.67 kW) – 200 Series Collet														
		12L2594-01	6,200	4"	6"	C	2.1	0.9	9.3	236			1/4"	1/4"
		12L2593-01	4,700	4"	6"	C	2.1	0.9	9.3	236			1/4"	1/4"
		12L2592-01	3,200	4"	6"	C	2.1	0.9	9.3	236			1/4"	1/4"
12-27 & 10-27 Series – 0.9 hp (.67 kW) – 5/8"-11 Threaded Spindle														
		12L2762-80•	4,500*	4"	6"	C	3.3	1.5	10.5	267	3.9	98	5/8"-11	1/4"
		12L2760-80•	3,300*	4"	6"	C	3.3	1.5	10.5	267	3.9	98	5/8"-11	1/4"
		10L2760-80	3,300*	4"	6"	A	3.9	1.8	9.3	236	3.9	98	5/8"-11	1/4"
12-42 Series – 1.7 hp (1.27 kW) – 5/8"-11 External Threaded Spindle														
		12L4203-80•	3,400	4"	8"	C	6.4	2.9	13.6	346	3.9	98	5/8"-11	1/2"

Housing Guide: A=Aluminum, C=Composite, S=Steel

*Governor controlled speeds

**Over spindle

•Oilless blades

General:

All tools performance rated @ 90psi (620 kPa) air pressure.

Minimum Hose I.D.– 12-10 Series: 1/4" (6.4mm)

12-25, 12-27, 10-27, Series: 5/16" (7.9mm)

12-42 Series: 1/2" (12.7mm)

Standard Equipment:

12-10, 12-25: Applicable collet, collet wrenches

10-27, 12-27: Spindle wrench

12-42: Nut, washer, spacer and wrenches.

Extra Equipment:

Collets: See page 24

Overhose (rear exhaust): See page 61

Dead Handle: (12-10 models) 6188

Dead Handle: (12-25 Models) 8088



12-42

Sander Accessories 磨光機配件

Low Profile Backup Pads for Random Orbital Sanders

A thinner, harder pad generally recommended for aggressive sanding and leveling of flat surfaces.

Diameter	Thickness	PSA Pads		Hook & Loop Pads	
		Non-Vacuum	Vacuum	Non-Vacuum	Vacuum
3 1/2"	3/8"	543025	543025	543026	543026
5"	3/8"	543017	543018	543019	543020
6"	3/8"	543021	543022	543023	543024



Tapered Edge Backup Pads for Random Orbital Sanders

A thicker, softer pad generally recommended for contour sanding and feather edging.

Diameter	Thickness	PSA Pads
		Non-Vacuum
5"	3/4"	543041
6"	3/4"	543042



Backup Pads for Orbital Sanders

PSA adhesion to tool eliminates the need for any tools when changing pads. Pad remains flat throughout full orbit at any speed.

Diameter	Thickness	PSA Pads		Hook & Loop Pads	
		Non-Vacuum	Vacuum	Non-Vacuum	Vacuum
3-2/3"x7"	3/8"	543011	-	-	543014



Belt Sander Attachments

Dotco 12-12 and 12-13 series.

300 Series Collet	1/4"-28 Int. Thread	Sanding Belt Size		Sanding Area	
		-36 Termination	-32 Termination	in.	mm

Non-Woven Attachments (used with 12,000 rpm 12-12 series)

14-1715	-	1/2" x 18"	13 x 457	1/2" x 6"	13 x 152
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Coated Abrasive Attachments (used with 12,000 rpm 12-12 series; 20,000 rpm 12-12 & 12-13 series)

14-1639	14-1638	1/4" x 12"	6.4 x 305	1/4" x 4"	6.4 x 102
14-1316	14-1301	1/2" x 12"	13 x 305	1/2" x 4"	13 x 102
14-1473	14-1463	1" x 12"	25 x 305	1" x 4"	25 x 102
14-1319	14-1318	1/2" x 24"	13 x 610	1/2" x 10"	13 x 254
14-1613	14-1603	1" x 24"	25 x 610	1" x 10"	25 x 254



Sanding Belts – Aluminum Oxide, Resin Bond

For use with Dotco belt sanders. Minimum order: 10 of any one belt.

Grit Size	Belt Number							
	1/4" x 12	1/2" x 12	1" x 12	1/2" x 24	1" x 24	1/4" x 18	1/2" x 18	3/4" x 18
40		14-1344						
50		14-1345						
60	14-1590	14-1346	14-1582	14-1366	14-1642	14-2320	14-2316	14-2326
80	14-1591	14-1348	14-1583	14-1368		14-2321	14-2317	14-2323
100		14-1350						
120	14-1593	14-1352	14-1585	14-1372		14-2322	14-2318	
150		14-1355						
180	14-1596	14-1358	14-1588	14-1378	14-1648			
240		14-1360						
320		14-1362						

Sanding Belts – Non-woven

Minimum order: 10 of any one belt.

Grit Size	Part Number	
	1/4" x 18	3/4" x 18
Extra Fine	14-1728	
Fine	14-1729	
Medium	14-1730	14-2327
Coarse	14-1731	



Spiralcool™ Backing Pads

For Dotco sanders with 5/8"-11 threaded spindles. Pad contour develops draft action to cool disc and avoid excessive pick-up.

Flexibility	Part Number – Pad Diameter (Max. rated RPM)				
	4"	4 1/2"	5"	7"	9"
	12,000 rpm	11,000 rpm	10,000 rpm	7,000 rpm	6,000 rpm
Flexible	14-2197	14-2255	14-2115	14-2529	14-2202
Medium	14-2198	14-2256	14-2116	14-2200	14-2203
Rigid	14-2199	14-2257	14-2117	14-2201	

Save-A-Disc Pads

For Dotco sanders with 5/8"-11 threaded spindles. Ribs on the backing plate cause a flexing action which throws off accumulation.



Diameter	Max. rpm	Part Number			
		Assembly	Pad Only	Plate Only	Nut Only
5"	7,500	14-2515	14-2521	14-2522	14-2525
7"	7,500	14-2517	14-2521	14-2523	14-2525
9"	7,500	14-2519	14-2521		14-2525

PSA Disc Holders

Collet Chuck:

Chuck the PSA disc holder shank directly into the appropriate collet (1/8" or 1/4").



Threaded Spindle:

Remove the threaded shank from the PSA disc holder. Referring to the spindle adapter chart, select the correct spindle and thread it into the PSA holder.

Part Number	Disc Holder Diameter	Shank Assembly	PSA Disc Holder Thread
14-1146	1/2"	1/8"	5-40 Female
14-1105	1/2"	1/4"	5-40 Female
14-1147	3/4"	1/8"	5-40 Female
14-1107	3/4"	1/4"	5-40 Female
14-1170	1"	1/8"	5-40 Female
14-1110	1"	1/4"	5-40 Female
14-1111	1-1/2"	1/4"	1/4"-20 Female
14-1112	2"	1/4"	1/4"-20 Female
14-1113	3"	1/4"	1/4"-20 Female
14-1114	4"	1/4"	1/4"-20 Female

Sanding Pad Nut

For use with Dotco sanders with 5/8"-11 threaded spindles.



Part Number	Tool Series
14-2118	5/8"-11 threaded spindle

Spanner Wrench

For use with 14-2118 Sanding Nut Pad.



Part Number	Tool Series
14-2319	5/8"-11 threaded spindle

Sanding Disc Cutter

An adjustment scale allows a 9" maximum diameter sanding disc to be cut down to 3" or 4" diameter. The double bevel cutting edge assures a round cut without a loose edge or raveling.



Part Number	Description
14-2535	Disc Cutter

Replacement Blades

14-2590	Upper
14-2591	Lower

Mini Chucks

For use with Dotco 12-12 series.

To adapt right angle threaded spindle sanders for drilling, disc sanding with PSA holders, and light grinding.



Shank Size	Part Number	
	Assembly	Collet
1/8"	14-1102*	14-0158**
1/4"	14-1104*	14-0168***
6 mm	14-1094	14-0170***

* NOTE: For 1/4"-28 internal thread

** NOTE: For 5/16"-24 internal thread – 1/8" collet

*** NOTE: For 3/8"-24 internal thread – 1/4" collet

Spindle Adapters

For use with PSA Disc holders.



Part Number	Adapter Description		
	Thread (for Tool Spindle)	Thread (for PSA Disc Holder)	Max. Disc Dia.
14-1142	1/4"-28 Male	5 -40 Male	1"
14-1144	1/4"-28 Male	1/4"-20 Male	4"
14-2903	5/8"-11 Male	5/16"-24 Male	4"
14-1212	5/8"-11 Male	1/4"-20 Male	4"
14-1211	5/8"-11 Female	3/8"-24 Male	4"