DYNABRADE®

OPERATION AND MAINTENANCE MANUAL

FOR PNEUMATIC (AIR-OPERATED) EXPLOSION PROOF /
DUST IGNITION PROOF INDUSTRIAL VACUUM CLEANERS

MODELS: SS-xx (yy) "DT

DETACHABLE TANK SERIES
FOR DRY RECOVERY ONLY

CE Ex II 2 G/D c IIC T6 (85°C)
LCIE 03 ATEX 6310

Designed for Use in Class I - Groups A, B, C and D, T6;
and Class II - Groups E, F, G Hazardous Locations
as defined in the National Electric Code (NFPA 70)

**READ ALL INSTRUCTIONS BEFORE OPERATING,
CLEANING OR SERVICING**

IMPORTANT - SAVE THESE INSTRUCTIONS

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January 8, 2015

1.0 INSPECTION

Carefully unpack and inspect your Explosion Proof/Dust Ignition Proof vacuum cleaner for shipping damage. Each vacuum cleaner is tested and thoroughly inspected before being shipped; therefore, any damage is the responsibility of the delivering carrier, who should be notified.

2.0 APPLICATIONS

WARNING: **A full Process Hazard Analysis has to be conducted by the user for the recovery of dusts in hazardous areas. The recommendations in this manual cannot, in any case, supplant the conclusions of a full Process Hazard Analysis.**

EUROPE

SS-xx (yy) series are pneumatic (air-operated) explosion proof / dust ignition proof industrial vacuum cleaners for use in potentially explosive atmospheres classified ATEX Zone1 and 2 for Gas and ATEX zone 21 and 22 for Dust.

SS-xx (yy) vacuum cleaners are certified in conformance with Directive 94/9/EC for Group II and Category 2 and bear the following marking

CE Ex II 2 G/D c IIC T6 (85^{o}C)

For this equipment a Voluntary Type Examination certificate No. LCIE 03 ATEX 6310, according to Directive 94/9/EC, has been obtained. The examination and tests results are recorded in confidential report No. 60010688-504549.

NORTH AMERICA

SS-xx (yy) pneumatic (air-operated) explosion proof / dust ignition proof industrial vacuum cleaners are also designed for use in Class I - Groups A, B, C & D, T6 and Class II - Groups E, F & G hazardous locations as defined in NFPA 70 (U.S National Electrical Code and Canadian Electrical Code)

WARNING: **This vacuum cleaner is designed for the recovery of dry materials only. Do not recover liquids.**

2.1. APPLICATIONS IN POTENTIALLY EXPLOSIVE ATMOSPHERES IN PRESENCE OF FLAMMABLE GASES, VAPORS OR LIQUIDS

EUROPE

SS-xx (yy) vacuum cleaners can be used in **Zone 1** classified areas in which an explosive atmosphere consisting of a mixture with air or flammable substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally.

SS-xx (yy) vacuum cleaners can be used in **Zone 2** classified areas in which an explosive atmosphere consisting of a mixture with air or flammable substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

SS-xx (yy) vacuum cleaners are certified for Gas Group II C which representative gases are Hydrogen and Acetylene and their maximum surface temperature is T6 – 85^{o}C.

NORTH AMERICA

SS-xx (yy) pneumatic (air-operated) explosion proof / dust ignition proof industrial vacuum cleaners are designed for use in Class I - Groups A, B, C & D, T6 hazardous locations as defined in NFPA 70 (U.S National Electric Code and Canadian Electrical Code)

WARNING: **The maximum surface temperature of SS-xx (yy) vacuum cleaners must always be lower than the ignition temperature of the gas present in the hazardous area.**

2.2. APPLICATIONS IN POTENTIALLY EXPLOSIVE ATMOSPHERES IN PRESENCE OF SOLVENTS AND FLAMMABLE LIQUIDS

The complete SS-xx (yy) DT vacuum cleaners series can be used in areas where solvents are present.

WARNING: **SS-xx (yy) DT vacuum cleaners series cannot be used to recover flammable liquids and solvents:**

2.3. APPLICATIONS IN POTENTIALLY EXPLOSIVE ATMOSPHERES IN PRESENCE OF COMBUSTIBLE DUST

EUROPE

SS-xx (yy) vacuum cleaners can be used in **Zone 21** classified areas in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur in normal operation occasionally.

SS-xx (yy) vacuum cleaners can be used in **Zone 22** classified areas in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation but – if it does occur – will persist for a short period only.

NORTH AMERICA

SS-xx (yy) pneumatic (air-operated) explosion proof / dust ignition proof industrial vacuum cleaners are also designed for use in Class II - Groups E, F & G hazardous locations as defined in NFPA 70 (U.S National Electric Code and Canadian Electrical Code)

SS-xx (yy) vacuum cleaners can be used to recover:

- carbon black, charcoal, coal or coke dusts or these dusts sensitized by other materials so that they present an explosion hazard
- Other combustible dusts including flour, grain, wood, plastic and chemicals

And, based on the application, (See note below):

- Explosive dusts (ex.: gun powder), combustible metal dusts, including aluminum, magnesium, and their commercial alloys, or other combustible dusts whose particle size, abrasiveness, and conductivity present an equivalent hazard

IMPORTANT NOTE CONCERNING THE RECOVERY OF EXPLOSIVE DUSTS AND OF METAL DUSTS:

The applicable standards do not specifically regulate the recovery of combustible dusts and flammable liquids in hazardous areas.

For the recovery of explosive dusts and of metal dusts, in particular, a risk assessment shall be conducted by the user. The following recommendations cannot, in any case, supplant the conclusions of a risk assessment.

For the recovery of explosive dusts and of metal dusts:

- In the case explosive dusts or metal dusts are mixed with other kind of dusts and the quantity of explosive dusts or metal dusts to recover is not significant (ex.: sanding of painted surfaces) the recovered dusts do not need to be rendered inert in a liquid bath.
- For the specific recovery of a significant quantity of explosive dusts or metal dusts or when these dusts are not mixed with other kind of dusts we recommend the use of an optional interceptor (model SS-IT EX) for the dusts to be rendered inert in a liquid bath.

WARNING CONCERNING THE INTERCEPTOR:

It is the user's responsibility to determine the appropriate liquid (water, oil, etc) to use to neutralize the metal dust in the interceptor.

WARNING: **DO NOT RECOVER ANY HOT EMBERS OR IGNITED DUSTS.**

3.0 COMPRESSED AIR REQUIREMENTS

IMPORTANT: **The compressed air has to be clean, dry and oil free to prevent blockage of the pneumatic system.**

	Single Venturi	**Twin Venturi**
Minimum diameter of air supply hose and fittings	0.5" (12.7mm)	1" (25.4mm)
Input air pressure for ideal performance	80 psi (5.5. bars)	100 psi (6.9 bars)
Input air volume for ideal performance	45 cfm (76.5 cu. meters / hour)	100 cfm (170 cu. meters / hour)
Minimum compressor size	15 hp	25 hp

IMPORTANT: **Do not downsize the compressed air fittings or air supply line. Downsizing the fittings will result in a reduction of the vacuum cleaner's performance.**

IMPORTANT: **Brass (or stainless steel) fittings are required to ensure spark free operation and to ensure ground continuity between vacuum cleaner and the compressed air supply.**

4.0 PRE-USAGE INSTRUCTIONS AND IMPORTANT SAFETY PRECAUTIONS

WARNING: **The pneumatic explosion proof vacuum cleaner must be grounded during use. (See Section "GROUNDING INSTRUCTIONS)**

WARNING: **DO NOT OPERATE UNIT WITHOUT A PROPER GROUND SOURCE. This unit is designed to operate on a grounded air supply outlet. It is the responsibility of the user to ensure that the air supply outlet is grounded. A secondary grounding reel is available as an option for this Pneumatic Explosion Proof vacuum cleaner. This grounding reel may be used where a grounded air supply outlet is not available or is not reliable.**

WARNING: **Air-operated vacuum cleaners can generate static electricity during use. To ensure that there is no static build up during operation, the vacuum cleaner unit and detachable tools and accessories are completely grounded and use special static-free materials. Any static charge developed is dissipated to ground through the static dissipating grounded air supply hose included with the vacuum cleaner unit.**

WARNING: **Improper use of this vacuum cleaner will result in the voiding of the warranty.**

WARNING: **Operation and service of this vacuum cleaner must only be carried out by trained personnel.**

WARNING: **Use only original replacement parts from the manufacturer or from one of its authorized distributors. This equipment is certified for explosion proof operation, only if used with supplied or recommended hose and tools. Any alteration to this equipment by a third party nullifies its certification.**

a. Inspect the vacuum cleaner's static dissipating air supply hose before every use. Return to manufacturer for servicing if damaged. Use only static dissipating air supply hose supplied with the unit or purchased from the manufacturer.

b. Do not pull vacuum cleaner by the static dissipating air supply hose.

c. Turn off the vacuum cleaner and disconnect the static dissipating air supply hose before servicing or storing the pneumatic explosion proof vacuum cleaner. Clean and service this vacuum cleaner **only in a NON-HAZARDOUS AREA.**

d. Always shut off main air supply and open ball valve on the vacuum to relieve the line pressure before disconnecting the static dissipating air supply hose.

e. The tank should be clean and dry before using the vacuum.

f. Do not pick-up anything that is burning or smoking, such as hot ashes, cigarettes or matches.

WARNING: **DO NOT RECOVER ANY HOT EMBERS OR IGNITED DUSTS.**

g. Do not use without appropriate filters in place.

h. Brass (or stainless steel) fittings are required to ensure spark free operation and to ensure ground continuity between vacuum cleaner and the compressed air supply

5.0 PRECAUTIONS FOR THE RECOVERY OF TOXIC / NUISANCE DUST

DANGER: **If the explosion proof vacuum cleaner is used to recover toxic or nuisance dust, the following safety precautions must be taken:**

a. The vacuum cleaner must be equipped with a HEPA or ULPA filter.

b. Service and operation should only be carried out by trained personnel.

c. Appropriate clothing and personal protective equipment should be worn when operating or servicing the vacuum cleaner.

d. Dispose of collected materials responsibly. Follow applicable government regulations for the disposal of hazardous materials.

6.0 GROUNDING INSTRUCTIONS

This vacuum cleaner must be properly grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to prevent the build-up static electrical charge and to ensure that static electricity is discharged to ground. The build-up of static electricity could create a sparking hazard and an ignition hazard.

This vacuum cleaner is equipped with a static dissipating air supply hose with brass fittings. It is the responsibility of the user to ensure that the compressed air supply outlet is grounded. If the grounding of the air supply outlet is questionable, or if a portable compressed is being used to power the pneumatic explosion proof vacuum, a secondary grounding reel is available as an option for this pneumatic explosion proof vacuum cleaner. The grounding reel may be used to connect the pneumatic explosion proof vacuum cleaner to a secondary grounding source, such as a grounding pole, in the event that grounded air supply outlet is not available or if the pneumatic explosion proof vacuum is being powered by portable compressor.

WARNING: **This vacuum cleaner for use in potentially explosive atmospheres is equipped with conductive wheels which allow for the vacuum cleaner to be grounded with the floor. Do not substitute the conductive front wheels and use only replacement conductive wheels supplied by the manufacturer.**

WARNING: **To effectively dissipate static electricity and to ensure spark-free operation, this vacuum cleaner must be grounded during use.**

DANGER: **Do not operate vacuum cleaner if the air supply outlet is not properly grounded or if the grounding is questionable.**

7.0 TESTING FOR GROUND CONTINUITY

WARNING: **Test the electrical continuity of the vacuum cleaner before each use. This will ensure that any static electricity that is produced while vacuuming will be discharged to ground.**

WARNING: **Use only original replacement parts from the manufacturer or from one of its authorized distributors.**

An ohm-meter is required to perform the following electrical continuity test. A reading of 10 ohms or less is satisfactory to ensure proper grounding and static dissipation.

a. Disconnect the static dissipating air supply hose from the compressed air supply.

b. Make sure that all the latches on the vacuum cleaner are fastened and that the detachable recovery tank is properly installed on the vacuum cleaner.

c. Disconnect the suction hose from the vacuum cleaner.

d. Connect the static dissipating air supply hose, 25' (7.5 m) long or 50' (15 m) long, to the compressed air inlet on the vacuum cleaner.

e. Using the ohm-meter test for the electrical continuity of the vacuum cleaner from the end of the static dissipating air supply hose to the suction intake of the vacuum cleaner. A reading of 10 ohms or less is satisfactory to ensure proper grounding and static dissipation.

8.0 OPERATING INSTRUCTIONS

WARNING: **Always wear eye protection when sanding or grinding even if using vacuum assisted tools.**

WARNING: **It is the user's responsibility to determine the type of protective clothing and respiratory equipment required.**

IMPORTANT: **Carefully read and follow the instructions provided with the vacuum assisted sander or grinder to ensure proper operation.**

WARNING: **DO NOT RECOVER ANY HOT EMBERS OR IGNITED DUSTS.**

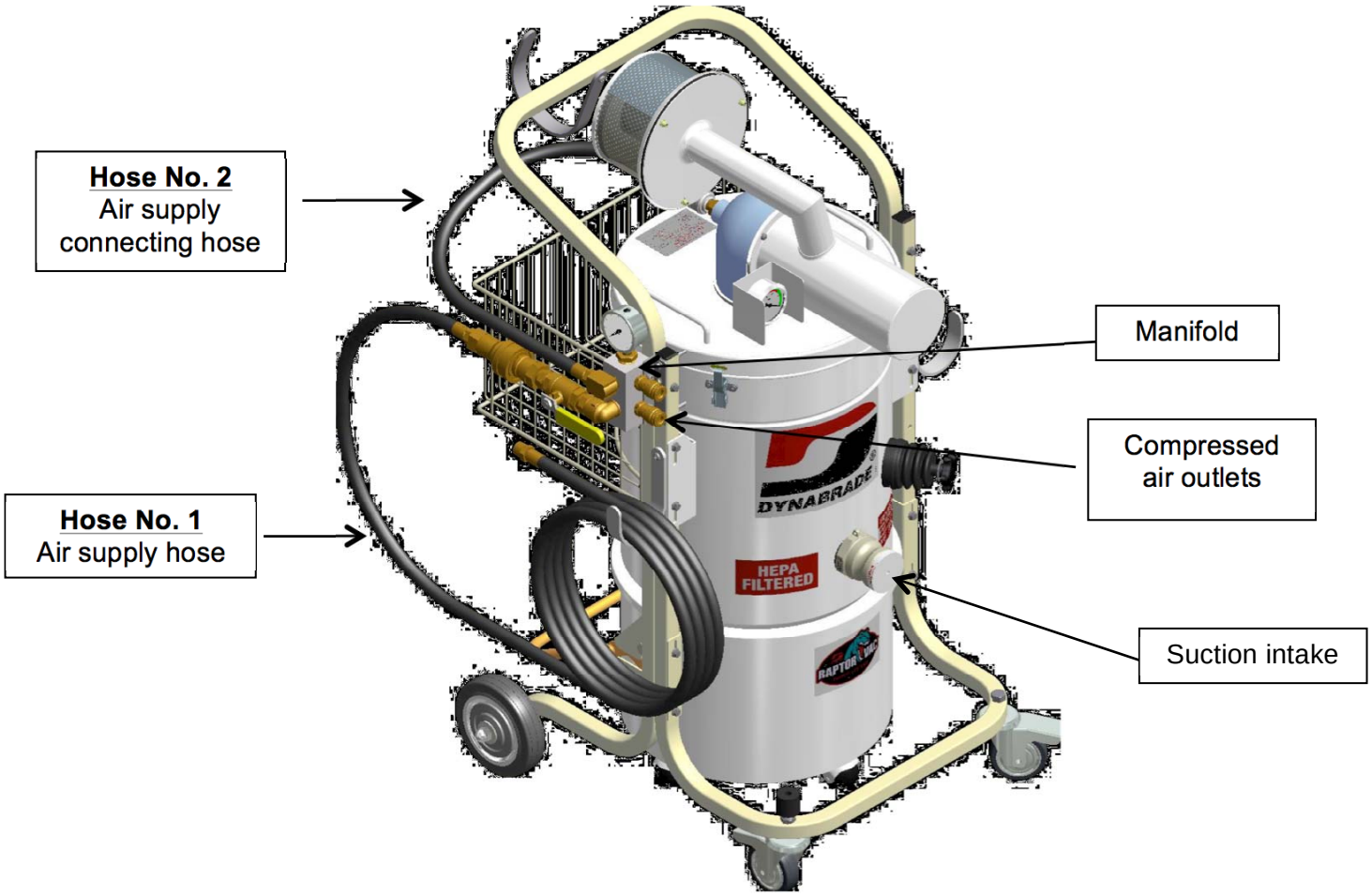


Figure 1

a. Remove the detachable recovery tank from the vacuum cleaner

b. Place the poly liner at the bottom of the detachable recovery tank and pull the top of the poly liner over the lip of the recovery tank. Please note that a poly liner retainer plate with clip is available to hold down the poly liner.

c. Place back the detachable recovery tank on the vacuum cleaner

d. Disengage the latches and remove the powerhead from the middle ring.

e. If using an optional pre-filter place it in the middle ring by overlapping the filter's elastic over the lip of the middle ring. Make certain the elastic covers the entire circumference of the middle ring.

f. Install the static dissipating main filter in the middle ring. Make certain that the filter's gasket covers the entire circumference of the middle ring.

g. Place the powerhead on the middle ring and fasten the latches.

h. Make sure the air supply hose (see hose No.1 on Fig. 1) is connected to the manifold (see Fig. 1) placed on the side of the vacuum cleaner

i. Make sure the air supply connecting hose (see hose No.2 on Fig. 1) makes the connection between the manifold (see Fig. 1) and the suction intake on the powerhead.

j. Connect one or two suction / air supply hose(s) to the suction intake(s) (see Fig. 1) on the vacuum cleaner. If using only one suction hose with the vacuum cleaner, close the unused suction intake with the storage plug to prevent loss of suction.

k. Connect the static dissipating suction / air supply hoses to the compressed air outlet on the manifold (see Fig. 1).

l. Connect the vacuum assisted sander or grinder to the static dissipating suction / air supply hose. Follow the instructions provided with the vacuum assisted sander or grinder to ensure proper operation.

m. To turn on the vacuum cleaner, open the ball valve on the manifold.

9.0 MAINTENANCE AND CLEAN-UP PROCEDURE

a. Shut off main air supply and open the ball valve on the manifold to relieve the pressure in the static dissipating air supply hose.

b. Detach the recovery tank and empty collected materials into suitable container.

c. Empty and clean the inside of the recovery tank after every use.

WARNING: **Flush the suction hose with water to remove build up dirt**

d. Clean or rinse the cloth filters regularly. A clogged filter restricts the air flow and reduces the vacuum's performance. If the static dissipating cloth filters are rinsed, make sure that they completely dry before reinstalling them in the vacuum cleaner.

e. Keep the air supply hoses clean and dry. This will help prevent blockage of the venturi jet which could reduce the vacuum cleaner's performance.

10.0 TRANSPORT AND HANDLING

SS-xx (yy) series vacuum cleaners are packaged on wood pallets and can be transported and handled with a power lift truck.

SS-xx (yy) series vacuum cleaners are portable vacuum cleaners on wheel carts that can be easily transported when necessary.

11.0 STORAGE

a. It is recommended that the inside of the recovery tank be clean and dry when storing the pneumatic explosion proof vacuum cleaner.

b. The suction intake must be closed using the storage cap provided with the vacuum cleaner.

12.0 HOW TO PROPERLY CHANGE A HEPA/ULPA FILTER (RE SERIES)

NOTE: **A second vacuum cleaner, sprays or other power sources are not required for this type of operation in our industry. Proper clothing is, however, required by OSHA for the health and safety of the operator.**

In the Controlled Environment Industry for the recovery of designated substances, changing a filter is considered a low to moderate risk. However, a protective mask and gloves should be worn. The following procedure is valid for both electrically and pneumatically (air) operated vacuum cleaners.

Remove the 3 screws on the HEPA/ULPA housing using a Philips Screw Driver.

Gently remove the housing and place it on the floor.

Place a poly liner around the now exposed HEPA/ULPA filter. Carefully remove the HEPA/ULPA filter from the back plate. Gently place the HEPA/ULPA filter into the poly liner. Gently twist the poly liner and then seal it with a tie wrap.

The HEPA/ULPA filter is now sealed inside of the poly liner and can be disposed of according to local governmental laws. *(Conductive poly liners are available.)*

13.0 HEPA FILTER REPLACEMENT

The best indication of a saturated HEPA filter is a noticeable drop in the performance of the vacuum cleaner. For users who wish to implement a conservative protocol for replacing the HEPA filter, it is recommended that the HEPA filter be replaced once a year.

WARNING: **Proper clothing and respiratory equipment are required when replacing the HEPA filter.**

IMPORTANT: **Use only original brand replacement HEPA filters.**

a. Turn off the vacuum cleaner and disconnect the static dissipating air supply hose.

b. Remove the three bolts that hold the HEPA filter housing and remove the HEPA filter housing.

c. Remove the used HEPA filter and install a new HEPA filter.

d. Re-install the HEPA filter housing by securely fastening the three bolts that hold the HEPA filter housing in place.

e. Dispose of the contaminated filter according to applicable government or state regulations.

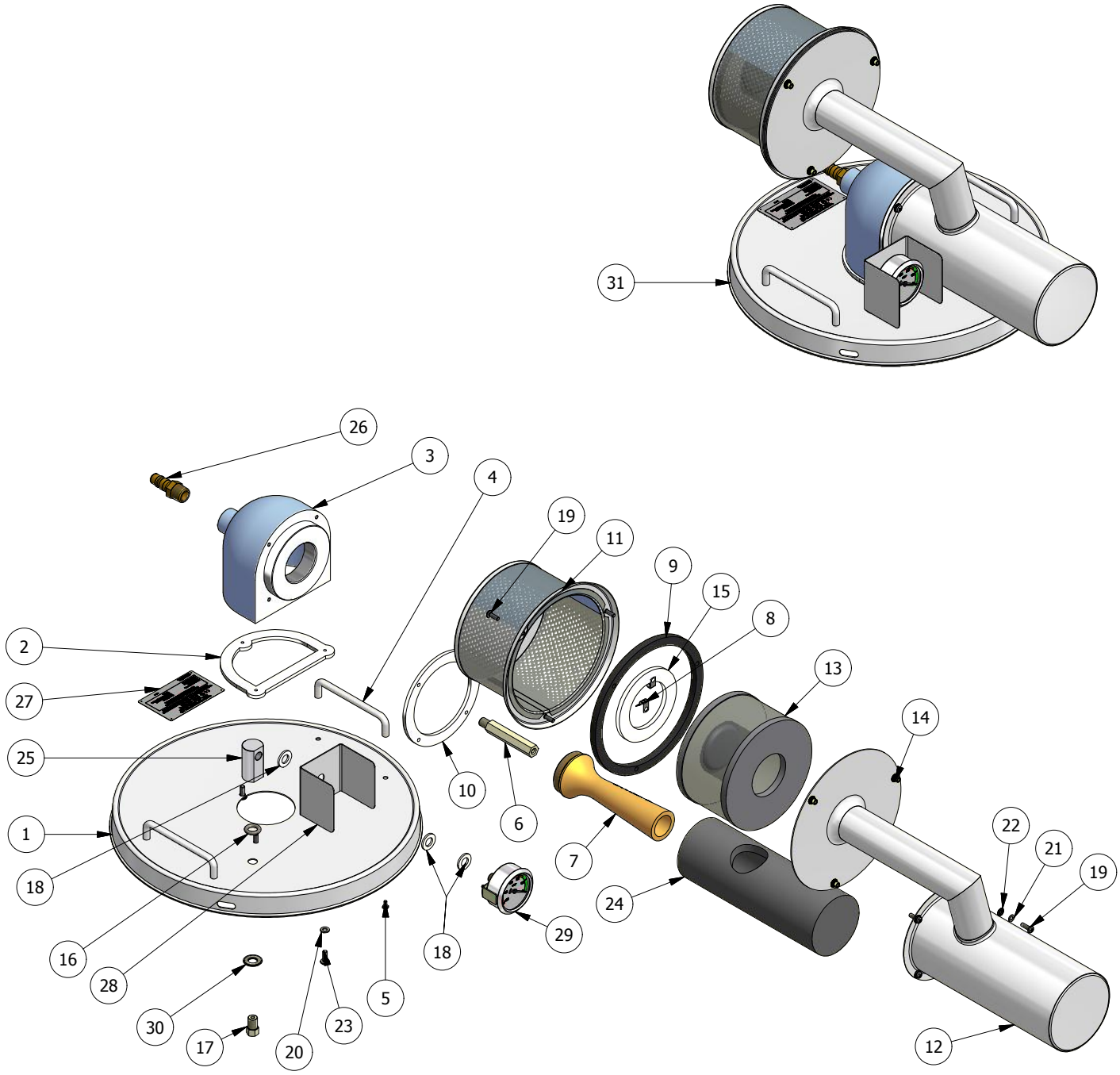
14.0 VACUUM CLEANER DISPOSAL

The vacuum cleaner is made of recyclable material. Please refer to the parts list and contact your local authorities for more information.

II 2 G/D c IIC T6 (85°C)
LCIE 03 ATEX 6310

DYNABRADE SS-20 DT MFS

DYNABRADE SS-20 DT MFS
POWER HEAD

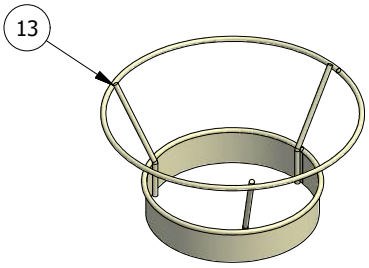


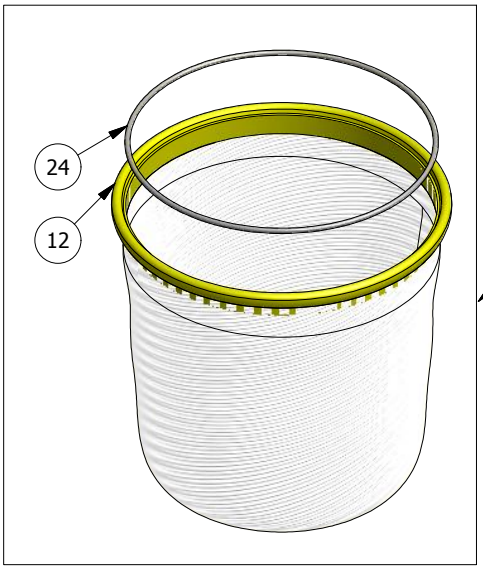
DYNABRADE SS-20 DT MFS
POWER HEAD

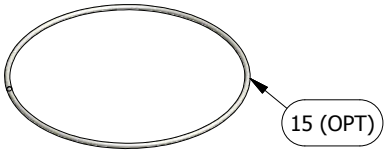
PARTS LIST

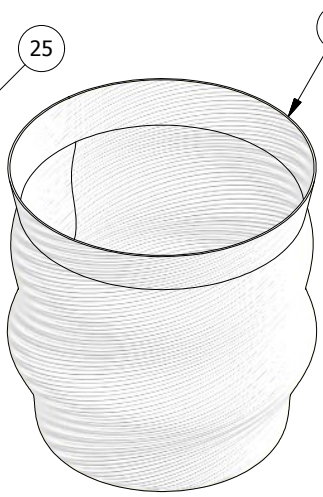
ITEM	PART NUMBER	DESCRIPTION	QTY
1	62605	LID	1
2	62357	GASKET	1
3	62592	DOME VENTURI	1
4	62354	HANDLE	2
5	62506	SCREW	4
6	62594	AIR JET	1
7	62595	BLOWER CHAMBER SHORT	1
8	62437	CLIP	2
9	62386	GASKET	1
10	62396	GASKET	1
11	62616	HEPA HOUSING EXTERNAL	1
12	62471	SILENCER HOUSING	1
13	62585	HEPA FILTER	1
14	62442	RIVET NUT	3
15	62428	GASKET	1
16	62530	O-RING	1
17	62551	SUPPORT FITTING	1
18	62446	FLAT WASHER	3
19	62352	BOLT	7
20	62356	FLAT WASHER	3
21	62361	FLAT WASHER	4
22	62355	SEAL WASHER	4
23	62358	BOLT	3
24	62614	FOAM SILENCER	1
25	62550	GAUGE SUPPORT	1
26	62351	MALE QUICK DISCONNECT	1
27	62600	NAME PLATE SS	1
28	62453	PROTECTOR PLATE	1
29	62423	VACUUM GAGE	1
30	62463	SEALING WASHER	1
31	62630	POWER HEAD	1

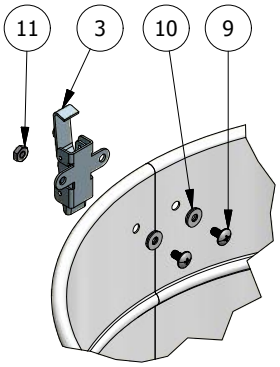
DYNABRADE SS-20 DT MFS
MIDDLE RING



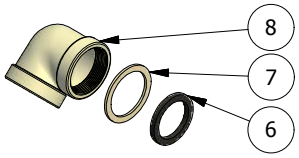


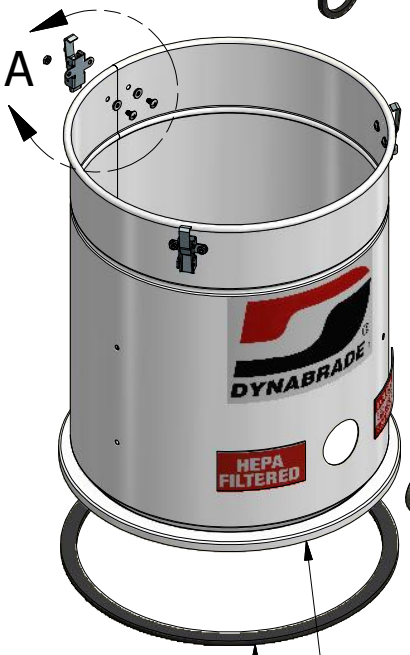


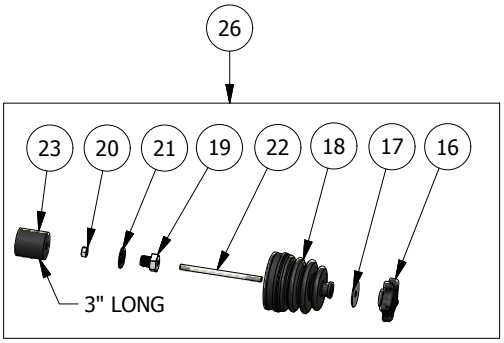


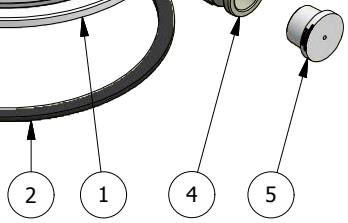


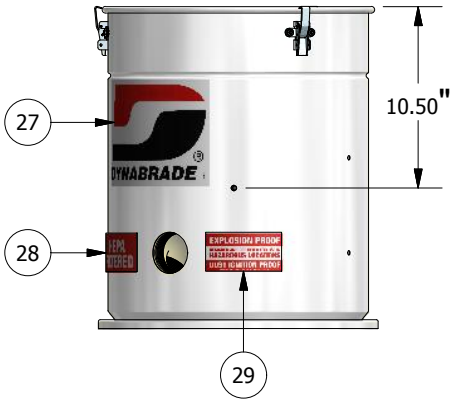
DETAIL A









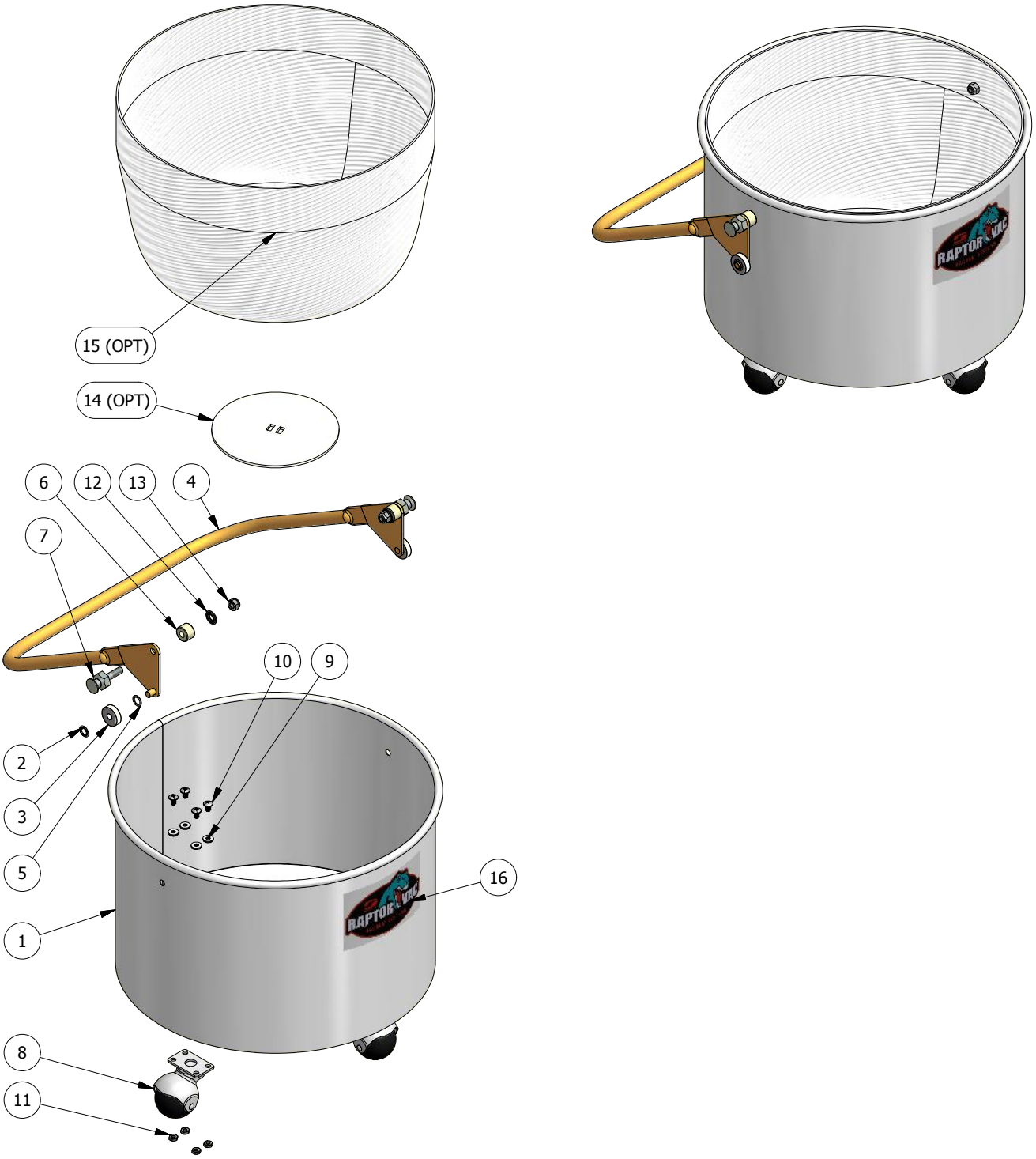


DYNABRADE SS-20 DT MFS
MIDDLE RING

PARTS LIST

ITEM	PART NUMBER	DESCRIPTION	QTY
1	62470	FILTER CHAMBER	1
2	62746	GASKET	1
3	62397	LATCH	3
4	62615	CAMLOCK	1
5	62649	PLUG	1
6	62369	GASKET	1
7	62398	SHIM WASHER	1
8	62603	ELBOW	1
9	62457	SCREW	6
10	62399	SEAL WASHER	6
11	62441	HEX NUT	6
12	62669	MAIN FILTER	1
13	62664	WIRE CAGE	1
14	62482	PREFILTER	OPT
15	62392	RING	OPT
16	62459	STAR SHAPE KNOB	1
17	62628	WASHER	1
18	62485	BOOT ONLY	1
19	62648	NUT	1
20	62368	HEX NUT	1
21	62463	SEALING WASHER	1
22	62429	THREADED SHAKER ROD	1
23	62748	RUBBER TUBE	1
24	62374	RING FOR FILTER	1
25	62668	MAIN FILTER ASSEMBLY	1
26	62427	SHAKER PLUNGER ASSEMBLY	1
27	12412	LARGE DYNABRADE LABEL	1
28	96618	HEPA FILTERED LABEL	1
29	69619	EXPLOSION PROOF LABEL	1

DYNABRADE SS-20 DT MFS
TANK

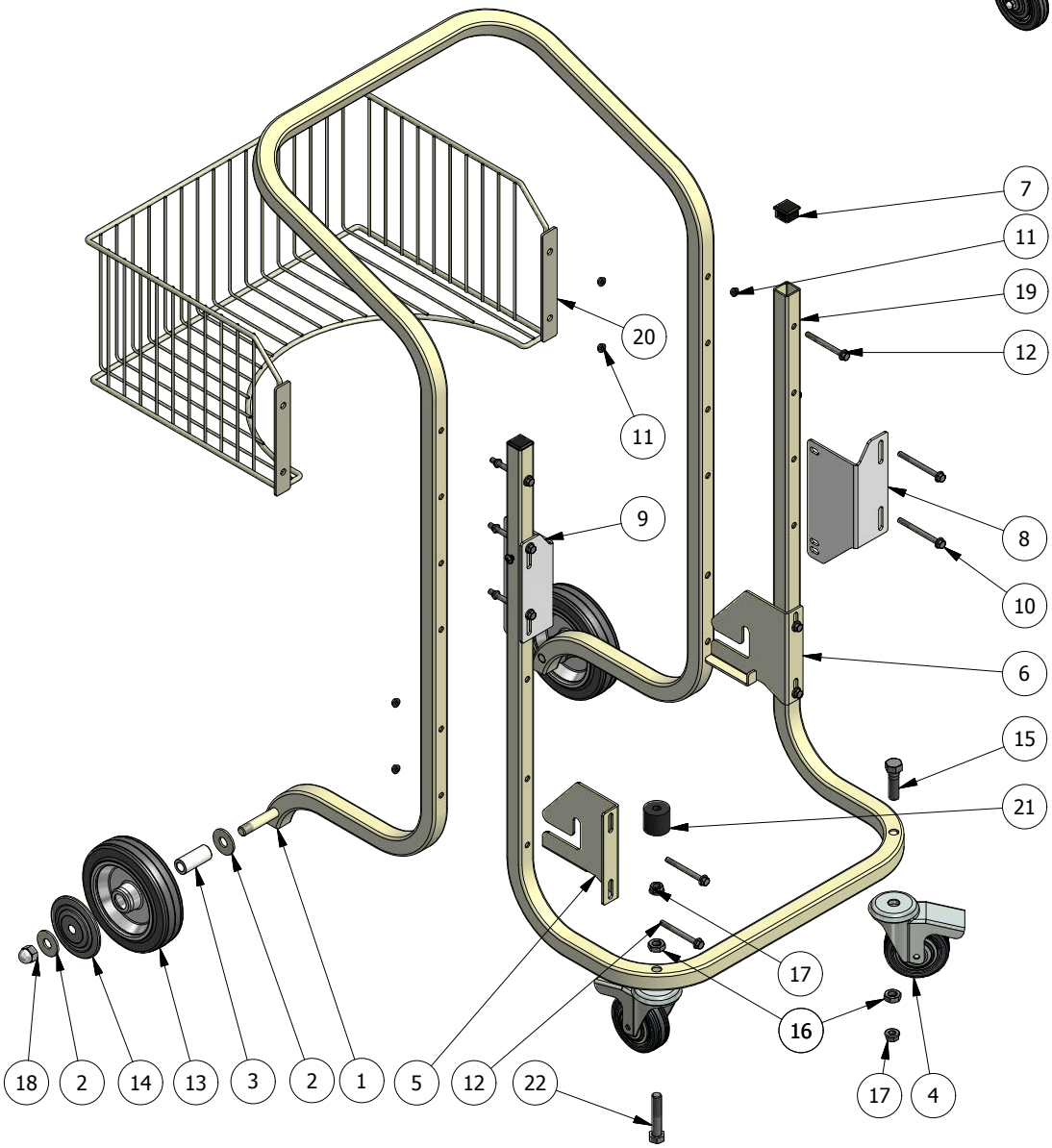


DYNABRADE SS-20 DT MFS
TANK

TABLE

ITEM	PART NUMBER	DESCRIPTION	QTY
1	62528	TANK	1
1B	62529	TANK	OPT
2	62514	RETAINING RING	2
3	62700	SPACER	2
4	62694	LIFTING HANDLE	1
5	62702	FLAT WASHER	2
6	62515	SPACER	2
7	62663	PIVOT	2
8	62389	BALL CASTER	4
9	62399	SEAL WASHER	16
10	62457	SCREW	16
11	62441	HEX NUT	16
12	62454	SEAL WASHER	2
13	62480	LOCKNUT	2
14	62440	POLY LINER RETAINER PLATE	OPT
15	62636	CONDUCTIVE POLY LINER	OPT
15B	62635	CONDUCTIVE POLY LINER	OPT
16	96616	RAPTOR VAC SYSTEMS LABEL	1

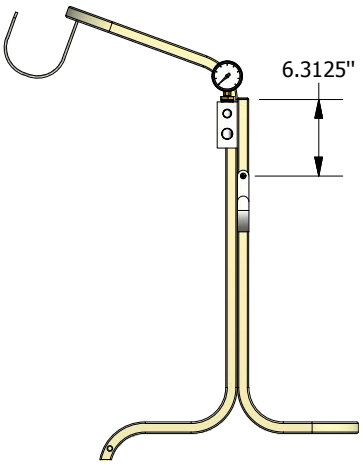
DYNABRADE SS-20 DT MFS
CART



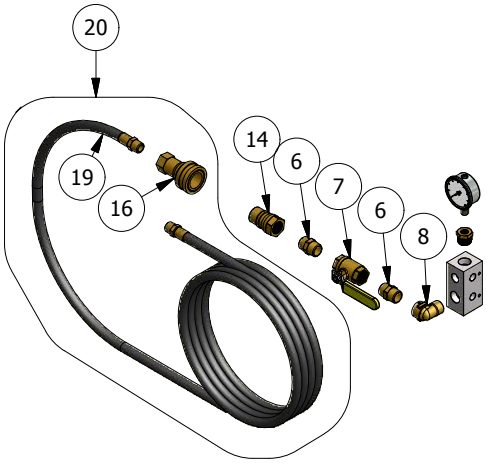
DYNABRADE SS-20 DT MFS
CART

PARTS LIST			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	62691	FRAME	1
2	62660	FLAT WASHER	4
3	62693	BUSHING	2
4	62476	WHEEL	2
5	62698	LEFT CAM BRACKET	1
6	62697	RIGHT CAM BRACKET	1
7	62509	PLUG	2
8	62695	RIGHT BRACKET	1
9	62696	LEFT BRACKET	1
10	62511	SCREW	4
11	62458	FLANGE NUT	13
12	62510	SCREW	6
13	62474	WHEEL	2
14	62666	THREAD GUARD	2
15	62512	HEX BOLT	1
16	62406	LOCKWASHER	2
17	62504	LOCKNUT	2
18	62513	ACORN CAP NUT	2
19	62692	FRAME	1
20	62665	TOOL BASKET	1
21	62540	RUBBER BUMPER	1
22	62518	HEX BOLT	1

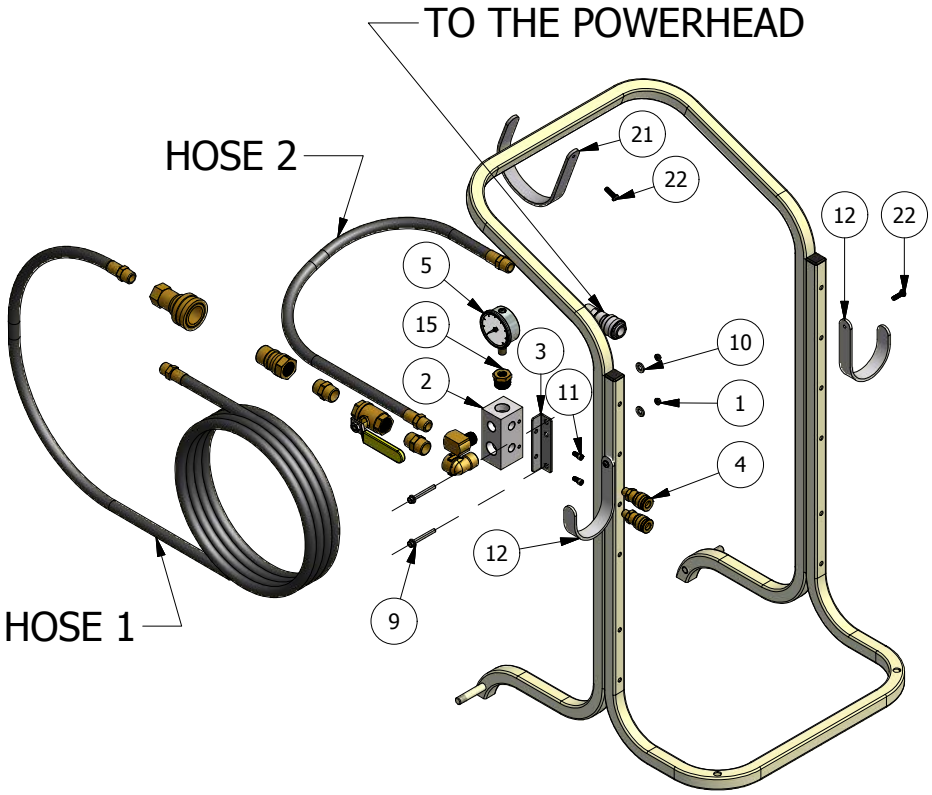
DYNABRADE SS-20 DT MFS
HOSE CONNECTION

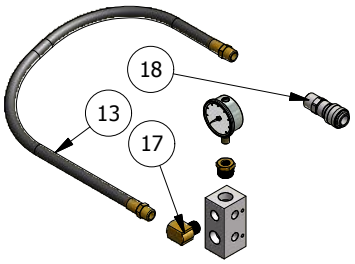


DETAIL



DETAIL HOSE 1





DETAIL HOSE 2

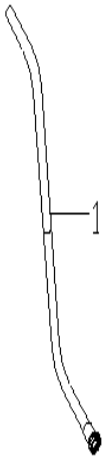
II 2 G/D c IIC T6 (85°C)
LCIE 03 ATEX 6310

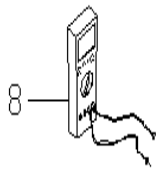
DYNABRADE SS-20 DT MFS
HOSE CONNECTION

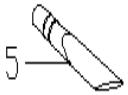
PARTS LIST

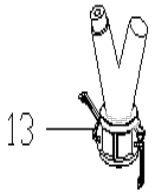
ITEM	PART NUMBER	DESCRIPTION	QTY
1	62458	FLANGE NUT	2
2	62557	MANIFOLD	1
3	62723	BRACKET	1
4	62548	QUICK DISCONNECT, FEMALE	2
5	62362	PRESSURE GAUGE	1
6	62460	HEX NIPPLE	2
7	62502	BALL VALVE	1
8	62538	ELBOW	1
9	62699	SCREW	2
10	62481	FLAT WASHER	2
11	62419	SCREW	2
12	62705	CABLE HOOK	2
13	62659	AIR SUPPLY HOSE	1
14	62450	MALE QUICK DISCONNECT	1
15	62473	HEX BUSHING	1
16	62451	FEMALE QUICK DISCONNECT	1
17	62596	90 DEGREE ELBOW	1
18	62589	QUICK DISCONNECT, FEMALE	1
19	62449	AIR SUPPLY HOSE	1
20	62661	AIR SUPPLY HOSE ASSEMBLY	1
21	62754	HOSE HOOK	1
22	62755	HEX BOLT	3

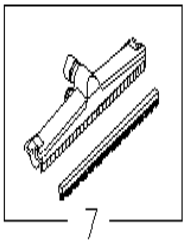
DYNABRDE SS-20 DT MFS
ACCESSORIES

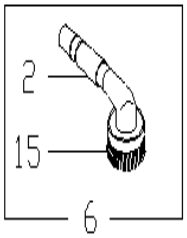


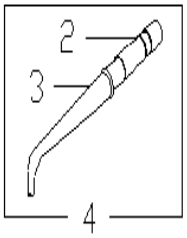


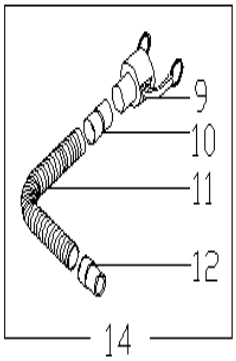












DYNABRDE SS-20 DT MFS
ACCESSORIES

PARTS LIST

ITEM	PART NUMBER	DESCRIPTION	QTY
1	62732	WAND ASSEMBLY	1
2	62728	CONNECTOR	1
3	62737	CONICAL NOZZLE	1
4	62736	CONICAL NOZZLE ASMBLY	1
5	62733	CREVICE TOOL	1
6	62730	BRUSH	1
7	62573	UNIVERSAL TOOL	1
8	62591	MULTIMETER	1
9	62581	CAMLOCK	1
10	62577	HOSE CUFF EXPANDER	1
11	62579	KANAFLEX SUCTION HOSE	10'
12	62578	HOSE CUFF	1
13	62583	WYE CONNECTOR	1
14	62734	SUCTION HOSE ASSEMBLY	1
15	62729	BRUSH	1

DYNABRADE AIR TOOL SPECIFICATIONS

JULY 2016

Dimensions	Inch x 25.4 = Millimeter
Air Pressure	6.2 Bar x 14.5 = 90 Pounds per square inch (PSI)
AOR	Data available on request

Air Flow Rate	Standard cubic feet per minute (SCFM) x 28.32 = Liter per minute (LPM)
Watt	Watt x .00134 = Horsepower (hp); hp x 745.7 = Watt
N/A or (-)	Does not apply, or data not available

DYNABRADE®

Published vibration levels are in accordance with standards EN 12096, ISO 20643 and ISO 28927 series; published sound levels are in accordance with standard ISO 15744. Vibration and sound levels shown are the result of laboratory testing in conformity with these codes and standards, but are not sufficient for risk evaluation. Values measured in a specific workplace may differ from declared values. Actual exposure values and associated risk will be unique to each workplace and workstation. Potential risk to each individual depends on a variety of factors such as workstation design, surrounding environment, operator proficiency, material being worked and amount of exposure time. The employer is responsible for adhering to any applicable legal requirements regarding workplace health and safety and for evaluation of actual vibration and sound levels based on factors affecting the workplace environment. Dynabrade cannot be held responsible for the consequences of using the listed values for risk assessment, rather than actual values unique to each situation.

							3 Axis Vector Sum (Current) Declared Vibration Emission Value In Accordance with EN 12096			Dominant Axis (Previous) Declared Vibration Emission Value In Accordance With EN 12096			ISO 15744 Uncertainty 3 dB	
Model No.	Tool Description	Power (Watt)	Power (hp)	Flow rate at 90 PSI (SCFM)	Flow rate at 90 PSI (L/Min)	Free Speed at 90 PSI (RPM)	Vib. Tool EN12096 (m/sec^2)	Uncertainty EN12096 (m/sec^2)	Vibration Test Method	Vib. Tool EN 12096 (m/sec^2)	Uncertainty EN12096 (m/sec^2)	Vibration Test Method	Sound Pressure (dBA)	Sound Power (R 1m Hemi on cyl. pedestal) (dBA)
10127	3" Dynabuffer	119	0.16	20	566	10,000	<2.5	.88	ISO 28927-3	3.3	1.7	ISO-8662-8	71	82
10170	Dynabug® Sander with 3/32" Orbit (Non-Vac)	179	0.24	16	453	10,000	5.4	1.0	ISO 28927-3	<2.5	1.8	ISO-8662-8	77	88
10174	Dynabug® Sander with 3/32" Orbit (Central Vac-Ready)	179	0.24	16	453	10,000	5.2	1.0	ISO 28927-3	2.5	1.2	ISO-8662-8	81	92
10207	1-1/4" Mini-Orbital Sander,15,000 RPM	298	0.40	21	595	15,000	6.1	1.1	ISO 28927-3	<2.5	0.9	ISO-8662-8	79	90
10271	Dynabug ll 3/16 Orbit 8K RPM Non Vacuum	82	0.11	12	340	8,000	7.62	2.5	ISO 28927-3	N/A	N/A	N/A	75	86
10278	Dynabug ll non vac	82	0.11	12	340	8,000	13.1	1.8	ISO 28927-3	N/A	N/A	N/A	77	88
10279	Dynabug ll central vac	82	0.11	12	340	8,000	13.1	1.8	ISO 28927-3	N/A	N/A	N/A	80	91
10280	Dynabug ll Orbital Finishing Sander	82	0.11	12	340	10,000	4.6	1.0	ISO 28927-3	2.5	0.9	ISO-8662-8	77	88
10281	Dynabug ll 3/32 Orbit 10K RPM Non Vacuum	82	0.11	12	340	10,000	5.14	1.0	ISO 28927-3	N/A	N/A	N/A	79	90
10282	Dynabug ll Orbital Finishing Sander Central Vac	82	0.11	12	340	10,000	3.8	0.9	ISO 28927-3	N/A	N/A	ISO-8662-8	77	88
10283	Dynabug ll Orbital Finishing Sander	82	0.11	12	340	10,000	5.4	1.1	ISO 28927-3	N/A	N/A	ISO-8662-8	77	88
10285	Dynabug ll Orbital Finishing Sander Central Vac	82	0.11	12	340	10,000	3.3	0.8	ISO 28927-3	<2.5	0.8	ISO-8662-8	77	88
10288	Wet "Model T" 5" w/Hook Pad	(-)	(-)	17	481	20,000	3.2	0.8	ISO 28927-3	2.9	1.5	ISO-8662-8	76	87
10289	Wet "Model T" 6" w/Hook Pad	(-)	(-)	17	481	20,000	3.2	0.8	ISO 28927-3	<2.5	1.1	ISO-8662-8	76	87
10290	Dynabug ll Delta Style 3/32 Orbit 10K RPM Central vacuum	82	0.11	12	340	10,000	3.14	1.5	ISO 28927-3	N/A	N/A	N/A	77	88
10292	Dynabug ll 3/32 Orbit 10K RPM Central vacuum	82	0.11	12	340	10,000	5.14	1.0	ISO 28927-3	N/A	N/A	N/A	79	90
10341	3-1/2" Wet Dynorbital® Supreme ROS	(-)	(-)	17	481	20,000	3.8	1.0	ISO 28927-3	<2.5	0.6	ISO-8662-8	73	84
10343	5" Wet Dynorbital® Supreme ROS	179	0.24	16	453	10,000	4.4	0.6	ISO 28927-3	<2.5	1.3	ISO-8662-8	74	85
10345	6" Wet Dynorbital® Supreme ROS	179	0.24	16	453	10,000	10.5	1.5	ISO 28927-3	2.5	1.3	ISO-8662-8	71	82
10353	5" Dia. 3/32" Orbit Wet Dynorbital® Supreme	179	0.24	16	453	10,000	3.5	0.8	ISO 28927-3	2.9	1.4	ISO-8662-8	74	85
10354	6" Dia. 3/32" Orbit Wet Dynorbital® Supreme	179	0.24	16	453	10,000	3.6	0.9	ISO 28927-3	2.9	1.4	ISO-8662-8	71	82
10360	1-1/4" Mini-Dynorbital® Sander 5,000 RPM Palm-Style	37	0.05	6	170	6,000	4.5	1.0	ISO 28927-3	4.4	2.2	ISO-8662-8	69	80
10390	3" Buffer 2,400 RPM Palm-Style	186	0.25	18	510	2,400	2.5	0.7	ISO 28927-3	<2.5	0.9	ISO-8662-8	76	87
10400	Dynaline Sander (Non-Vac)	186	0.25	18	510	2,400	4.6	1.0	ISO 28927-3	<2.5	0.7	ISO-8662-8	79	90
10404	Dynaline Sander (Cen Vac-Ready)	186	0.25	18	510	2,400	5.2	1.0	ISO 28927-3	2.6	1.3	ISO-8662-8	80	91
10470	"Model T" Sheet Sander w/57999 Pad	(-)	(-)	5	127	20,000	3.1	0.8	ISO 28927-3	<2.5	1.1	ISO-8662-8	70	81
10472	"Model T" Sheet Sander w/57998 Pad	(-)	(-)	5	127	20,000	3.1	0.8	ISO 28927-3	<2.5	1.1	ISO-8662-8	70	81
10475	"Model T" 5" Round w/56249 Pad	(-)	(-)	5	127	20,000	3.0	0.8	ISO 28927-3	<2.5	1.1	ISO-8662-8	70	81
10477	"Model T" 5" Round w/56248 Pad	(-)	(-)	5	127	20,000	3.2	0.8	ISO 28927-3	<2.5	1.1	ISO-8662-8	70	81
10479	"Model T" Sheet Sander w/56244 Pad	(-)	(-)	5	127	20,000	3.1	0.8	ISO 28927-3	<2.5	1.1	ISO-8662-8	70	81
10481	"Model T" 6" Round Sander w/ 56269 Pad	(-)	(-)	5	127	20,000	2.7	0.8	ISO 28927-3	<2.5	1.1	ISO-8662-8	70	81
10483	"Model T" 6" Round Sander w/ 56268 Pad	(-)	(-)	5	127	20,000	3.2	1.4	ISO 28927-3	<2.5	1.1	ISO-8662-8	70	81
10485	"Model T" Sander w/Vinyl Pad Central Vac	(-)	(-)	5	127	20,000	4.0	0.9	ISO 28927-3	<2.5	1.1	ISO-8662-8	73	84
10487	"Model T" Sander w/Hook Pad Central Vac	(-)	(-)	5	127	20,000	4.4	0.9	ISO 28927-3	<2.5	1.1	ISO-8662-8	73	84
10540	11" File Board Sander	224	0.30	18	510	2,400	6.5	2.3	ISO 20643	3.8	1.9	S1051	77	88
10710	5" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/16" Dia. Orbit (Non-Vac)	336	0.45	23	651	12,000	4.1	0.9	ISO 28927-3	<2.5	1.1	ISO-8662-8	82	93
10712	5" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/16" Dia. Orbit (Vac-Ready)	336	0.45	23	651	12,000	4.3	0.9	ISO 28927-3	<2.5	1.1	ISO-8662-8	84	95
10720	6" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/16" Dia. Orbit (Non-Vac)	336	0.45	23	651	12,000	5.5	1.8	ISO 28927-3	3.7	1.9	ISO-8662-8	81	92
10722	6" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/16" Dia. Orbit (Vac-Ready)	336	0.45	23	651	12,000	8.9	1.8	ISO 28927-3	3.7	1.9	ISO-8662-8	84	95
10724	6" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/16" Dia. Orbit (Central Vac)	336	0.45	23	651	12,000	6.1	1.3	ISO 28927-3	3.7	1.9	ISO-8662-8	84	95
10725	8" Two-Hand Dynorbital® R.O. Sander 10,000 RPM, 3/16" Dia. Orbit (Non-Vac)	336	0.45	23	651	10,000	15.5	2.9	ISO 28927-3	5.8	2.3	ISO-8662-8	82	93
10727	8" Two-Hand Dynorbital® R.O. Sander 10,000 RPM, 3/16" Dia. Orbit (Vac-Ready)	336	0.45	23	651	10,000	16.0	2.3	ISO 28927-3	5.8	2.3	ISO-8662-8	85	96
10729	8" Two-Hand Dynorbital® R.O. Sander 10,000 RPM, 3/16" Dia. Orbit (Central Vac)	336	0.45	23	651	10,000	9.6	1.5	ISO 28927-3	5.8	2.3	ISO-8662-8	85	96
10730	5" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/8" Dia. Orbit (Non-Vac)	336	0.45	23	651	12,000	8.1	1.3	ISO 28927-3	3.0	1.5	ISO-8662-8	82	93
10731	5" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/8" Dia. Orbit (Vac-Ready)	336	0.45	23	651	12,000	9.9	1.5	ISO 28927-3	3.0	1.5	ISO-8662-8	84	95
10733	6" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/8" Dia. Orbit (Non-Vac)	336	0.45	23	651	12,000	10.5	3.0	ISO 28927-3	3.6	1.8	ISO-8662-8	81	92
10734	6" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/8" Dia. Orbitl (Vac-Ready)	336	0.45	23	651	12,000	10.5	4.3	ISO 28927-3	3.6	1.8	ISO-8662-8	84	95
10735	6" Two-Hand Dynorbital® R.O. Sander 12,000 RPM, 3/8" Dia. Orbit (Central Vac)	336	0.45	23	651	12,000	10.5	3.7	ISO 28927-3	3.6	1.8	ISO-8662-8	84	95
10745	5" Dynabuffer w/Hanger Bracket (14 mm Orbit)	224	0.30	23	651	10,000	7.1	3.2	ISO 28927-3	<2.5	1.1	ISO-8662-8	81	92
10746	5" Dynabuffer w/Hanger Bracket	224	0.30	23	651	10,000	7.1	3.2	ISO 28927-3	<2.5	1.1	ISO-8662-8	81	92
10750	5" Non-Vac DynaLocke® Random Dual Action Sander	336	0.45	23	651	12,000	3.0	0.8	ISO 28927-3	<2.5	1.2	ISO-8662-8	82	93
10750	5" Non-Vac DynaLocke® Rotary Dual Action Sander	336	0.45	23	651	12,000	<2.5	0.7	ISO 28927-3	<2.5	1.0	ISO-8662-8	82	93
10752	5" Self-Generated Vac-Ready DynaLocke® Random Dual Action Sander	336	0.45	23	651	12,000	3.3	0.8	ISO 28927-3	<2.5	1.2	ISO-8662-8	82	93
10752	5" Self-Generated Vac-Ready DynaLocke® Rotary Dual Action Sander	336	0.45	23	651	12,000	<2.5	1.1	ISO 28927-3	<2.5	1.0	ISO-8662-8	82	93
10754	6" Non-Vac DynaLocke® Random Dual Action Sander	336	0.45	23	651	12,000	3.7	0.9	ISO 28927-3	3.7	1.8	ISO-8662-8	85	96
10754	6" Non-Vac DynaLocke® Rotary Dual Action Sander	336	0.45	23	651	12,000	<2.5	0.7	ISO 28927-3	2.7	1.3	ISO-8662-8	85	96
10756	6" Self-Generated Vac-Ready DynaLocke® Random Dual Action Sander	336	0.45	23	651	12,000	5.8	1.1	ISO 28927-3	3.7	1.9	ISO-8662-8	85	96
10756	6" Self-Generated Vac-Ready DynaLocke® Rotary Dual Action Sander	336	0.45	23	651	12,000	<2.5	0.7	ISO 28927-3	2.7	1.3	ISO-8662-8	85	96
10760	6" Two-Hand Gear-Driven Sander 900 RPM (Non-Vac)	336	0.45	23	651	900	19.0	5.4	ISO 28927-3	4.7	2.3	ISO-8662-8	85	96
10761	6" Two-Hand Gear-Driven Sander 900 RPM w/57772 Pad (Central Vac-Ready)	336	0.45	23	651	900	7.6	1.3	ISO 28927-3	4.6	2.3	ISO-8662-8	83	94
10763	8" Two-Hand Gear-Driven Sander 900 RPM (Non-Vac)	336	0.45	23	651	900	15.0	3.9	ISO 28927-3	5.8	2.3	ISO-8662-8	85	96
10764	8" Two-Hand Gear-Driven Sander 900 RPM (Central Vac-Ready)	336	0.45	23	651	900	12.0	2.8	ISO 28927-3	5.8	2.3	ISO-8662-8	76	87
10770	3" DynaLocke® 12,000 RPM (Non-Vac) (Rotary)	336	0.45	23	651	12,000	3.0	1.6	ISO 28927-3	<2.5	0.3	ISO-8662-8	81	92
10770	3" DynaLocke® 12,000 RPM (Non-Vac) (Random)	336	0.45	23	651	12,000	<2.5	0.6	ISO 28927-3	<2.5	0.6	ISO-8662-8	81	92
10771	3" DynaLocke® 12,000 RPM (Self-Gen Vac-Ready) (Rotary)	336	0.45	23	651	12,000	3.0	1.6	ISO 28927-3	<2.5	0.3	ISO-8662-8	89	100
10771	3" DynaLocke® 12,000 RPM (Self-Gen Vac-Ready) (Random)	336	0.45	23	651	12,000	<2.5	0.6	ISO 28927-3	<2.5	0.6	ISO-8662-8	86	97
10780	3-1/2" DynaLocke® 12,000 RPM (Non-Vac) (Rotary)	336	0.45	23	651	12,000	7.7	1.8	ISO 28927-3	<2.5	0.8	ISO-8662-8	80	91
10780	3-1/2" DynaLocke® 12,000 RPM (Non-Vac) (Random)	336	0.45	23	651	12,000	8.2	1.3	ISO 28927-3	<2.5	1.1	ISO-8662-8	80	91
10781	3-1/2" DynaLocke® 12,000 RPM (Self-Gen Vac-Ready) (Rotary)	336	0.45	23	651	12,000	7.7	1.1	ISO 28927-3	<2.5	0.8	ISO-8662-8	88	99
10781	3-1/2" DynaLocke® 12,000 RPM (Self-Gen Vac-Ready) (Random)	336	0.45	23	651	12,000	8.2	1.5	ISO 28927-3	<2.5	1.1	ISO-8662-8	85	96
10800	Dynafine® Detail Sander	298	0.40	23	651	13,000	<2.5	0.7	ISO 28927-3	<2.5	1.2	ISO-8662-8	77	88
10820	Dynafine Finger Sander	298	0.40	23	651	15,000	7.9	1.5	ISO 28927-3	3.5	1.8	ISO-8662-8	77	88
10832	DynaPen Reciprocating Tool, 3 mm Collet	(-)	(-)	1	28	14,000 SPM	6.0	1.1	ISO-20643	8.0	3.2	ISO-8662-12	76	87
10843	DynaPen Reciprocating Tool, 1/8" Collet	(-)	(-)	1	28	14,000 SPM	6.0	1.1	ISO-20643	8.0	3.2	ISO-8662-12	76	87
11475	Dynabelter® Abrasive Belt Machine (Standard)	522	0.70	30	850	18,000	<2.5	0.6	ISO-20643	<2.5	1.3	S 1049	91	102
11476	Dynabelter® Abrasive Belt Machine (Heavy-Duty)	895	1.20	58	1643	13,000	<2.5	0.5	ISO-20643	<2.5	0.4	S 1049	85	96
11477	Dynabelter® Abrasive Belt Machine (Extra Heavy-Duty)	1491	2.00	66	1878	7,200	3.9	0.9	ISO-20643	<2.5	1.3	S1056	79	90
11486	Dynabelter® Accu-GrinderAbrasive Belt Machine (Heavy-Duty)	895	1.20	58	1643	13,000	<2.5	0.6	ISO-20643	7.2	2.9	S1056	85	96
12200	Stockade Reciprocating Filer	298	0.40	28	793	2,400 SPM	AOR	N/A	ISO-20643	<2.5	1.3	ISO-866212	79	90
12201	Stockade Reciprocating Filer	298	0.40	28	793	2,400 SPM	AOR	N/A	ISO-20643	3.51	1.8	ISO-866212	79	90
12204	Stockade Reciprocating Sander	298	0.40	28	793	2,400 SPM	AOR	N/A	ISO-20643	4.05	2.0	ISO-866212	79	90
12205	Stockade Reciprocating Saw	298	0.40	28	793	2,400 SPM	AOR	N/A	ISO-20643	4.05	2.0	ISO-866212	79	90
12250	Dynadie® III Reciprocating Filer	149	0.20	18	510	5000 SPM	AOR	N/A	ISO-20643	7.5	3.0	ISO-866212	85	96
13100	Lightweight Dynastraight® Finishing Tool	298	0.40	29	821	950	6.0	2.4	ISO-20643	6.0	2.4	ISO 20643	79	90
13101	Lightweight Dynastraight® Finishing Tool	298	0.40	21	581	3,200	AOR	N/A	ISO-20643	<2.5	1.3	S1049	78	89
13102	Lightweight Dynastraight® Finishing Tool	298	0.40	26	736	5,000	AOR	N/A	ISO-20643	<2.5	1.3	S1049	81	92
13200	Dynastraight® Finishing Tool	522	0.70	45	1274	950	<2.5	0.7	ISO 20643	<2.5	1.3	S1049	80	91
13201	Dynastraight® Finishing Tool	522	0.70	41	1161	3,400	<2.5	0.8	ISO 20643	<2.5	1.3	S1049	80	91
13202	Dynastraight® Finishing Tool	522	0.70	41	1161	3,400	<2.5	0.8	ISO 20643	<2.5	1.3	S1049	80	91
13204	Dynastraight® Finishing Tool	522	0.70	41	1161	3,400	<2.5	0.8	ISO 20643	<2.5	1.3	S1049	80	91
13205	Dynastraight® Finishing Tool	522	0.70	41	1161	3,400	<2.5	0.8	ISO 20643	<2.5	1.3	S1049	80	91
13206	Dynastraight® Finishing Tool	522	0.70	40	1133	4,500	6.0	1.4	ISO 20643	<2.5	1.3	S1049	82	93
13207	Dynastraight® Finishing Tool	522	0.70	40	1133	4,500	6.0	3.0	ISO 20643	<2.5	1.3	S1049	82	93
13300	Mini-Dynisher® Finishing Tool	298	0.40	22	623	3,200	5.4	2.0	ISO 20643	N/A	N/A	S1049	80	91
13301	Mini-Dynisher® Finishing Tool	298	0.40	25	708	950	2.7	0.8	ISO 20643	<2.5	1.3	S1049	81	92
13400	Dynisher® Finishing Tool	522	0.70	46	1303	3,400	3.7	0.8	ISO 20643	<2.5	1.3	S1049	85	96
13450	Dynisher® Finishing Tool	746	1.00	31	867	2,800	3.7	1.7	ISO 20643	<2.5	1.3	S1049	82	93
13500	Slow-Speed Dynastraight® Finishing Tool	746	1.00	43	1221	950	2.8	0.8	ISO 20643	<2.5	0.2	S1049	79	90
13501	Dynastraight® Finishing Tool	746	1.00	34	952	1,800	4.2	1.1	ISO 20643	<2.5	0.1	S1049	73	84
13502	Dynastraight® Finishing Tool	746	1.00	43	1215	3,400	<2.5	0.6	ISO 20643	<2.5	0.4	S1049	76	87
13503	Dynastraight® Finishing Tool	746	1.00	43	1215	3,400	<2.5	0.6	ISO 20643	<2.5	0.3	S1049	76	87
13504	Dynastraight® Finishing Tool	746	1.00	43	1215	3,400	<2.5	0.7	ISO 20643	<2.5	0.2	S1049	76	87
13505	Dynastraight® Finishing Tool	746	1.00	43	1215	3,400	<2.5	0.7	ISO 20643	<2.5	0.2	S1049	76	87
13506	Dynastraight® Finishing Tool	746	1.00	43	1215	3,400	4.4	1.0	ISO 20643	<2.5	0.2	S1049	76	87
13507	Dynastraight® Finishing Tool	746	1.00	41	1147	4,500	<2.5	0.8	ISO 20643	<2.5	0.3	S1049	78	89
13508	Dynastraight® Finishing Tool	746	1.00	41	1147	4,500	4.2	0.9	ISO 20643	<2.5	0.2	S1049	78	89
13509	Dynastraight® Finishing Tool	746	1.00	42	1184	6,000	8.8	2.1	ISO 20643	<2.5	0.7	S1049	83	94
13511	Slow-Speed Extension Dynastraight® Finishing Tool	746	1.00	34	952	1,800	2.8	0.8	ISO 20643	<2.5	0.1	S1049	73	84
13512	Extension Dynastraight® Finishing Tool	746	1.00	41	1167	1,800	3.3	1.4	ISO 20643	<2.5	0.1	S1049	73	84
13515	Extension Dynastraight® Finishing Tool	746	1.00	41	1167	1,800	3.3	1.4	ISO 20643	<2.5	0.1	S1049	76	87
13516	Extension Dynastraight® Finishing Tool	746	1.00	41	1167	1,800	3.3	1.4	ISO 20643	<2.5	0.1	S1049	76	87
13517	Extension Dynastraight® Finishing Tool	746	1.00	42	1195	4,500	2.5	0.5	ISO 20643	<2.5	0.1	S1049	78	89
13518	Extension Dynastraight® Finishing Tool	746	1.00	42	1195	4,500	7.9	1.4	ISO 20643	<2.5	0.1	S1049	78	89
13521	Dynastraight® Finishing Tool	746	1.00	34	952	1,800	4.2	1.1	ISO 20643	<2.5	1.3	S1049	73	84
13531	Slow-Speed Extension Dynastraight® Finishing Tool	746	1.00	34	952	1,800	2.8	0.8	ISO 20643	<2.5	0.1	S1049	73	84
14000	Dynafile® Abrasive Belt Machine	373	0.50	26	731	20,000	<2.5	1.4	ISO 20643	<2.5	1.3	S1049	80	91
14200	Dynangle® Abrasive Belt Machine	373	0.50	26	731	20,000	<2.5	1.5	ISO 20643	<2.5	1.3	S1056	90	101
14300	Dynangle® II (Single Motor)	373	0.50	26	731	20,000	<2.5	0.6	ISO 20643	3.8	1.9	S1056	80	91
14303	Dynangle® II (Dual Motor with Platen)	373	0.50	26	731	20,000	<2.5	0.6	ISO 20643	2.7	1.4	S1049	79	90
14306	Dynangle® II (Dual Motor with Platen)	373	0.50	26	731	20,000	<2.5	0.6	ISO 20643	2.7	1.4	S1049	88	99
14309	3,400 RPM Dynangle® II - Dual Motor	373	0.50	26	731	20,000	<2.5	0.6	ISO 20643	<2.5	1.3	S 1049	87	98
14360	Pipe belt finisher .7 HP 3400 RPM 2100 SFPM	522	0.70	40	1133	3,400	<2.5	0.6	ISO 20643	N/A	N/A	N/A	82	93
15002	.4 HP 25K Vacuum Mini Dynafile ll	298	0.40	21	595	25,000	<2.5	0.6	ISO 20643	N/A	N/A	N/A	83	94
15003	Mini-Dynafile® II Abrasive Belt Machine	298	0.40	20	566	25,000	<2.5	0.6	ISO 20643	<2.5	0.2	S 1049	81	92
15013	.4 hp Mini-Dynafile II	298	0.40	21	595	25,000	<2.5	0.6	ISO 20643	N/A	N/A	N/A	83	94
15300	Dynafile® III Abrasive Belt Machine	522	0.70	37	1048	20,000	<2.5	0.6	ISO 20643	<2.5	0.3	S 1049	87	98
15400	Dynafile® III Abrasive Belt Machine w/11206 Contact Arm	522	0.70	37	1048	20,000	<2.5	0.6	ISO 20643	<2.5	0.6	ISO 20643	79	90
15401	Dynafile® III Abrasive Belt Machine w/11287 Contact Arm	522	0.70	37	1048	20,000	<2.5	0.6	ISO 20643	<2.5	1.3	S 1049	82	93
18000	.2 hp Die Grinder	149	0.20	20	552	25,000	<2.5	0.7	ISO 28927-12	N/A	N/A	N/A	79	90
18001	.2 hp Die Grinder	149	0.20	20	552	25,000	<2.5	0.7	ISO 28927-12	N/A	N/A	N/A	79	90
18010	.2 hp Right Angle Die Grinder	149	0.20	20	552	20,000	5.8	1.8	ISO 28927-12	N/A	N/A	N/A	78	89
18011	.2 hp Right Angle Die Grinder	149	0.20	20	552	20,000	5.8	1.8	ISO 28927-12	N/A	N/A	N/A	78	89
18068	3" 2500 RPM Automotive Pistol Grip Buffer.	134	0.18	23	651	2,500	<2.5	1.3	ISO 28927-3	N/A	N/A	N/A	84	95
18069	4" 2500 RPM Automotive Pistol Grip Eraser Wheel	134	0.18	23	651	2,500	<2.5	1.3	ISO 28927-3	N/A	N/A	N/A	84	95
18072	4" 2500 RPM Automotive Pistol Grip Eraser Wheel	134	0.18	23	651	2,500	<2.5	1.3	ISO 28927-3	N/A	N/A	N/A	84	95
18100	Auto File II Abrasive Belt Tool	373	0.50	22	623	20,000	<2.5	0.6	ISO 20643	<2.5	0.6	ISO 20643	81	92
20110	Dynapoint ll	522	0.70	37	1048	15,500	2.45	1.1	ISO 20643	N/A	N/A	N/A	79	90
21000	3" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	5.4	1.0	ISO 28927-3	<2.5	0.8	ISO 8662-8	70	81
21001	3" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	6.1	2.8	ISO 28927-3	<2.5	0.8	ISO 8662-8	76	87
21004	3" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	6.8	1.2	ISO 28927-3	<2.5	0.8	ISO 8662-8	75	86
21005	3-1/2"Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	15.5	2.0	ISO 28927-3	<2.5	0.7	ISO 8662-8	71	82
21006	3-1/2"Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	10.5	1.5	ISO 28927-3	<2.5	1.0	ISO 8662-8	77	88
21009	3-1/2"Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	12.5	1.7	ISO 28927-3	<2.5	1.0	ISO 8662-8	77	88
21010	5" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	12.5	1.7	ISO 28927-3	<2.5	1.2	ISO 8662-8	73	84
21011	5" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	13.5	1.8	ISO 28927-3	<2.5	1.1	ISO 8662-8	76	87
21014	5" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	13.5	3.1	ISO 28927-3	<2.5	1.0	ISO 8662-8	77	88
21015	6" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	14.0	5.1	ISO 28927-3	<2.5	1.0	ISO 8662-8	74	85
21016	6" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	13.5	1.9	ISO 28927-3	<2.5	0.8	ISO 8662-8	79	90
21019	6" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	11.5	3.4	ISO 28927-3	<2.5	1.0	ISO 8662-8	79	90
21020	3" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	2.5	0.8	ISO 28927-3	<2.5	0.9	ISO 8662-8	72	83
21021	3" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	2.5	0.8	ISO 28927-3	<2.5	1.0	ISO 8662-8	76	87
21024	3" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	2.5	0.7	ISO 28927-3	<2.5	1.0	ISO 8662-8	77	88
21025	3-1/2" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	5.1	1.0	ISO 28927-3	<2.5	0.7	ISO 8662-8	72	83
21026	3-1/2" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	4.0	1.9	ISO 28927-3	<2.5	1.1	ISO 8662-8	78	89
21029	3-1/2" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	3.9	0.9	ISO 8662-8	<2.5	1.2	ISO 8662-8	76	87
21030	5" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	3.9	0.9	ISO 28927-3	<2.5	0.6	ISO 8662-8	72	83
21031	5" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	4.6	1.4	ISO 28927-3	<2.5	0.5	ISO 8662-8	76	87
21034	5" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	2.9	0.8	ISO 28927-3	<2.5	1.2	ISO 8662-8	75	86
21035	6" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	4.5	1.7	ISO 28927-3	<2.5	1.0	ISO 8662-8	73	84
21036	6" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	4.4	1.0	ISO 28927-3	<2.5	0.8	ISO 8662-8	77	88
21039	6" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	5.1	1.7	ISO 28927-3	<2.5	1.0	ISO 8662-8	77	88
21040	3" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	2.9	0.8	ISO 28927-3	<2.5	0.5	ISO 8662-8	70	81
21041	3" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	3.9	1.2	ISO 28927-3	<2.5	0.6	ISO 8662-8	77	88
21044	3" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	3.1	0.8	ISO 28927-3	<2.5	0.5	ISO 8662-8	76	87
21045	3-1/2"Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	2.9	1.5	ISO 28927-3	<2.5	0.8	ISO 8662-8	70	81
21046	3-1/2"Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	<2.5	1.1	ISO 28927-3	<2.5	0.7	ISO 8662-8	76	87
21049	3-1/2"Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	2.9	0.8	ISO 28927-3	<2.5	0.8	ISO 8662-8	76	87
21050	5" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	4.0	0.9	ISO 28927-3	<2.5	0.8	ISO 8662-8	74	85
21051	5" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	4.8	1.0	ISO 28927-3	<2.5	1.0	ISO 8662-8	75	86
21054	5" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	5.0	1.0	ISO 28927-3	<2.5	0.9	ISO 8662-8	76	87
21055	6" Dynorbital-Spirit® ROS (Non-Vac)	186	0.25	14	396	12,000	6.5	1.1	ISO 28927-3	<2.5	0.7	ISO 8662-8	70	81
21056	6" Dynorbital-Spirit® ROS (Basic Vac)	186	0.25	14	396	12,000	5.8	2.4	ISO 28927-3	<2.5	0.6	ISO 8662-8	77	88
21059	6" Dynorbital-Spirit® ROS (Central Vac-Ready)	186	0.25	14	396	12,000	6.3	2.6	ISO 28927-3	<2.5	0.7	ISO 8662-8	74	85
21060	6" Dynorbital-Spirit® ROS w/54327 Pad (Non-Vac)	186	0.25	14	396	12,000	21.2	3.3	ISO 28927-3	<2.5	2.6	ISO 8662-8	74	85
21061	6" Dynorbital-Spirit® ROS w/54327 Pad (Non-Vac)	186	0.25	14	396	12,000	9.0	3.2	ISO 28927-3	<2.5	0.9	ISO 8662-8	73	84
21062	6" Dynorbital-Spirit® ROS w/54327 Pad (Non-Vac)	186	0.25	14	396	12,000	4.6	1.0	ISO 28927-3	<2.5	0.7	ISO 8662-8	70	81
21063	6" Dynorbital-Spirit® ROS w/54328 Pad (Central Vac-Ready)	186	0.25	14	396	12,000	4.1	0.9	ISO 28927-3	3.5	1.8	ISO 8662-8	79	90
21064	6" Dynorbital-Spirit® ROS w/54328 Pad (Central Vac-Ready)	186	0.25	14	396	12,000	3.7	0.9	ISO 28927-3	<2.5	0.8	ISO 8662-8	77	88
21065	6" Dynorbital-Spirit® ROS w/54328 Pad (Central Vac-Ready)	186	0.25	14	396	12,000	7.8	1.3	ISO 28927-3	<2.5	0.8	ISO 8662-8	74	85
40320	Dynafile® II Abrasive Belt Machine	373	0.50	28	793	20,000	<2.5	0.6	ISO 20643	<2.5	0.6	S 1049	78	89
40326	Dynafile® II Abrasive Belt Machine For 20-1/2" Belts	373	0.50	28	793	20,000	<2.5	0.6	ISO 20643	<2.5	0.2	S 1049	81	92
40330	Dynafile® II Abrasive Belt Machine (Vacuum)	373	0.50	28	793	20,000	<2.5	1.0	ISO 20643	<2.5	0.3	S1056	84	95
40335	NWN Dynafile® II Abrasive Belt Machine	373	0.50	28	793	20,000	<2.5	0.6	ISO 20643	<2.5	0.1	S1049	78	89
40352	Dynafile® II Abrasive Belt Machine	298	0.40	22	623	25,000	<2.5	0.6	ISO 20643	<2.5	0.1	S1049	76	87
40353	NWN Dynafile® II Abrasive Belt Machine	298	0.40	22	623	25,000	<2.5	0.7	ISO 20643	<2.5	0.1	S1049	80	91
40381	Slow-Speed Dynafile® II Abrasive Belt Machine	298	0.40	26	736	5,000	<2.5	0.6	ISO 20643	<2.5	0.3	S1049	74	85
43500	3".4 HP Extention die grinder Front Exhaust	298	0.40	19	538	25,000	<2.5	0.8	ISO 28927-12	N/A	N/A	N/A	77	88
43505	3" .4 HP Extention Die grinder Rear Exhaust	298	0.40	19	538	25,000	<2.5	1.1	ISO 28927-12	N/A	N/A	N/A	72	83
43510	6" .4 HP Extention die grinder Front Exhaust	298	0.40	19	538	25,000	<2.5	0.7	ISO 28927-12	N/A	N/A	N/A	77	88
43515	6" .4 HP Extention die grinder Rear Exhaust	298	0.40	19	538	25,000	<2.5	1.7	ISO 28927-12	N/A	N/A	N/A	71	82
46000	Die Grinder .4 hp 12,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	12,000	5.0	1.0	ISO-28927-12	N/A	N/A	ISO 8662-13	80	91
46001	Die Grinder .4 hp 15,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	15,000	5.0	1.2	ISO-28927-12	N/A	N/A	ISO 8662-13	81	92
46002	Die Grinder .4 hp 20,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	20,000	4.3	1.3	ISO-28927-12	N/A	N/A	ISO 8662-13	81	92
47200	.4 hp 950 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	950	2.9	0.8	ISO 28927-12	<2.5	0.3	ISO 8662-13	76	87
47201	.4 hp 3,200 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	3,200	<2.5	0.7	ISO 28927-12	2.5	1.2	ISO 8662-13	75	86
47202	.4 hp 5,500 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	5,500	2.9	1.0	ISO 28927-12	3.5	1.7	ISO 8662-13	80	91
47211	Die Grinder .4 hp 3,200 RPM 1/4" & 6 mm Collet	298	0.40	23	651	3,200	<2.5	1.2	ISO-28927-12	N/A	N/A	ISO 8662-13	73	84
47212	Die Grinder .4 hp 5000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	5,000	<2.5	0.8	ISO-28927-12	N/A	N/A	ISO 8662-13	75	86
47800	Die Grinder .4 hp 12,000 RPM 1/4" & 6 mm Collet	298	0.40	25	708	12,000	3.7	2.0	ISO-28927-12	N/A	N/A	ISO 8662-13	85	96
47801	Die Grinder .4 hp 15,000 RPM 1/4" & 6 mm Collet	298	0.40	25	708	15,000	3.2	0.8	ISO-28927-12	N/A	N/A	ISO 8662-13	86	97
47802	Die Grinder .4 hp 20,000 RPM 1/4" & 6 mm Collet	298	0.40	25	708	20,000	4.6	1.5	ISO-28927-12	N/A	N/A	ISO 8662-13	85	96
47820	Rotary Sander 12,000 2" (51 mm)	298	0.40	25	708	12,000	3.6	1.7	ISO-28927-12	N/A	N/A	ISO 8662-8	85	96
47821	Rotary Sander 15,000 2" (51 mm)	298	0.40	25	708	15,000	4.5	0.9	ISO-28927-12	N/A	N/A	ISO 8662-8	85	96
47822	Rotary Sander 20,000 2" (51 mm)	298	0.40	25	708	20,000	2.8	0.8	ISO-28927-12	N/A	N/A	ISO 8662-8	84	95
47915	.4 HP15K Dynafine Dynascraper Rear Exhaust	298	0.40	15	425	15,000	<2.5	0.7	ISO 28927-8	N/A	N/A	N/A	71	82
48201	.4 hp 25,000 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	25,000	<2.5	0.9	ISO 28927-12	<2.5	1.2	ISO 8662-13	74	85
48203	.4 hp 30,000 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	30,000	<2.5	1.1	ISO 28927-12	3.2	1.6	ISO 8662-13	79	90
48205	Die Grinder .4 hp 25,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	25,000	4.6	1.7	ISO-28927-12	N/A	N/A	ISO 8662-13	71	82
48207	Die Grinder .4 hp 30,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	30,000	<2.5	0.7	ISO-28927-12	N/A	N/A	ISO 8662-13	72	83
48315	Die Grinder .4 hp 12,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	12,000	3.3	0.8	ISO-28927-12	N/A	N/A	ISO 8662-13	81	92
48316	Die Grinder .4 hp 15,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	15,000	2.8	0.8	ISO-28927-12	N/A	N/A	ISO 8662-13	81	92
48317	Die Grinder .4 hp 20,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	20,000	4.8	1.0	ISO-28927-12	N/A	N/A	ISO 8662-13	80	91
48325	.4 hp 25,000 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	5,000	<2.5	0.6	ISO 28927-12	<2.5	1.0	ISO 8662-13	79	90
48327	.4 hp 30,000 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	5,000	2.6	1.2	ISO 28927-12	<2.5	1.2	ISO 8662-13	76	87
48335	Die Grinder .4 hp 25,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	25,000	3.6	0.9	ISO-28927-12	N/A	N/A	ISO 8662-13	73	84
48337	Die Grinder .4 hp 30,000 RPM 1/4" & 6 mm Collet	298	0.40	23	651	30,000	3.3	0.8	ISO-28927-12	N/A	N/A	ISO 8662-13	74	85
48341	.4 hp 30,000 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	30,000	<2.5	0.6	ISO 28927-12	<25	1.2	ISO 8662-13	78	89
48345	.4 hp 30,000 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	30,000	<2.5	1.7	ISO 28927-12	<2.5	1.6	ISO 8662-13	82	93
48350	.4 hp 35,000 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	35,000	3.6	1.4	ISO 28927-12	<2.5	1.1	ISO 8662-13	79	90
48355	.4 hp 35,000 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	35,000	3.2	1.1	ISO 28927-12	<2.5	1.1	ISO 8662-13	76	87
48360	.4 hp 20,000 RPM Straight Die Grinder Rear Exhaust ¼" and 6 mm Collets	298	0.40	26	736	20,000	<2.5	0.6	ISO 28927-12	3.0	1.5	ISO 8662-13	76	87
48500	Rotary Sander 25,000 2" (51 mm)	298	0.40	25	708	25,000	<2.5	0.8	ISO-28927-12	N/A	N/A	ISO 8662-8	73	84
48503	Rotary Sander 25,000 2" (51 mm)	298	0.40	25	708	25,000	3.0	1.3	ISO-28927-12	N/A	N/A	ISO 8662-8	73	84
48520	Rotary Sander 12,000 2" (76 mm)	298	0.40	25	708	12,000	4.6	1.0	ISO-28927-3	N/A	N/A	ISO 8662-8	76	87
48521	Rotary Sander 15,000 2" (76 mm)	298	0.40	25	708	15,000	2.8	0.8	ISO-28927-3	N/A	N/A	ISO 8662-8	79	90
48522	Rotary Sander 20,000 2" (51 mm)	298	0.40	25	708	20,000	4.8	2.9	ISO-28927-3	N/A	N/A	ISO 8662-8	78	89
48530	Rotary Sander 12,000 3" (76 mm)	298	0.40	25	708	12,000	2.7	1.9	ISO-28927-3	N/A	N/A	ISO 8662-8	78	89
48531	Rotary Sander 15,000 3" (76 mm)	298	0.40	25	708	15,000	3.4	1.9	ISO-28927-3	N/A	N/A	ISO 8662-8	78	89
48532	Rotary Sander 20,000 3" (76 mm)	298	0.40	25	708	20,000	3.0	0.8	ISO-28927-3	N/A	N/A	ISO 8662-8	78	89
48540	Rotary Sander 12,000 3" (76 mm)	298	0.40	25	708	12,000	3.8	0.9	ISO-28927-3	N/A	N/A	ISO 8662-8	81	92
48541	Rotary Sander 15,000 3" (76 mm)	298	0.40	25	708	15,000	4.2	1.5	ISO-28927-3	N/A	N/A	ISO 8662-8	83	94
48542	Rotary Sander 20,000 2" (51 mm)	298	0.40	25	708	20,000	4.5	2.1	ISO-28927-3	N/A	N/A	ISO 8662-8	81	92
49400	Mini-Angle Head Dynorbital Sander 3,200 RPM	298	0.40	26	736	3,200	4.7	3.1	ISO-28927-3	N/A	N/A	ISO 8662-8	77	88
49401	Mini-Angle Head Dynorbital Sander 3,200 RPM	298	0.40	26	736	3,200	6.7	2.9	ISO-28927-3	N/A	N/A	ISO 8662-8	77	88
49410	Mini-Angle Head 2" (51 mm) Rotary Sander 3,200 RPM	298	0.40	26	736	3,200	<2.5	0.9	ISO-28927-3	N/A	N/A	ISO 8662-8	78	89
49420	Mini-Angle Head 1/4" Collet Die Grinder	298	0.40	26	736	3,200	<2.5	0.7	ISO-28927-3	N/A	N/A	ISO 8662-13	80	91
49425	Die Grinder .4 hp 3,200 RPM 1/4" & 6 mm Collet	298	0.40	23	651	3,200	<2.5	0.7	ISO-28927-12	N/A	N/A	ISO 8662-13	81	92
49430	Mini-Angle Head Drill 3,200 RPM	298	0.40	26	736	3,200	<2.5	1.1	ISO-28927-3	N/A	N/A	ISO 8662-5	79	90
49445	3" .4 hp 3,200 RPM Buffing Tool	298	0.40	26	725	3,200	4.9	1.8	ISO 28927-3	N/A	N/A	N/A	83	94
49455	Mini-Angle Head Drill 950 RPM	298	0.40	26	736	950	4.6	1.2	ISO-28927-3	N/A	N/A	ISO 8662-5	77	88
50210	3" Disc Sander (Self-Generated Vac-Ready)	298	0.40	22	623	15,000	<2.5	0.8	ISO28927-3	<2.5	0.4	ISO 8662-8	87	98
50211	3" Disc Sander (Central Vac-Ready)	298	0.40	22	623	15,000	<2.5	0.8	ISO28927-3	<2.5	0.4	ISO 8662-8	81	92
50302	4-1/2"-5" Right Angle Depressed Center Wheel Grinder	298	0.40	22	623	12,000	12.5	4.2	ISO28927-1	7.7	3.1	ISO 8662-4	76	87
50303	4-1/2"-5" Depressed Center Wheel Grinder	298	0.40	22	623	15,000	7.8	2.6	ISO28927-3	<2.5	0.3	S1056	77	88
50304	4-1/2"-5" Disc Sander	298	0.40	22	623	15,000	<2.5	0.6	ISO28927-3	<2.5	0.3	S1056	72	83
50307	4-1/2"-5" Disc Sander	298	0.40	22	623	15,000	<2.5	0.7	ISO28927-3	<2.5	0.4	S1049	75	86
50320	4-1/2"-5" Disc Sander	522	0.70	32	906	8,000	<2.5	0.6	ISO 28927-3	<2.5	1.1	ISO 8662-8	68	79
50321	4-1/2"-5" Disc Sander	522	0.70	32	906	11,000	<2.5	0.6	ISO 28927-3	<2.5	1.0	ISO 8662-8	71	82
50324	4" Disc Sander .7 hp 11,000 RPM	522	0.70	32	906	11,000	<2.5	0.6	ISO 28927-3	<2.5	0.5	ISO 8662-8	71	82
50340	4-1/2"-5" Depressed Center Wheel Grinder	522	0.70	32	906	11,000	3.7	1.2	ISO28927-1	3.2	1.6	S1056	71	82
50348	7" Depressed Center Wheel Grinder	298	1.20	22	623	6,000	4.1	1.4	ISO28927-1	3.0	1.5	S1056	85	96
50350	7" Depressed Center Wheel Grinder	298	1.20	22	623	6,000	4.1	1.4	ISO28927-1	2.6	1.3	S1056	83	94
50561	3" Disc Sander (Central Vac-Ready)	298	0.40	22	623	15,000	<2.5	0.8	ISO 28927-3	<2.5	0.5	ISO 8662-8	81	92
50570	3" Disc Sander (Self-Generated Vac-Ready)	298	0.40	22	623	15,000	3.5	1.5	ISO 28927-3	<2.5	0.4	ISO 8662-8	87	98
51130	Dynastraight® Flapper	373	0.50	24	680	18,000	6.4	1.5	ISO 20643	<2.5	1.3	S1049	79	90
51134	Dynastraight® Extension Flapper 8" long	373	0.5	24	680	18,000	5.8	2.8	ISO 20643	5.8	2.3	S1049	79	90
51225	2" Self-Generated Vac-Ready Disc Sander 12,000 RPM	298	0.40	21	595	12,000	AOR	N/A	ISO 28927-3	<2.5	0.3	ISO 8662-8	90	101
51226	2" Self-Generated Vac-Ready Disc Sander 15,000 RPM	298	0.40	21	595	15,000	AOR	N/A	ISO 28927-3	<2.5	0.4	ISO 8662-8	87	98
51227	2" Self-Generated Vac-Ready Disc Sander 20,000 RPM	298	0.40	21	595	20,000	AOR	N/A	ISO 28927-3	<2.5	0.5	ISO 8662-8	87	98
51230	2" Central Vac-Ready Disc Sander 12,000 RPM	298	0.40	21	595	12,000	AOR	N/A	ISO 28927-3	<2.5	0.3	ISO 8662-8	82	93
51231	2" Central Vac-Ready Disc Sander 15,000 RPM	298	0.40	21	595	15,000	AOR	N/A	ISO 28927-3	<2.5	0.4	ISO 8662-8	80	91
51232	2" Central Vac-Ready Disc Sander 20,000 RPM	298	0.40	21	595	20,000	AOR	N/A	ISO 28927-3	<2.5	0.5	ISO 8662-8	81	92
51235	2" Self-Generated Vac-Ready Disc Sander 7 Degree 25,000 RPM	298	0.40	20	566	25,000	AOR	N/A	ISO 28927-3	<2.5	0.9	ISO 8662-8	89	100
51236	2" Central Vac-Ready Disc Sander 7 Degree 25,000 RPM	298	0.40	20	566	25,000	AOR	N/A	ISO 28927-3	<2.5	0.9	ISO 8662-8	89	100
51259	.4 hp Right Angle Die Grinder, 20,000 RPM	298	0.40	21	595	20,000	AOR	N/A	ISO 28927-12	<2.5	0.5	ISO 8662-13	85	96
51300	1/4" & 6 mm Collet Die Grinder	373	0.50	24	680	15,000	8.0	4.9	ISO 28927-12	<2.5	1.1	ISO 8662-13	78	89
51301	1/4" & 6 mm Collet Die Grinder	373	0.50	24	680	18,000	<2.5	1.1	ISO 28927-12	3.7	1.9	ISO 8662-13	78	89
51302	1/4" & 6 mm Collet Die Grinder	373	0.50	27	765	20,000	<2.5	1.2	ISO 28927-12	3.7	1.9	ISO 8662-12	77	88
51303	1/4" & 6 mm Collet Die Grinder	373	0.50	27	765	24,000	<2.5	0.6	ISO 28927-12	3.1	1.6	ISO 8662-13	83	94
51304	1/4" & 6 mm Collet Die Grinder	373	0.50	24	680	15,000	4.2	0.9	ISO 28927-12	3.1	1.6	ISO 8662-13	76	87
51305	1/4" & 6 mm Collet Die Grinder	373	0.50	27	765	18,000	<2.5	0.6	ISO 28927-12	2.8	1.4	ISO 8662-13	76	87
51306	1/4" & 6 mm Collet Die Grinder	373	0.50	24	680	20,000	2.7	1.0	ISO 28927-12	3.5	1.8	ISO 8662-13	75	86
51307	1/4" & 6 mm Collet Die Grinder	373	0.50	27	765	24,000	6.0	2.8	ISO 28927-12	<2.5	0.9	ISO 8662-13	75	86
51330	Air Powered Router	522	0.70	33	935	20,000	7.0	2.3	ISO 20643	<2.5	1.3	ISO 8662-13	88	99
51332	Central Vacuum Router with 3-1/2" (89 mm) Base	522	0.70	33	935	20,000	7.0	2.3	ISO 20643	3.5	1.8	ISO 8662-13	80	91
51333	Central Vacuum Router with 4" Base	522	0.70	33	935	20,000	7.0	2.3	ISO 20643	3.5	1.8	ISO 8662-13	80	91
51350	11" File Board	746	1.00	42	1201	1,250	6.5	2.3	ISO 20643	3.8	1.9	S1051	79	90
51390	Right Angle Buffer	746	1.00	42	1201	1,250	<2.5	0.6	ISO 28927-3	<2.5	0.6	ISO 8662-8	81	92
51391	Right Angle Buffer	746	1.00	42	1187	1,800	<2.5	0.9	ISO 28927-3	<2.5	0.5	ISO 8662-8	80	91
51392	Right Angle Buffer	746	1.00	41	1167	2,800	2.6	1.0	ISO 28927-3	<2.5	0.5	ISO 8662-8	82	93
51393	Right Angle Buffer	746	1.00	35	997	4,500	4.4	2.0	ISO 28927-3	7.3	3.7	ISO 8662-8	73	84
51394	Right Angle Buffer	746	1.00	42	1201	1,250	<2.5	0.6	ISO 28927-3	<2.5	0.6	ISO 8662-8	81	92
51395	Right Angle Buffer	746	1.00	42	1187	1,800	<2.5	0.9	ISO 28927-3	<2.5	0.5	ISO 8662-8	80	91
51396	Right Angle Buffer	746	1.00	41	1167	2,800	2.6	1.0	ISO 28927-3	<2.5	0.5	ISO 8662-8	82	93
51397	Right Angle Buffer	746	1.00	35	997	4,500	4.4	2.0	ISO 28927-3	7.3	3.7	ISO 8662-8	73	84
51400	3" Buffer	298	0.40	22	623	3,200	<2.5	0.7	ISO 28927-3	<2.5	0.0	S1049	76	87
51401	3" Buffer	298	0.40	25	708	5,000	<2.5	0.7	ISO 28927-3	<2.5	0.9	ISO 8662-8	81	92
51402	3" Buffer	298	0.40	22	623	3,600	AOR	N/A	ISO 28927-3	<2.5	0.6	ISO 28927-3	75	86
51410	Mini-Dynorbital® Random Orbital Sander	298	0.40	22	623	3,200	<2.5	0.9	ISO 28927-3	8.7	3.5	ISO 8662-8	74	85
51411	Mini-Dynorbital® Random Orbital Sander	298	0.40	22	623	3,200	<2.5	0.9	ISO 28927-3	8.7	3.5	ISO 8662-8	74	85
51412	Mini-Dynorbital® Random Orbital Sander	298	0.40	25	708	5,000	<2.5	0.7	ISO 28927-3	N/A	N/A	ISO 8662-8	75	86
51430	5" Diameter Buffer	298	0.40	22	623	3,200	<2.5	0.7	ISO 28927-3	<2.5	0.2	S1049	76	87
51450	Two-Hand Buffer-Sander (5/8"-11 male spindle)	522	0.70	25	708	3,400	<2.5	0.8	ISO 28927-3	N/A	N/A	ISO 8662-8	81	92
51451	Two-Hand Buffer-Sander (5/8"-11 male spindle)	522	0.70	25	708	4,500	8.6	1.4	ISO 28927-3	<2.5	0.7	ISO 8662-8	80	91
51454	Two-Hand Buffer-Sander (M14 male spindle)	522	0.70	41	1161	3,400	<2.5	0.8	ISO 28927-3	N/A	N/A	ISO 8662-8	81	92
51455	Two-Hand Buffer-Sander (M14 male spindle)	522	0.70	25	708	4,500	8.6	1.4	ISO 28927-3	<2.5	0.7	ISO 8662-8	80	91
51458	6" & 8" Buffer/Polisher, 2,500 RPM, M14	522	0.70	27	765	2,500	<2.5	1.1	ISO 28927-3	N/A	N/A	ISO 8662-8	79	90
51459	6" & 8" Buffer/Polisher, 2,500 RPM, 5/8"-11	522	0.70	27	765	2,500	<2.5	0.7	ISO 28927-3	N/A	N/A	ISO 8662-8	79	90
51470	6" Sander Polisher	522	0.70	34	963	2,000	<2.5	0.7	ISO 28927-3	<2.5	1.3	ISO 8662-8	77	88
51472	6" Sander Polisher	522	0.70	34	963	3,100	<2.5	0.7	ISO 28927-3	N/A	N/A	ISO 8662-8	78	89
51474	6" Wet Sander Polisher (Basic Model)	522	0.70	34	963	2,000	<2.5	1.1	ISO 28927-3	<2.5	0.4	ISO 8662-8	77	88
51476	6" Wet Sander Polisher (Basic Model)	522	0.70	34	963	3,100	6.1	1.1	ISO 28927-3	<2.5	0.5	ISO 8662-8	78	89
51479	6" Wet Sander Polisher (Deluxe Model)	522	0.70	34	963	2,000	6.1	1.1	ISO 28927-3	<2.5	0.4	ISO 8662-8	77	88
51520	Wet Polisher	522	0.70	46	1303	3,600	<2.5	0.6	ISO 28927-3	N/A	N/A	N/A	80	91
51570	R.O. Polisher- 1 hp, Right Angle (Rotary)	746	1.00	41	1161	2,800	5.5	4.7	ISO 28927-3	3.4	1.7	ISO 8662-8	82	93
51570	R.O. Polisher- 1 hp, Right Angle (Random)	746	1.00	41	1161	2,800	4.5	3.3	ISO 28927-3	3.4	1.7	ISO 8662-8	82	93
51600	6" Sander Polisher (Metric Thread)	522	0.70	34	963	2,000	<2.5	0.7	ISO 28927-3	<2.5	0.4	ISO 8662-8	77	88
51601	Sander Polisher (Metric Thread)	522	0.70	34	963	3,100	<2.5	0.7	ISO 28927-3	<2.5	0.7	ISO 28927-3	78	89
51622	Central Vac-Ready Pencil Die Grinder (1/8" Collet)	75	0.10	4	113	35,000	<2.5	1.2	ISO 28927-12	<2.5	0.6	ISO 8662-13	63	74
51623	Extension Central Vac-Ready Pencil Die Grinder (1/8" Collet)	75	0.10	4	113	35,000	7.0	4.1	ISO 28927-12	<2.5	0.8	ISO 8662-13	63	74
51624	Central Vac-Ready Pencil Die Grinder (3 mm Collet)	75	0.10	4	113	35,000	<2.5	1.2	ISO 28927-12	<2.5	0.8	ISO 8662-13	63	74
51629	Central Vac-Ready Pencil Die Grinder (1/8" Collet)	75	0.10	4	113	50,000	2.9	1.7	ISO 28927-12	<2.5	0.5	ISO 8662-13	64	75
51630	Extension Central Vac-Ready Pencil Die Grinder (1/8" Collet)	75	0.10	4	113	50,000	<2.5	0.7	ISO 28927-12	<2.5	0.5	ISO 8662-13	64	75
51631	Central Vac-Ready Pencil Die Grinder (3 mm Collet)	75	0.10	4	113	50,000	2.9	1.7	ISO 28927-12	<2.5	0.5	ISO 8662-13	64	75
51632	Central Vac-Ready Pencil Die Grinder (1/8" Collet)	75	0.10	4	113	60,000	<2.5	0.6	ISO 28927-12	<2.5	0.5	ISO 8662-13	70	81
51633	Extension Central-Vac Ready Pencil Die Grinder (1/8" Collet)	75	0.10	4	113	60,000	<2.5	0.8	ISO 28927-12	<2.5	1.1	ISO 8662-13	70	81
51634	Central Vac-Ready Pencil Die Grinder (3 mm Collet)	75	0.10	4	113	60,000	<2.5	0.6	ISO 28927-12	<2.5	1.1	ISO 8662-13	68	79
51700	Pencil Die Grinder (1/8" Collet)	75	0.10	4	113	60,000	<2.5	0.6	ISO 28927-12	<2.5	1.1	ISO 8662-13	76	87
51701	Pencil Die Grinder (3 mm Collet)	75	0.10	5	142	60,000	<2.5	0.6	ISO 28927-12	<2.5	1.1	ISO 8662-13	76	87
51702	Pencil Die Grinder (3/32" Collet)	75	0.10	5	142	60,000	<2.5	0.6	ISO 28927-12	<2.5	1.1	ISO 8662-13	76	87
51703	Pencil Die Grinder (1/8" Collet)	75	0.10	4	113	50,000	2.9	1.7	ISO 28927-12	<2.5	0.5	ISO 8662-13	65	76
51704	Pencil Die Grinder (3 mm Collet)	75	0.10	4	113	50,000	2.9	1.7	ISO 28927-12	<2.5	0.5	ISO 8662-13	65	76
51705	Pencil Die Grinder (3/32" Collet)	75	0.10	4	113	50,000	2.9	1.7	ISO 28927-12	<2.5	0.5	ISO 8662-13	65	76
51706	Pencil Die Grinder (1/8" Collet)	75	0.10	4	113	35,000	<2.5	1.2	ISO 28927-12	<2.5	0.8	ISO 8662-13	62	73
51707	Pencil Die Grinder (3 mm Collet)	75	0.10	4	113	35,000	<2.5	1.2	ISO 28927-12	<2.5	0.8	ISO 8662-13	62	73
51708	Pencil Die Grinder (3/32" Collet)	75	0.10	4	113	35,000	<2.5	1.2	ISO 28927-12	<2.5	0.8	ISO 8662-13	62	73
51730	Pencil Die Grinder - Ceramic Bearings (1/8" Collet)	75	0.10	4	113	50,000	2.9	1.7	ISO 28927-12	<2.5	0.7	ISO 8662-13	66	77
51731	Pencil Die Grinder - Ceramic Bearings (1/8" Collet)	75	0.10	8	227	60,000	<2.5	0.6	ISO 28927-12	<2.5	0.5	ISO 8662-13	68	79
51732	Pencil Die Grinder - Ceramic Bearings (3 mm Collet)	75	0.10	4	113	50,000	2.9	1.7	ISO 28927-12	<2.5	0.7	ISO 8662-13	66	77
51733	Pencil Die Grinder - Ceramic Bearings (3 mm Collet)	75	0.10	8	227	60,000	<2.5	0.6	ISO 28927-12	<2.5	0.8	ISO 8662-13	68	79
51740	Pencil Die Grinder w/Permanent Mount Stem (1/8" Collet)	75	0.10	8	227	60,000	<2.5	0.6	ISO 28927-12	<2.5	0.5	ISO 8662-13	67	78
51742	Pencil Die Grinder w/Permanent Mount Stem (3 mm Collet)	75	0.10	8	227	60,000	<2.5	0.6	ISO 28927-12	<2.5	0.8	ISO 8662-13	67	78
51750	Extension Pencil Die Grinder (1/8" Collet)	75	0.10	5	142	60,000	<2.5	0.8	ISO 28927-12	<2.5	1.1	ISO 8662-13	67	78
51753	Extension Pencil Die Grinder (1/8" Collet)	75	0.10	8	221	50,000	<2.5	0.7	ISO 28927-12	<2.5	0.9	ISO 8662-13	67	78
51756	Extension Pencil Die Grinder (1/8" Collet)	75	0.10	8	221	35,000	<2.5	1.1	ISO 28927-12	<2.5	0.8	ISO 8662-13	62	73
51810	Pencil Die Grinder - Ceramic Bearings (1/8" Collet)	N/A	N/A	6	170	100,000	<2.5	0.7	ISO 28927-12	<2.5	0.8	ISO 8662-13	70	81
51811	Pencil Die Grinder - Ceramic Bearings (1/16" Collet)	N/A	N/A	6	170	100,000	<2.5	0.7	ISO 28927-12	<2.5	1.3	ISO 8662-13	70	81
51812	Pencil Die Grinder - Ceramic Bearings (3/32" Collet)	N/A	N/A	6	170	100,000	<2.5	0.7	ISO 28927-12	<2.5	1.3	ISO 8662-13	70	81
51813	Pencil Die Grinder - Ceramic Bearings (3 mm Collet)	N/A	N/A	6	170	100,000	<2.5	0.7	ISO 28927-12	<2.5	1.3	ISO 8662-13	70	81
51846	Drill	298	0.40	17	481	12,000	<2.5	0.7	ISO 28927-5	<2.5	0.6	S1049	83	94
51847	Drill	298	0.40	16	453	15,000	3.6	1.6	ISO 28927-5	<2.5	1.2	S1049	85	96
51848	Drill	298	0.40	18	510	20,000	<2.5	0.7	ISO 28927-5	3.3	1.7	S1049	83	94
51854	.4 hp Trim Router 30,000 RPM	298	0.40	25	708	30,000	<2.5	1.5	ISO 20643	N/A	N/A	N/A	77	88
51857	.7 hp Trim Router 20,000 RPM	522	0.70	39	1104	20,000	<2.5	1.7	ISO 20643	N/A	N/A	N/A	78	89
51860	20K 1 HP Trim Router Rear Exhaust	746	1.00	42	1189	20,000	<2.5	0.6	ISO 20643	N/A	N/A	N/A	81	92
51862	.4 HP Front Exhaust Trim Routers	298	0.40	21	595	30,000	<2.5	0.7	ISO 20643	N/A	N/A	N/A	81	92
51863	.7 HP Front Exhaust Trim Routers	522	0.70	37	1048	20,000	<2.5	0.6	ISO 20643	N/A	N/A	N/A	85	96
51865	20K 1 HP Trim Router front Exhaust	746	1.00	42	1189	20,000	<2.5	0.6	ISO 20643	N/A	N/A	N/A	84	95
52050	Lightweight Dyninger Finishing Tool (1/4" Collet)	298	0.40	27	765	3,200	5.0	1.0	ISO 28927-3	<2.5	0.0	S1049	79	90
52051	4" Lightweight Dyninger Finishing Tool (6 mm Collet)	298	0.40	27	765	3,200	5.0	1.0	ISO 28927-3	<2.5	0.0	S1049	79	90
52052	4" Lightweight Dyninger Finishing Tool (1/2" Arbor)	298	0.40	27	765	3,200	5.0	1.0	ISO 28927-3	<2.5	0.0	S1049	79	90
52060	8" Dyninger Finishing Tool	298	0.40	29	821	950	3.0	1.0	ISO 28927-3	3.0	0.8	ISO 8662-8	77	88
52100	1/4" & 6 mm Collets Buffer/Polisher	522	0.70	41	1161	950	<2.5	0.7	ISO 28927-3	<2.5	0.7	ISO 28927-3	80	91
52101	1/4" & 6 mm Collets Buffer/Polisher	522	0.70	41	1161	3,400	<2.5	0.7	ISO 28927-3	<2.5	0.7	ISO 8662-8	82	93
52102	1/4" & 6 mm Collets Buffer/Polisher	298	0.40	20	566	4,500	<2.5	0.7	ISO 28927-12	<2.5	0.8	ISO 8662-13	82	93
52200	1/4" Collet Die Grinder	298	0.40	20	566	25,000	<2.5	1.2	ISO 28927-12	5.4	2.2	ISO 8662-13	75	86
52202	1/4" Collet Die Grinder	298	0.40	20	566	30,000	<2.5	0.7	ISO 28927-12	5.0	2.5	ISO 8662-13	82	93
52204	1/4" & 6 mm Collet Die Grinder	298	0.40	20	566	25,000	2.7	1.1	ISO 28927-12	<2.5	1.2	ISO 8662-13	70	81
52206	1/4" & 6 mm Collet Die Grinder	298	0.40	20	566	30,000	3.8	0.9	ISO 28927-12	<2.5	0.8	ISO 8662-13	75	86
52211	1/4" & 6 mm Collet Die Grinder	298	0.40	20	566	18,000	<2.5	0.7	ISO 28927-12	<2.5	0.6	ISO 8662-13	75	86
52212	1/4" & 6 mm Collet Die Grinder	298	0.40	20	566	20,000	2.6	0.8	ISO 28927-12	<2.5	1.1	ISO 8662-13	75	86
52213	1/4" & 6 mm Collet Die Grinder	298	0.40	20	566	25,000	3.2	1.6	ISO 28927-12	<2.5	0.9	ISO 8662-13	79	90
52216	1/4" Collet Die Grinder	373	0.50	20	566	15,000	3.0	1.2	ISO 28927-12	N/A	N/A	ISO 8662-13	73	84
52218	1/4" Collet Die Grinder	373	0.50	20	566	20,000	3.3	1.1	ISO 28927-12	<2.5	1.1	ISO 8662-13	77	88
52221	1/4" Collet Die Grinder	373	0.50	23	651	18,000	2.9	1.2	ISO 28927-12	<2.5	0.6	ISO 8662-13	74	85
52222	1/4" Collet Die Grinder	373	0.50	20	566	20,000	2.6	0.8	ISO 28927-12	<2.5	1.1	ISO 8662-13	73	84
52223	1/4" Collet Die Grinder	373	0.50	20	566	24,000	3.6	0.5	ISO 28927-12	<2.5	0.9	ISO 8662-13	77	88
52242	1/4" & 6 mm Collet Die Grinder	298	0.40	20	566	20,000	3.0	1.0	ISO 28927-12	N/A	N/A	ISO 8662-13	80	91
52256	1/4" & 6 mm Collet Die Grinder	522	0.70	20	566	15,000	2.6	1.3	ISO 28927-12	N/A	N/A	ISO 8662-13	81	92
52257	1/4" & 6 mm Collet Die Grinder	522	0.70	20	566	18,000	<2.5	0.6	ISO 28927-12	2.5	1.3	ISO 8662-13	80	91
52258	1/4" & 6 mm Collet Die Grinder	522	0.70	20	566	20,000	<2.5	3.5	ISO 28927-12	3.5	1.8	ISO 8662-13	80	91
52267	1/4" Collet Die Grinder	373	0.50	20	566	15,000	4.7	1.0	ISO 28927-12	<2.5	0.4	ISO 8662-13	73	84
52276	1/4" & 6 mm Collet Die Grinder	522	0.70	20	566	15,000	<2.5	1.5	ISO 28927-12	<2.5	1.3	ISO 8662-13	81	92
52277	1/4" & 6 mm Collet Die Grinder	522	0.70	20	566	18,000	<2.5	0.7	ISO 28927-12	N/A	N/A	ISO 8662-13	79	90
52278	1/4" & 6 mm Collet Die Grinder	522	0.70	20	566	20,000	<2.5	0.7	ISO 28927-12	3.5	1.8	ISO 8662-13	81	92
52280	1/4" Collet Die Grinder	410	0.55	20	566	15,000	3.2	0.8	ISO 28927-12	<2.5	0.8	ISO 8662-13	79	90
52289	1/4" & 6 mm Collet Die Grinder	522	0.70	20	566	18,000	<2.5	1.0	ISO 28927-12	<2.5	0.7	ISO 8662-13	83	94
52290	1/4" & 6 mm Collet Die Grinder	522	0.70	20	566	20,000	<2.5	0.7	ISO 28927-12	N/A	N/A	ISO 8662-13	80	91
52293	1/4" & 6 mm Collet Die Grinder	298	0.40	20	566	18,000	3.1	0.8	ISO 28927-12	<2.5	0.6	ISO 8662-13	77	88
52294	1/4" & 6 mm Collet Die Grinder	298	0.40	20	566	20,000	5.0	1.3	ISO 28927-12	<2.5	0.6	ISO 8662-13	79	90
52297	1/4" Collet Die Grinder with Side Handle	298	0.40	20	566	20,000	3.8	0.9	ISO 28927-12	3.2	1.6	ISO 8662-13	79	90
52373	4" (102 mm) Type 1 Wheel Grinder	746	1.00	35	991	12,000	<2.5	0.4	ISO 28927-4	<2.5	0.1	S1049	74	85
52374	4" (102 mm) Type 1 Wheel Grinder	746	1.00	35	991	15,000	<2.5	0.8	ISO 28927-4	N/A	N/A	ISO 8662-4	73	84
52376	3" (76 mm) Type 1 Extension Wheel Grinder	746	1.00	35	991	12,000	3.1	1.0	ISO 28927-4	6.3	2.5	ISO 8662-4	74	85
52377	3" (76 mm) Type 1 Extension Wheel Grinder	746	1.00	35	991	15,000	4.2	1.4	ISO 28927-4	8.4	3.4	ISO 8662-4	73	84
52378	3" (76 mm) Type 1 Extension Wheel Grinder	746	1.00	35	991	18,000	<2.5	1.5	ISO 28927-4	11.0	4.4	ISO 8662-4	79	90
52379	4" (102 mm) Type 1 Extension Wheel Grinder	746	1.00	38	1085	12,000	3.3	1.1	ISO 28927-4	<2.5	0.1	S1049	74	85
52380	4" (102 mm) Type 1 Extension Wheel Grinder	746	1.00	35	991	12,000	3.4	1.1	ISO 28927-4	<2.5	0.1	S1049	73	84
52400	2" Disc Sander	522	0.70	32	906	15,000	<2.5	0.6	ISO 28927-3	<2.5	1.3	ISO 8662-8	73	84
52402	2" Disc Sander	522	0.70	32	906	15,000	3.6	0.9	ISO 28927-3	<2.5	0.6	ISO 8662-8	76	87
52405	2" Disc Sander	522	0.70	32	906	15,000	3.1	1.2	ISO 28927-3	<2.5	0.6	ISO 8662-8	73	84
52410	3" Disc Sander	522	0.70	32	906	15,000	<2.5	1.0	ISO 28927-3	<2.5	1.0	ISO 8662-8	87	98
52412	3" Disc Sander	522	0.70	36	1020	20,000	3.3	1.5	ISO 28927-12	<2.5	1.2	ISO 8662-8	86	97
52413	3" Disc Sander	522	0.70	29	821	15,000	AOR	N/A	ISO 28927-3	<2.5	1.3	ISO 8662-8	77	88
52415	3" Disc Sander	522	0.70	35	991	20,000	<2.5	0.7	ISO 28927-3	2.5	1.3	ISO 8662-8	79	90
52420	3" Cut-Off Wheel Tool	373	0.50	27	765	20,000	13.5	4.4	ISO 28927-1	3.9	2.0	S1056	80	91
52430	4" Cut-Off Wheel Tool	373	0.50	27	765	15,000	6.2	2.0	ISO 28927-1	<2.5	0.1	S1049	89	100
52431	4" Cut-Off Wheel Tool	373	0.50	27	765	20,000	10.0	3.3	ISO 28927-1	<2.5	0.4	S1056	89	100
52434	3" Cut-Off Wheel Tool	373	0.50	27	765	20,000	11.0	3.7	ISO 28927-1	<2.5	0.5	S1049	89	100
52435	3" Cut-Off Wheel Tool	373	0.50	27	765	20,000	8.5	2.8	ISO 28927-1	<2.5	0.6	S1049	78	89
52436	4" Diamond Cut-Off Wheel Tool	373	0.50	27	765	20,000	3.7	1.2	ISO 28927-1	<2.5	1.0	S1049	78	89
52438	5" Diamond Vac Cut-Off Wheel Tool	746	1.00	40	1133	12,000	<2.5	0.7	ISO 28927-1	2.5	1.2	S1049	81	92
52500	2" Disc Sander	298	0.40	20	566	25,000	2.8	0.8	ISO 28927-3	3.3	1.7	ISO 8662-8	72	83
52503	2" Disc Sander	298	0.40	20	566	25,000	3.0	1.7	ISO 28927-3	<2.5	0.9	ISO 8662-8	80	91
52515	4-1/2" Dia., Right Angle Disc Sander	410	0.55	30	850	15,000	<2.5	1.2	ISO 28927-3	<2.5	0.6	ISO 8662-8	79	90