

APEX

MACHINE GROUP
Reaching New Heights in Production



Operations Manual Model PWDC-5 Wet Collector

PWDC-5 COLLECTOR BY APEX MACHINE GROUP

WARRANTY AND SERVICE

APEX Machine Group warrants every product it sells. If you need service or repair, contact us or one of our Service Dealers.

WARRANTY

Apex Machine Group machines carry a limited warranty which varies in duration based upon the product.

WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the exceptions stated below.

WHO IS COVERED?

This warranty covers only the initial purchaser of the product.

WHAT IS THE PERIOD OF COVERAGE?

The APEX Machine Group warranty is for a **One Year Period** (2000 hours) from the date of purchase.

WHAT IS NOT COVERED?

This warranty does not cover defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair or alterations, or lack of maintenance. Also, the warranty does not cover those consumable items such as coolant or rust additives.

HOW TO GET SERVICE

Contact APEX Machine Group at (855-500-2739) (952-895-518) www.apexmachinegroup.com or the dealer you purchased the machine from.

Manufacture or Distributor is not responsible for, and will not pay for, work done, material furnished, or repairs made by others unless agreed to in writing prior to performing work. All express delivery charges, repair labor and expenses are the responsibility of the customer.

Parts repaired or replaced under warranty are covered for the balance of the original machine warranty, or a standard 90-day parts warranty, whichever is longer. Except as stated above, there are no warranties, expressed or implied, including the warranties of merchantability and fitness for a particular purpose.

HOW STATE LAW APPLIES

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

Caution: Please read and understand this manual prior to operation of this machine.

MACHINE WARRANTY REGISTRATION

By e-mail at: www.apexmachinegroup.com

Or mail a registration card to:

Apex Machine Group
4700 Olson Memorial Highway
Golden Valley, Minnesota 55422

Warranty Registration Card

Model No. PWDC-5 Collector

Serial No. _____

Date Purchased: _____

Company Name: _____

Address: _____

Phone No: _____

E-mail Address: _____

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WARNINGS

Please note: You can be seriously injured working on or around machinery. Only do service work for which you have the knowledge and proper equipment. If you have any doubt about your ability to perform a service job, please call our toll free line at 877-754-7266 or 855-500-7239 or contact an authorized dealer to schedule a qualified technician.

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace the warning labels if they become obscured or removed.
4. This collector is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of this collector, do not use until proper training and knowledge have been obtained.
5. Do not use this collector for anything other than its intended use. If used for other purposes. Apex Machine Group disclaims any real or implied warranty and holds itself unaccountable from any injury that may result from that use.
6. Always wear approved safety glasses/face shields while around collector. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
7. Before operating this collector, or while cleaning it be sure to wear proper gloves and clothing.
8. Wear ear protectors (plugs or muffs) during extended periods of operation.
9. Some dust created by power sanding, and other construction activities, contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead based paint.
 - Crystalline silica from bricks, cement and other masonry products.
 - Arsenic and chromium from Chemically treated lumber.

Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as face or dust masks that are specifically designed to filter out microscopic particles.

10. Make certain control switch is **OFF** before connecting the machine to the power supply.
11. Make certain the machine is properly grounded.

12. Keep safety guards in place at all times when the collector is in use. If removed for maintenance purposed, use extreme caution and replace the guards immediately.
13. Provide for adequate space surrounding work area.
14. Keep the floor around the machine clean and free of scrap material, oil and grease.
15. Keep visitors a safe distance from the work area. Keep children away.

Familiarize yourself with the following safety notices used in this manual:



This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.



This means that if precautions are not heeded, it may result in serioius injury or possibly even death.

INTRODUCTION

This manual is provided by APEX Machine Group covering the safe operation and maintenance procedures for this collector. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This collector has been designed and constructed to provide years of trouble free operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local dealer or APEX Machine Group who can also be reached at our web site: www.apexmachinegroup.com (855-500-2739) or (952-895-1518).

SPECIFICATIONS

Model Number:	PWDC-5
Main Motor:	5 HP, 3 HP, 208/230 V
Dust Collector Inlet:	6 inch
Dust Collection CFM:	1350
Overall Dimensions:	36 x 30 z 68" High
Gross Weight:	1,760 lbs
Net Weight:	1,650 lbs
Water Capacity:	32 Gallons
Solution Requirements:	82 Ounces of 1100 metalworking solution for a 2% Solution

- **NOTE:** The collector is pre-wired 208 / 230V three phase. Conversion to 460V requires the purchase and installation of additional parts.

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, APEX Machine Group, reserves the right to change specifications at any time without prior notice.

UNPACKING

Open shipping container and check for shipping damage. Report any damage immediately to your distributor and shipping agent. Do not discard any shipping material until the collector is installed and running properly. Compare the contents of your container with the following parts list to make sure all parts are intact. Missing parts, if any, should be reported to your distributor. Read this instruction manual thoroughly for assembly, maintenance and other instructions. Be sure to check inside the filter, by opening the door to find manual and sample of additive for water.

INSTALLATION AND ASSEMBLY OF UNIT

ELECTRICAL INSTALLATION:

All electrical work must be done by a qualified electrician or qualified person according to local, state and national codes.

Caution: Installation can cause exposure to live components. Be sure to disconnect electrical power before proceeding with installation.

Determine the location where the collector will be installed. Be sure to allow sufficient room around the unit to service the sludge collection bin, or roll the unit out of position. Allow for the inlet ducting and the exhaust air also. When selecting a location consider the floor surface; a smooth and level floor will be helpful when moving unit for cleaning.

1. Uncrate collector using caution not to damage the paint while lifting or dismantling the crate.
2. Remove any other item that may be on the skid.
3. When using a forklift, be careful lifting the unit as it is top heavy.
4. After placing the unit onto its location be sure to lock the front caster so the unit does not move.
5. When make the electrical connection, a quick power plug is recommended so it is easy to disconnect when unit is required to be moved for cleaning.
6. Check blower for proper rotation direction; if blower rotation is backward, interchange two of the motor lead connections. (L1 and L2)
7. Start unit by depressing the start button located on the starter box.
8. Check total current draw on the motor with water in the unit and at the proper level. If the amperage is higher than the rating on the motor, either the water level or the inlet needs to be blocked off to reduce the total amperage. (For best performance, the motor should run a few amps lower than total listed on motor name plate).
9. Water is added as needed through the front-loading door. Water should be filled to a level about ½ way up the water sight window. (Middle of sight glass or approx. 9" up). Note

that if water comes out of the top of the exhaust silencer the water level is too high and you need to take out some of the water.

10. After water and rust additives are added, and the inlet pipe is connected, start unit and check the current draw. See general maintenance for type of additive and amount.

230 VOLT OPERATION

This unit is factory built and tested at 230 / 3 / Phase / 60 HZ Voltage and overloads are size for this voltage also. (Will also run on 208 / 3 / 60 current).

460 VOLT OPERATION

The 5 HP motor on this unit can run at 460 / 3 / 60 voltage also, however the starting unit and overloads along with the rewiring of the motor are required. Contact your local dealer or Apex Machine Group if you require the unit to run on 460 voltage.

230 SINGLE PHASE VOLTAGE

Requires unit to be purchased this way.

OPERATION CONTROLS

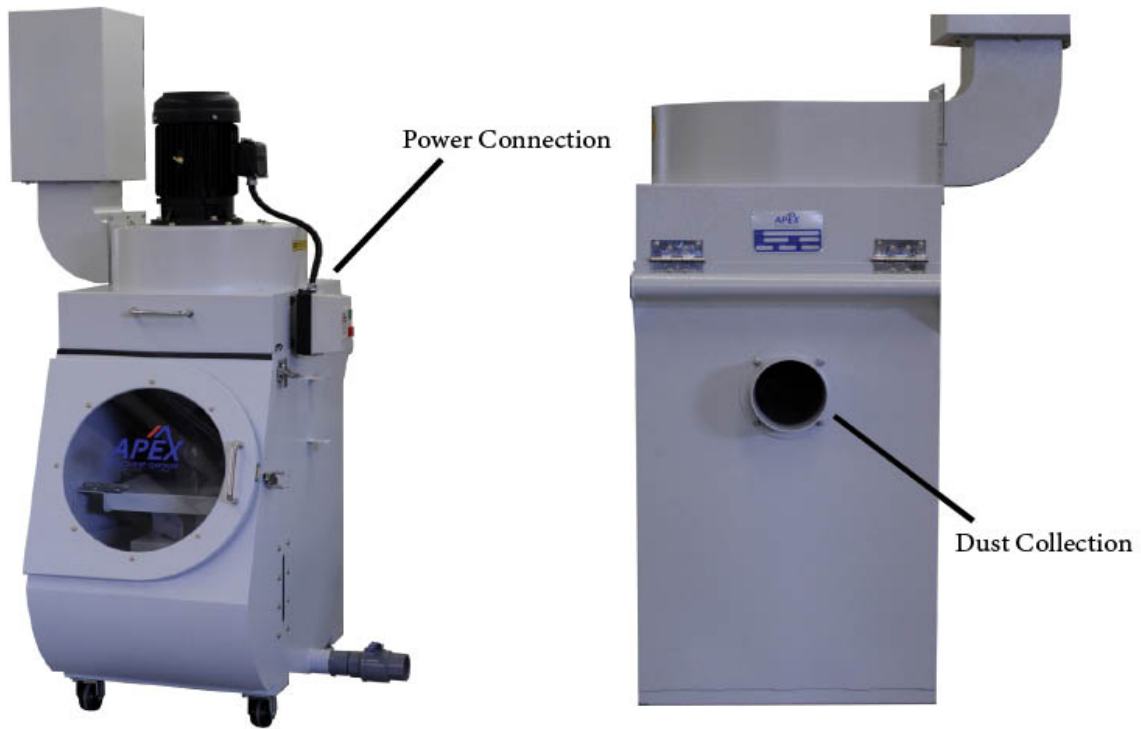
For Starting and Stopping of this collector: Press the green button labeled START. Press the red button labeled STOP.

GENERAL MAINTENANCE

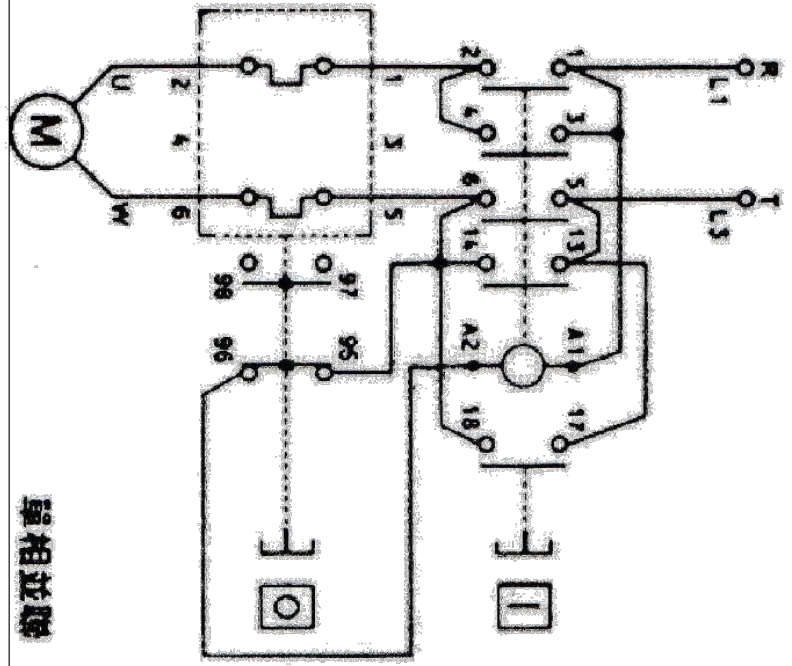
1. No lubrication of the main motor is required as it is permanent pre-lube type. Keeping it clean is all that is required.
2. The sludge or sump should be raked or drained and washed out once the material reaches a certain level and effects the air flow.
3. When cleaning the tank or sump tank area, with this unit on casters, it can be pushed over to a drain to be emptied and washed out. The easy to open front door gives you access to the inside of the unit.
4. The use of biodegradable additive is recommended to help in containing any odor and rust from water being inactive for a period of time. (Syn Kool 7000 #101-41080-05 from Lubrication Technologies Inc. 763-545-0707) is a source. Once Water level is determined add about 16 oz of additive and if excessive foaming happens reduce the ratio of the additive.

CONNECTION POINTS:

Only two connections are required; power supply to the starter box, located on the right side of the unit and inlet pipe (6") located at the back of the unit.



SINGLE-PHASE TERMINAL JUMPER POWER SOURCE

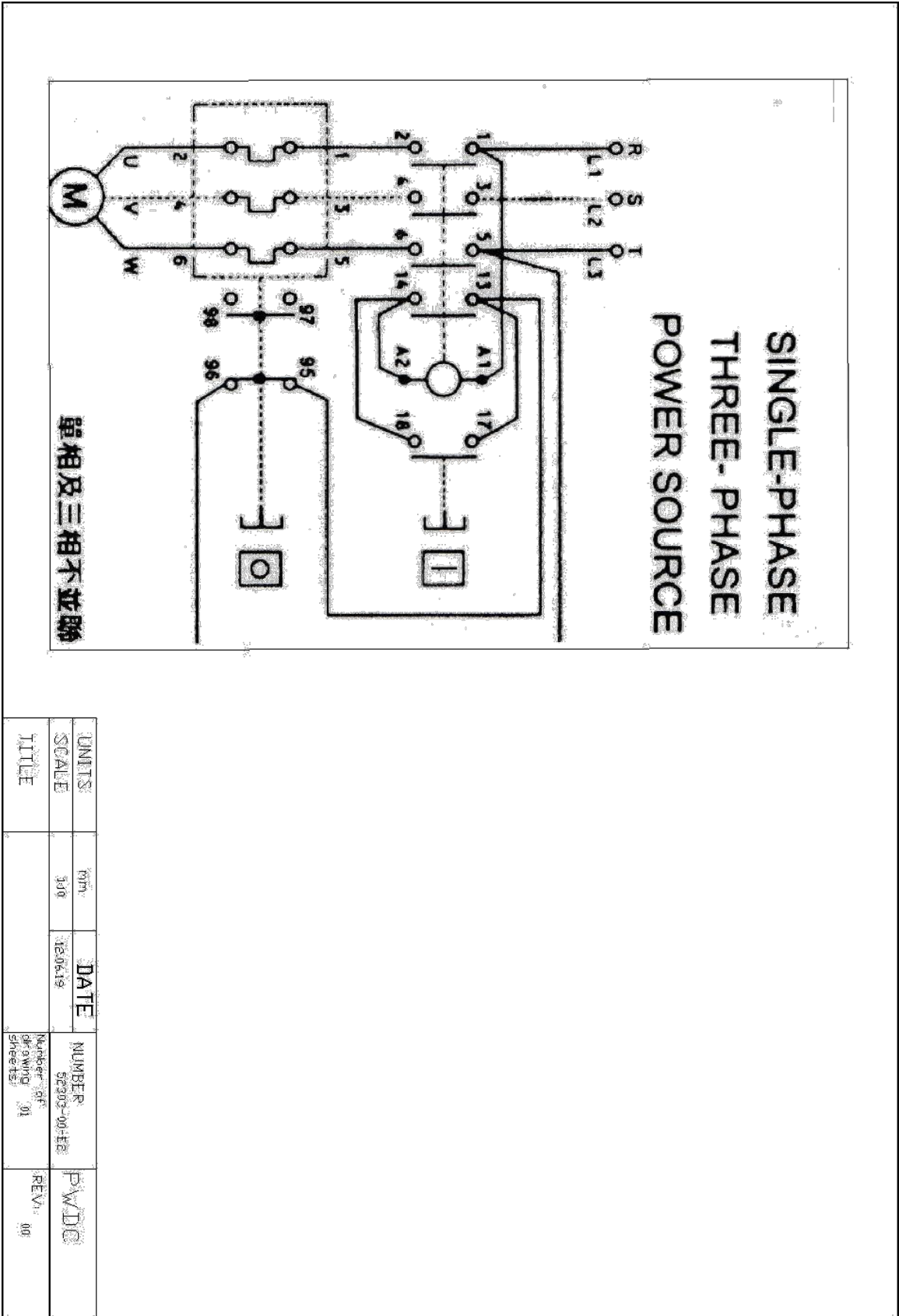


UNITS	mm	DATE	NUMBER	PWD/C
SCALE	1:1	12/06/19	20203-00-02	REV: 00
TITLE			Number of drawing sheets: 01	

SINGLE PHASE ELECTRICAL BOM

PWDC EZ WC 52303-1	PWDC-5	
ELECTRICAL PARTS LIST	5HP	
1PH	230/1/60	
24.4 FLA	2019/03/19	
Description	Sheng	
REFERENCE ITEMS	Symbol	q'ty
SEE ELECTRICAL NAMEPLATE FOR OPTIONS SUPPLIED WITH THIS MACHINE		
ELECTRICAL DIAGRAM	52303-00-E1	
COMMON PARTS		
ELECTRICAL ENCLOSURE		1
HEAD NO. 1 (FLA 24.4)		
FUKUTA 5 HP 3450 ,IP54, FR 112M, BI BY 230/1/60		1
NHD MS1-25D 1PH 5HP 230V 24-28A IP54 (MS1-25D1H7N282P)		1

THREE PHASE ELECTRICAL DIAGRAM 230 OR 460 VOLTAGE

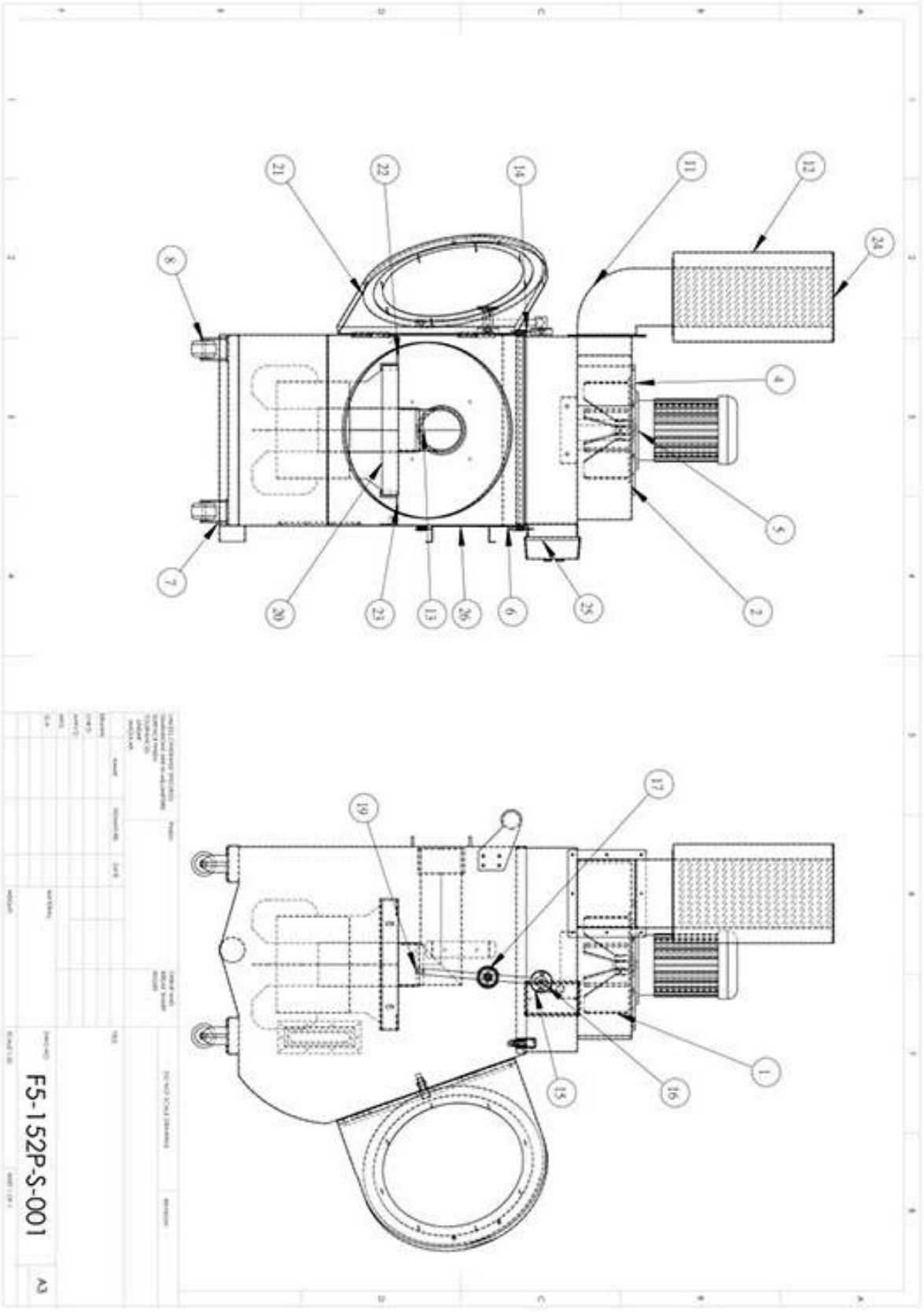


THREE PHASE ELCTRICAL BOM 230 VOLT

PWC EZ WC 52303-1	PWDC-5	
ELECTRICAL PARTS LIST	5HP	
3PH	230/3/60	
12.4 FLA	2012/06/19	
Description	Sheng	
	Symbol	q'ty
REFERENCE ITEMS		
SEE ELECTRICAL NAMEPLATE FOR OPTIONS SUPPLIED WITH THIS MACHINE		
ELECTRICAL DIAGRAM	52303-1-E1.E2	
COMMON PARTS		
ELECTRICAL ENCLOSURE		1
HEAD NO. 1 (FLA 12.4)		
FUKUTA 5 HP 3450 ,IP54, FR 112M, B3 MNT, F2 BOX, 230/460/3/60		1
NHD MS1-12D 3PH IP54		1

THRE PHASE ELECTRICAL BOM 460 VOLT

PWC EZ WC 52303-1	PWDC-5	
ELECTRICAL PARTS LIST	5HP	
3PH	460/3/60	
6.2 FLA	2012/06/19	
Description	Sheng	
REFERENCE ITEMS	Symbol	q'ty
SEE ELECTRICAL NAMEPLATE FOR OPTIONS SUPPLIED WITH THIS MACHINE		
ELECTRICAL DIAGRAM	52303-00-E2	
COMMON PARTS		
ELECTRICAL ENCLOSURE		1
HEAD NO. 1 (FLA 6.2)		
FUKUTA 5 HP 3450 ,IP54, FR 112M, B3 MNT, F2 BOX,460/3/60		1
NHD MS1-12D 3PH 5HP 460V 7.5A IP54 (MS1-12D 3S7N82P)		1



Parts List for PWDC-5

<u>Item No.</u>	<u>Part No...</u>	<u>Descriptio n</u>
1	P-0009	Blower Fan
2	P-0005	Blower Housing
3		
4	P-0007	Blower Housing Mounting Plate
5		
6		
7	P-0018	Straight Caster
8		
9		
10		
11	P-0001	Diffusor Mounting Tube
12	P-0002	Silencer
13	P-0012	Separator Tube
14		Sealing Gasket
15	P-0024	Support Bracket
16		
17	P-0027	Knob
18		
19	P-0026	Support Rod
20	P-0008	Separator
21	P-0003	Front door
22	P-0014	Separator Sprt Bracket
23	P-0015	Separator Sprt Bracket
24	P-0004	Silencer top screen
25	P-0017	Control Box
26	P-0006	Unit Frame

**Lubrication Technologies
Material Safety Data Sheet
LUBE-TECH SYN-KOOL 7000**

Lubrication Technologies
900 Mendelssohn Avenue North
Golden Valley, MN
55427-4309

Emergency: 800-424-9300

Information: 763-545-0707

Fax: 763-545-9256

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: LUBE-TECH SYN-KOOL 7000
Synonyms: Synthetic Coolant
MSDS Code: 10392
Product Type: Metal working fluid
Preparation/Revision Date: 6/21/2010

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS #	% by Weight	ACGIH TWA	OSHA PEL	OSHA STEL	Other
Triethanolamine	102-71-6	1-10	5 mg/m ³	N/E	N/E	N/E
Ethanolamine	141-43-5	1-5	3 mg/m ³	3 mg/m ³	6 mg/m ³	N/E

N/E – Not Established;

SECTION 3 HAZARDS IDENTIFICATION

Primary Entry Routes EYES, SKIN, INHALATION

Acute Effects

Inhalation INHALATION OF MISTS MAY CAUSE IRRITATION OF THE UPPER RESPIRATORY TRACT.

Eye MAY CAUSE IRRITATION

Skin PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION.

Ingestion MAY CAUSE NAUSEA OR DISCOMFORT.

Carcinogenicity NO COMPONENT KNOWN TO BE PRESENT IN THIS PRODUCT AT GREATER THAN 0.1% IS LISTED AS A CARCINOGEN BY IARC, NTP OR OSHA

Medical Conditions Aggravated by Long Term Exposure PRE-EXISTING SKIN AND RESPIRATORY CONDITIONS MAY BE AGGRAVATED BY EXPOSURE.

Chronic Effects UNKNOWN

HMIS:

Health 1

Flammability 0

Reactivity 0

Lubrication Technologies
Material Safety Data Sheet
LUBE-TECH SYN-KOOL 7000

SECTION 4 FIRST AID MEASURES

Inhalation	REMOVE TO A SOURCE OF FRESH AIR.
Eye Contact	FLUSH WITH WATER FOR 15 MINUTES. CONSULT PHYSICIAN.
Skin Contact	WASH WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND LAUNDER BEFORE REUSING. CONSULT PHYSICIAN IF IRRITATION PERSISTS.
Ingestion	GIVE LIQUIDS TO DILUTE. INDUCE VOMITING AND CONSULT PHYSICIAN.
Note to Physicians	NO SPECIFIC ANTIDOTE KNOWN. BASED ON INDIVIDUAL REACTIONS OF THE PATIENT, THE PHYSICIAN'S JUDGMENT SHOULD BE USED TO CONTROL SYMPTOMS AND CLINICAL CONDITIONS.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point	N/A – PRODUCT CONTAINS WATER.
Autoignition Temperature	N/D
LEL	N/D
UEL	N/D
Extinguishing Media	IF WATER IS REMOVED, USE CARBON DIOXIDE, DRY CHEMICAL OR FOAM.
Unusual Fire or Explosion Hazards	NONE KNOWN.
Fire Fighting Instructions	WEAR PROTECTIVE GEAR DURING FIREFIGHTING.
NFPA:	
Health	1
Flammability	0
Reactivity	0
Special	N/A

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or Release Procedures	APPLY DRY ABSORBENT MATERIAL AND SWEEP UP THOROUGHLY. FLUSH AREA WITH WATER AND MOP UP THOROUGHLY TO AVOID RESIDUAL SLIPPERINESS.
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**Lubrication Technologies
Material Safety Data Sheet
LUBE-TECH SYN-KOOL 7000**

SECTION 7 HANDLING AND STORAGE

Handling Precautions AVOID CONTACT WITH EYES, SKIN AND CLOTHING. USE ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. DO NOT ADD NITRITES TO THIS PRODUCT.

Storage Requirements KEEP AWAY FROM STRONG OXIDIZERS. KEEP CONTAINERS CLOSED WHEN NOT IN USE.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW THE EXPOSURE LIMITS IN SECTION 2.

Personal Protection Equipment

Eye/Face Protection SAFETY GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS.

Skin Protection RUBBER GLOVES AND LONG SLEEVES TO MINIMIZE EXPOSURE.

Respiratory Protection REQUIRED IF THE EXPOSURE LIMITS IN SECTION 2 ARE EXCEEDED. RECOMMENDED IN MISTING CONDITIONS.

Other EYE WASH AND SAFETY SHOWER RECOMMENDED.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, or applying cosmetics.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	BLUE LIQUID	Water Solubility	SOLUBLE
Odor	MILD	Boiling Point	>212°F
Vapor Pressure (mmHg)	AS WATER	Freezing/Melting Point	N/D
Vapor Density (Air = 1)	AS WATER	Evaporation Rate (BuAc = 1)	AS WATER
Specific Gravity (Water = 1)	1.04		
pH (Neat)	10.00		
pH (Dilution)			
At Percent	5		
pH	9.45		

**Lubrication Technologies
Material Safety Data Sheet
LUBE-TECH SYN-KOOL 7000**

SECTION 10 STABILITY AND REACTIVITY

Stability	THIS PRODUCT IS STABLE AT ROOM TEMPERATURE IN CLOSED CONTAINERS UNDER NORMAL STORAGE AND HANDLING CONDITIONS.
Chemical Incompatibilities	STRONG OXIDIZERS
Hazardous Decomposition Products	THERMAL: OXIDES OF CARBON AND NITROGEN
Hazardous Polymerization	HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

SECTION 11 TOXICOLOGICAL INFORMATION

NO DATA AVAILABLE

SECTION 12 ECOLOGICAL INFORMATION

NO DATA AVAILABLE

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal	FOLLOW PERTINENT REGULATIONS FOR DISPOSAL. IT IS THE RESPONSIBILITY OF THE PRODUCT USER TO DETERMINE, AT THE TIME OF DISPOSAL, WHETHER A MATERIAL CONTAINING THE PRODUCT OR DERIVED FROM THE PRODUCT SHOULD BE CLASSIFIED AS A HAZARDOUS WASTE. (40 CFR 261.20-24)
RCRA Hazardous Waste Number	N/A

SECTION 14 TRANSPORT INFORMATION

Proper Shipping Name	NOT HAZARDOUS UNDER DOT, AIR, OR IMO REGULATIONS.
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SECTION 15 REGULATORY INFORMATION

TSCA Section 8(b)	ALL OF THE COMPONENTS IN THIS PRODUCT ARE ON THE TSCA INVENTORY.
CERCLA Reportable Quantity	NONE

**Lubrication Technologies
Material Safety Data Sheet
LUBE-TECH SYN-KOOL 7000**

SECTION 15 REGULATORY INFORMATION - CONTINUED

SARA Title III, Section 313 THIS PRODUCT CONTAINS NO TOXIC CHEMICAL SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.

Ozone Depleting Substances THIS PRODUCT WAS NOT MANUFACTURED, DOES NOT CONTAIN, AND WAS NOT PACKAGED USING ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES AS DEFINED BY THE CLEAN AIR ACT.

SECTION 16 OTHER INFORMATION

Precautionary Labels WARNING

- MAY CAUSE EYE IRRITATION
- MAY CAUSE SKIN IRRITATION
- HOT VAPORS MAY CAUSE RESPIRATORY IRRITATION
- HARMFUL IF SWALLOWED

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Lube-Tech must rely on information provided by those materials manufacturers or distributors.

Creation date: 06/21/2010
File: Lube-Tech Syn-Kool 7000
Version: 1

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