

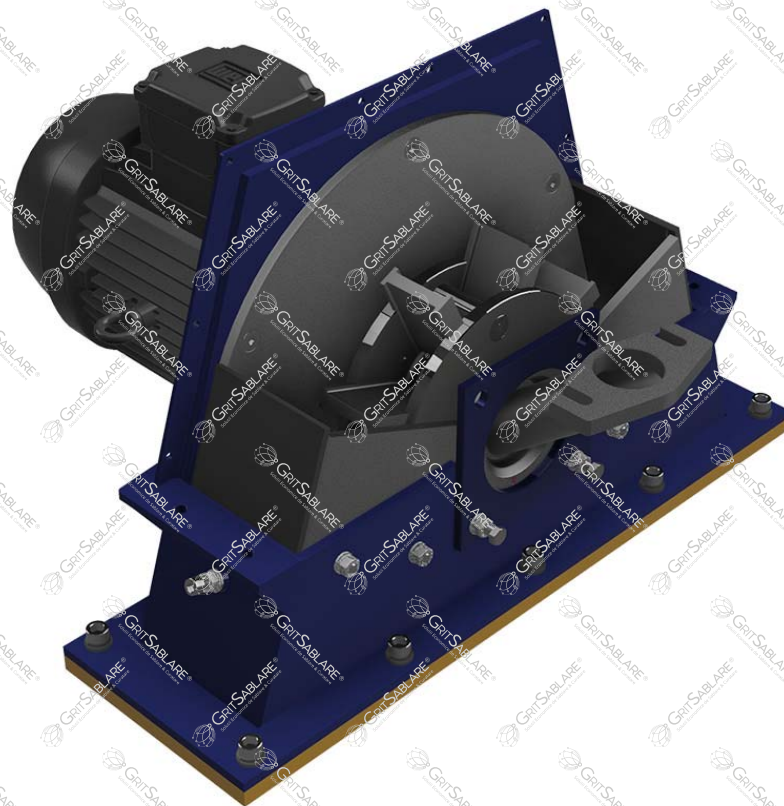
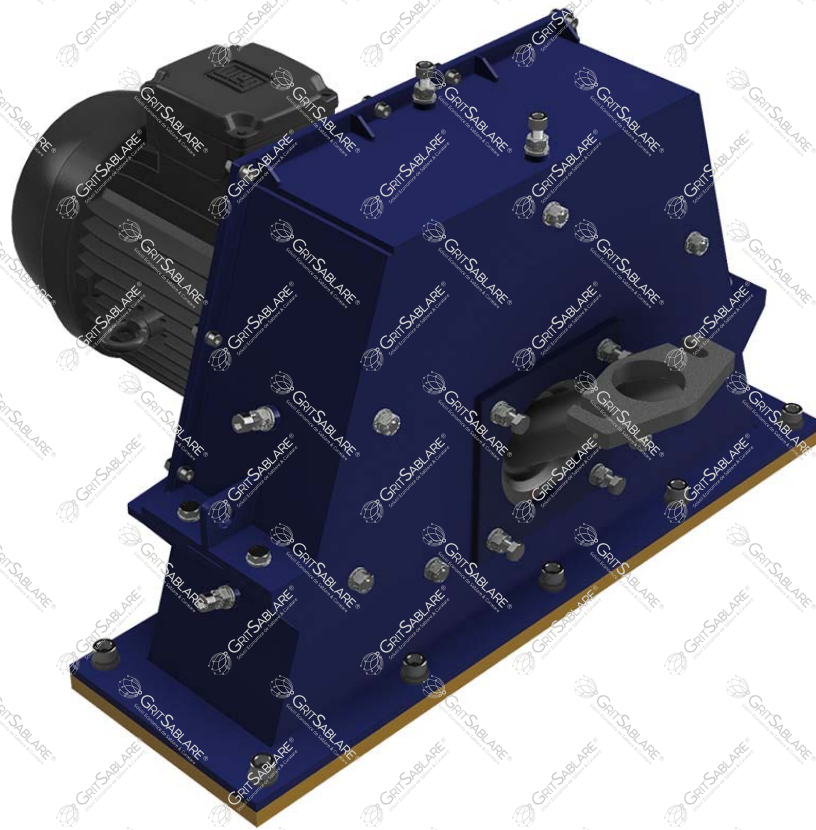


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Sustainable Solutions for Blasting & Cleaning

Dedicated Line for Professional Blasting Equipment



Blast Wheel R370F by GritSablare

OPERATIONS AND MAINTENANCE MANUAL



Section 1. PRODUCT IDENTIFICATION

Product name

Blast Wheel R370F by GritSablare

Distributor:

GritSablare

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Storage & Logistic: Constanța Seaport, Gate 2, SORENA Platform, Constanța, Romania

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Section 2. SPECIFICATION, DUTY AND SERVICES

ITEM

SPECIFICATION

Wheel Type

Direct drive, reversible

Wheel Size

370 mm effective diameter

Blast Pattern

900 mm wide @ 1000 mm from the wheel centre line

Wheel Motor

15.0 kW

Abrasive Flow Rate

225 to 275 KGs per minute

Reference Drawings attached to this manual as follows:

- SI RD3015-1 - General Arrangement
- SI RD3015-2 - R370 Blast Wheel Assembly
- SI RD3015-3 - R370 Blast Wheel Assembly Detail
- SI RD3000-4 - Wheel Hood Lid with Liners
- SI RD3015-5 - Wheel Hood base with Liners
- SI 200 - Abrasive Valve

Section 3. OPERATING AND MAINTENANCE INSTRUCTIONS

1. Always be sure that the operating instructions for your machine and wheel unit have been read thoroughly and are strictly adhered to.
2. When the wheel unit has been installed and is now ready for commissioning check that all hoppers and elevator are clear of debris.
3. Check the existing machine operation as per the supplier's instructions/manual.
4. Set all Dust Extraction Dampers to at least ½ open.
5. Check for correct rotation of the blast wheel and ensure the blast pattern has been set correctly.



VERY IMPORTANT!

- It is important that persons operating this wheel unit are fully conversant with the operating and maintenance instructions and that he/she wear eye protection whilst operating machine and also any person working in near vicinity of the machine.
- The grade of eye protection recommended for use of shot blast machines are BS2092 impact grade 1.

ALL LOCAL REGULATIONS IN THE COUNTRY OF INSTALLATION FOR THE MACHINE MUST BE CHECKED AND COMPLIED WITH BY THE CLIENT

Section 4. EFFECTIVE BLAST CLEANING

In order to get the best from your Blast Wheel it is important to follow these three simple rules:

RULE ONE - ABRASIVE

- Always use premium quality steel abrasive.
- Select the best mixture of shot and grit to achieve the desired surface profile and production rates. Remember the size of abrasive gives the surface profile and the line speed is used to control the cleanliness of the steel.
- Maintain a good working mix. This is achieved by making regular additions, twice daily, to the machine and carrying out a sieve analysis of the abrasive least once a week to monitor the abrasive distribution. Generally 45% to 55% of the abrasive sample should be of the nominal size for selected abrasive and then there should be an even distribution of abrasive down to the cutoff point which generally should be 0.3mm for abrasives of S280 / G50 or bigger sizes.
- High Carbon Steel Shot must be as per SAE J827
- High Carbon Steel Grit must be GM grade with a hardness of HRC 50 to 55 and with a chemical composition as per SAE J827

RULE TWO - BLAST STREAM

- Always ensure that the correct level of wheel amps are being utilised to throw abrasive.
- Always ensure that the blast patterns are correctly aimed at the work to be processed.
- Simply put – throw the right quantity of abrasive for the line speed required in the right direction.

RULE THREE - MAINTENANCE

- Carry out the maintenance as per the guidelines in this manual. Blast Wheels are self-destructive, if you do not carry out the maintenance the machine will break down and these break downs may not be covered by the warranty.

Section 5. OVERVIEW

- The R370F Blast Wheel Unit is a bidirectional direct drive blast wheel unit that is mounted on a heavy-duty base plate.
- When installing the wheel correct positioning and rotation is critical to optimise the effectiveness of the unit and GritSablare can offer expert assistance with this.
- It is suitable to be used in any surface preparation application using steel abrasive, both shot or grit or a shot/grit mixture.

Section 6. ABRASIVE FLOW RATE

- When retrofitting to an existing blast machine the abrasive recycling system must have the correct capacity to recover and recycle the abrasive, the amount of abrasive that can be thrown depends on the power of the blast wheel fitted and this is shown below:

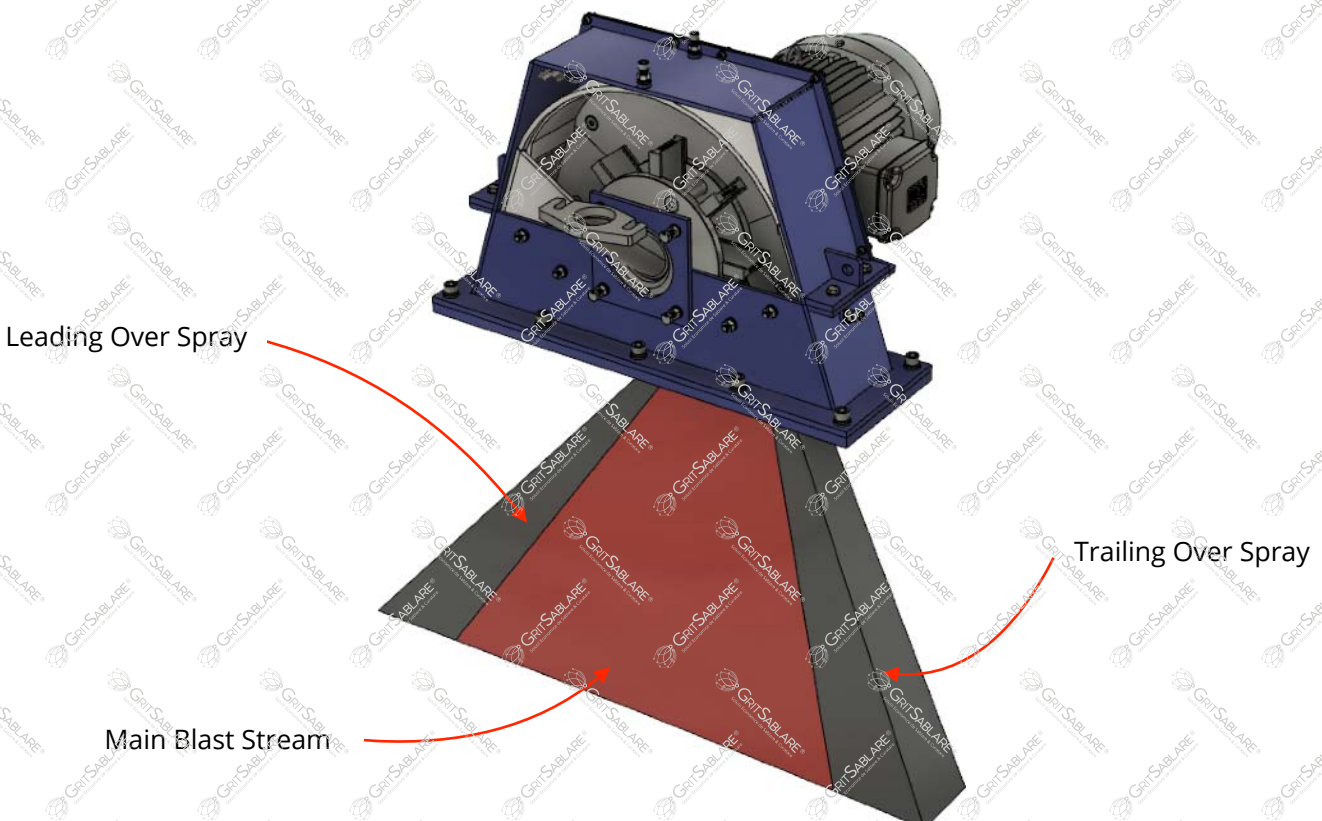
STEEL SHOT THROW RATES IN KGS PER MINUTE (50/60 HZ SUPPLY)

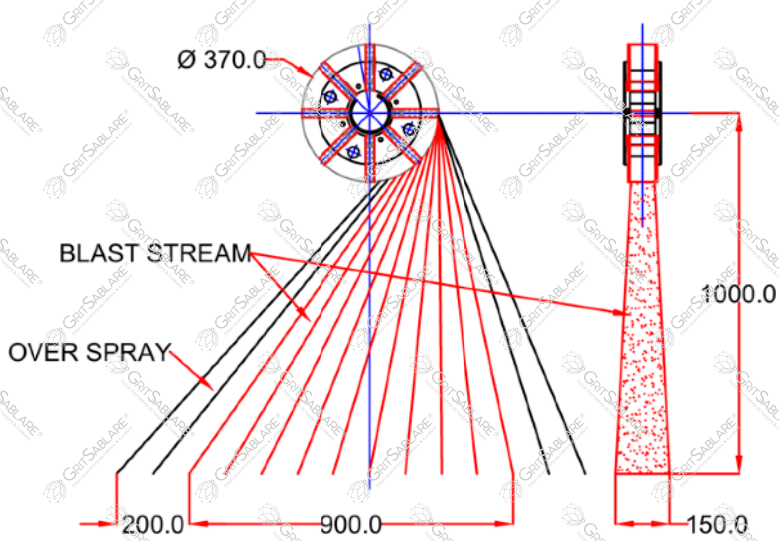
| WHEEL UNIT | 5.5 KW | 7.5 KW | 11 KW | 15 KW | 18.5 KW | 22 KW | 30 KW | 37 KW |
|------------|--------|--------|-------|-------|---------|-------|-------|-------|
| R370 | - | - | 160 | 250 | 275 | 300 | 375 | 450 |

- The wheel units fitted are 15.0 kW and will throw approximately 250 KG's per minute per wheel unit of steel shot subject to the machines design and abrasive recycling / storage capacity.

Section 7. ABRASIVE STREAM

The abrasive stream has three areas:



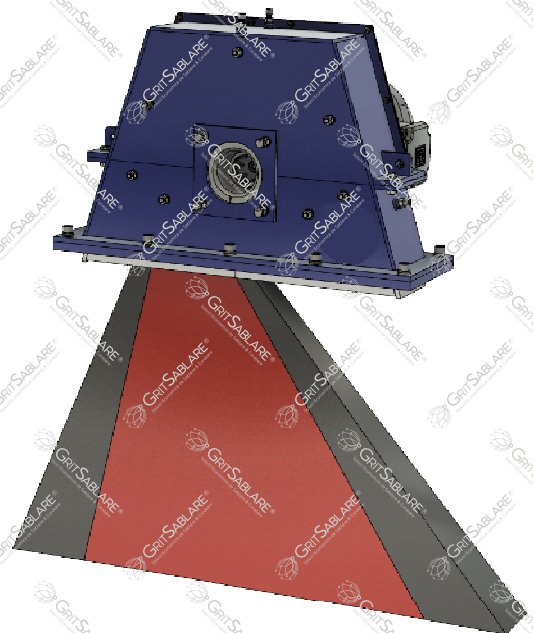


The R370F blast pattern is shown left, the maximum efficiency is achieved when the blast stream impacts the work at a distance of 1 m from the wheel centreline.

At 1 m from the wheel centreline the main blast stream is approximately 900 mm wide x 150 mm thick.



Right Hand Throw



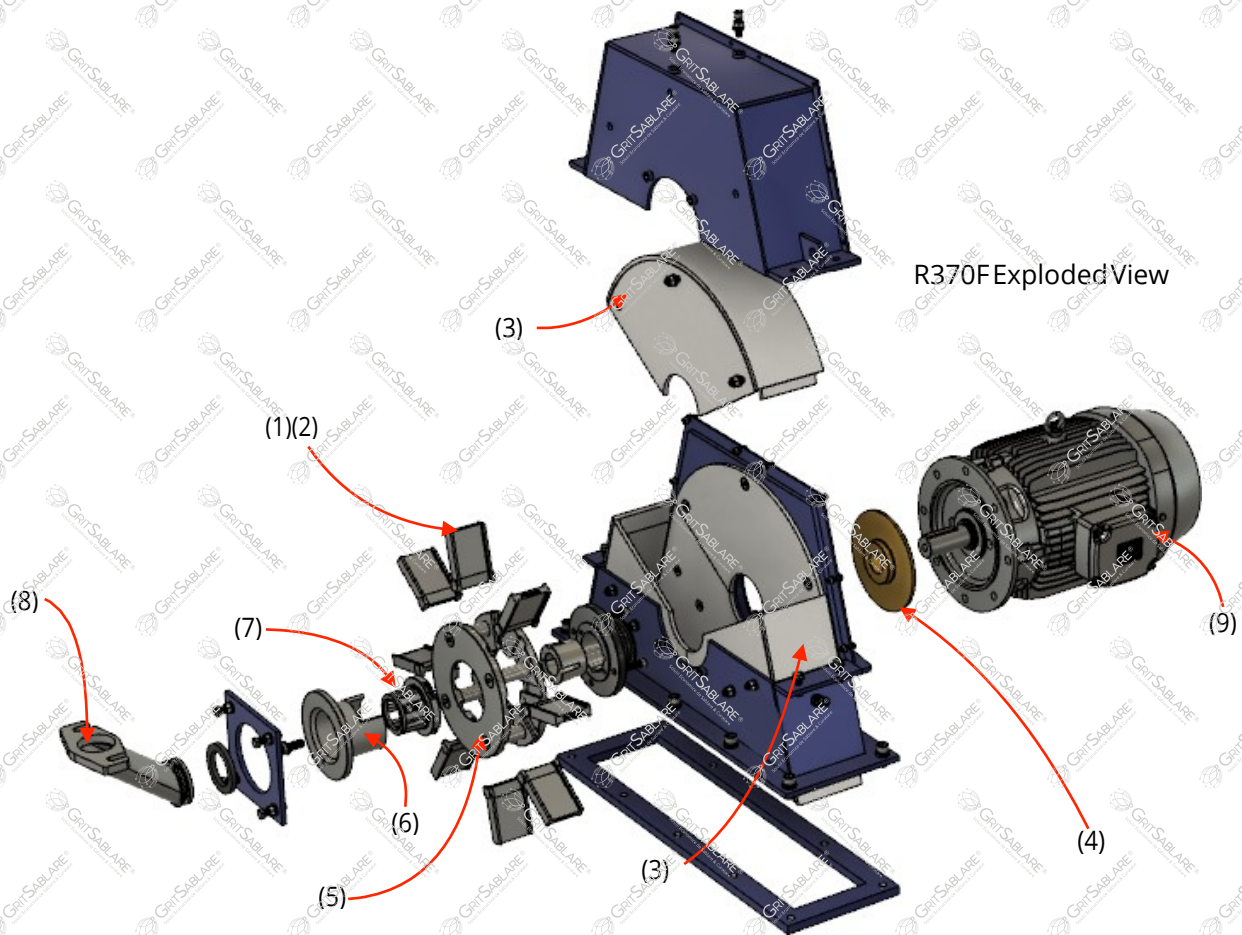
Left Hand Throw

The R370F is a bi-direction blast wheel as shown in the pictures above, the direction is set based on the blast machine design and the product to be blast cleaned. The direction is set by the motor rotation.

The focus of the blast stream is extremely important and this combined with maximising the blast wheel motor amps will provide the most efficient blast cleaning.

Section 8. R370F Arrangement

The main parts and function of each main part are detailed below.



R370F Exploded View

| # | PART NUMBER | NAME | FUNCTION |
|---|-------------------|------------------------|--|
| 1 | SI 001C | Wheel Blade (Cast) | Throw of the abrasive |
| 2 | SI 001M | Wheel Blade (Machined) | Throw of the abrasive |
| 3 | SI 004, 006, 130 | Hood Liners | Protective enclosure |
| 4 | SI 005 | Hood End Wear Plate | Protective enclosure |
| 5 | SI 002 | Blast Wheel | Hold the wheel blades |
| 6 | SI 026 | Dispenser Housing | Set the abrasive stream position (Focus) |
| 7 | SI 025 | Dispenser | Feed of the abrasive to the wheel blades |
| 8 | SI 024 | Feed Chute | Delivery of abrasive to the wheel unit |
| 9 | SI CIM-D160(15.0) | Blast Wheel Motor | Rotation and power |



Section 9. BASIC GUIDE FOR BLAST WHEELS / AUTOMATIC BLAST MACHINES

1. Use only steel abrasive, shot or grit. **NEVER USE CHILLED IRON ABRASIVE OR HARDENED STEEL ABRASIVE.** Only premium steel abrasive manufactured in accordance with the guidelines given by GritSablare. We recommend the use of PREMIUM QUALITY HIGH OR LOW CARBON STEEL SHOT, if grit is required then GM hardness should be used to ensure efficient blast cleaning and long life of your machine. Please see the specification at the back of this manual.
2. GritSablare can supply a range of premium steel shot and steel grit and can recommend specific mixtures of abrasive to give the best performance and the combination of the required profile and surface cleanliness. The size selection is based on the surface profile required.
3. Never re-cycle fines into machine.
4. Monitor ammeters regularly to ensure good cleaning.
5. Check and service machine/blast wheel regularly as per the maintenance recommendations.
6. Regularly empty the dust extraction unit. The compressed air supply to the dust collector must be left on at all times so the pulse cleaning system for the filters operates continuously.
7. Do not overload recovery system when filling machine with abrasive (i.e. fill slowly).
8. Keep area around the machine clean of loose shot that can be slippery and dangerous.
9. Always use eye protection whilst in the vicinity of running equipment.
10. Do not allow any large particles to get into the abrasive.
11. Never clean damp components. Wet shot becomes hard causing blockages and possible damage to the plant.

IMPORTANT

- Under no circumstances should the plant be closed down using the isolator or emergency stop button fitted to the control panel, as this will close the machine down in the incorrect sequence.

THE EMERGENCY STOP BUTTON WILL COMPLETELY CLOSE THE PLANT DOWN AND SHOULD BE ONLY USED IN EMERGENCIES, NOT AS MEANS OF CLOSING DOWN THE PLANT.

- Should the emergency stop be used the main control panel will need to be reset.

N.B.

- New abrasive should only be added to the plant whilst recovery system is running.
- Eye protection should ALWAYS be used in the immediate vicinity of the machine whilst in operation.

Section 10. MAINTENANCE

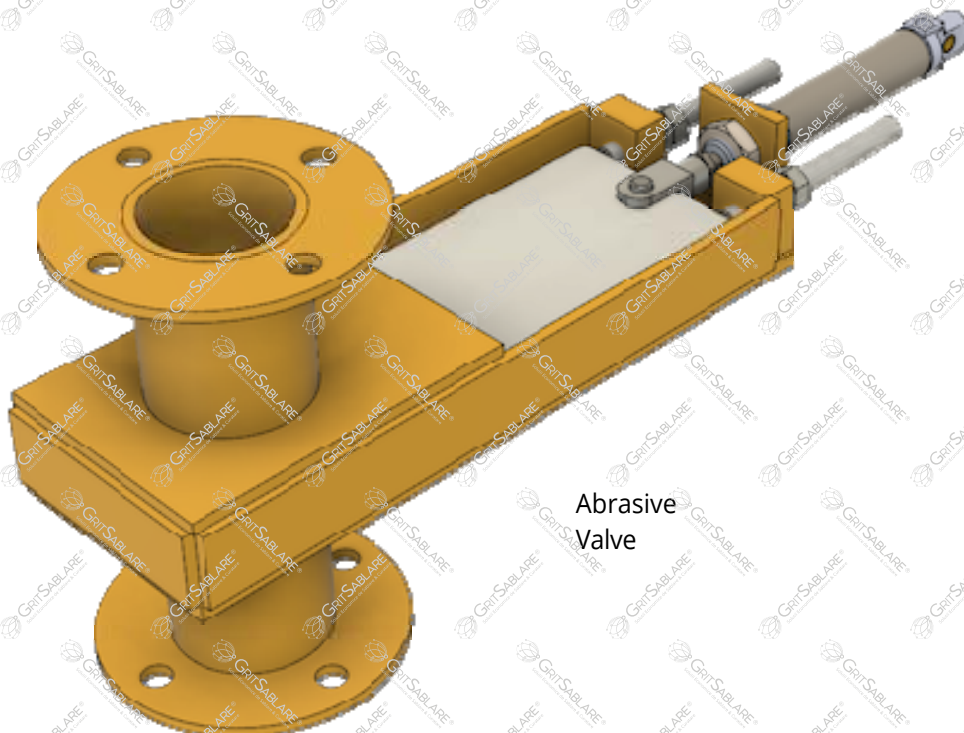
- When ordering spare parts please quote the serial number mentioned on the front cover of this manual along with the actual part number and quantity required. Please see the drawings attached for easy reference for the blast wheel spare parts.

One key point for the operator is to LISTEN and touch the wheel unit. Any abnormal sound or vibration should be investigated immediately by the maintenance staff. Use the correct tools only and never hit any parts of the machine with a metallic hammer or mallet.

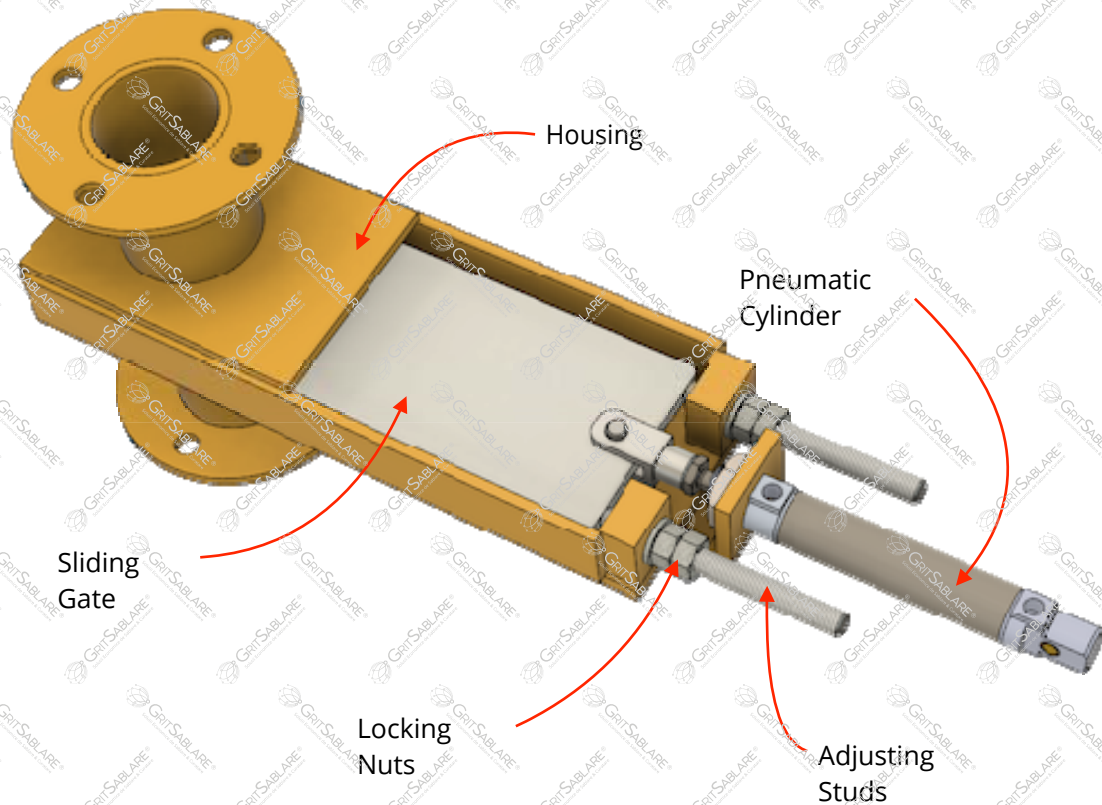
- The following procedures for setting blast wheel amps and blast pattern setting must be followed when the new blast wheels are first commissioned and then at the required time intervals mentioned in the maintenance instructions.

Section 11. SETTING BLAST WHEEL AMPS

- As part of the daily maintenance checks it is very important to check that the wheel amps are set correctly for the wheel motor fitted. If the amps are not set correctly the blasting efficiency will be greatly reduced.
- The flow of abrasive is controlled by the Abrasive Valve as shown in the pictures below and drawing SI 200;



Abrasive
Valve



To set the blast wheel amps for the first time the procedure is as follows:

- A. The blast machine must be running completely in manual mode ensuring the abrasive valve is fully closed before starting the machine up.
- B. Ensure the abrasive hopper is full and the level is even.
- C. Ensure that any manual sliding gates, if fitted, are fully open.
- D. Open the two Adjusting Studs fully.
- E. Disconnect the compressed supply to the pneumatic cylinder.
- F. Slowly manually open the Sliding Gate while checking the blast wheel ammeter until a consistent reading of 20 amps is reached.
- G. Monitor for 5 minutes to be sure the amps reading remains the same.
- H. Screw the two Adjusting Studs to touch with the Sliding Gate and tighten the Locking Nuts.
- I. Manually close the Sliding Gate.
- J. Reconnect the compressed air supply.
- K. Open the valve with the compressed air supply and check the wheel amps reading.
- L. Close the valve.
- M. Open the two Adjusting Studs 1-2 turns and then open the Sliding gate and check the amps.
- N. The amps should of increased and a note can be taken of the increase to turns opened to gauge how much further the Adjusting Studs need to be moved to get the required amps on the wheel.
- O. Open the Adjusting Studs further to get the desired wheel amps monitoring for 5-10 minutes between each adjustment.



- **For the R370F Blast Wheel, 15.0 kW, we recommend the wheel amps should be between 20-25.**
- It's important to note that the higher the amps the more abrasive thrown and therefore the higher the abrasive consumption / costs. To achieve the lowest blasting costs it is important to set the blast wheel amps at a level to get the required line speed for the initial steel condition and cleanliness required and not have the wheel amps at maximum unless the maximum line speed is required.

Three conditions can occur when setting the blast wheel amps as follows;

1 - STARVING

- The wheel amps will remain consistently low and then will cause either slow line speeds or a surface cleanliness below what's required.

2 - NORMAL

- The wheel amps set as required and the line speed is matched with the initial steel condition and surface cleanliness required.

3 - CHOKING

- This occurs when the Sliding Gate is opened too far and can be seen by carefully watching the ammeter for the blast wheel. When the Sliding Gate is opened the wheel amps will go high for a short time and then drop down so insufficient abrasive is being thrown with the same effect as 1.
- If this is seen then the Sliding Gate must be closed to stop this and achieve 2.
- If running the blast wheel without abrasive then the actual wheel must be left running to avoid uneven wear on the wheel unit.

Section 12. SETTING BLAST WHEEL PATTERNS

After setting the blast wheel amps the blast wheel patterns or focus must be set, this is done as follows;

1. Place a suitably sized steel plate on the conveyor
2. Move it into the machine ensuring that it is stopped in a suitable position so that all the blast wheels will fire onto it.
3. Start the machine up in the normal manner. Do not start the abrasive.
4. Switch the abrasive on for 15 to 25 seconds (ensure full amps loading is achieved)
5. Move the plate out of the machine.
6. Look at the plate and check if the blast stream has covered all areas of the plate. Check both the top and bottom of the plate, they need to be the same.
7. Should the patterns need adjusting then use the following procedure.



Procedure for Blast Pattern Setting

1. On the blast wheel unit remove the Feed Chute (SI 024)
2. Mark the existing position of the Dispenser Housing (SI 026)
3. Loosen the bolts on the Dispenser Housing Clamp Plate (SI 027)
4. Rotate the Dispenser Housing (SI 026) to move the pattern position based on the initial position found.
5. Remember a small movement can move the blast stream position a lot.
6. Tighten the Dispenser Housing Clamp Plate.
7. Replace the Feed Chute, check that the Feed Chute Seal (SI 033) is not damaged.
8. After all the adjustments have been made re-check the pattern settings.

Attached is a typical blast pattern setting procedure for a six wheel roller conveyor type blasting machine.

Section 13. DAILY MAINTENANCE CHECKS

- Daily maintenance checks must be carried out as per the schedule attached.

Section 14. WEEKLY OR 50 BLASTING HOUR MAINTENANCE CHECKS

- Weekly or 50 Blasting Hours maintenance checks must be carried out as per the schedule attached.
- It is very important to check the wear on the wheel blades as per point 1.2 of the "Weekly Maintenance Schedule". Blades must be replaced once any part of any blade has worn more than 50%. If the wheel blades are not replaced in time then you run the risk of damaging the wheel motor bearings due to the unbalanced load on the wheel. Damage caused this way is not covered by the warranty.

Please note that blades are supplied in balanced sets of eight. You must never mix sets, as this will cause serious damage to the wheel motor.

N.B.

- It is very important that any badly worn parts are replaced. Ignoring worn parts could lead to deterioration in the performance of your machine and possible damage to certain moving parts.

Section 15. MONTHLY OR 200 BLASTING HOUR MAINTENANCE CHECKS

- Monthly or 200 Blasting Hours maintenance checks must be carried out as per the schedule attached.
- Blast patterns should be checked at least once a month as incorrect patterns will result in a poor quality of finish and impose excessive wear to other parts of your machine. Please see the procedure in this manual for principle details of how to set the blast patterns.



Section 16. INSPECTION – REPAIR / REPLACEMENT OF PARTS AND COMPONENTS

For the machine to perform efficiently periodic inspection and maintenance must be accomplished through a regular inspection and preventive maintenance program. "Have a good program and practice it". The purpose of the program is:

1. To detect minor necessary repairs and to foresee all major ones.
2. To anticipate repairs by locating probable causes – i.e. preventative maintenance.
3. To plan repairs for convenient times.
4. To prevent breakdowns.
5. To be certain that the machine is being operated at the highest possible standard.
6. To keep an accurate record of replacements so as to maintain an accurate inventory of spare parts.

CAUTION!

- When performing inspection and maintenance on the wheel unit **all** Electrical Mains power must be disconnected and safety glasses and gloves should be worn.

Please follow the Blast Machines Lock Out Procedure before doing any maintenance.

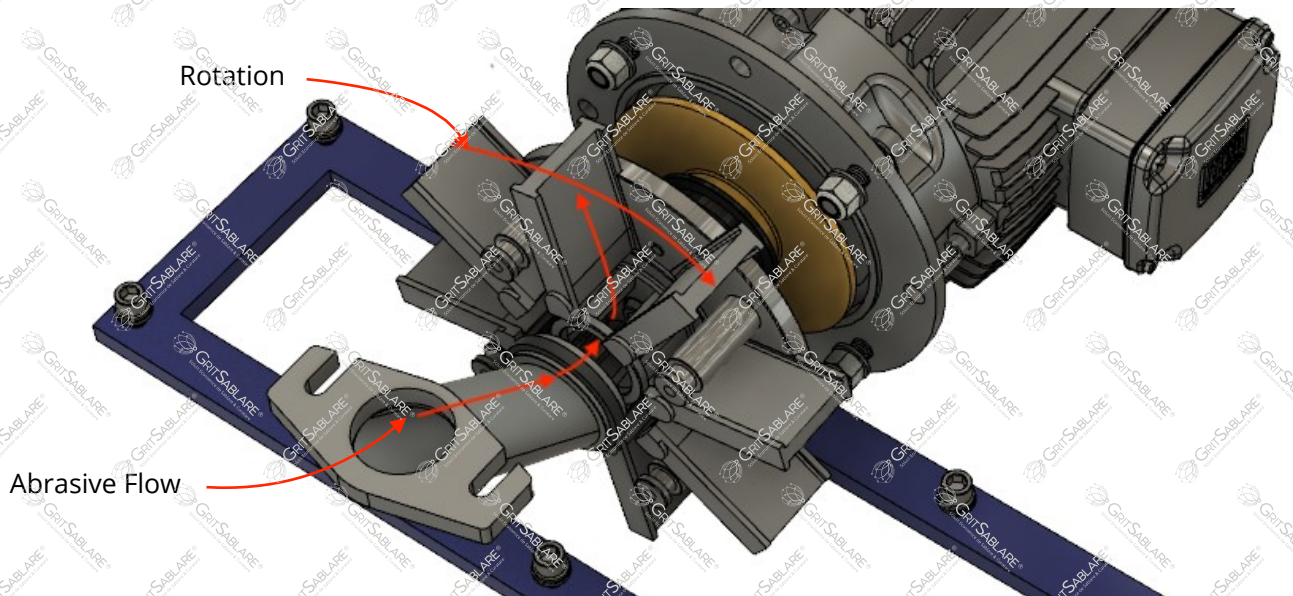
- Before starting work on any part of the machine it is essential to clean any loose abrasive and dust from the area. A single grain of abrasive can cause havoc with screw threads and bearings.
- The components of the machine that require periodic inspection and eventual repair / replacement include, but are not limited to the following:

WHEEL ASSEMBLY (Drawing Ref. SI RD3015-1 / 2 / 3)

- The R370F is mounted on a base-plate that is welded to the side of the blast cabinet to give maximum support.
- It is also important to ensure that the wheel motor retaining bolts remain tight during the machine operation and this must be checked on a weekly / 50 hour basis as per the maintenance checklist provided.
- One of the main objectives of wheel assembly inspection and maintenance is to keep the blast wheel in balance. Severe vibration can be a major cause of bearing and motor failure.
- Please see drawings RD 3015-2 and 3 for reference.
- The most frequent cause of vibration is usually due to worn, chipped or broken wheel blades, (Part Number SI 001). Wear on the wheel varies greatly from one installation to another. Its life is dependent on various operating conditions.
- Although the wheel (Part Number SI 002) may be wearing evenly and may not be causing any abnormal vibrations, it should not be worn all the way through. Holes in the wheel will allow some of the abrasive to enter into areas of the wheel assembly, causing wear on other parts and disrupting the blast pattern.
- The wheel can be used as long as wear has not affected balance, which is shown by vibration particularly on starting up and running down, or until excessive wear has impaired the strength of the wheel or is apparent along the slots holding the blades.
- Inspection of the wheel assembly can be carried out by removing the wheel hood lid or from inside the blast cabinet.

ABRASIVE FLOW


- The picture below shows the flow of the abrasive through the wheel unit, from the abrasive storage hopper the abrasive flows through the abrasive valve and into the Feed Chute where it enters the wheel unit. The opening in the Dispenser Housing, a non-rotating part, allows the abrasive to go into the blast wheel unit that is rotating, the Dispenser has slots that only allow the abrasive into the blast wheel in front of the Wheel Blades, the Wheel Blades then carry the abrasive round and this forms the blast stream or blast pattern.



(Some wheel parts not shown in this picture for clarity)

- The blast stream can be accurately set to target the exact place on the product being processed by rotating the Dispenser Housing's opening.
- Access to the blast wheel for maintenance is obtained by removing the feed chute (Part Number SI 024), abrasive dispenser housing clamping plate (Part Number SI 027), abrasive dispenser housing (Part Number SI 026), hub seal clamping plate (Part Number SI 196) and eventually the hood lid. The feed chute seal (Part Number SI 033) and hub seal (Part Number SI 032) should be replaced if required.

WHEEL BLADES (Part Number SI 001)

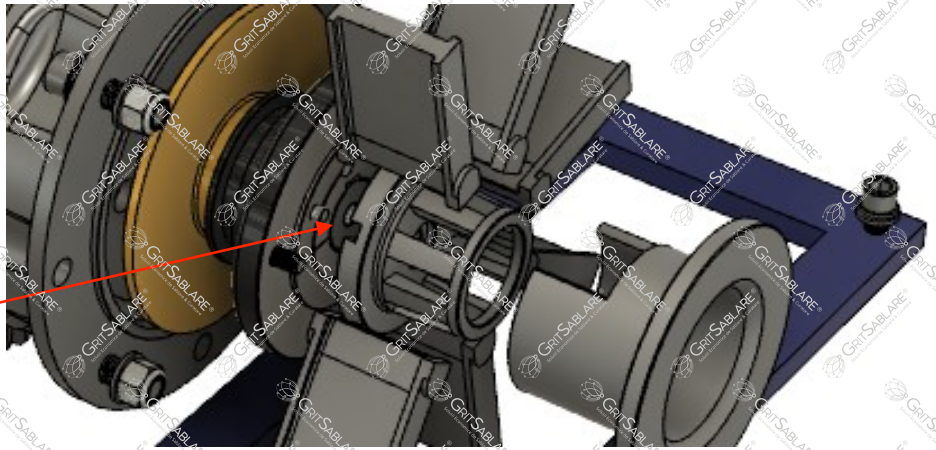
- 
- To remove the wheel blades it is first necessary to remove the feed chute, abrasive dispenser housing clamping plate, the dispenser housing and the dispenser.
 - A socket head cap screw fastens the dispenser to the motor shaft. When the socket head cap screw is removed the abrasive dispenser can be removed.
 - Replacement is the reversal of the above.

The wheel blades are supplied in balanced sets of eight and must only be replaced in complete sets. When any one blade is worn to 50% of the original thickness or a high level of vibration is felt on the wheel motor the complete set must be replaced.

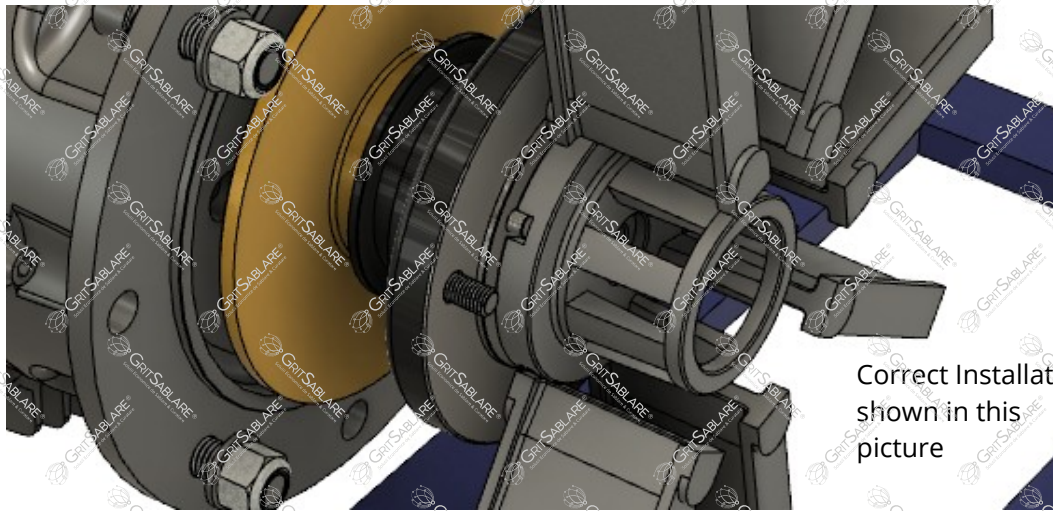
DISPENSER (Part Number SI 025)

Ensure that the dispenser is correctly located on the dowel pins fitted to the wheel hub.

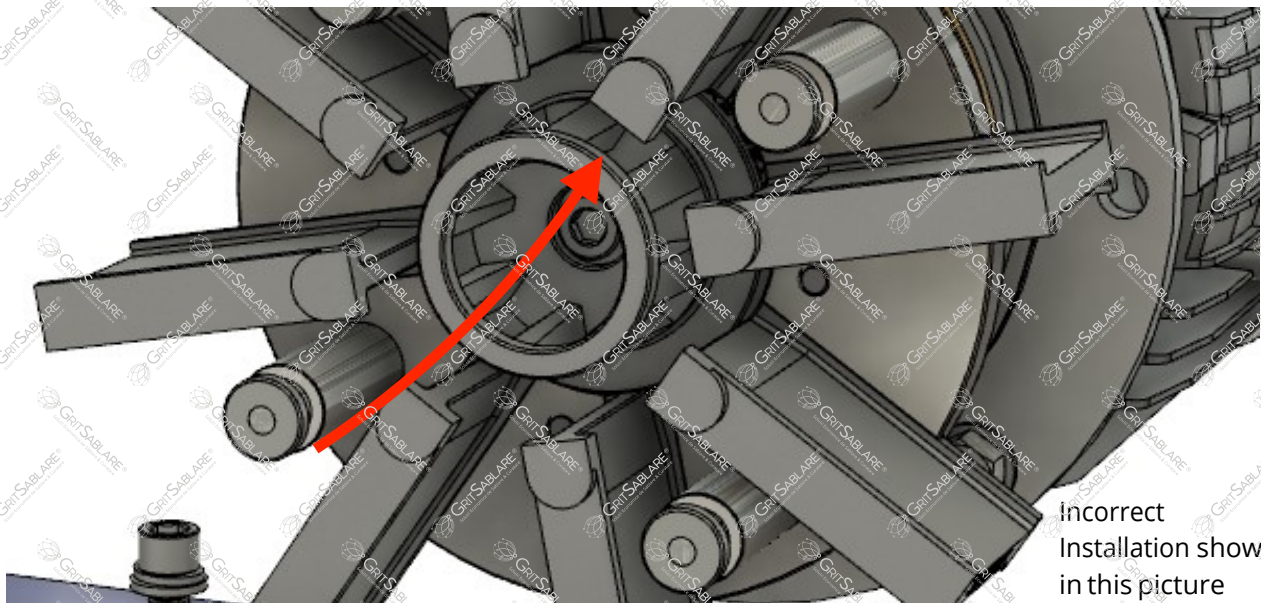
Wheel Hub Dowel / Dispenser Slot



(Some wheel parts not shown in these pictures for clarity)



Correct Installation shown in this picture



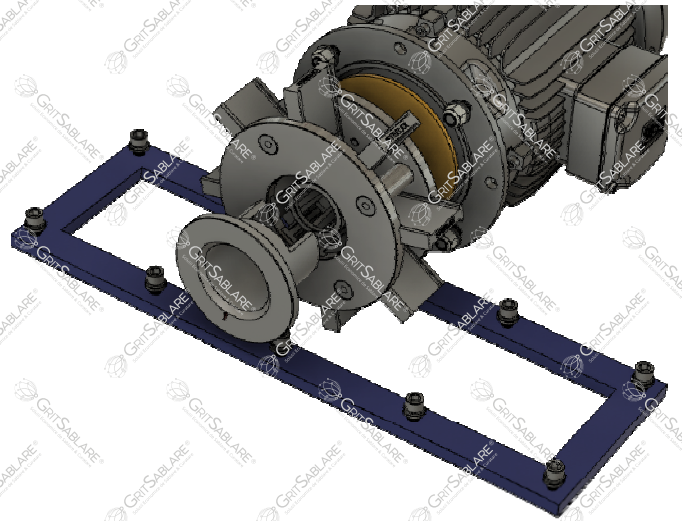
Incorrect Installation shown in this picture

(Some wheel parts not shown in these pictures for clarity)

The picture above shows incorrect installation of the Dispenser where the slot opens onto the wheel blade and will not allow the abrasive to flow onto the blade and cause slow cleaning times.

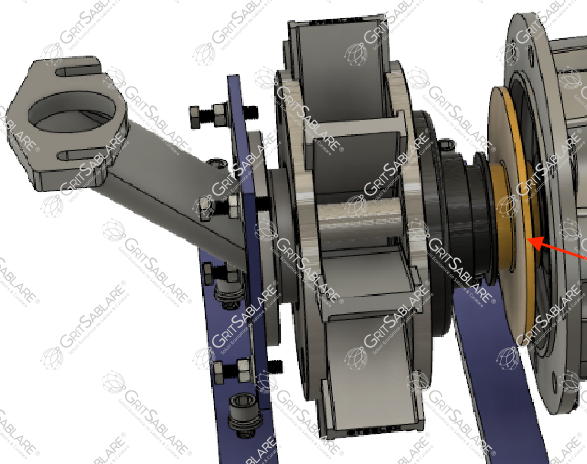
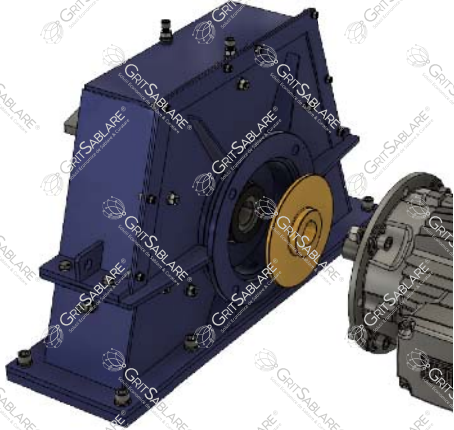
DISPENSER HOUSING (Part Number SI 026)

- The opening in the Dispenser Housing should be positioned as shown in the picture on the right.
- Due to the rotation of the Blast Wheel and the time it takes the abrasive to travel along the Wheel Blast the blast stream will come out at the front of the wheel.
- This position can only be set accurately by following the blast pattern setting procedure.

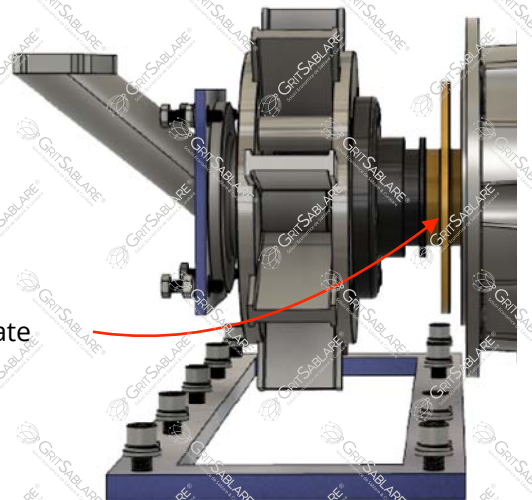


DEFLECTOR PLATE (Part Number SI 132-1-D160)

- The Deflector Plate protects the motor from the abrasive and is fitted on the motor shaft before assembly to the wheel hood as shown in the pictures below. There must be zero gap between the deflector and the motors and wheel hub.



Deflector plate



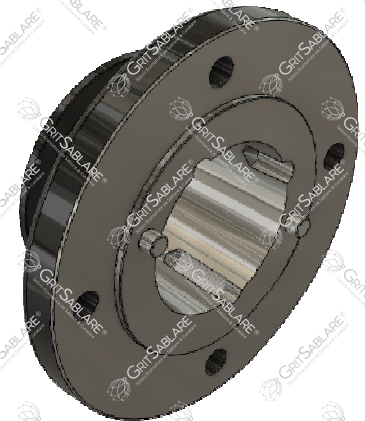
IMPELLER WHEEL (Part Number SI 002)

- To remove the impeller wheel, it is first necessary to remove the feed chute, abrasive housing clamping plate, dispenser housing, dispenser and the wheel hood lid.
- The wheel is then removed by releasing the socket head cap screw in the centre of the abrasive dispenser. This socket head cap screw fastens the wheel hub to the motor shaft. When the socket head cap screw is removed the abrasive dispenser can be removed, this will allow the wheel blades to slide to the centre of the wheel and be withdrawn.
- The impeller wheel can then be removed from the hub by the removal of the four socket head fixing bolts.
- Replacement is the reversal of the above, but before replacing the wheel, the hub felt seal should be inspected and replaced if it is showing signs of wear.



WHEEL HUB (Part Number SI 131)

- To remove the wheel hub, it is first necessary to remove the feed chute, abrasive dispenser housing clamping plate, the abrasive dispenser housing, the wheel hood lid and the impeller wheel unit as previously described.
- The hub can be removed by releasing the taper lock. To release the taper lock slacken all the grub screws, remove the same number of jacking-off holes, insert the screws into the jacking -off hole and tighten alternatively to loosen the bush for the removal of the hub assembly.



IMPORTANT!

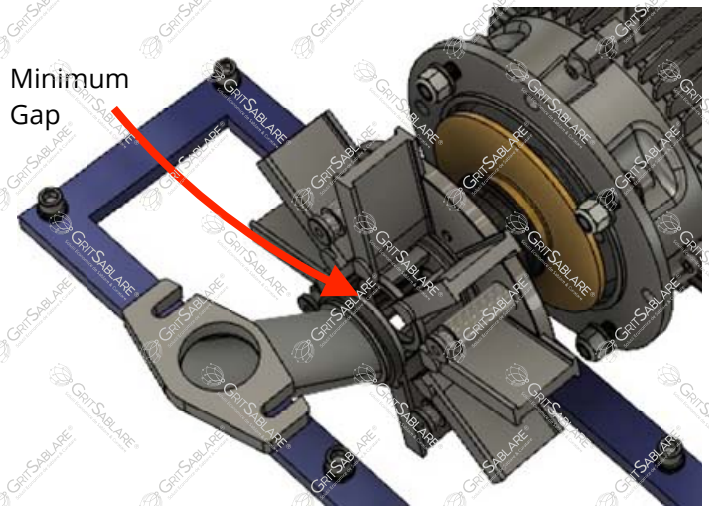
- The following paragraphs must be read before your maintenance staff fit a new taper lock hub, this will ensure correct hub assembly and that it is running true. Incorrect fitting of this component will cause the wheel assembly to run out of balance.
- Make sure the motor shaft is clean and free from burrs.
- Make sure the new hub and taper lock bush are thoroughly de-greased and cleaned.
- Fit the spacer hard home onto the motor shaft.
- Fit the shaft key so it is hard up against the spacer and flush with the end of the motor shaft.
- Insert taper lock bush into the hub and screw the grub screws into the tightening holes.

The taper lock bush should be checked for any signs of damage, which should be rectified. This is especially the case if the old bush is to be re-used. i.e. possible damage can usually be seen at the point where the jacking screws fit.

- Fit the Hub and Bush onto the motor shaft and push the hub hard home against the spacer.
- Using a drift, evenly tap the bush hard into the hub keeping the hub hard up to the spacer.
- Tighten the grub screws up equally until the taper lock bush is hard home.
- Using a shot dispenser and its centre screw tighten the whole unit pulling the hub towards the motor.
- Remove the centre screw and dispenser, now re-tighten the taper lock grub screws equally.
- The hub is now ready to receive the Impeller Wheel.

FEED CHUTE (Part Number SI 024)

- When installing the Feed Chute the gap between this and the Dispenser (SI 025) must be as short as possible without the parts touching.
- The Feed Chute / Feed Chute Seal (SI 033) must be central in the Dispenser Housing (SI026).



(Some wheel parts not shown in these pictures for clarity)

WHEEL HOODS AND LINERS

- Each blast wheel unit has a wheel hood, this is split into two parts: Hood Lid and Hood Base which are a mild steel fabrication.
- The wheel hoods are lined with replaceable liners manufacture from a special alloy that is hardened to 60 HRC minimum. These are retained in the wheel hood by countersunk Wear Plate Bolts as shown on the pictures below.



Hood Lid Assembly



Hood Base Assembly



When assembling / disassembling the wheel hoods with liners please note the following:

- Do not hit the liners with any metallic implements as this may cause the liners to crack due to their hardness. Use only a plastic or hide mallet or have some wood between the a steel hammer and the liner
- When assembling new liners in the Wheel Hood Base install the Bottom Side Wear Plates (SI 130 x 4) first and loosely bolt them. Then insert the Hood End Wear Plate (SI 005 x 2) and loosely tighten the side bolt. Check all the liners for the correct fit, adjust if required and then tighten all the bolts
- When installing the Hood End Wear Plate ensure that the slot on the back is correct located with the bolt on the side of the Wheel Hood Base
- When assembling new liners in the Wheel Hood Lid install the Top Curved Wear Plate (SI 004 x 1) first and leave loose ensuring that the slot on the back lines up with the clamping bolt. Then install the Top Side Wear Plates (SI 006 x 2) and loosely tighten them. Check all the liners for the correct fit, adjust if required and then tighten all the bolts
- When installing the liners ensure that there are no gaps between them to allow abrasive to escape and damage the wheel hood
- Inspect the wear plate bolts as per the Maintenance Check Lists and replace as required. The head of the bolts will wear in operation and if this wear go's to far replacement of the bolts is very difficult.
- When installing new wear plate bolts you must use a washers x 2 and spring washers x 1 to avoid the risk of the bolts becoming loose in operation.

See drawings SI RD3000-4 and SI RD3015-5

BLAST WHEEL MOTORS

- The Blast Wheel Motors used are flange mounted with a heavy duty cast iron frame retained with DIN 10.9 Cap Screws and Nyloc Nuts.
- Nyloc Nuts must be used avoid the risk of the cap screws becoming loose in operation.
- Great care must be taken when removing or replacing the Blast Wheel Motor to avoid cracking the cast iron frame.
- Please see the manufacturer's manual for specific maintenance instructions

Section 17. IMPORTANT NOTE - ABRASIVE "FINES" CONTENT

"Fines" in the abrasive mixture is very small particles of abrasive and dust that are below the "cut-off" point for for the abrasive sizes being used combined with the surface profile requirements.

In most applications this is particles below 0.3mm and the blast machines airwash should be set to remove the "Fines" and maintain it below 3%, if this is not done and the fines content is allowed to build up the following will happen;

1. High wear on the blast wheel parts due to the increased number of contactpoints
2. Incorrect surface profile due to the smaller particle sizes
3. Slower cleaning times
4. High dust levels on the steels surface



This can be checked by doing a Sieve Analysis of the abrasive and should be done every week as detailed in the Weekly Maintenance Checklist, GritSablare can provide the equipment and training needed for this.

Section 18. ELECTRICAL

BEFORE INITIATING MAINTENANCE PROCEDURES BE SURE THAT ALL POWER SOURCES HAVE BEEN DISCONNECTED FROM THE MACHINE AND ACCESSORIES TO AVOID PERSONAL INJURY FROM ELECTRICAL POWER OR FROM ROTATING PARTS.

THIS BLAST WHEEL OPERATES ON 400 - 440 VOLT, 3 PHASE, and 50/60-HERTZ ELECTRICAL POWER.

For the machine to perform efficiently, the electrical equipment must undergo periodic inspection to detect any wear conditions, physical damage, loose connections or component failure. Regular inspection/maintenance should be performed with particular emphasis on the following.