



Wheelabrator Plus
surface preparation
services and support



wheelabrator
plus+ shaping industry

About Wheelabrator Plus

With over a century of expertise in design and manufacture, Wheelabrator Plus offers the largest aftermarket replacement parts supply, service and technical support for the surface preparation industry globally. With the capability of maintaining and upgrading surface preparation equipment from both Wheelabrator and non-Wheelabrator brands within the industry, Wheelabrator Plus continually strives to contribute in helping to profitably meet or even exceed your customers' requirements and deliver the highest quality of both replacement parts and service, in the shortest timeframe and at the most competitive prices.

Wheelabrator Plus services include:

- Servicing and inspection
- Equipment modernisation and upgrades
- Operation & Maintenance incorporating:
 - Training
 - Replacement parts
 - Equipment relocation

Machine downtime is undesirable, but not unavoidable with proactive servicing and inspection. Wheelabrator Plus understands the work pressures of your internal resources and is well prepared with a team of service technicians that are available at short notice. We have the largest inventory of surface preparation spare parts in the world, this allows us to meet your requirements quickly.

Our Equipment Modernisation Programme has been designed to enable you to completely upgrade your current shot blast equipment, giving you all the advantages of a new machine at a lower cost. By utilising the latest technical developments including the use of long life technology to improve productivity and save costs, we can effectively enable you to reduce the cost of each part you produce.

There are many benefits to having your current equipment upgraded rather than buying a new machine:

- Lower cost
- Faster payback on investment
- Additional return on the initial investment of original equipment
- Quicker turnaround
- Easier to implement
- Less disruption to production
- Added value to overall process
- More environmentally responsible as you "recycle", rather than replace your existing machine

Blast pattern settings

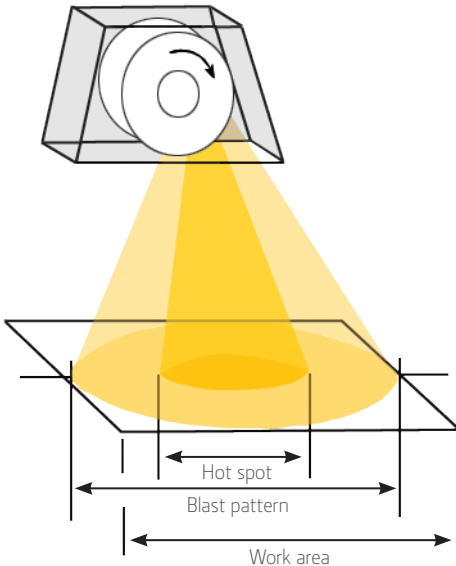
Incorrect blast pattern settings have the following negative effects on your machine:

- Blast cleaning time increased and your production output decreased
- Unnecessary wear to blast chamber and housing linings
- Increased abrasive usage

The causes of the incorrect blast pattern could be:

- Wear to impeller case (leading edge)
- Wear to impeller
- Wear to blades

Typical blast pattern setting



Incorrect setting of impeller case: a 10% misalignment can affect the blast pattern by up to 25%.

Extreme wear rates to blast wheel blades can be caused by the retention of sand, scale and fines within the abrasive mix. As little as 1% mix of sand in the abrasive can cause the blade life to be reduced by as much as 50%. You should check your fines bin to ensure your separator is working correctly.

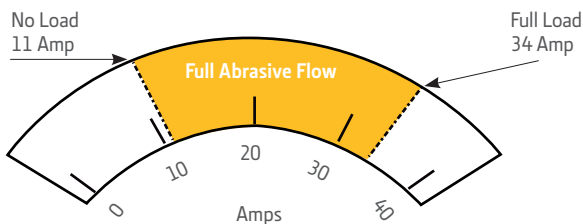
Wheel amp efficiency

Low blast wheel amp efficiency will have the following effects on your machine:

- Increased blast cleaning times
- Ineffective cleaning, causing rework and increased costs

The causes of this could be:

- Incorrect level of abrasive in the machine. This could be due to work component carry out or inefficient abrasive refill.
- Abrasive starvation due to feed pipe or separator blockages
- Worn blast wheel feed parts
- Wear or damage to abrasive gate control assembly
- Incorrect operation of abrasive system:
 - Incorrect tension on elevator belt
 - Missing or worn elevator buckets
 - Worn elevator discharge area
 - Worn or blocked separator
 - Worn conveyor flights



Typical application of 18.5kw blast wheel motor:

- No load amps = 11
- Full load amps = 34
- Utilised amps = 23
- Each amp throwing up to 12.9kgs of abrasive per minute with 23 utilised amps = 297 kg/min

Contact us

Contact Wheelabrator Plus for any information or support you require to increase your performance.

T: +44 161 928 6388

E: uk-info@wheelabratorgroup.com

W: www.wheelabratoplus.com

Preventative Maintenance Checklist

By following this preventative maintenance checklist you will ensure your machine is working to its optimum performance. Please follow safety procedures at all times when maintaining your equipment.

Blast wheel assembly	Daily	Weekly	Monthly
1. Inspect blades/vanes - replace before 50% worn	<input type="radio"/>		
2. Inspect impeller - replace before 3mm worn		<input type="radio"/>	
3. Inspect control cage/impeller case - replace before opening increases by 6mm		<input type="radio"/>	
4. Check wheel housing liners for excessive wear and alignment		<input type="radio"/>	
5. Check control cage/impeller case indicator for blast pattern setting	<input type="radio"/>		
6. Check V-belts for correct tension (if applicable)		<input type="radio"/>	
7. Check feed spout seal to reduce abrasive loss	<input type="radio"/>		
8. Check ammeter reading for correct abrasive flow - do not exceed full load rating of motor	<input type="radio"/>		
Separator			
1. Clean scalping drum	<input type="radio"/>		
2. Check screens under airwash section for debris and wear	<input type="radio"/>		
3. Check housing for abrasive leakage	<input type="radio"/>		
4. Check baffles and plates for wear - replace as required			<input type="radio"/>
5. Check abrasive flow to ensure uniformly spread across width of separator with machine operating	<input type="radio"/>		
6. Check fine and coarse refuse pipe for usable abrasive		<input type="radio"/>	
7. Check ventilation and airflow to filter unit	<input type="radio"/>		

Wheelabrator Plus Key facts

- Over 30 globally situated sales and service centres
- Serving customers in over 100 countries
- Over 22,000 product lines in stock
- Over 400 technical experts globally

Preventative Maintenance Checklist

Abrasive handling system	Daily	Weekly	Monthly
1. Check elevator belt for correct tension and alignment			○
2. Check elevator pulleys and drive for wear and alignment			○
3. Check for wear on elevator bucket and bolts			○
4. Check screw and oscillating conveyor for wear and debris		○	
5. Maintain the correct abrasive level in storage hoppers	○		
Cabinet and work handling			
1. Check cabinet wear plates - replace before 50% worn	○		
2. Check work door curtains and brushes for wear and abrasive leakage	○		
3. Check floor grating - replace before 50% worn			○
4. Remove any debris from floor grating to maintain abrasive flow	○		
Lubrication			
1. Follow instructions in maintenance manual			○
Filter Unit			
1. Inspect the casing joints for air, dust, and water leakage		○	
2. Inspect filter cartridges or dust bags for build up of dust			○
3. Check reverse jet or shaker mechanism is operating correctly			○
4. Check the magnehelic gauge for correct reading			○
5. Empty dust hoppers	○		

Contact Wheelabrator Plus for an evaluation of your existing surface preparation equipment, regardless of its manufacturer. Upon assessment, Wheelabrator Plus will follow-up with a detailed report so that you can achieve the best results.

T: +44 161 928 6388

E: uk-info@wheelabratorgroup.com

W: www.wheelabratorplus.com