

Wet Blast Phosphating System



Formation of high quality phosphate film (high adhesion / high coating strength) for antivibration rubber and brake pad metal fittings

A dense and strong granular film crystal is stably formed because phosphating treatment is performed immediately after wet blasting degreases, cleans and activates the surface to a high level.

Integration and automation of pretreatment and phosphating treatment processes

Conventionally divided processes can be compactly integrated, realizing space and labor savings.

Cost reduction, environmental friendliness

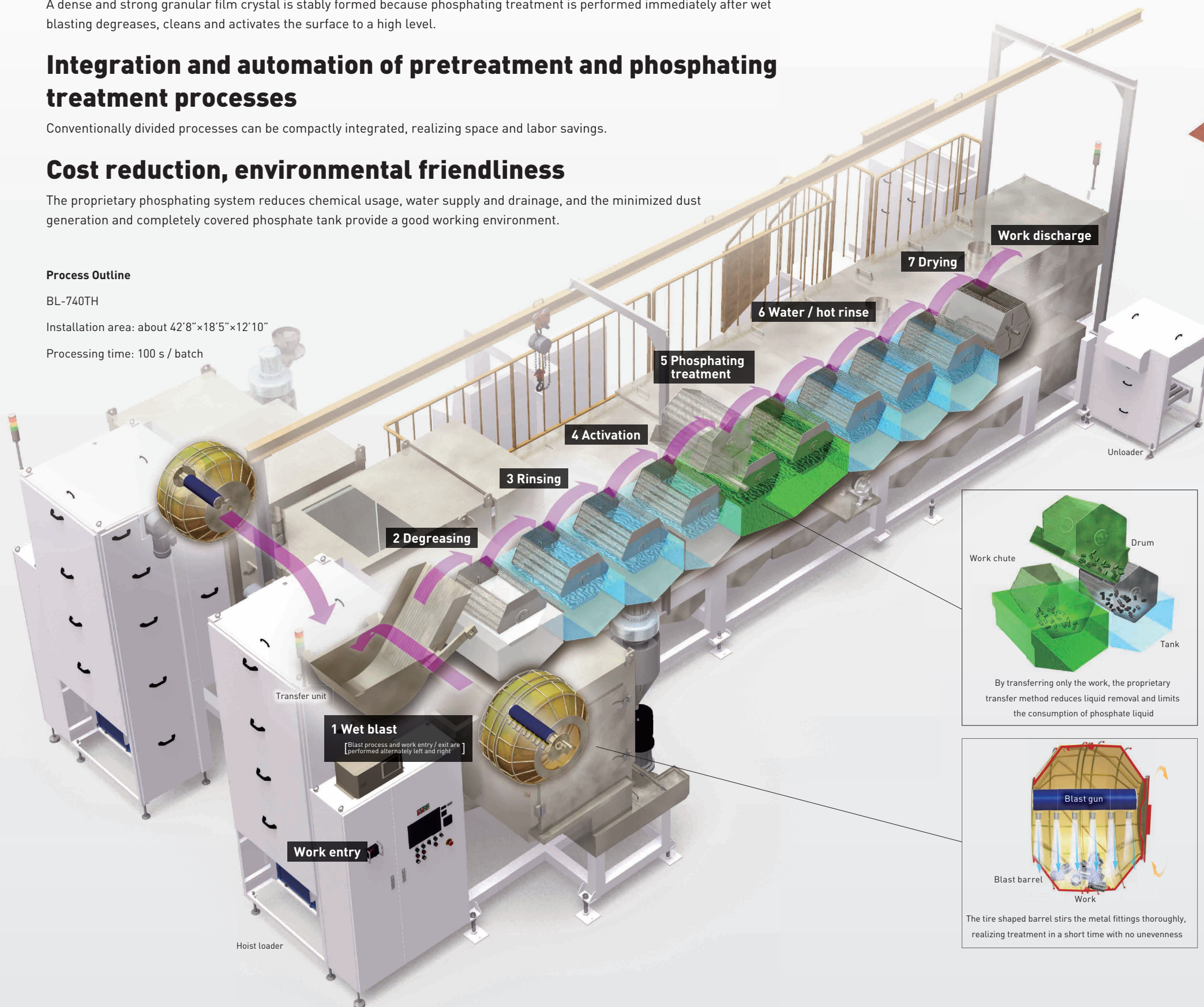
The proprietary phosphating system reduces chemical usage, water supply and drainage, and the minimized dust generation and completely covered phosphate tank provide a good working environment.

Process Outline

BL-740TH

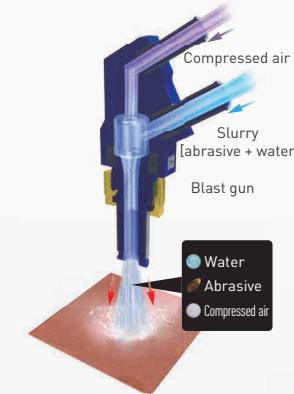
Installation area: about 42'8"×18'5"×12'10"

Processing time: 100 s / batch



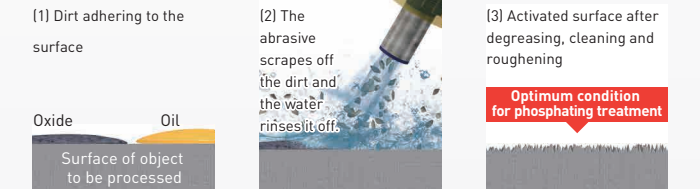
Wet blast effect and benefits

Processing principle



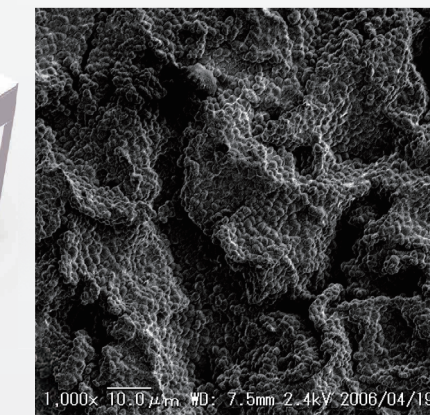
Wet blasting is a technique of spraying a mixture of water and abrasives at high speed with compressed air to clean, process and refine the surface. The wet treatment process has high performance in terms of forming finely roughened surfaces because of high detergency and the ability to use fine abrasives.

Processing image



High quality phosphate coating

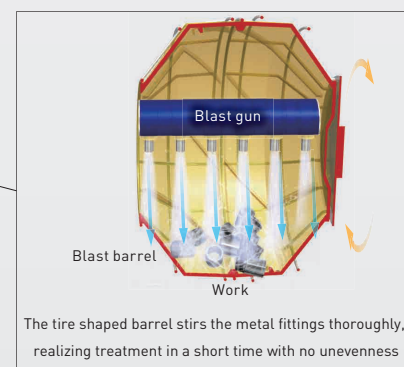
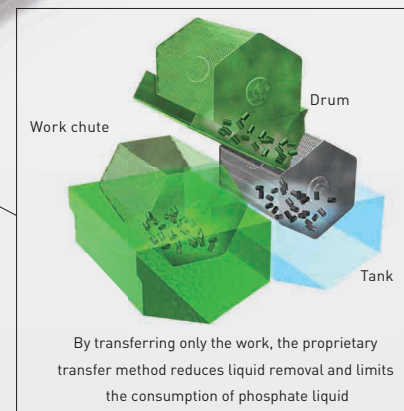
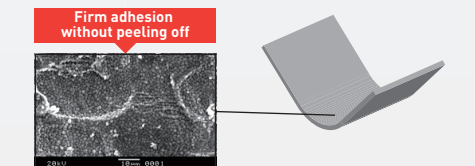
Wet blast / phosphate coating film



Coating weight: 1 to 3 g / m², Crystal size: 1 to 3 μm

A dense and uniform phosphate film is formed using wet blast pre-processing. Since the film is a dense crystal that is hard to peel off, it is excellent in adhesive strength, corrosion resistance, drawability, and is difficult to peel off even in bending tests, contributing to improvement of drawing ratio, etc., for antivibration rubber parts.

Phosphate coating after bending test



Processed example

Antivibration rubber (Bush type)



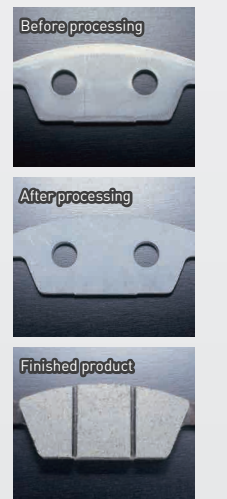
Antivibration rubber (Mount type)



Antivibration rubber (Liquid seal type)



Brake pad



Lineup



Model	40L double head type BL-740TH	40L 40L-WBP-G	20L For aluminum BL-720	7L mini barrel MSB-S7																								
System configuration	<table border="1"> <tr><td>Wet blast × 2</td></tr> <tr><td>Degreasing</td></tr> <tr><td>Rinsing</td></tr> <tr><td>Rinsing</td></tr> <tr><td>Activation</td></tr> <tr><td>Phosphating</td></tr> <tr><td>Phosphating</td></tr> <tr><td>Rinsing</td></tr> <tr><td>Rinsing</td></tr> <tr><td>Hot rinse</td></tr> <tr><td>Drying</td></tr> </table>	Wet blast × 2	Degreasing	Rinsing	Rinsing	Activation	Phosphating	Phosphating	Rinsing	Rinsing	Hot rinse	Drying	<table border="1"> <tr><td>Wet blast</td></tr> <tr><td>Degreasing</td></tr> <tr><td>Rinsing</td></tr> <tr><td>Rinsing</td></tr> <tr><td>Activation</td></tr> <tr><td>Phosphating</td></tr> <tr><td>Rinsing</td></tr> <tr><td>Hot rinse / Drying</td></tr> </table>	Wet blast	Degreasing	Rinsing	Rinsing	Activation	Phosphating	Rinsing	Hot rinse / Drying	<table border="1"> <tr><td>Wet blast</td></tr> <tr><td>Rinsing</td></tr> <tr><td>Rinsing</td></tr> <tr><td>Hot rinse / Drying</td></tr> </table>	Wet blast	Rinsing	Rinsing	Hot rinse / Drying	<table border="1"> <tr><td>Wet blast</td></tr> </table>	Wet blast
Wet blast × 2																												
Degreasing																												
Rinsing																												
Rinsing																												
Activation																												
Phosphating																												
Phosphating																												
Rinsing																												
Rinsing																												
Hot rinse																												
Drying																												
Wet blast																												
Degreasing																												
Rinsing																												
Rinsing																												
Activation																												
Phosphating																												
Rinsing																												
Hot rinse / Drying																												
Wet blast																												
Rinsing																												
Rinsing																												
Hot rinse / Drying																												
Wet blast																												
1 batch throughput	Max. capacity: 40L / 10.5US gal Max. weight: 50kg / 110lb	Max. capacity: 40L / 10.5US gal Max. weight: 50kg / 110lb	Max. capacity: 20L / 5.3US gal Max. weight: 30kg / 66.1lb	Max. capacity: 7L / 1.8US gal Max. weight: 10kg / 22lb																								
Tact time	100 Seconds / Batch	360 Seconds / Batch	210 Seconds / Batch	200 Seconds / Batch																								
Main unit dimensions (W×D×H)	13000×5600×3900mm / 42'8"×18'5"×12'10"	10000×2400×3900mm / 32'10"×7'10"×12'10"	7000×2800×3650mm / 23'×9'2"×12"	1400×1365×1850mm / 4'7"×4'6"×6'1"																								
Barrel	40L Tire type	40L Cylindrical type	20L Tire type	7L Cylindrical type																								
Blast gun	φ11mm×8 Consecutive zigzag gun	φ11mm×6 Consecutive zigzag gun	φ11mm×5 Consecutive zigzag gun	Compact gun 9.5mm×2																								
Power supply	AC200V, 50/60Hz, 3-phase	AC200V, 50/60Hz, 3-phase	AC200V, 50/60Hz, 3-phase	AC200V, 50/60Hz, 3-phase																								
Power capacity	Blast L: 17.3kVA Blast R: 17.3kVA Phosphating: 26kVA	51.9kVA	7.3kVA	5.2kVA																								
Air consumption	12.5m ³ /min(INPTI) / 441CFM <small>(At blast air pressure 0.4 MPa / 58psi)</small>	6m ³ /min(INPTI) / 212CFM <small>(At blast air pressure 0.4 MPa / 58psi)</small>	5.5m ³ /min(INPTI) / 194CFM <small>(At blast air pressure 0.4 MPa / 58psi)</small>	2.0m ³ /min(INPTI) / 71CFM <small>(At blast air pressure 0.4 MPa / 58psi)</small>																								
Water consumption	1.2m ³ /h / 0.7CFM	1.2m ³ /h / 0.7CFM	0.6m ³ /h / 0.35CFM	No consumption																								
Steam consumption	400kg/h / 0.24CFM	325kg/h / 0.19CFM	200kg/h / 0.12CFM	—																								
Displacement	60m ³ /min / 2119CFM	55m ³ /min / 1942CFM	8m ³ /min / 283CFM	3m ³ /min / 106CFM																								

Contact → MACOHO Sales Dept.
TEL 0258-47-1729
 Email inquiry@macoho.co.jp

Specifications are subject to change without notice. The drawings and pictures in this brochure are images. They may be different from the actual product. Specifications of the products listed are those as of May, 2017. Although we are careful in the production of our brochures, we are not responsible for any damage caused by typographical errors or omissions.



B1028-02-1706 Copyright© 2017 MACOHO Co., Ltd. All Rights Reserved.