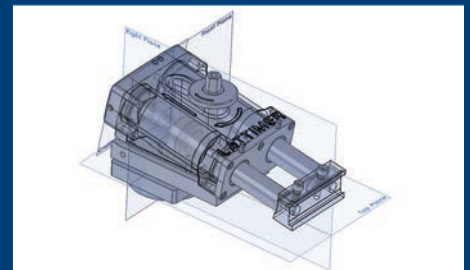
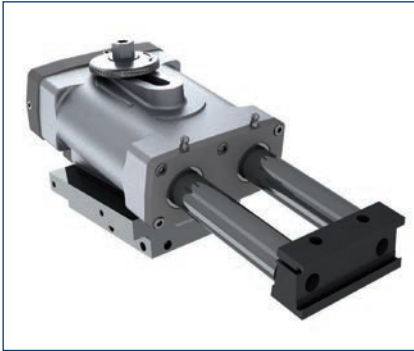


PUSHERS

- Exceptional service life with proven reliability
- Low maintenance designs
- Suitable for all IS machines from single to quad Gob
- Complementary Sole and Front Plate available to suit most machine requirements
- Upgrade kit available
- Through air option available

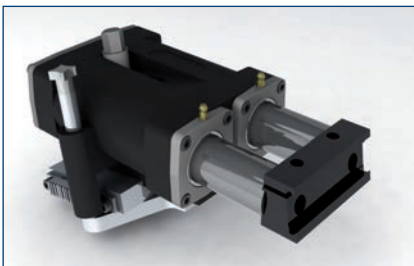


SECTION 1 PM3000 lightweight pusher



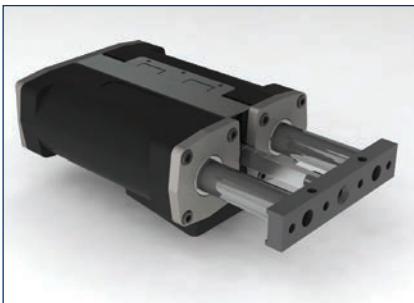
- A 40% reduction in weight for extended servomotor life, energy saving and ease of handling.
- Inclined body to give both improved clearance and improved ware handling.
- Replaceable wear parts giving low maintenance and extended life with the benefit of a reduction in total life cost.
- Smooth performance achieved by the combination of self-alignment characteristic and 360° air sealing of pistons.
- Simple positive adjustment mechanism to perform faster setup.
- Fully compatible with existing Lattimer fixed stroke sole plate.
- Fast retract as standard.

SECTION 2 FX2000 fixed stroke pusher with adjustable body



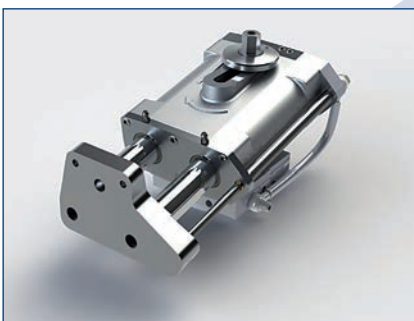
- Proven reliable design, the industry standard.
- High rigidity cast iron body construction.
- Compatible with all existing Lattimer fixed stroke pusher sole plate.
- Improved clearance from the inclined body creating improved ware handling.
- Ease of adjustment through pinion mechanism.
- Fast retract speed due to quick exhaust valve.

SECTION 3 PM2000 adjustable stroke pusher



- PM2000 comes in 4" and 5" models for large stroke adjustment.
- Both models are suitable for I.S machines from single to quad gob.
- Twin cylinder eliminates the need for guide rods and bushes and provide smooth action over a longer working life.
- Bespoke sole plates available upon request
- Lift finger attachment available to provide increased finger clearance for large containers on return to the dead plate.

SECTION 4 PA 3000 - Front Plate Airway & Product Comparison



SECTION 5 Sole/Front Plates and Risers

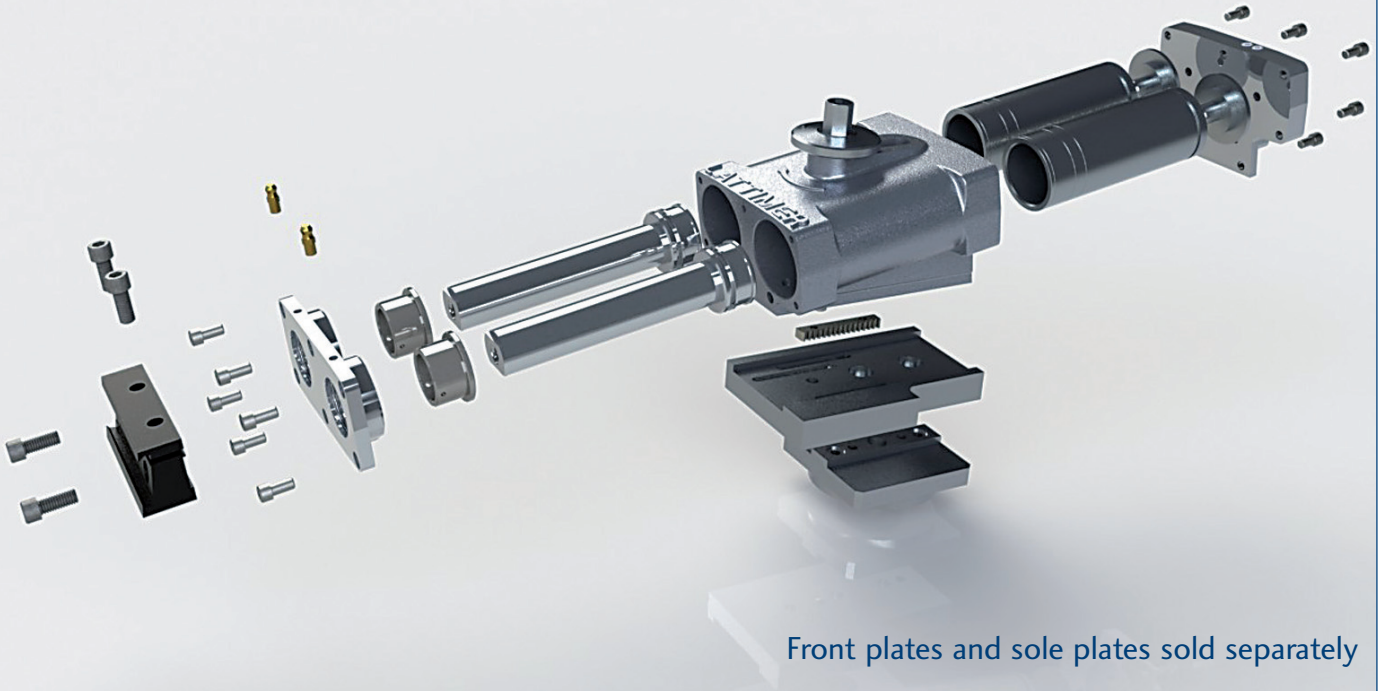


SECTION 6 Maintenance

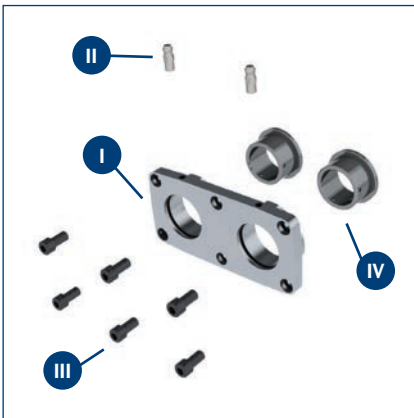


Section 1 - Lightweight High Speed Pusher Unit - PM3000

Main Assembly L14384800



Front Cap Assembly L14384901

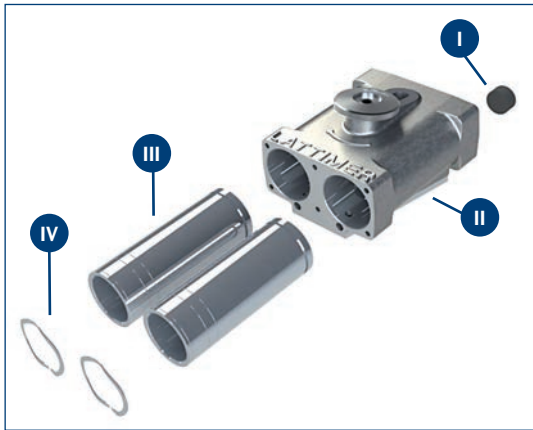


KEY	DESCRIPTION	Part Number	Qty
I	Front Cap	L34384901	1
II	Grease Nipple	V9018-0006-0000	2
III	Cap Screw	V1211-0250-0500	6
IV	Bush	L34385001	2

Piston Assembly L14382100

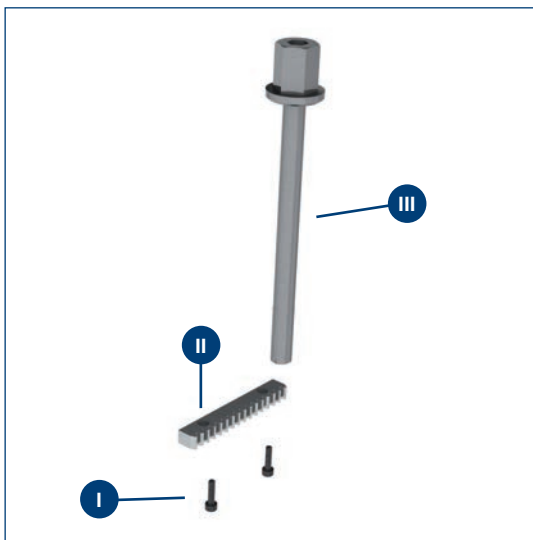


KEY	DESCRIPTION	Part Number	Qty
I	Piston	L34382100	2
II	Bronze load wear strip	V6900-0010-00015	2
III	Piston Quad Ring	V7400-1359-0139	2



Body Assembly L24384800

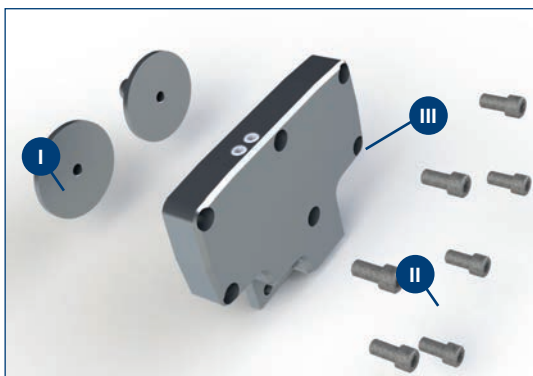
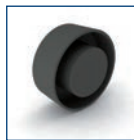
KEY	DESCRIPTION	Part Number	Qty
I	Viton Q/E Seal	L94334800	1
II	Pusher Body	L34384800	1
III	Cylinder Sleeve	ELX-10-3	2
IV	Wave Spring	V3400-2000-0024	4



Rack & Clamping Bolt

KEY	DESCRIPTION	Part Number	Qty
I	Cap Screw	V1211-0164-0500	2
II	Rack	L34385500	1
III	Stud	L34385600	1

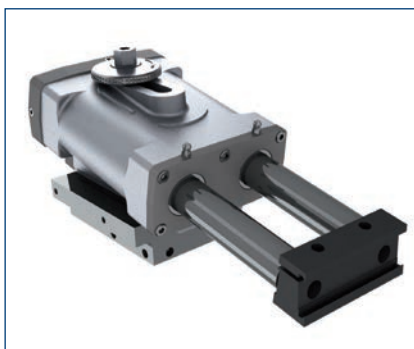
Quick Exhaust Seal L94334800



Back Plate Assembly L14385200

KEY	DESCRIPTION	Part Number	Qty
I	Spigot	L34385100	2
II	Cap Screw	V1211-0250-0500	7
III	Back Plate	L34385200	1

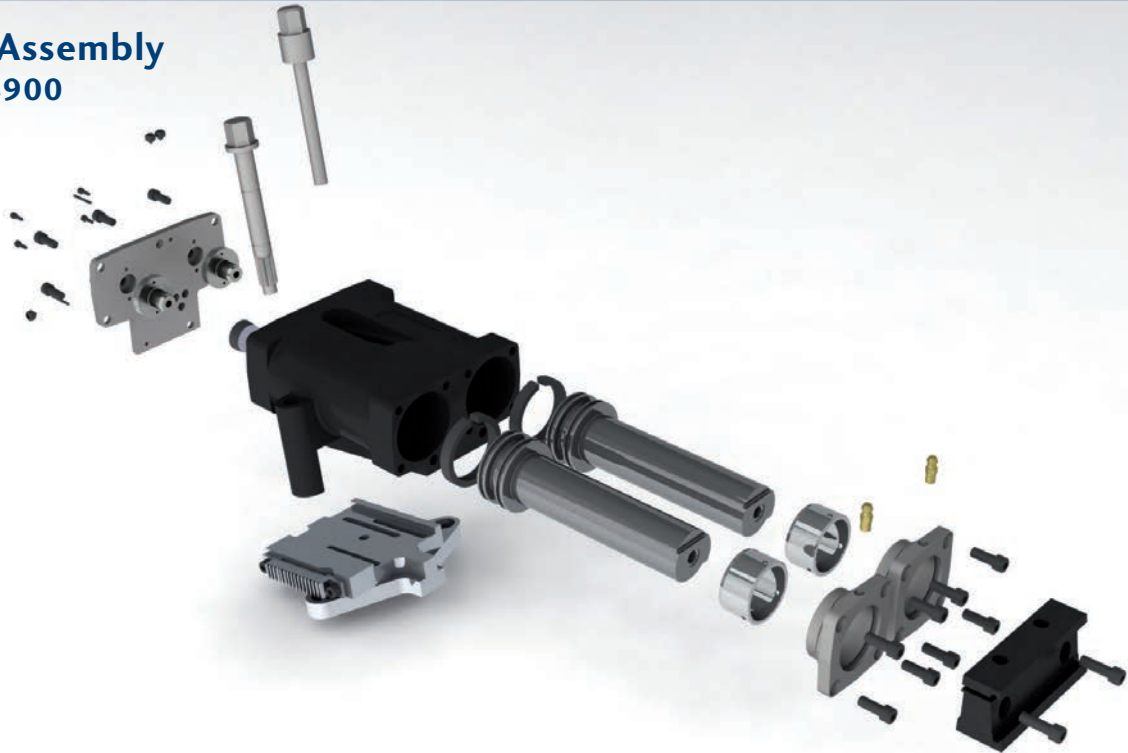
PM3000 lightweight pusher



- A 40% reduction in weight for extended servomotor life, energy saving and ease of handling.
- Inclined body to give both improved clearance and improved ware handling.
- Replaceable wear parts giving low maintenance and extended life with the benefit of a reduction in total life cost.
- Smooth performance achieved by the combination of self-alignment characteristic and 360° air sealing of pistons.
- Simple positive adjustment mechanism to perform faster setup.
- Fully compatible with existing Lattimer fixed stroke sole plate.
- Fast retract as standard.

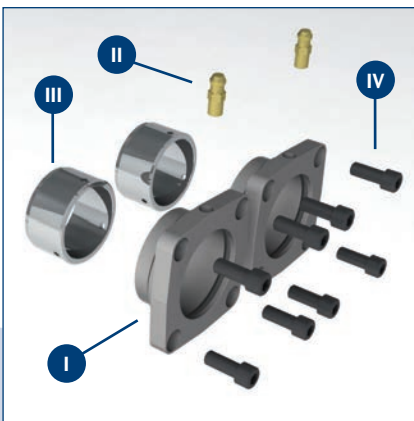
Section 2 - Fixed Stroke Pusher - FX2000

Main Assembly L14328900



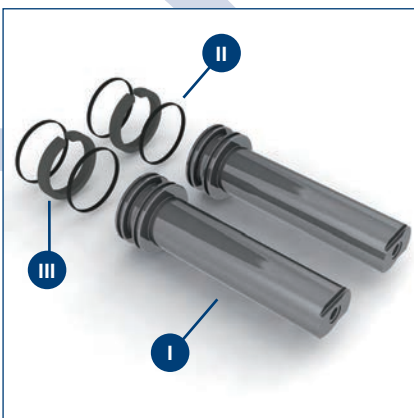
Front plates and sole plates sold separately

Front Cap Assembly L14329100



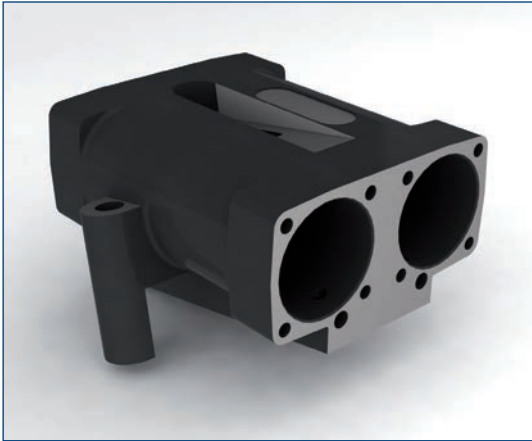
KEY	DESCRIPTION	Part Number	Qty
I	Front Cap	L64329100	2
II	Grease Nipple	V9018-0006-0000	2
III	Front Cap Bush	L34329200	2
IV	Cap Screw 1/4" UNC x 5/8"	V1211-0250-0625	8

Piston Assembly L14329300

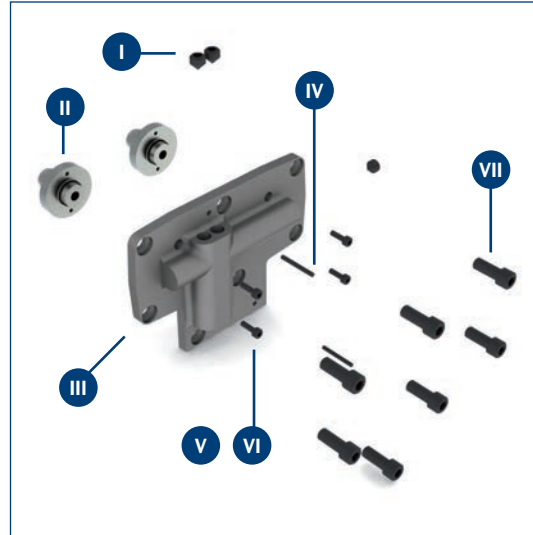


KEY	DESCRIPTION	Part Number	Qty
I	Piston	L34329300	2
II	Piston Ring	L94200700	4
III	Support Ring	L94200800	2

Body Assembly L24328900



Back Plate Assembly L14329900



Clamping Bolt L34329600



KEY	DESCRIPTION	Part Number	Qty
I	Grub Screw 5/16 UNG x 5 1/16	V2110-0312-0312	3
II	Spigot	L34330000	2
III	Back Plate	L34329900	1
IV	Roll Pin 1/8 Dia x 1/2 Long	V4600-0125-0500	2
V	Cap Head Screw M3 x 10mm	V1218-0003-0010	4
VI	Shake-Proof Washer x 3mm	V3300-0003-0000	4
VII	Capscrew 1/4 UNC x 5/8	V1211-0250-0625	7

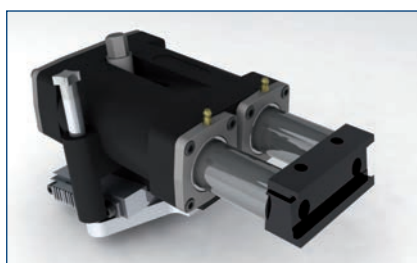
Pinion Assembly L14330402



Quick Exhaust Seal L94334800



FX2000 fixed stroke pusher with adjustable body

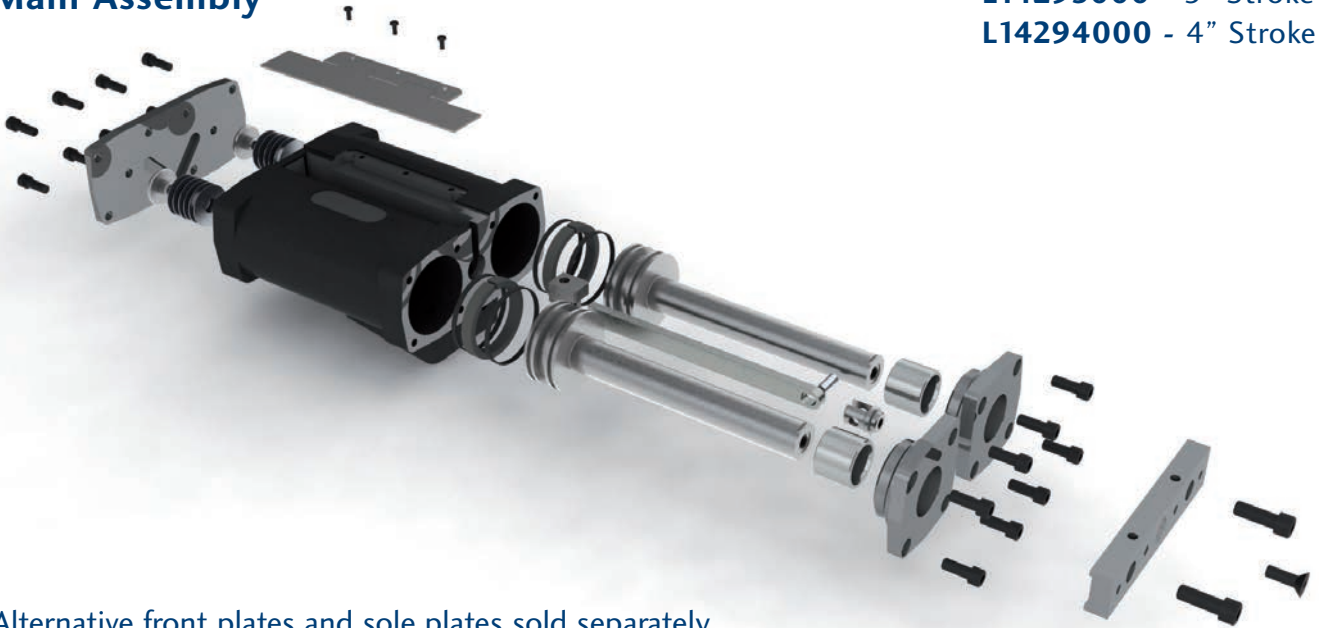


- Proven reliable design, the industry standard.
- High rigidity cast iron body construction.
- Compatible with all existing Lattimer fixed stroke pusher sole plate.
- Improved clearance from the inclined body creating improved ware handling.
- Ease of adjustment through pinion mechanism.
- Fast retract speed due to quick exhaust valve.

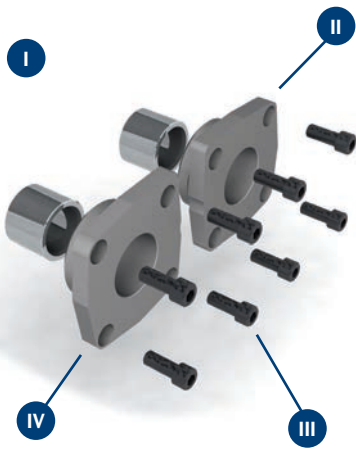
Section 3 Adjustable Stroke Pusher - PM2000

Main Assembly

L14295000 - 5" Stroke
L14294000 - 4" Stroke



Alternative front plates and sole plates sold separately

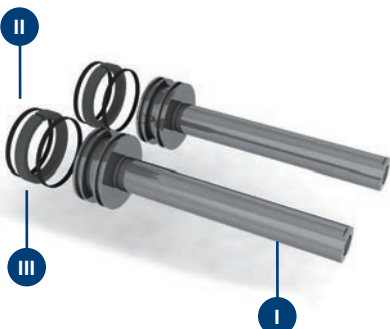


Front Cap Assembly (RH) L14200300

KEY	DESCRIPTION	5" Part Number	Qty	4" Part Number	Qty
I	Bronze Bush	L34201001	1	L34201001	1
II	Front Cap (RH)	L34200300	1	L34200300	1
III	Cap Screw	V1211-0250-0625	4	V1211-0250-0625	4

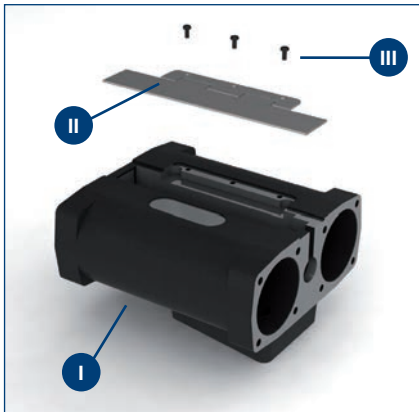
(LH) L14200400

I	Bronze Bush	L34201001	1	L34201001	1
IV	Front Cap (LH)	L34200400	1	L34200400	1
III	Cap Screw	V1211-0250-0625	4	V1211-0250-0625	4



Piston Assembly L14200600

KEY	DESCRIPTION	5" Part Number	Qty	4" Part Number	Qty
I	Piston	L34200600	2	L34210600	2
II	Piston Ring	L94200701	4	L94200701	4
III	Support Ring	L94200800	2	L94200800	2

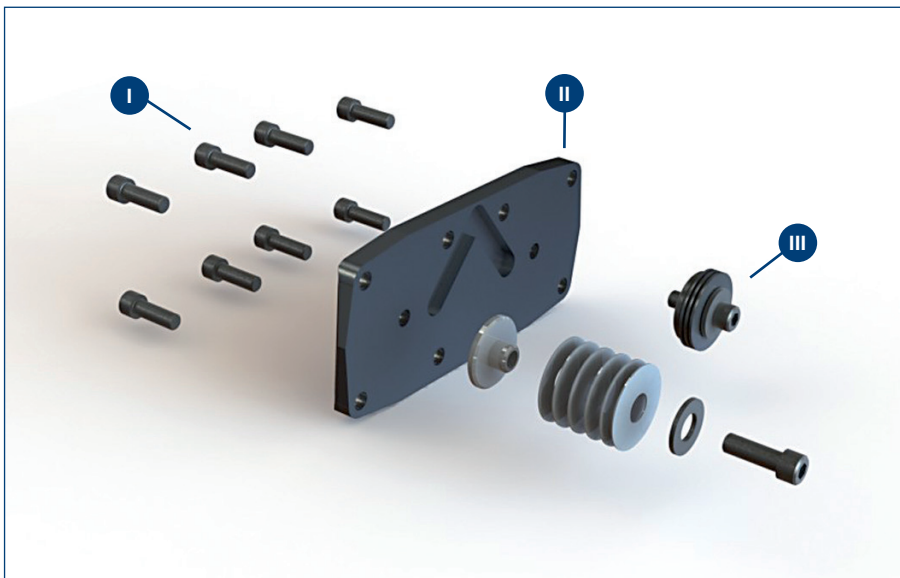


Body Assembly (5") L14200100 / (4") L14210100

KEY	DESCRIPTION	5" Part Number	Qty	4" Part Number	Qty
I	Pusher Body	L34200100	1	L34210100	1
II	Hinged Cover	L34202600	1	L34212600	1
III	Screw	V2917-0004-0187	3	V2917-0004-0187	3



Stop Bar Assembly (5") L14201100 / (4") L14211100



Back Plate Assembly L14200200



Buffer kit available
L14200900

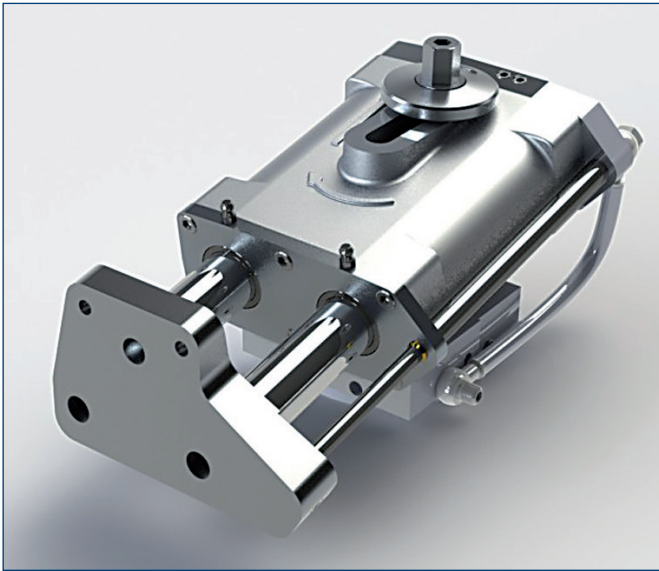
KEY	DESCRIPTION	5" Part Number	Qty	4" Part Number	Qty
I	Capscrew 1/4 UNC x 5/8	V1211-0250-0625	8	V1211-0250-0625	8
II	Back Plate	L34200200	1	L34200200	1
III	Buffer Kit	L14200900	2	L14200900	2

PM2000 adjustable stroke pusher



- PM2000 comes in 4" and 5" models for large stroke adjustment.
- Both models are suitable for I.S machines from single to quad gob.
- Twin cylinder eliminates the need for guide rods and bushes and provide smooth action over a longer working life.
- Bespoke sole plates available upon request
- Lift finger attachment available to provide increased finger clearance for large containers on return to the dead plate.

Section 4 - Front Plate Air Way – PA3000 kit



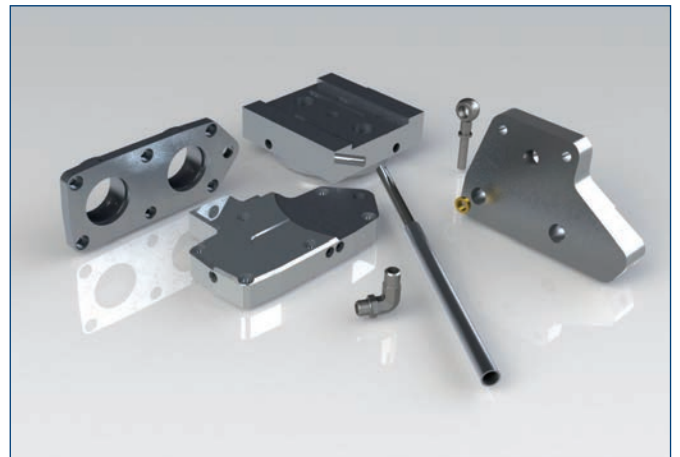
L14294600

The PA3000—Kit combines the reliability of our high performance PM3000 pusher with a simple upgrade to enhance or improve ware stability.

The PA3000 kit contains components designed exclusively for the Lattimer PM3000 pusher and its respective sole plate. Further details are available on request.

Lattimer is committed to providing purpose built and customisable options without compromising performance.

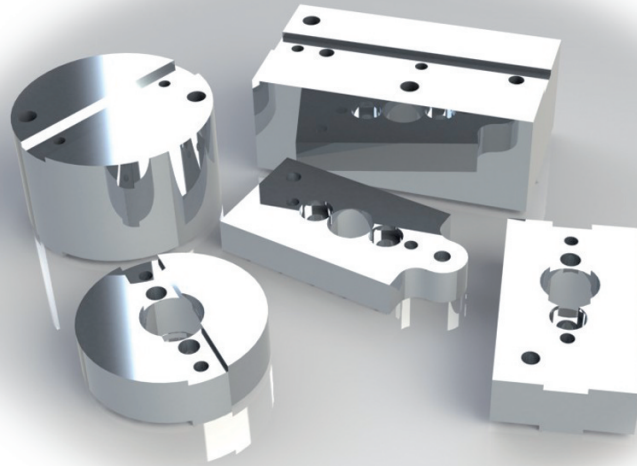
For further Lattimer products or upgrade kits suitable for difficult environments such as high temperatures, speed or loads.



Pusher Reference Table

Type	Max Reach (inches)	Max Stroke Reach (inches)	Material	LUBRICATION METHOD		ADJUSTMENT TYPE		Weight (kg)	Adjustment Range (inches)
				Nipple	Oil/Air Ratio Feed (%)	Stroke	Body		
PM3000	9.875	4.5	Aluminium	Y	Y	N	Y	3.28	2
PM 2000	7	5	Cast Iron	N	Y	Y	N	8.2	2.9
FX2000	9.875	4.25	Cast Iron	Y	Y	N	Y	9	2

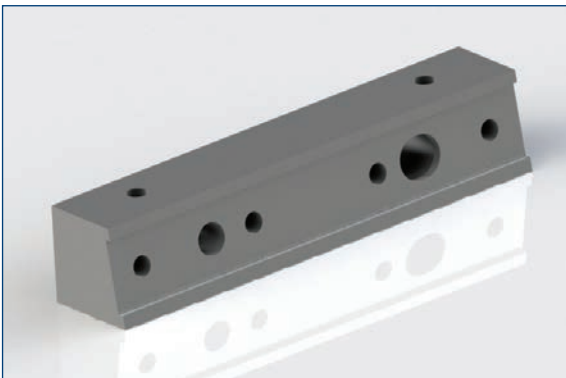
Section 5 - Sole/Front Plates & Risers for FX2000 & PM3000



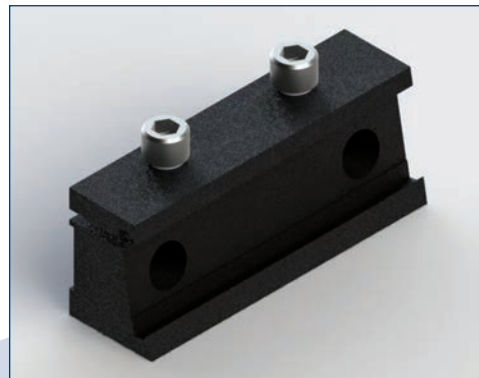
When used in combination with the PM3000 lightweight pusher, Lattimer sole plates and risers are normally manufactured from a high grade aluminium alloy to minimise weight and torque thereby improving turntable life.

A wide range of sole plates and risers to suit most machine types are available. If you need assistance Lattimer can advise you with sole plate selection to suit your particular machine/application.

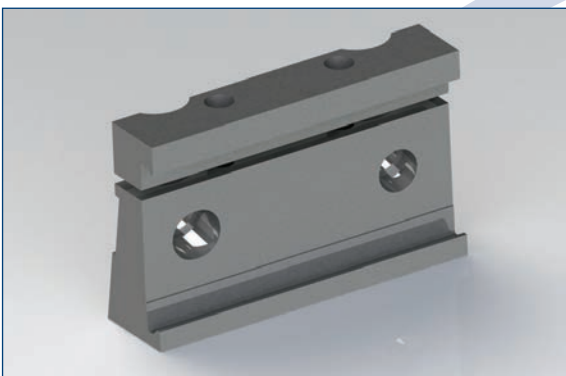
L14330101



L14329401



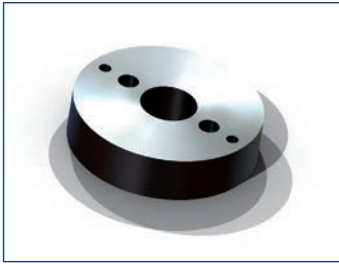
L134341104



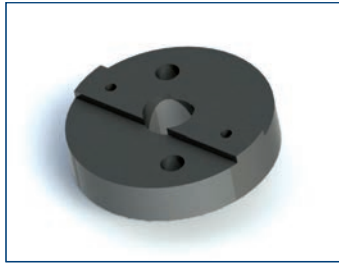
L14341102



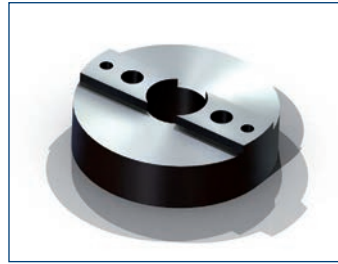
Turntable Types



TYPE A
Emhart/Maul turntable
with flat top



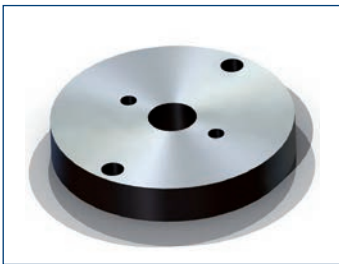
TYPE B
OI 4" turntable with tenon



TYPE C
CSS/HEYE turntable
with tenon location



TYPE D
OI 6 1/4" Centre 'F'
machine turntable



TYPE E
MAUL turntable with
flat top



TYPE F
Emhart 560/860 turntable



TYPE G
Emhart 860 turntable
with Pocketair



TYPE H
Bottero Turntable

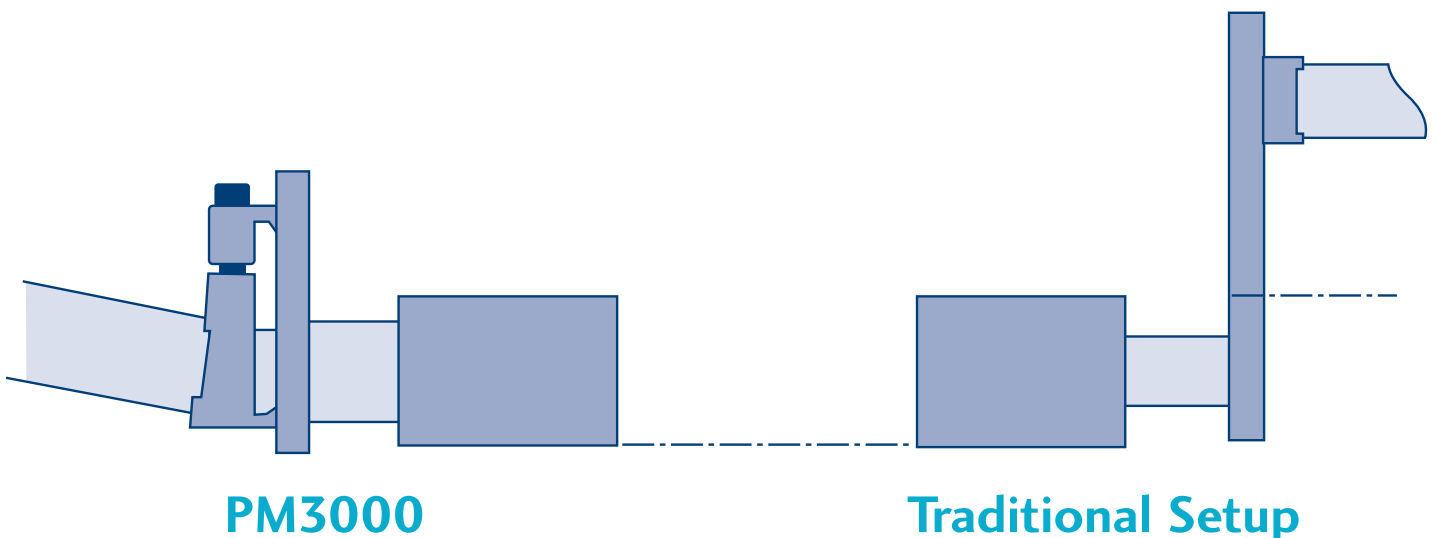
PM 3000 Improved ware handling

Benefits include:

- Simple set-up
- Improved clearance for finger retraction due to 10' lift angle
- More consistent ware handling due to the reduction in finger components
- Improved Ware quality due to consistent stroke length and repeatability

Note:

When replacing a traditional parallel pusher unit, the use of an angled pusher affects the front plate finger height, and may have to be shortened to avoid a collision.



Lattimer provides, high quality and performance soleplates for most turntable types. Use this step by step guide to locate further material and assist selection



Step 1

Go online. Visit the Lattimer website at: www.lattimer.com

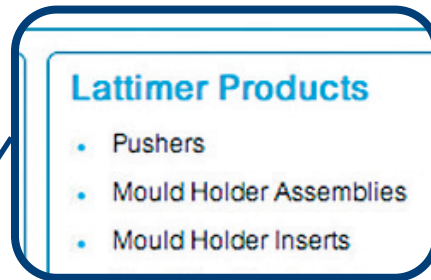
Step 2

Select Glass Products



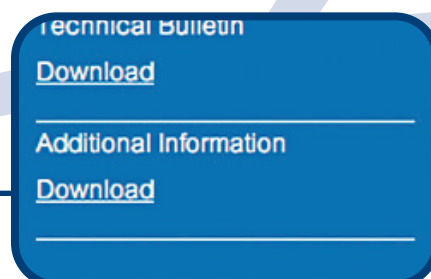
Step 3

Select Pushers



Step 4

Select 'Download' under additional information to access our data sheet which will aid the correct selection of a Soleplate to meet your technical specifications.



Maintenance

Lattimer Pusher units are designed to be easily maintained throughout their lifetime with spare parts available from stock. It is recommended that only genuine Lattimer parts be fitted to ensure reliability and consistent performance.

Method of adjustment

PM 3000 Fixed Stroke

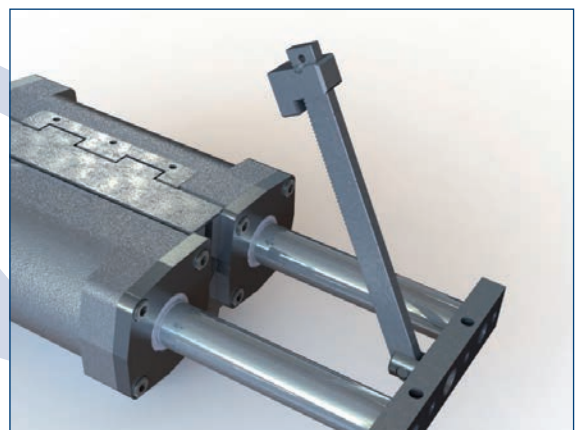
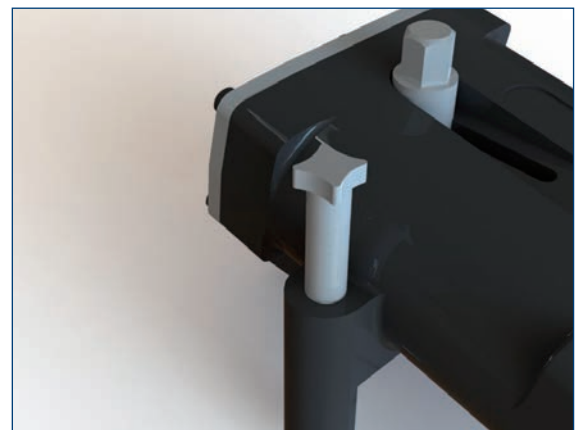
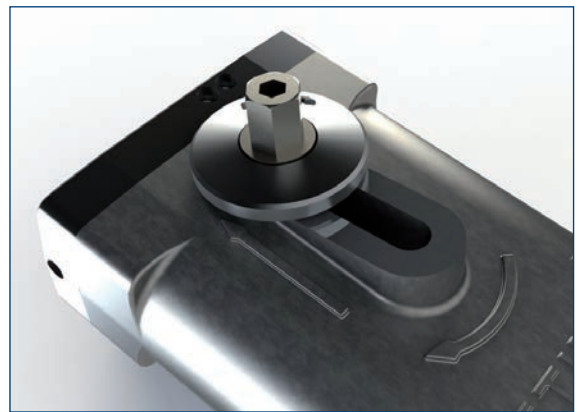
Is adjusted with a simple but accurate centralised rack and pinion setup, controlling end stroke position through variation of body position on a fixed sole plate.

FX 2000 Fixed Stroke

Is adjusted using a rack and pinion setup along the side of the pusher and soleplate to provide stroke control through variation of body position on a fixed sole plate.

PM 2000 Variable Stroke

Is adjusted using a stop bar assembly, the end stop is moved along the length of the stop bar to determine stroke length.







Precautions on Use

HANDLING

Do not drop the product or subject it to high impact as doing so may lead to damage, therefore care should be exercised in its handling.



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