Linapump IIIr Centrifugal Slurry Pumps

LINATEX

Service, Selection and Support

Total Service

From design to installation and beyond, Linatex engineers are available to give advice on your slurry pumping needs and problems. We've been in the business of designing and manufacturing pumps for over 60 years and our collective experience in abrasive slurry handling is second to none.

The Linapump IIIr range has been designed to offer a wide choice of pump sizes to suit most slurry pumping applications. The selection chart below demonstrates the coverage of Linapump IIIr performance over a range of flow rates and total heads. A standard questionnaire is available to ensure that the most complex installation, as well as the more straightforward pumping application, receives individual consideration.

Linatex can also advise on the ancillary components within the pumping system. The provision of abrasion resistant low head loss valves, sumps, priming devices and flexible bends incorporating Linatex linings for trouble free life, are an important aspect of ensuring a totally successful pump installation.

Linapump IIIr Selection

The importance of selecting the correct size and type of Linatex slurry pump cannot be overstated. Selection is based on analysing a number of factors which, when considered in total, determine the pump's performance for a given installation and duty.

Linapump IIIr

'D' - Dry Gland
Unlike c onventional mechanical seals, the Linatex dry gland has a stationary hard wearing face flexibly held against the Linatex rubber rotating ring. Any particle getting between the faces is absorbed into the Linatex rubber. This seal absorbs little energy and requires no external lubrication. It is particularly recommended where the use of gland water is undesirable.

'H' - Hydrostatic Gland
With lowest maintenance and longest life, the unique Linatex rubber gland seal is designed to deflect inwards to provide an effective seal. A clean water supply of 0.2 bar above pump discharge pressure is required with a flow of between 0.04 and 0.15 litres per second, depending on pump size.

'P' - Packed Gland
Sealing is obtained by compressing the gland packing rings onto the shaft sleeve. The gland offers the capacity to seal the pump even at high pressures, for instance in series pumping. A clean water feed or grease is essential to lubricate the packing to sleeve interface to provide additional cooling.

Drive Positions
Overhead & horizontal Vee-belt, Direct coupled and Z-drive. Maximum flexibility to suit each installation.

Gland Options
Three interchangeable gland designs are available to suit operator preference and site conditions.

Bearing & Shaft Assembly
Fully enclosed, heavy duty assembly gives long service life and allows easy removal for clean bench inspection and maintenance

Pedestal
Construction provides rigid mounting for pump assemblies.

Linapump IIIr

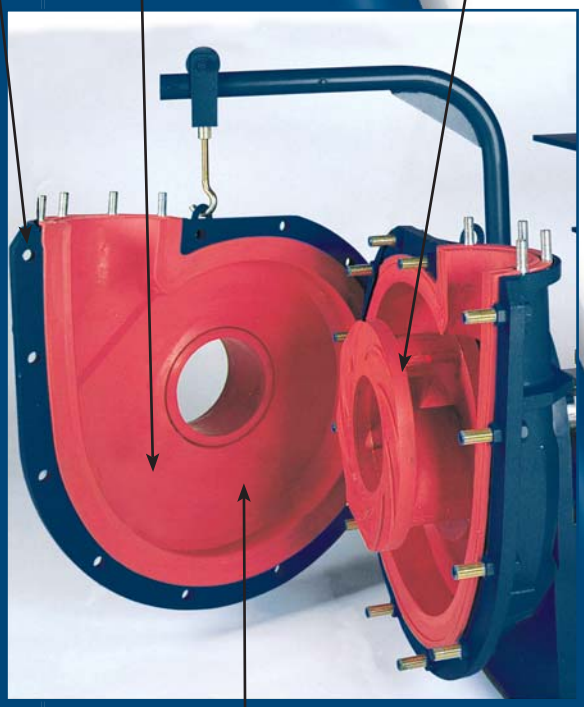
- Increased wear life with Linatex rubber
- Thicker rubber at recognised areas of wear
- Unique, reliable energy efficient gland sealing system
- Simple mechanical design for easy maintenance
- Low cost gland parts
- Low energy consumption

Results in lowest total whole life operating cost.

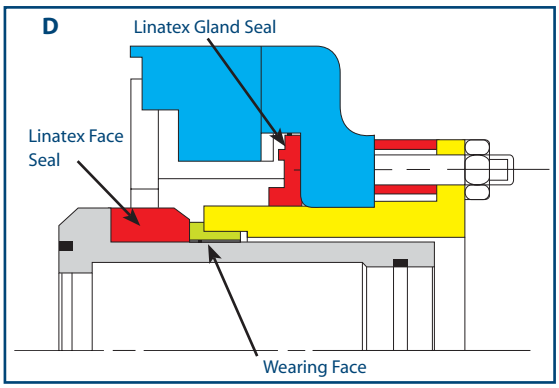
Suction Bush Liner
Simple, easy to replace high quality Linatex rubber bush on 150 x 125 upwards

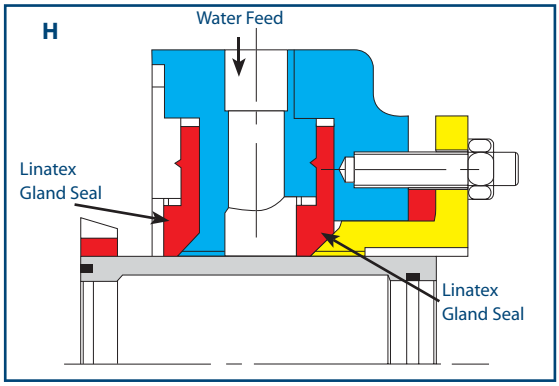
Outer Casing
Rigid casing design facilitates ease of field liner replacement

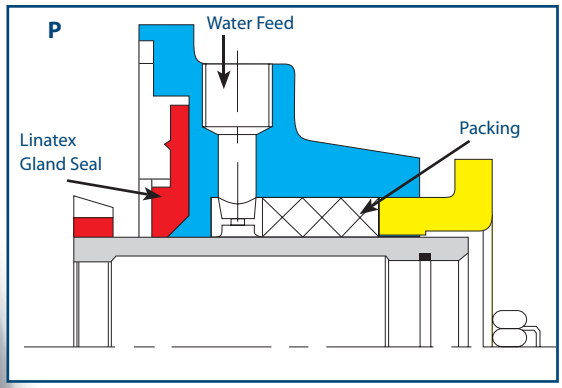
Impeller
Thick, hydrodynamically efficient Linatex rubber over steel reinforcing gives optimum performance



Casing Liners
Field-proven Linatex abrasion and corrosion-resistant rubber liners moulded over steel reinforcement give maximum wear life. Alternative rubber compounds available for pumping oil, chemicals, food products and higher temperature slurries. Bolt in design facilitates simple site replacement.





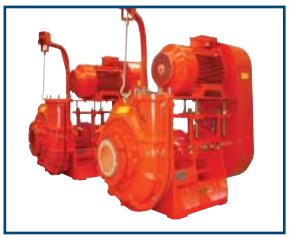


Industries Served

Equally suitable for handling abrasive slurries or combinations of abrasives and corrosive solutions, Linatex pumps will solve pumping problems outside the scope of metal and other
vtypes of pumps.

The following list gives but a few of the many duties for which Linatex pumps have been used.

- Sand plants
Feeding sand and water to all types of classification and dewatering.



- Coal preparation plants
For dense medium circuits; feeding hydrocyclones; filtrate pumping; handling the underflow from thickeners; disposal of washery effluent, etc.

- Chemical works
Linatex pumps, by virtue of their rubber linings, are suitable for pumping many chemical solutions, acid or alkaline, at moderate temperatures and for the disposal of effluent.

- Cement manufacture
Slurry feed to tube mill circuits: thickener feed and underflow; flotation plant circuits.

- Metalliferous mining
Mill circuits; feeding hydrocyclones; cyanide plant filter residues; concentrates; tailings disposal and other pulp and slurry handling duties.

- Irrigation schemes and Dredging
Silt removal in dams and canal sand traps.

- Paper mills
China clay slurries; paper stock; effluent disposal.

- Steel works
Pickling acid distribution circuits in plate and wire de-scaling plants.

- Power stations
Boiler house ash disposal; de-scaling plants.

- China clay works
Feeding slurry to hydrocyclones and for general use in the preparation of china clay.

- Glass works
Feeding polishing media; sand plants; handling effluent.

- Water Treatment
Feeding sand and water to all types of classification and dewatering plant.

- Vegetable washing
Feeding sand and dirty water to all types of classification and dewatering plants, effluent water transfer.

LINATEX

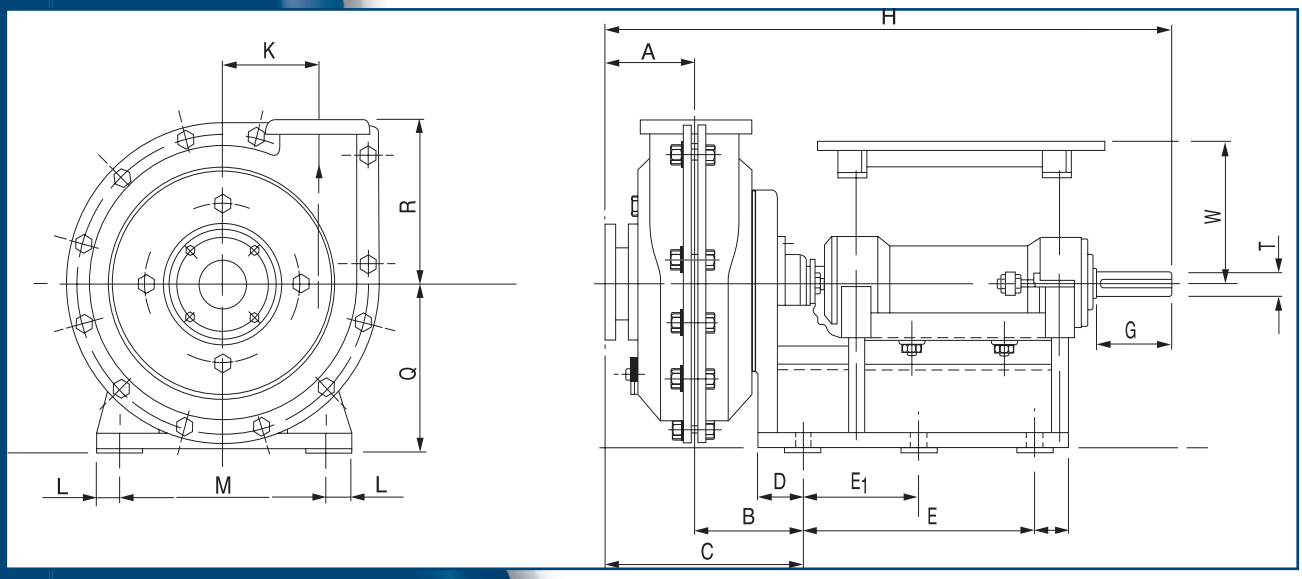
Technical Data

Design Specifications and Options

Linapump IIIr standard casing is designed for a maximum working pressure of 10 bar. Higher pressure casings are available for series pumping. Please contact Linatex for higher pressure applications.

Suction and discharge flanges are universal and available in metric BS4504 and ASA150 drilling patterns as standard. Other drilling patterns are available to order. Orientation of discharge to 4 positions according to installation requirements.

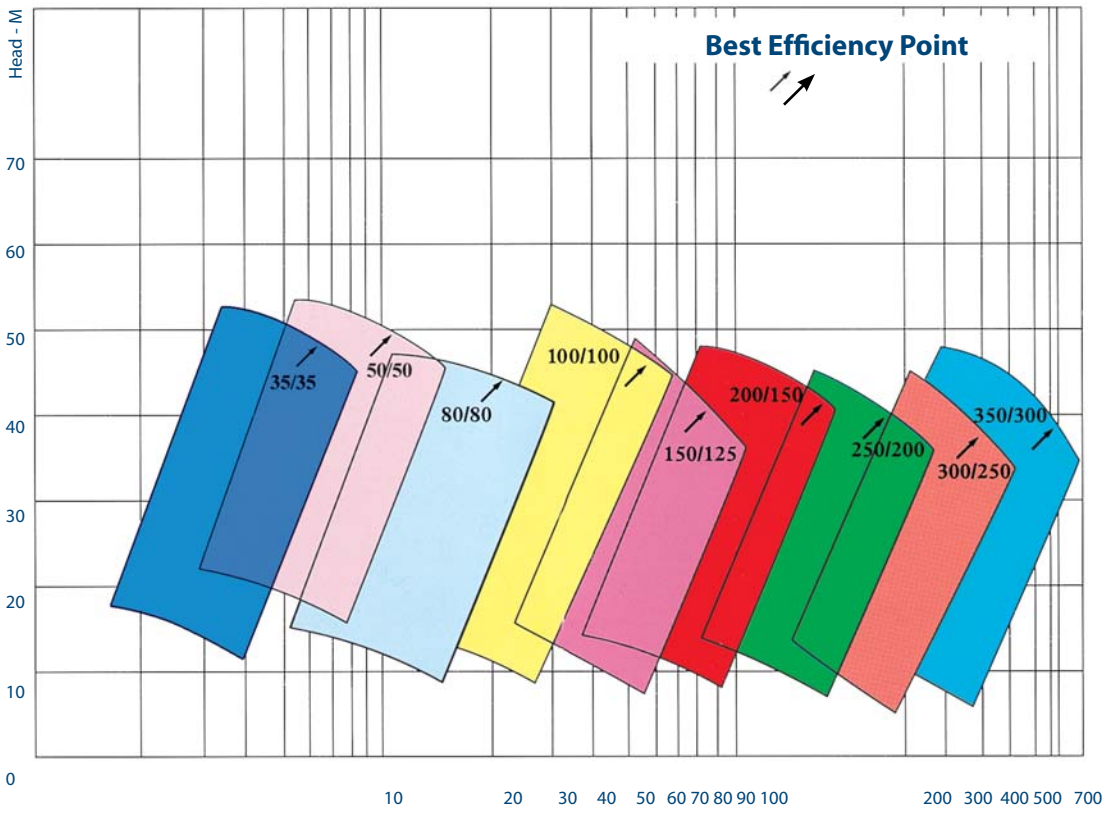
The Linapump IIIr range of pumps is designed and manufactured in accordance with appropriate International Quality Standards, such as ISO9000.



End elevation **Side elevation**

PUMP SIZE (mm)	MASS (kg)	Dimensions in mm																
	A	B	C	D	E	E1	F	G	H	K	L	M	Q	R	T	W	W
35 x 35	142	87	137	224	49.5	310	-	46	70	725	111	20	285	250	216	40	165	220
50 x 50	156	92.5	132	224.5	49.5	310	-	46	70	725	120.5	20	285	250	241	40	165	220
80 x 80	326	120	180	300	65	355	-	50	120	915	168	30	360	300	295	45	250	310
100 x 100	440	132	169	301	57	460	-	40	127	998.5	184	30	400	336	324	60	272	372
150 x 125	608	211	234	445	100	479	-	100	189	1286	210	30	480	390	368	65	340	440
200 x 150	736	217.5	223	440.5	90	468	-	66	174	1312.5	222	35	490	428	394	70	345	445
250 x 200	1250	309	270	579	108	660	330	76	200	1600	321	40	660	550	406	90	430	585
300 x 250	1956	317.5	285	602.5	70	640	320	70	200	1697.5	368	40	750	600	483	100	-	-
350 x 300	-	322	329	651	90	660	330	93	230	1752	441	40	770	650	560	110	-	-

Service, Selection and Support



Linapump IIIr
Preliminary Selection Chart

The principal factors which affect the pumpability of solids in suspension are:

- The amount of dry solids and their density.
- The density of the carrying liquid.
- The maximum particle size and representative size distribution.
- The shape of the particle.
- The discharge pressure.

In addition, other parameters such as pipe layout, suction conditions and friction losses relating to pipework and fittings must also be considered in the calculation. Linatex can advise on these aspects of your slurry system.

Pumptec: Computer Aided Support

To complement and facilitate optimum selection of your slurry system, Linatex has developed "Pumptec." This unique computer programme, available for use on a personal computer, allows the operator to:

- Calculate the pump duty and select a pump and drive.
- Analyse the effects of changing slurry density.
- Calculate the pump de-rating for slurry mixture.
- Calculate setting velocities of various slurries and select pipe sizes.
- Calculate pipeline frictional losses in various pipe materials and pipe fittings.

Linatex Africa

SOUTH AFRICA
5 Fuchs Street, Alrode 1451,
Gauteng, South Africa
Phone: +27 11 617 4800
Fax: +27 11 908 1644 Head Office
Fax: +27 11 908 2130 Process Equip.
Fax: +27 11 908 5518 Rubber/Pumps

Linatex Europe

UNITED KINGDOM
Wilkinson House, Blackbushe Park,
Galway Road, Yateley
Hampshire GU46 6GE, England
Phone: +44 1252 743000
Fax: +44 1252 743046

Linatex The Americas

CHILE
Santa Catalina de Chena 850
Parque Industrial Estrella Del Sur
San Bernardo, Santiago, Chile
Phone: +56 2 447 9400
Fax: +56 2 447 9368

USA
1550 Airport Road,
Gallatin, Tennessee 370666 USA
Phone: +1 615 230 2100
Fax: +1 615 230 2109

CANADA
372 Noel
Sept Iles, Quebec G4R1L7
Phone: +418 968 2822
Fax: +418 962 9221

Linatex Asia Pacific

MALAYSIA
Commercial Division – ASIA
6 Mile Jalan Ipoh, 68100 Batu Caves,
Selayang, Selangor, Darul Ehsan,
Malaysia
Ph: +60 3 6251 2195
Fax: +60 3 6255 2173

CHINA
Room 1007, Eton Place
No 69 Dongfang Road
Shanghai 200120
People's Republic of China
Ph: +86 21 5882 7366 ext:101
Fax: +86 21 5882 7377

MELBOURNE
Suite 7, 61-63 Camberwell Road
Hawthorn East, VIC 3123
Phone: +61 3 9834 7400
Fax: +61 3 9834 7405

DANDENONG
23 Quality Drive
Dandenong, VIC 3175
Phone: +61 3 9706 6568
Fax: +61 3 9706 6575

TOWNSVILLE
Lot 3, 694 Ingham Road
Mt. St. John, QLD 4814
Phone: +61 7 4758 6100
Fax: +61 7 4758 6111

MT ISA
26 Richardson Road
Mt Isa, QLD 4825
Phone: +61 7 4743 2805
Fax: +61 7 4743 7209

DARWIN
2/15 Graffin Crescent
Winnellie, NT 0820
Phone: +61 8 8984 4931
Fax: +61 8 8984 3032

PERTH
30-36 Wittenberg Drive
Canning Vale, WA 6155
Phone: +61 8 9256 8300
Fax: +61 8 9265 8305

KALGOORLIE
216 Dugan Street
Kalgoorlie, WA 6430
Phone: +61 8 9021 0266
Fax: +61 8 9021 0277

LINATEX

www.linatex.com

Headline Graphics Australia Pty. Ltd. +61 3 9419 9775