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Powder Process Solutions

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"Listening intently to the operator, understanding their process and then providing them a safe, simple solution to help them do their job is the essence of our business and who we are.

Success is an operator energised with a smile on their face and a Palamatic Lifter in their hand!"

MELANIE ARCHBOULD MANAGING DIRECTOR

We are Palamatic

At the heart of Palamatic are our people, every single one of our customers and employees help make the difference

It is our people that make us who we are.

Stewart Bennison formulated Palamatic's guiding principles back in 1985. Respect, courage, long-lasting relationships and talent. These simple words are a measure of how we do business, they encourage us to constantly improve and help us contribute to the wellbeing of all customers, our employees and our families. As a business we strive to provide the best opportunities for our employees to grow, we nurture their talent and in return they work harmoniously to design, develop and build products that we are proud of.



Based in Chesterfield we are well situated for distribution of product to all parts of the UK and Overseas. The premises include a warehouse, assembly workshops, stores, two fabrication facilities, new test plant, meeting room and offices.

We also have an office and warehouse facility in North Carolina to help with enquiries and distribute lifters parts and systems to our customers in the USA, Canada and South America.

Over the years Palamatic has built up strong relationships with a team of distributors all over the world who have worked with us to represent our products to their customers. Palamatic has evolved to form four separate divisions that focus on our customers' needs in all industries.

Palamatic Materials Handling

Manufactures lifting and handling solutions for all general industries including Woodworking, Chemicals, Food, Packaging, Refractory, White Goods, Printing and Logistics.

www.palamatic.com



A well established Manufacturer and leading force in handling and process solutions for the Pharmaceutical, Healthcare, Medical, Fine Chemicals, Cosmetics and Nuclear industries.

www.palpharma.com



Manufactures a full range of automatic and manual powder handling in-feed and sack opening machines for Food, Chemical, Paints, Pharmaceutical, Oil and Plastic industries.

www.palamaticpowderhandling.com

PalFab

Our dedicated fabrication department running on Lean Principles provides us with the facility to produce both mild steel & stainless steel assemblies in separated workshops to the highest quality for all our product divisions. The excellence of the finished product for our customers is assured with manufacturer under our control.

www.palfab.co.uk

Respect Courage Long-lasting relationships Talent



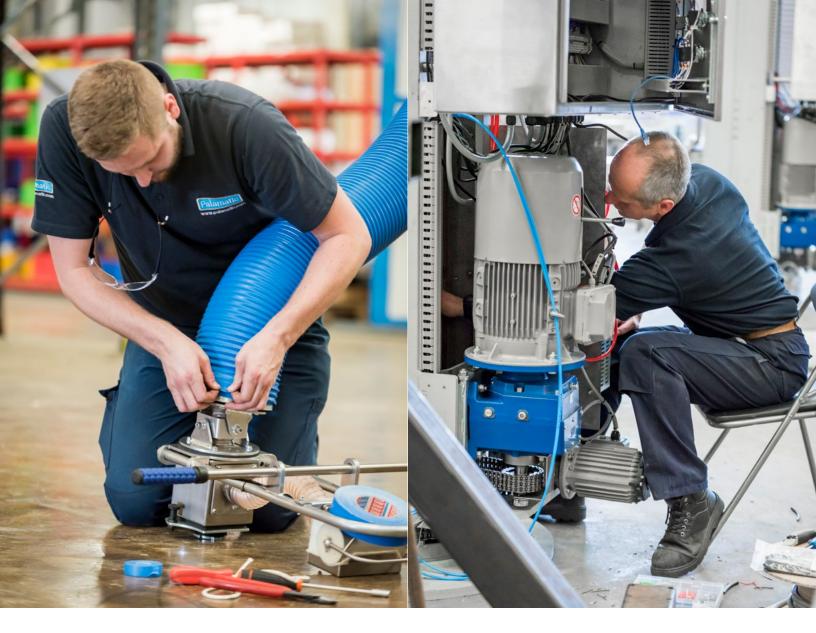
How can we help

Our aim is to reduce operator injury, increase productivity, protect your valuable product and save you money

The handling of powders, flakes, pellets etc in any environment is potentially one of the dirtiest, time consuming, labour intensive and hazardous processes in Industry. Many thousands of people are affected each year resulting in illnesses such as long term disability from lung diseases, skin diseases from frequent contact with irritants, hand/eye injury by contact with corrosive products, asthma from sensitisation to isocyanates, poisoning or cancer caused by exposure to carcinogens at work. Risks range from operator dust inhalation to spillage and loss of valuable product through ineffective handling processes.

The COSHH1 regulations are intended to reduce the pain and suffering and high economic price to be paid by occupational ill health.

Many varying handling systems are available for this market. Possibly the most common of which is the manual sack tip station. In it's simplest form and when designed correctly, this type of



system can prove a valuable corrective measure for the operator. But why stop there? Why not consider one of Palamatic's dynamic Manual, Semi or Fully Automatic Powder Processing Solutions. Throughout the range Palamatic's control measures significantly reduce environmental dust emissions by combining low maintenance with high throughput they arrive at the ideal solution to COSHH recommendations.

Choose a Palamatic sack opener to maximise product retrieval, ensure good housekeeping and increase profitability.

In 15 years Palamatic have taken this field to a new dimension. From the early days of promoting a single machine concept, Palamatic has never been satisfied in allowing the market development of state of the art sack, drum and FIBC discharging equipment to deal withall types of powders and sack/FIBC types has been at the forefront of Palamatic's Powder Processing philosophy. Through our experience working closely within many Industries and handling of many varying products from raw food ingredients to highly toxic chemicals and high specification pharmaceuticals,

Palamatic can choose from any one of five fully automatic sack opening machines, defining the most beneficial system to suit your needs. With satellite companies in the USA, India and France Palamatic's powder processing machines are now installed all over the world achieving opening and discharging of sacks and FIBC's in a dust tight environment.

- From twin rotating to band saw and rotary drum cutting systems
- 1 to 16 sack throughput per minute2
- 11b plastic packets to 1T FIBC's
- 1 to 42T of product discharge per hour

Whether you're handling mud mix on an oil rig in the North Sea or opening FIBC's containing toothpaste ingredients in the South Sea Islands, Palamatic will always come up with the answer to your infeed process problem. You know you're in safe hands with Palamatic!This brochure gives you a brief overview of some of what we've achieved in 15 years.

- 1. Control of Substances Hazardous to Health Regulations (1988)
- 2. Dependent on product flow characteristics and process facilities

Health & Safety comes first

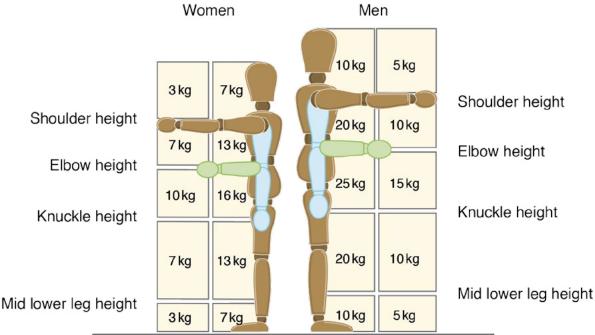
Protecting your workforce from injury and helping you comply with Health & Safety legislation is our number 1 priority

The Manual Handling Operations Regulations 1992, as amended in 2002 apply to a wide range of manual handling activities, including lifting and moving of objects.

The Health & Safety Executive (HSE) estimated 909,000 working days were lost in 2013/14 due to handling injuries;

- 6.6 days were lost for each handling injury
- 24% of all reported injuries are handling related
- 8% of major/specified and 25% of over-7-day injuries to employees involved handling
- Over-7-day injuries accounted for more than nine in ten of the total (18 354)
- An estimated 54,000 reportable handling injuries resulted in more than three days' absence from work this was a rate of 190 per 100,000 workers

LIFTING AND LOWERING GUIDELINES AS PUBLISHED BY THE HSE ARE:



TWISTING

Reduce the guideline weights if the handler twists to the side during the operation. As a rough guide, reduce them by 10% if the handler twists beyond 45°, and by 20% if the handler twists beyond 90°.

FREQUENT LIFTING AND LOWERING

The guideline weights are for infrequent operations – up to about 30 operations per hour – where the pace of work is not forced, adequate pauses to rest or use different muscles are possible, and the load is not supported by the handler for any length of time. Reduce the weights if the operation is repeated more often. As a rough guide, reduce the weights by 30% if the operation is repeated once or twice a minute, by 50% if it is repeated 5–8 times a minute, and by 80% where it is repeated more than 12 times a minute.

THE PALAMATIC SOLUTION

All our vacuum tube lifters are designed to exceed the HSE guidelines and reduce operator effort and fatigue which reduces the chance of manual handling injuries.

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Hazardous Environments

Palamatic can configure applications for hazardous environments that require ATEX certification

Explosive atmospheres can be caused by flammable gases, mists or vapours or by combustible dusts. If there is enough of the substance, mixed with air, then all it needs is a source of ignition to cause an explosion.

Explosions can cause loss of life and serious injuries as well as significant damage. Preventing releases of dangerous substances, which can create explosive atmospheres, and preventing sources of ignition are two widely used ways of reducing the risk. Using the correct equipment can help greatly in this.

Palamatic understand the specific process requirements when working in hazardous environments. We can build and install a full turn-key system or work with your system integrators to ensure compliance in ATEX zones 1/21 and 2/22 is met. Not only are we fully experienced in Directive 99/92/ EC (ATEX 137) and Directive 94/9/EC (ATEX 95) but we are also able to supply equipment to meet the requirements of several international standards so can provide a solution wherever you are worldwide.

We can configure powder handling systems to operate in specialised environments where ATEX and International standard recommendations must be considered. Fully compliant, safe and robust components are used to meet regulations, such as;

- Air operated vacuum generators
- Anti-static tubes
- Earth bonding
- Non-sparking crane trolleys

For further information on how we can help with your ATEX installation please contact one of our Technical Consultants or Worldwide Distributors.



Research & Development

Projects at Palamatic



Our undertaking of enterprising projects across various Industries has allowed Palamatic to work closely with many clients.

This has proven particularly useful in gaining a detailed knowledge of the huge spectrum of products and their handling characteristics, in use throughout Industry. From PVC, TiO2 and Microdol used in the Paint Industry to

free-flowing raw ingredients such as Coffee, Cocoa Beans, Rice and Grains for Food, Confectionery and Beverage Industries.

Expensive Pharmaceutical materials, Dyes/Pigments and non-free flowing products including Desiccated Coconut to the many hazardous and corrosive acids and alkaline products such as Sulphuric Acid and Sodium Nitrate used in Chemical and Water Treatment processes.

With this knowledge Palamatic have developed machine and system specifications ideally suited to the handling of these products. Special design features including;

- Sack Pre-Breaker crushes solid product from two directions before entry into the main machine, a feature highly regarded in the Chemical Industry
- Sack Pre-Brusher cleans dust residue from sack outers in Food applications
- **Top Clamp Sack Infeed Roller** provides a positive downward force for light sacks such as Aerosil used as a filler for the Resin Industry
- Clean-in-Place systems developed where applications require high levels of cleandown such as the Pharmaceutical and Dairy Industries
- Internal Acetal Gripper Chain assembly required when handling caustic products
- Special materials such as PVDF Chains and PVC Coated Skirting required when handling acidic products
- Dust extraction filter media's such as PTFE,
- Anti-Static and Polypropylene all available with stainless steel end caps.

All have been borne out of handling specific Industry needs, combined with tests and trials carried out at our dedicated Test Plant facility in Chesterfield. And we don't stop at simple component design. Our Research and Development Division have played a key role in the design of two recent additions to Palamatic's Automatic Sack Opening Machines.

The Goliath Tumble Drum resulted from our clients need to handle raw materials at throughput rates of 42T/hr. Another Industry led machine is the RotaSlit2000. This unit came to life when an existing client approached Palamatic for a compact system to handle small paper, plastic and cardboard packages of sugar weighing as little as 500g as well as more recognised 25kg sacks.



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Powder Processing Solutions

A unique range of sack tipping and powder processing machines

Many manufacturing processes require product in sacks to be discharged at the infeed point. Powder products have their own set of handling problems, dust containment being high on the list. The COSHH Regulations require employers/business owners to provide a dust-free environment for their process operators to work in.

The handling of powders, flakes, pellets etc can be one of the most time consuming, labour intensive and hazardous processes in industry. Thousands of people are affected each year resulting in illnesses as serious as lung disease and cancer. It is important that efficient solutions are made available to combat suffering and also the high economic costs relating to occupational ill health. For 30 years Palamatic has been at the forefront of designing sack opening machinery to suit a variety of process related operations. The main objectives of Palamatic's range of machines is to maximise product retrieval, ensure good house-keeping and help businesses comply with the COSHH Regulations. Once opened the product leaves the machine outlet into onward processing such as into collection hoppers, vibratory screens, screw or aero mechanical conveyors.

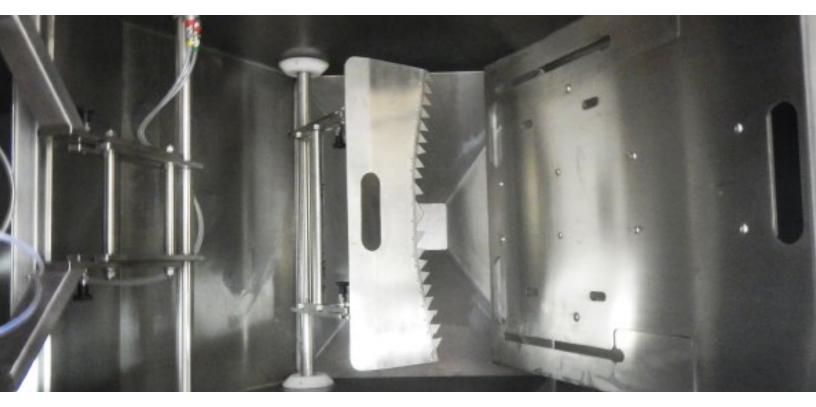
As no two manufacturing processes are the same and with individual site plan restrictions to take account for Palamatic has developed a range of machines that will suit your requirements whatever industry you are in.

THROUGHPUT CAPACITIES (sacks per minute)						
Product	AST600 Range	MiniSlit	VariSlit	RotaSlit	Goliath	
Peanuts		8	8-10			
Coffee Beans		6	6-8		10-12	
PE/LDPE Granules		8	10-12	8-10	12-14	
Lentils		8	10-12	8-10	12-14	
Animal Feed Pellets		5	6-8	8-10	8-10	
Charcoal					12-14	
Dicalite	4	6-8	6-8	8-10	10-12	
Sugar	4	4-6	6-8	8-10	8-10	
Tea		5	8		8-12	
PVC Powder		5-6	5-7	8-10	7-9	
Carbon Black		4-6	6-8		8-10	
Soya Flour	4	4-5	6-8	8-10	8-10	
Cement		5-6	8	8-10	10-12	
Starch	4	4	6	8-10	8	
TiO2		4-5	6-8		10-12	
Aluminium Oxide		3-4	6-7	8-10	10-12	
Caustic Flake		3-4	6-8	8-10	6-8	
Ammonium Sul- phate		3-4	6-7	8-10	8-10	
Milk Powder	4	5-6	6-8	8-10	8-9	
Filter Aid		5-6	6-7	8-10	9-10	

Which machine is right for you:

AST600[™]Range

Hygienic compact solutions for food processing



This compact range of machines has been designed to fit in the same neat footprint of a typical Sack Tip unit. Each option of machine has a 600mm wide inlet and opens sacks at rates of between 2-4 per minute with an emptying efficiency of up to 99.95%. (dependent on nature and flow of product)

The benefit to industry of this unique machine design is within the principle of operation which allows the machine to be offered in three configurations

- F-AST-600 Fully automatic operation
- E-AST-600 Enclosed operator control with Glove Ports
- S-AST-600 Semi Automatic Sack Tip.

Running on a completely automatic cycle the F-AST600 responds to a sack entering the infeed with a choice of conveyors, cuts the sack, discharges the product and ejects the sack material through a range of empty sack collection systems.

Each option utilises the same cutting and shaking action. On all the machines the product discharge shaking time can be pre-determined with the automatic machine having a secondary shaking cycle inbuilt. The Enclosed Sack Tip and the Semi Automatic machine have the facility for operator to manually shake the sacks in a secondary discharge process. Internal machine components to be removed for cleaning so in industries such as Food and Dairy on products such as milk powder and infant formula, or Pharmaceuticals the issue of cross contamination of product is controlled.

For maximum dust management an integral dust extraction unit can be fitted or a simple dust extraction spigot to connect to customer's own plant dust extraction system.

The fully pneumatically controlled machine makes it highly suitable for the most arduous ATEX/Hazardous environments. It can also be supplied with an electrical control system or configured to suit your unique requirements.



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RotaSlit™ Oil & Gas

The concept of the RotaSlit[™] design was to eliminate the sensitivity of a sack opener's cutting system relative to a sack size and shape

The concept of the RotaSlit[™] design was to eliminate the sensitivity of a sack opener's cutting system relative to a sack size and shape.

With RotaSlit[™] designs, the sacks can be processed in regardless of sack type and has the highest emptying efficiency of the range.

The RotaSlitTM operates by feeding the sacks through the large rotating cutting blades that effectively cut the sack into complete hoops in a primary cutting and emptying operation. The hoops on the RotaSlitTM are then transferred via a screw auger into a secondary discharge chamber with Tumble Drum. The emptied sack hoops are transferred from the Tumble Drum into a waste sack screw compactor to be collected and extruded into polythene tubing attached to the compactor outlet.

The RotaSlit[™] can be supplied with a simple sack shelf, gravity roller conveyor or a powered infeed conveyor.

A dust extraction spigot or an integral dust extraction unit is available to ensure maximum dust-tight operation.

The RotaSlit™ can be supplied to operate in various hazardous environments and where material is of an explosive nature, ATEX, IECEx or compliant with a Class/

DIV system can be fitted with explosion relief panels, flameless vent or explosion suppression equipment. The RotaSlitTM can be supplied fully wired to a machine mounted terminal box. An optional control panel can be supplied loose for mounting as required where customers prefer to integrate controls into their own factory systems.

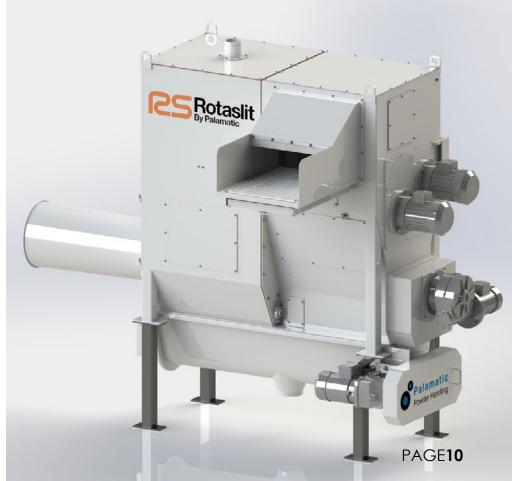
Palamatic can supply any necessary Functional Design Specification for such integration.

Specification

- Aimed at applications handling well packed 2 or 3 ply paper bags and plastic sacks.
- Mild steel body painted to Norsok-M-501. Other specifications available and a choice of colours.
- The RotaSlitTM offers a throughput of 6-8 sacks per minute dependant on which option is chosen and the type of sack material and product contents.
- The RotaSlitTM has a compact foot-print allowing it to fit in much smaller spaces.







RotaSlit™ Std/RotaSlit™ Maxi

The name Palamatic is synonymous with sack opening, providing dust-tight handling equipment for industries processing powder products in sacks



The handling of powders, flakes and pellets in any environment is potentially one of the dirtiest, time consuming, labour intensive and hazardous processes in industry.

Complying with the COSHH Regulations is a driving force for employers to reduce occupational ill health caused by operator exposure to powders causing lung disease, skin irritation, asthma and other serious consequences.

Palamatic has considered the need for operator safety by designing a range of sack opening machines that control environmental dust emissions as well as combining low maintenance and high throughput when required.

Palamatic's wide range of sack opening equipment takes into consideration the customer's needs including:

- Equipment foot-print
- Variations in sack throughput
- Wide ranges of sacks to open
- Product and sack material
- Hazardous and explosion proof restrictions
- Low headroom
- Cleandown and maintenance
- Emptying capability

The concept of the RotaSlit[™] design was to eliminate the sensitivity of a sack opener's cutting system relative to a sack size and shape. With RotaSlit[™] designs the sacks can be tipped in regardless of sack type and has the highest emptying efficiency of the range. The RotaSlit[™] range can handle between 6-16 sacks per minute dependant on which option is chosen and the type of sack material and product contents. The RotaSlit[™]-STD has a compact foot-print with the RotaSlit[™]-Maxi being much larger due to its increased length Tumble Drum section.

The RotaSlitTM operates by feeding the sacks through the large rotating cutting blades mounted on a single shaft that effectively cut the sack into complete hoops in a primary cutting and emptying operation. The hoops on the RotaSlitTM-STD are then transferred via a screw auger into a secondary discharge chamber with Tumble Drum whilst on the RotaSlitTM-Maxi the hoops are transferred by gravity into an extended Tumble Drum. On both versions the emptied sack hoops are transferred from the Tumble Drum into a waste sack screw compactor to be collected and extruded into polythene tubing attached to the compactor outlet.

The RotaSlit[™]-STD and The RotaSlit[™]-Maxi are supplied with a powered inclined infeed conveyor.

A dust extraction spigot or an integral dust extraction unit is available to ensure maximum dust-tight operation.

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The RotaSlit[™] can be supplied to operate in various ATEX zones and where material is of an explosive nature can be fitted with a scope of explosion relief panels or explosion suppression equipment.

With many machine finishes from mild steel powder coated to various levels of stainless steel finishes polished to 240 grit which makes it suitable for high specification applications.

Additionally the RotaSlit[™] can be supplied fully wired to a machine mounted terminal box. An optional control panel can be supplied loose for mounting as required where customers prefer to integrate controls into their own factory systems.

Palamatic can supply any necessary Functional Design Specification for such integration.

The range also includes:

- Manual Sack Opening Systems
- Bulk Bag Dischargers FIBC Semi Automatic
- Bulk Bag Dischargers FIBC Fully Automatic
- Combination Bulk Bag (FIBC)/Small Sack Discharger Range
- Compactors
- Infeed Solutions





MiniSlit™

For 30 years Palamatic have lead the market worldwide in materials handling innovation. Palamatic's focus on powder process and its specific handling

The MiniSlit[™] is based on a continuous cyclic sequence of operation with electro-pneumatically powered sack opening functions making it ideal for operations requiring 4-8 sacks per minute.

The MinISlit[™] has a small foot-print and due to its principle of operation is most suitable for free-flowing and lightly compacted materials in sacks. The MiniSlit[™] can be supplied with the options of a horizontal infeed roller conveyor for manual feeding of the machine or with an powered inclined infeed conveyor.

The band-knife cutting blade utilised on the MiniSlitTM achieves a very efficient cut and emptying operation of the product from the sack. As the sack is being conveyed through the blade system a clean cut is made through its length and then retracted leaving the end of the sack uncut. The bottom and the top halves of the sack are transferred via inverter discs in a continuous operationinto the waste sack screw compactor where secondary discharge of product can take place as the sack is collected and then compacted out into a dust-tight polythene tube attached to the compactor outlet.

A dust extraction spigot or an integral dust extraction unit is available to ensure maximum dust-tight operation. The MiniSlit[™] can be supplied to operate in various ATEX zones and where material is of an explosive nature can be fitted with a scope of explosion relief panels or explosion suppression equipment.

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- Bulk Bag Dischargers FIBC Fully Automatic
- Combination Bulk Bag (FIBC)/Small Sack Discharger Range
- Compactors
- Infeed Solutions



Goliath 1200TM

Maximum output for demanding environments

The Goliath 1200[™] is the giant of the range originally designed to cater for opening hessian (burlap) sacks of coffee beans at rates of 15 - 20 sacks per minute (up to

60 T per hour).

Capable of opening paper machine is capable of opening paper, polythene, polywoven, polythene, polywoven and hessian sacks of all free-flowing product such as coffee beans, tea, and rice.

Sacks from 25 - 70 Kg are effectively cut with the unique 4-blade rotary cutting system which ensures full control of upper and lower cut penetration.

The variable angle Tangle Tumble Drum discharge system produces the highest discharge efficiency on high volumes of bagged product. Palamatic's Goliath 1200™ sack opener also incorporates an access



RotaSlit™ 3600

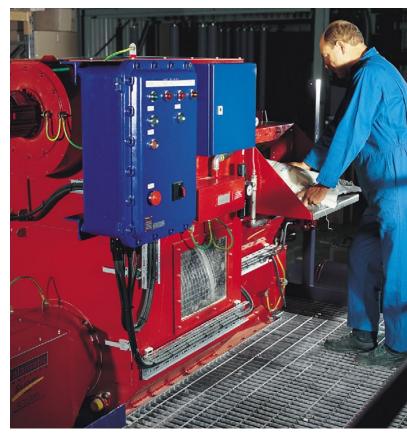
The Palamatic RotaSlitTM 3600 was first introduced to meet a design brief for a sugar re-work process, the RotaSlitTM has since gone on to service the demands of offshore oil rigs in their mud-mixing processes.

A much simpler machine than the conventional cyclic range, utilising only one drive motor with low energy requirements of 3 Kw. The tumble drum action achieves maximum product discharge with the simple cutting action using a unique patented screw auger to meter sacks through the machine.

A major benefit of this type of machine is that sacks can be fed in from any orientation and it is also capable of being set up to handle cardboard or plastic wrapped sachets and cartons as well as paper and plastic sacks.

As with all Palamatic automatic sack openers the RS3600 is built for easy cleandown and maintenance having minimum hang up points, flanges and gaskets. Ideal for low headroom applications the machine can also be supplied with an optional right angled screw compactor.

Common to all Palamatic semi and fully automatic machines the robust construction houses an integral screw compactor to deal with the emptied bags This machine is capable of handling 10 tonnes of product per hour (dependant on material flow characteristics) and is available in mild steel or stainless steel construction.



System Components

Palamatic Powder Handling Solutions can be found in over 200

Countries from Argentina to Zimbabwe

WASTE SACK COMPACTORS

The Palamatic CBU 2000 and Wastepactor 2000 are ideal high density screw compactor units for integration into existing and new process facilities. Palamatic screw compactors effectively reduce process waste packaging material, extruding the waste into dust tight polytubing, increasing overall plant house keeping.

Palamatic's CBU 2000 is available with a range of waste infeed chute arrangements, for integration with manual sack tipping stations and other process waste machinery. A list of typical waste sack materials handled are detailed in figure 1. Palamatic's Wastepactor 2000 is available with single or double infeed chute arrangements, providing a user friendly solution for your waste handling requirements. Both the CBU 2000 and Wastepactor 2000 can be designed as mobile units.

FIBC COMPACTORS

Palamatic's BBC 2000, high density screw compactor units have been specifically designed to effectively reduce large volume FIBC's to manageable waste. The Big Bag Compactor significantly reduces FIBC waste, extruding the waste into dust tight polytubing.

BBC 2000 is available with a range of waste infeed chute arrangements, for integration with FIBC discharge stations and other process equipment, depending on the application

The BBC 2000 is available with a single or double infeed chute arrangement, providing a user friendly solution for your waste handling requirements.





SACK TYPE	SACK SIZE	No of PLY	COMPACTION RATE
Paper	780 x 450 x 150	4	40-50/m of polytube
Paper with liner	950 x 520 x 225	2	40m of polytube
Paper with foil liner	950 x 520 x 225	2	40m of polytube
Plastic	650 x 420 x 100	1	60-65/m of polytube
Polywoven	850 x 480 x 90	1	55-60/m of polytube
Polywoven with liner	850 x 480 x 90	2	50-55/m of polytube
Hessian/Jute	950 x 510 x 170	1	30-35/m of polytube
Double Hessian/Jute	950 x 510 x 170	2	20-25/m of polytube

FIBC DISCHARGER

Palamatic's range of FIBC Discharge systems handle big bags up to 2 tonnes in weight, whether single trip, multi trip or multi trip with inner liners.

When combined with a Palamatic dust extraction system, the standard discharger works to a high level of dust containment, with negative pressure reducing dust emissions.

Further features such as optional rubber membrane seals between bag, infeed cone and glovebox arrangement further enhance the containment of dust. To assist discharge of cohesive products, additional rams can be incorporated in the design providing one of the most effective massage systems available.

The standard upper support structure is adjustable in height to accommodate all bag sizes between 0.5 -2 tonnes. Optional upper tensioning frames maintain bag tension during product discharge. When a lower spout clamp is included (in the optional glovebox) even greater bag tension is achieved. Inner liners are securely held using a clamp and spring arrangement.

Pneumatically operated flow cut-off valves are available to control product discharge to suit process requirements.

Whether toxic in nature or harmless free-flowing product Palamatic's range of FIBC Dischargers have the solution.

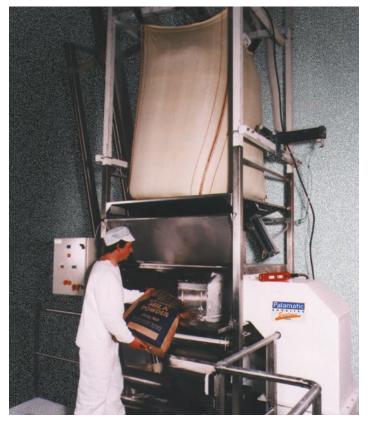


DUO-PAL FIBC/SMALL SACK DISCHARGERS

Palamatic's specially designed combination small sack/FIBC Discharger has proved highly successful due to its flexible usage.

Both types of bags can be discharged simultaneously, with the glovebox style sacktip cabinet being fitted with a static blade to assist the operator in discharging small sacks.

Hinged access doors with glove ports give easy and safe access to the FIBC spout. Also included are a flow control gate on the central discharge unit and an FIBC crucifix support frame. Amongst the many optional features available are pneumatic massage system, electrical vibratory discharge tray and dust control systems.



FIBC FILLING/WEIGHING

Palamatic's FIBC Filler/Weigh unit is designed for flexibility and ease of operation.

FIBC's ranging from 0.5 tonne - 2 tonnes can be filled as well as Pallecons with inner liners. Materials specification include mild steel epoxy, direct contact parts stainless steel or full crack & crevis-free stainless steel.

A selection of optional extras are on offer with this system such as inflation fan, vibratory compaction table, mobile base frame and PLC controls. The weighing function is simple to operate with the added benefit of trickle feed at the lower set point. An automatic tare function and 'inflight' compensation facility is incorporated as standard.

A 3-phase supply, 5-bar air pressure and sound level foundations are all that is necessary to install this effective, simple to use system.

Ancillary Product Options

An extensive range of ancillary equipment available for integration into any new or existing system

Pre-conditioning units are generally attachments to infeed process equipment prior to entering the next stage of the powder process. Basic pre-conditioners are available for light agitation of the product, through to comprehensive, heavy-duty assemblies for more stubborn products.

Options include;

- **Single acting pre-conditioner unit**, designed to strike the leading edge of the sack agitating and fluidising consolidated product.
- **Double acting pre-conditioner unit** is designed to handle products, which totally compacts within the sack, forming solid blocks. The heavy-duty conditioning pads strike along the upper surface and sides of the sack in a reciprocating action. The number of cycles can be infinitely adjusted through the PLC control system, guaranteeing total product conditioning.



Sack pre-cleaning systems remove unwanted debris from the external surface of the packaging, prior to entering the next processing stage. There are 4 precleaners available in the range:

- **Single brush cleaner** incorporates an upper rotating brush assembly positioned above the conveyor.
- **Double brush cleaner** beneficial in applications where external cleaning of the sack is paramount. An upper rotating brush and lower castellated rotating brush assembly are incorporated.
- Single air jet cleaner incorporating an upper air

jet header pipe assembly positioned above the infeed conveyor.

• **Double air jet cleaner** gives a further action to assist with outer sack cleaning. Here, an upper and lower air jet header pipe assembly is positioned above and below the infeed conveyor.



With all pre-cleaning equipment debris is removed from the side, upper and lower surfaces of the sack and this debris can be extracted and contained within an integral or existing plant dust extraction system.

Rotary product breakers reduce particle size, prior to entry into the next phase of the process as climatic changes, material characteristics or transportation can compact product.

Rotary paddle breaker reduce powder products into manageable particles. Product falls by gravity into the trough section of the rotary paddle breaker and is forced through optional sized screens.

Twin shaft product breaker assembly incorporates two contra rotating rotors mounted on central rotating shafts, to reduce hard, flaked products into manageable particles.

To compliment the extensive portfolio of powder handling

machinery, Palamatic offer customised product discharge systems. Approximately 90% of our discharge solutions are specifically designed to suit product flow characteristics, as well as interfacing with down stream process equipment.

Product discharge solutions available from Palamatic include static and vibratory product outlet hoppers, fluidisation systems, bridge breakers, flow cones and

UPGRADES & REFURBISHMENTS

Existing systems can often be upgraded to improve performance at a fraction of the cost of a new system, taking advantage of new technological advances.

Palamatic Powder Handling offers a range of upgrading options to help you get the best from your system, from simple upgrades to complete refurbishment of your vacuum lifting system.

Full mechanical can either be carried out on-site or by returning your equipment to the Palamatic factory. When the unit returns to service, as-new performance is guaranteed and backed up by an as-new warranty.

Refurbishment and upgrades can be carried out on most Palamatic Powder Handling equipment.

Many of the units we refurbish are 10 or more years old so customers often take this opportunity to have them upgraded at the same time. By updating to today's standards you gain:

- Improved process performance
- Operating expenditure savings
- Extended asset life
- Minimised operation downtime due to maintenance

To find out more about how we can upgrade or refurbish your existing equipment to meet today's faster production requirements simply give one of our friendly Technical Customer Support staff a call, drop them an email or fill in an enquiry form online.

ENQUIRE ONLINE: Scan QR code

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WORLDWIDE DISTRIBUTORS NETWORK

Rapid response, local support

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- +001 919 779 0988

Wherever you are worldwide we have a sales and distributor team located near you. Our authorised distributors can help with consultation on any of our powder handling systems.

Product inventory is stored in strategic places around the world to maintain quick deliveries for our international customers.

Test plants are also available in most locations for product testing and evaluation. Local support is a key factor for companies who choose Palamatic Powder Handling.

With on-site consultation, site surveys and worldwide servicing you can be assured that your investment in our powder handling solutions is looked after.

Please contact us for your nearest authorised distributor or service centre:



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