









# PACKAM CONTROLS

SUCCESSFUL MOTION CONTROL SOLUTIONS



## **Patel Extrusion Group**

Packam Controls is an extension of the Patel Extrusion Group, world leader in manufacture of aluminium collapsible tubes established in 1957.



The key component of any production process is an accurate and fault-free operation for a very long time. Packam products ensure this can happen in your process every time.

Headquartered in Mumbai, the group operates nationally to meet the packaging needs of several important industries such as pharmaceuticals, food products, inks & paints, agrochemicals, cosmetics (including hair colour) toothpaste, adhesives, rubber solutions and many more.

With a small beginning more than 60 years back, it has grown multifold with the present production capacity of 300 million tubes per annum. We have 8 manufacturing units in India with exports to over 50 countries. Our group is ISO 9001:2008 certified and some of our plants have DMF approval by US FDA. We have our sales network in USA, Europe, Asia, Australia & Singapore. We are one of the few in this part of the world with all the manufacturing and service capabilities under one roof.

Packam's current business of Indexers was started in 1997, in order to provide motion control solutions to the rapidly increasing automation industry.

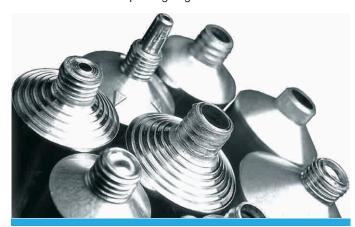
Packam has dedicated more than five decades in delivering quality products to its customers. An experience in manufacturing and exports to over 50 countries gives us the needed expertise and enables us to keep up with the customers' demands and handle global projects with ease.

We are always on the lookout for betterment and it is this passion to do the best that keeps us going.



- Year of establishment: 1957
- Product: Aluminium collapsible tubes
- Manufacturing Capacity: 2.00 Mil tubes per day
- Current Production: 1.50 Mil tubes per day
- o Workforce: 900
- Locations: Mumbai, Silvassa, Vapi, Baroda & Goa
- Certifications: ISO 9001:2008, DMF approval

(US FDA) Class 100,000 Clean Room



#### 1957- Started manufacturing Aluminium Collapsible Tubes

- 1960- Developed the World's first Ophthalmic Nozzle tube in Aluminium
- 1962- Developed Tube Manufacturing Line
- o 1968- Commenced production of Monoblock Aerosol Cans
- o 1971- Commenced production of Aluminium Extruded Sections & Profiles
- 1980- Developed a Fully Automatic Tube Manufacturing Line
- o 1990- Promotion of sales of Cam Indexers in India
- o 1997- Started manufacturing Cam indexers
- o 2000- Introduced additional models
  - 2005- Developed special indexers with integrated worm gear
- 2010- Shifted into a new manufacturing unit in Mumbai
- o 2013- Major investments to build up manufacturing capacity
- o 2014- Implemented latest software's to enhance cam programming & manufacturing
- 2017- Major increase in market share globally Celebrated 20 Years! Received CE Certification
- 2018- Launched New Product Line: Precision Link Conveyor
- 2019- Launched New Product Line: Servo-Mechanical Indexer

**History** 



## **Packam Controls**



We distinguish ourselves as pioneers in the field of motion control, especially the manufacture of Cam Indexers.

Our high precision cam indexers are manufactured on state of the art machines, backed by skilled and internationally trained technicians. We have the experience and know how to choose the optimal, risk free indexer to assure the required function and life.

Packam has partnered with an international company to manufacture slip-ring units according to the electrical and mechanical specifications and requirements of the respective customer. Our technicians are trained in Europe and our assembly / testing facilities are approved by our partners. This ensures a high and consistent quality of every unit manufactured.

#### **Facts**

- Year of establishment: 1997
- Products: Cam Indexers, Slip Rings, Packaging
- Manufacturing Capacity (Indexer): ~200+ units per month
- Manufacturing Capacity (Slip Ring): ~300+ units per month
- Manufacturing Capacity (Packaging):~1.5 Mil pcs per month
- Workforce: ~200
- Office Area: 6000 Sq. Ft.
- Factory Area: 45000 Sq. Ft.



## Our "All Under one Roof" policy helps us respond faster to our customer's requirements and effect timely deliveries.

We operate out of a dedicated state-of-the-art facility that has new, modern machinery and equipment, including CNCs and precision measuring and testing equipment. We have effectively integrated the latest technology in manufacturing with the long experience of our skilled, trained & committed work force.

Our sophisticated workshop is focused on accuracy and precision, and, as a result, we are able to provide well-engineered products that have a long track record of trouble free performance.

In addition, we have our own design team that works with our customers to identify an optimal solution for their needs and to design a suitable, tailored product. With an aim to provide maintenance free product we have a well-equipped quality control & assurance facility.





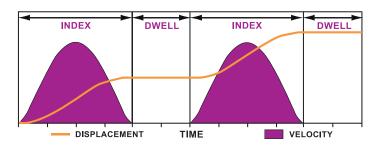
## **Cam Indexers**

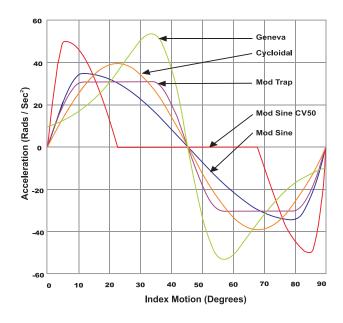
The key component of any production process is accurate and fault free operation for a very long time. Packam products ensure this can happen in your product every time.

The drives manufactured by Packam Controls are mechanical indexing units or oscillating mechanisms used to transform the constant speed rotary motion of the input shaft into intermittent one-way or oscillating movement of the output shaft by way of a cam drive profiles and followers. Once the motion profile is decided and manufactured it cannot be changed unless the indexing mechanism is exchanged. An exception is the servo-driven indexing unit with a backlash-free, constant velocity globoidal cam mechanism.

The size of the indexing unit is determined by analysing the forces resulting from the load, velocity and the acceleration/ deceleration forces. Packam has many years of experience in the selection of the optimum indexer size and can therefore serve its customers in the best possible way.

Mechanical indexing units and indexing drives with globoidal cams or flat cams have a high reliability and virtually zero maintenance during a long service life. They are available as cycle-on-demand or continuous run drives. Depending on the application, there may be need for protecting the indexer/oscillator from overload on either the input or the output side of the indexer. Overload clutches are available to protect the indexing drive unit in emergency situations (failure in the power supply, blockage through external influences, interfering motions). Further, Packam delivers indexing units complete with motor and gear units of any type selected by the customer.





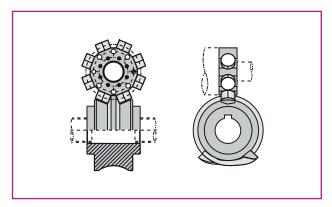
Complete product range based on globoidal and flat cams, available in housed units and open mechanisms.

Packam has many years of experience in design and manufacture of indexers. All the materials and hardware used is from reputed manufacturer. Our cams are through hardened and ground to micron accuracy with a very high surface finish. Our cam followers have too had almost no breakages under specified working parameters. The assembly process has been mastered by our technicians to ensure that the indexer is delivered in ready-to-use condition.

Packam offers a wide range of indexing devices for all your automation needs. They are used in many areas of machine design like: Assembly Automates, Automotive, Rotary Tables, Feeding Mechanisms, Indexing Conveyors, Indexing heads on tool machines, Packaging Machinery, Part Transfers, Printing Machinery, Welding Automation and many more...

If you are looking for reliable, long-lasting automation equipment, Packam has the solution.







## **Cam Indexers - Product Range**

Packam has a wide range of products - Unit Sizes, No. of Stops and Index Periods to suite customers specific applications. Using the same housing, most of our indexing units can be fitted with an indexing, oscillating or constant lead roller drive cam without a dwell period.

#### **OUR RANGE OF PRODUCTS**



#### Globoidal Cam Indexers

Right angle indexers are typically used for continuously running applications with cams designed to match the indexing and idle times without stopping the motor. These are versatile units suitable for a wide range of applications.



#### Parallel Cam Indexers

Parallel indexers have the input and output shafts located parallely. They are commonly used to drive conveyors when a line shaft needs to index.



#### **Rotory Table Indexers**

Rotary indexing units with globoidal cam mechanisms are ideal for dial plate indexing. Each have centre through hole for routing supply lines.



#### **Heavy Duty Indexers**

HD type indexers are very accurate and reliable rotary tables suitable for heavy duty applications. The robust and compact design provides a big dial plate and a large center hole.





Packam Cams are an economical alternative to in-house cam design and manufacturing. Backed by over 20 years of experience, we offer cams in a comprehensive range of configurations, tolerances and materials.





Packam mechanisms allow accurate design of motion characteristics that fully address the above requirements. These mechanisms are available in standard models or tailormade to suit customers unique requirements.

## Cam Followers



Packam offers a full range of needle roller cam followers, from 13mm to 101mm outside diameter sizes.



#### Precision Link Conveyor

Packam precision link conveyors (LC) are the state-of-the art of precision conveyors with ultimate design for accurate linear operation for every kind of industry. These precision conveyors are designed to be a foundation for automation applications that require accurate positioning.



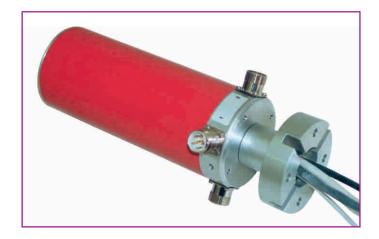
#### Servo-Mechanical Indexer

The SM Series of indexers are servo-mechanical indexers designed for application where different output motions are required on the same table.



## Slip Ring Assembly

A Slip Ring, also known as Electrical Rotary Joint, is an electromechanical device that allows the transmission of power and electrical signals from a stationary to a rotating structure.





Packam Slip Ring units of the types SRK and SRW represent the highest quality standard of electrical rotary joints. They allow the transmission of the finest currents and signals as well as power.

The Slip Rings are special hard gold plated. The electrical transmission is made through a minimum of 2 contacts per ring, also made of Gold. This combination of Gold to Gold provides resistance to corrosion and ensures the highest quality of contact.

Our products are totally maintenance-free and will provide reliable life-time operation.

With the use of the Gold-Gold technology, a safe transmission of electricity to a rotating shaft can be guaranteed.



The safe transmission of electrical currents in the range of mA to several 100s of Amps. (welding currents) requires the use of high-quality contacting materials such as Gold-Gold. To cover the various technical needs such as transmission of data, ie. Profibus, Ethernet, video signals, high current supply etc. the internal design and routing of leads as well as proper shielding and the use of the correct cables and connectors is important for a successful product.

Packam has partnered with an international company to manufacture slip-ring units according to the electrical and mechanical specifications and requirements of the respective customer. Our technicians are trained in Europe and our assembly / testing facilities are approved by our partners. This ensures a high and consistent quality of every unit manufactured.

Wherever possible the slip ring assembly is delivered as a complete and sealed-housed assembly. This eliminates the danger of any environmental influence and makes the slip-ring assembly maintenance free.

Electrical rotary joints are often combined with rotary joints for air and/or liquids such as hydraulic oil. The use of Packam slip rings enables new solutions for machine designers towards an optimised problem solution.





## Packam Slip Rings ind application in:

- Wind power stations
- Rotating table machines
- Packaging machines
- Automatic Tool Room Machinery
- Handling Cranes and Winches
- Welding machinery
- Plastic moulding machines
- Video systems for inspection



## **Other Products**

#### **Machines**

Packam has been designing and manufacturing Special Purpose Machines for past 40 years.

#### **Packaging Products**

With the packaging industry being a big part of our clientele, we also provide the packaging itself. Starting from mould designing through to manufacturing, we offer a complete range of shapes, sizes, colors and finishes:

- Cyno bottles
- Anaerobic bottles
- Dauber caps
- Glass bottles
- Plastic Tubes
- Ampoules
- Tin containers
- Chemicals
- Paper products

For additional information, kindly contact our Sales Team.







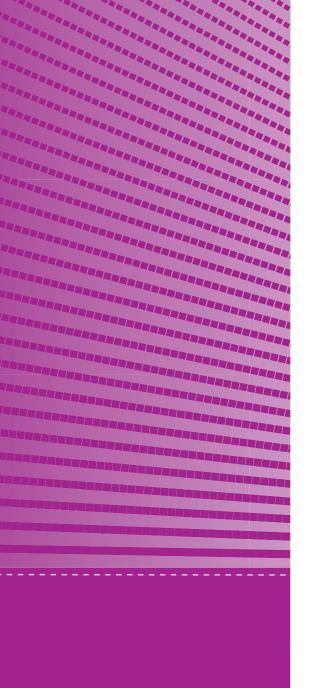






















#### **Packam Controls Private Limited**

Patel Vanika, Western Express Highway, Goregaon (East), Mumbai-400 063, India

**T** +91 22 61206600 **F** +91 22 61206606

**E** info@packam.co.in **U** www.packam.co.in

Domestic Sales Enquiry International Sales Enquiry After Sales Service

sales@packam.co.in export@packam.co.in service@packam.co.in