

RESOURCE
ENGINECH (INDIA) PVT. LTD





ESTABLISHED SINCE EARLY 70'S

IN HOUSE DESIGN CAPABILITIES, MANUFACTURING & INSPECTION

RELIABLE MANUFACTURING BASED ON KNOWLEDGE

QUALITY PRODUCT FOR GLOBAL MARKET

GROWTH RATE 18 – 25% YEARLY

SELLING IS PROVIDING SOLUTIONS

92% REPEAT CUSTOMERS

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Who we are...

RESOURCE is a one of the market leaders for Expanding Shafts and Reel Holders. Quality, Simplicity, Reliability and Innovation are the cornerstones of RESOURCE. Ever since its inception in 1973, RESOURCE has been vigorously pushed forward by a technocrat educated and trained in the United States. We have achieved exponential growth by using state-of-the-art technology and latest methodologies. To add to this, we have our own machine shop with latest CNC turning centers and high end VMCs. To cater to the evolving needs of the industry, we have an in-house rubber plant as well as an Induction Hardening facility.

Our only passion is to dedicate our resources and intelligence for working with our clients. We strive to improve winding making the reel stronger and robust. RESOURCE delivers high quality, reliable and cost-effective products to customers globally. Our objective is to utilize our expertise to deliver technology-driven products that meet the strategic objectives of our valuable clients. We would like RESOURCE to be the only Expanding Shafts & Chuck Producer imaginable in our customer's world.

Presently, we are supplying all types of specialized web holders to Packaging, Converting, Paper Mills and many other industries related to Paper, Film & Foil. Majority of our clients come from the Indian subcontinent and around 30% come from Europe, North & South America, Middle East and Africa.



Manufacturing Facilities





uniqueness

Understanding client's needs Customized solutions
Spares readily available



design & development

In House Design Staff
Using 3D CAD Software like Creo



advantage

More than 35 years of Experience in Product
Frequent Improvements



SERVING
1600
CUSTOMERS IN
60 COUNTRIES



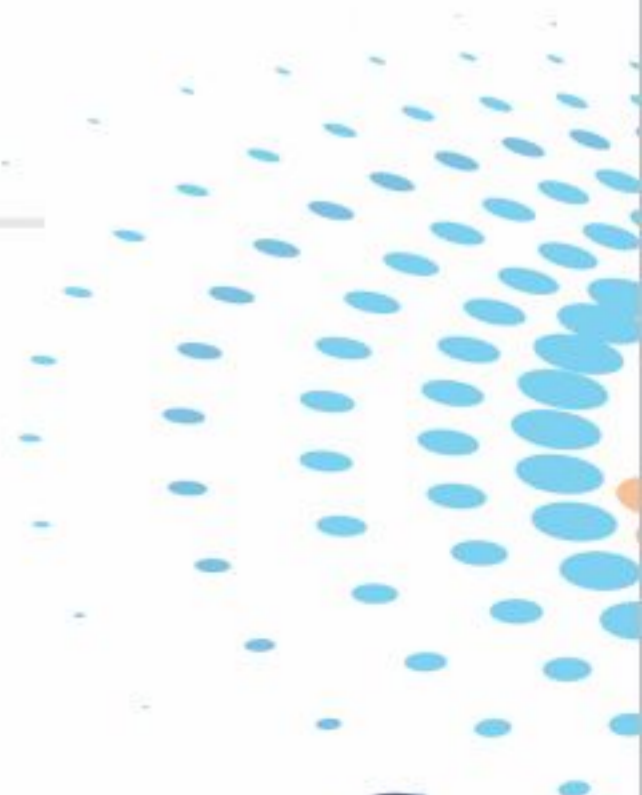
quality assurance

Documented System for QC
Capability to Measure 5 μ m (Microns)



since 1990

Online data of each shaft since 1990 with ears
Listen to your feedback





LUG SHAFT Series 101

Grippers are slit through the metal pipe and pneumatic bladder is used for inflating. The grippers give positive holding of the core.

These shafts are strong & rigid

Standardized design allow us to manufacture the shaft in any size

The same design can be offered for heavy duty to light capability shaft

Simple design ensuring long service

Staggered lug design makes it best in winding application.

Each gripper offers a designed chamfer for easy core insertion

Dimensional tolerance of journal is very tight for better fitting & rigidity during operation

Material

Pipe : Steel or Aluminum,
Carbon Fiber

Lugs : Steel, Rubber or Plastic

Available Size

Core ID from 3" to 8"

Length up to 6000 mm(240")

Option

Cantilever shaft

Various size of lug (Gripper)
available

Rotary Union air supply possible



MULTI BLADDER SHAFT Series 201

The Multi Bladder Shaft is made of Aluminum Extrusion with steel journals Tight -fitted for High Torque capability. It is assembled with a PU tube for longevity.

These shafts are strong & rigid

Standardized design allow us to manufacture the shaft in any size

The same design can be offered for heavy duty to light capability shaft

Simple design ensuring a long service

Material

Pipe : Steel or Aluminum

Lugs : Steel, Rubber or Plastic

Available Size

Core ID from 1" to 12"

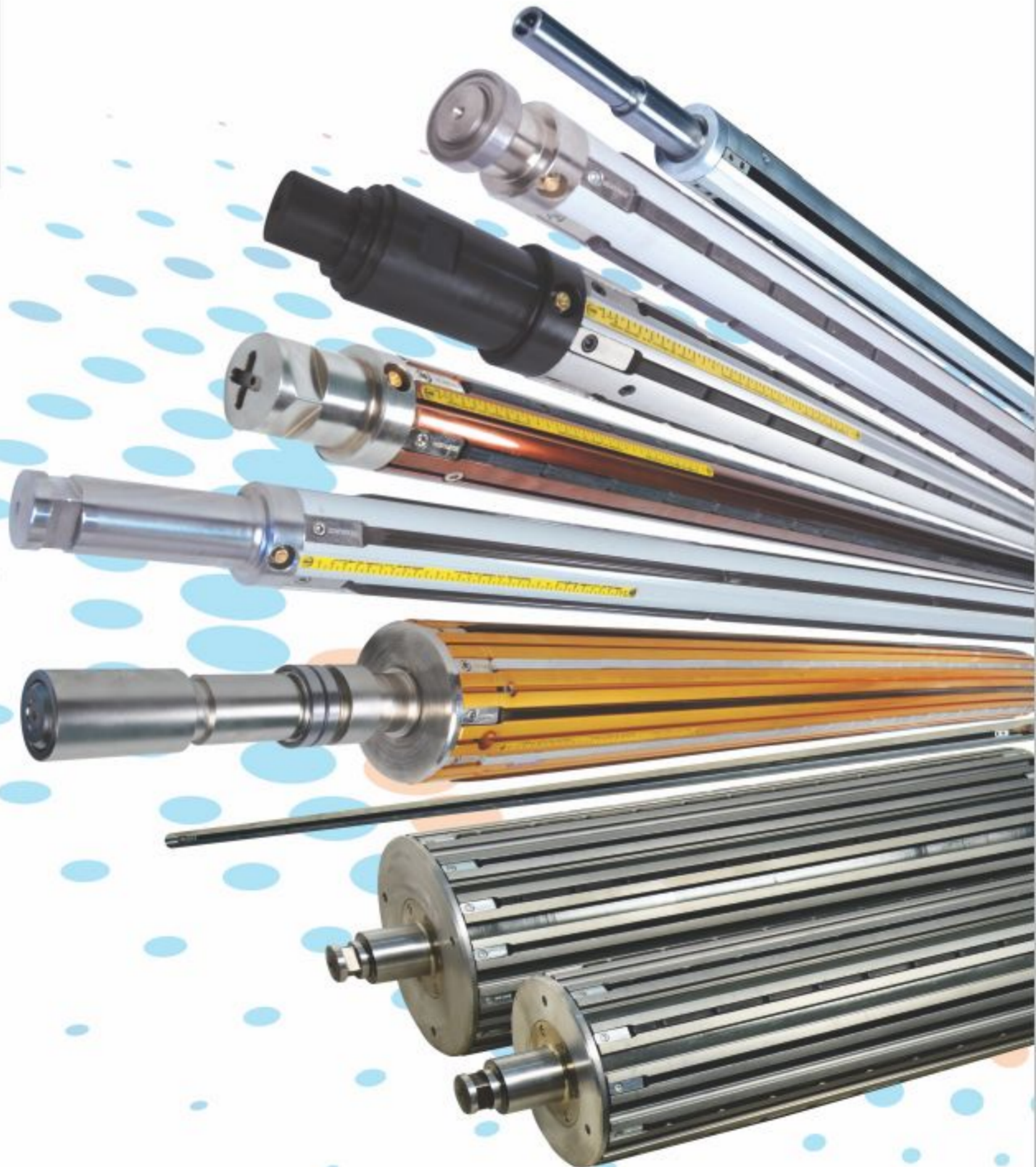
Length up to 6000 mm(240")

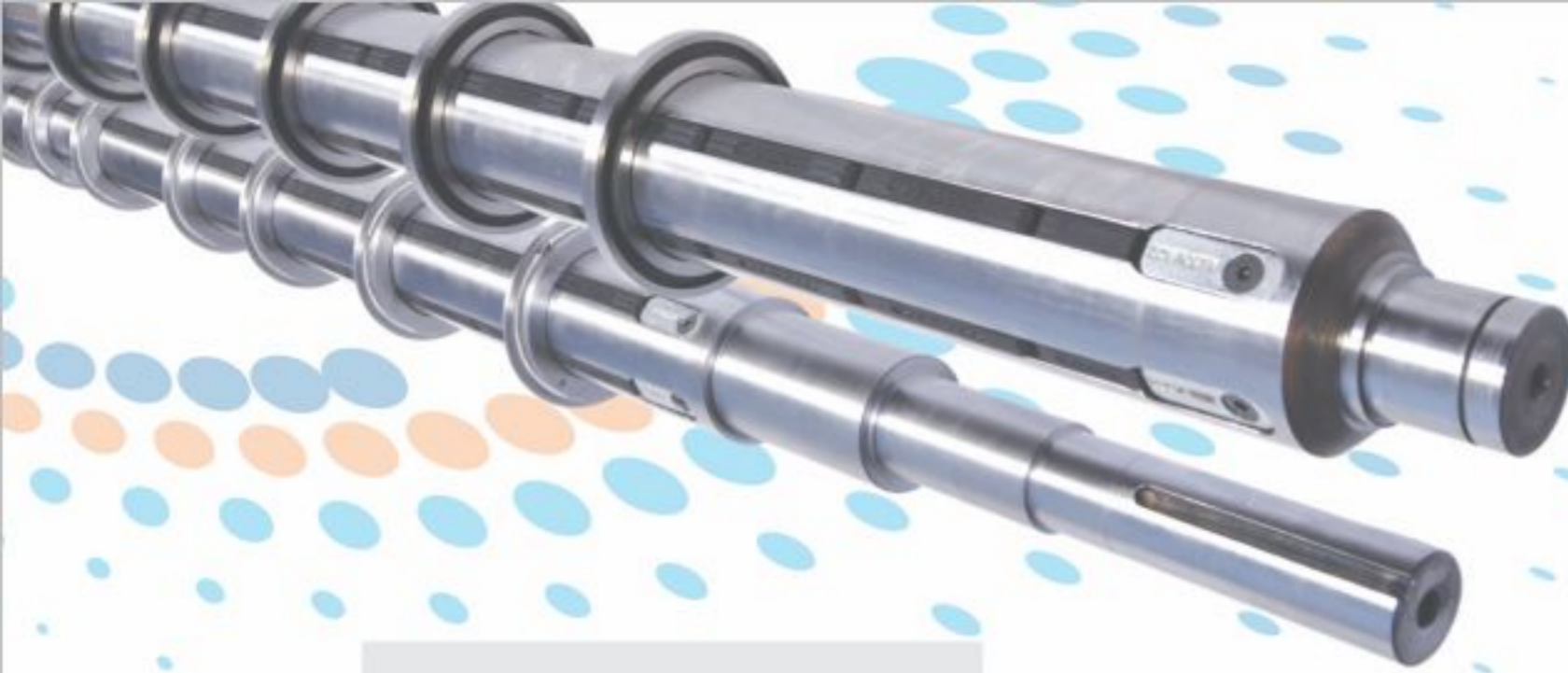
Option

Cantilever shaft

Various size of lug (Gripper)
available

Rotary Union air supply possible



**Material**

Body : Alloy steel, Hard Chrome Plated & Hardened
Lugs : Aluminum, Steel and Rubber

Available Size

The shaft's outer diameter ranges from 50 mm to 300mm, Length up to 3 meters

Options

Rotary union connection option for automatic handling

BOTTOM KNIFE HOLDING SHAFT Series 205

Fundamentally a Multi Bladder Shaft with tight-tolerance

External body which holds anvils or knives precisely

in place for slitting operations.

**Material**

Pipe : Steel Body & Alloy steel journal
Lugs : Metal, Engineering Plastics

Available Size

Core ID 3" to 12" shafts, length up to 3000 mm

Options

Numbers of grippers can be defines based on customer requirements

MECHANICAL EXPANDING SHAFT Series 141

Externally Lug Type Expanding Shaft with Wedge type design makes it possible for concentric holding and allow high speed winding.

Heavy spring is applied for ensuring sliding back of lugs.

True mechanical advantage is used in achieving heavy clamping force

Absolutely maintenance free as no rubber components or lubrication



Material

Pipe : Normally Aluminum extrusion. We use steel pipes in case of heavy duty at
Lugs : Rubber, plastic and Aluminum

Available Size

Core ID : 6" to 12" Length up to 3,000 mm (120")

Option

Grippers can be offered as per holding requirements i.e. rubbers, Engineering Plastic and aluminum. We offer one piece steel Body for heavy torque.

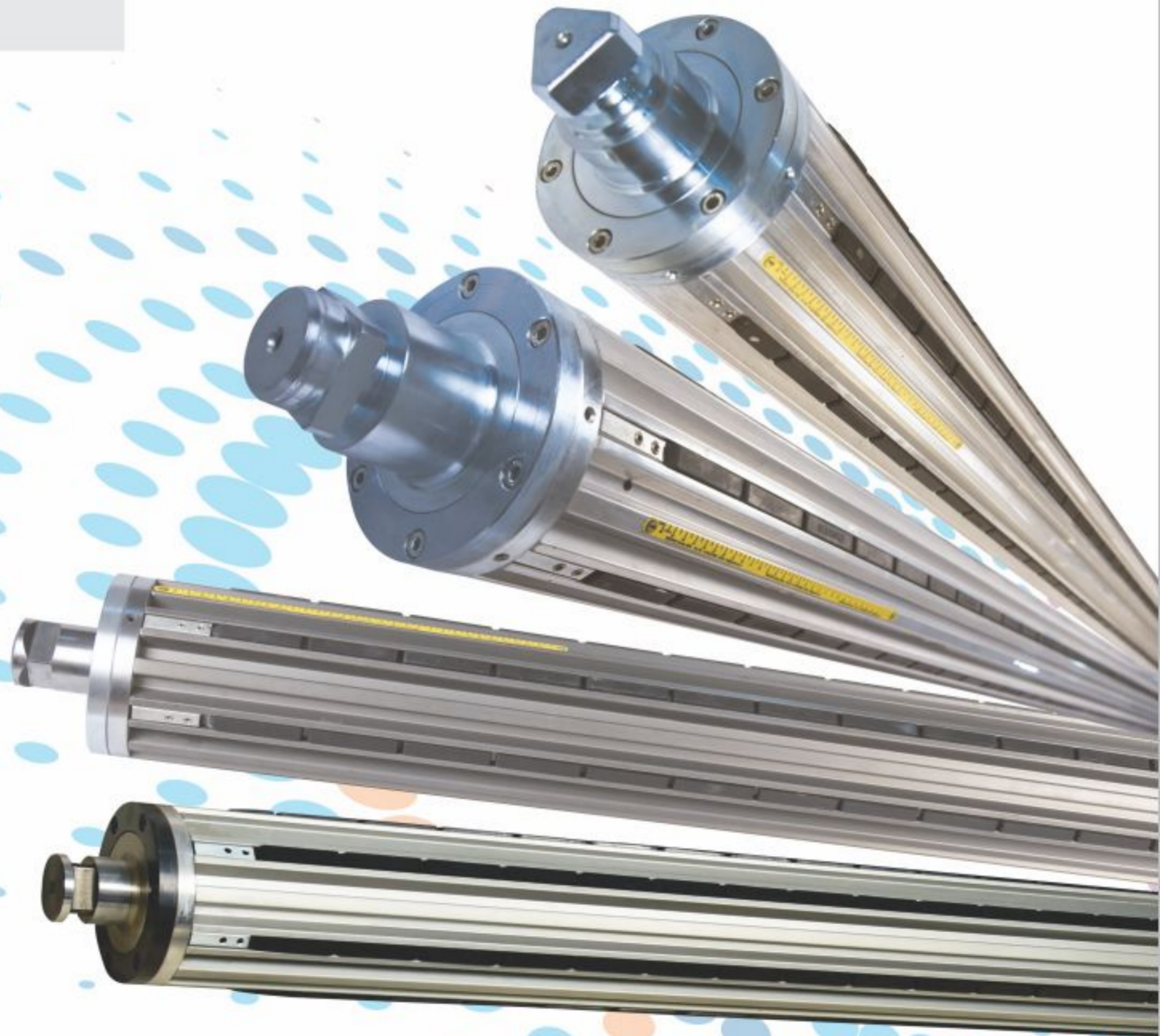
SELF - CENTERING MULTI BLADDER SHAFT Series 251

Basic Structure of Multi Bladder Shaft with special internal valves design to handle Reels much higher Linear Speeds. The shaft is assembled with PU Tube and Hard Rubber Ledges for long life and operation.

Internal Separate Valves for Each Tube

Shaft can be supplied in Aluminum & Steel as per Requirement

Easy Maintenance, if needed.





SAFETY CHUCK - ADJUSTMENT

Series 351

Certain material needs alignment adjustments, while shaft is rotating on the machine. The safety chuck is designed to handle the reel shifting in either direction upto 25mm. The sliding flange design is based on standard safety chuck with locking mechanism.

Material:

Body: Graded Casting,
Forged Steel, Harden Alloy Steel
Rubber Finger Guard

Available Size:

Square-Round(35-50, 40-55mm)

Options:

Pneumatic Locking Flange,
Safety Sensors,
Non-standard Mounting

The thrust is applied by lead screw and sliding drive is taken care of by Spline and cam for smooth adjustment at high speed

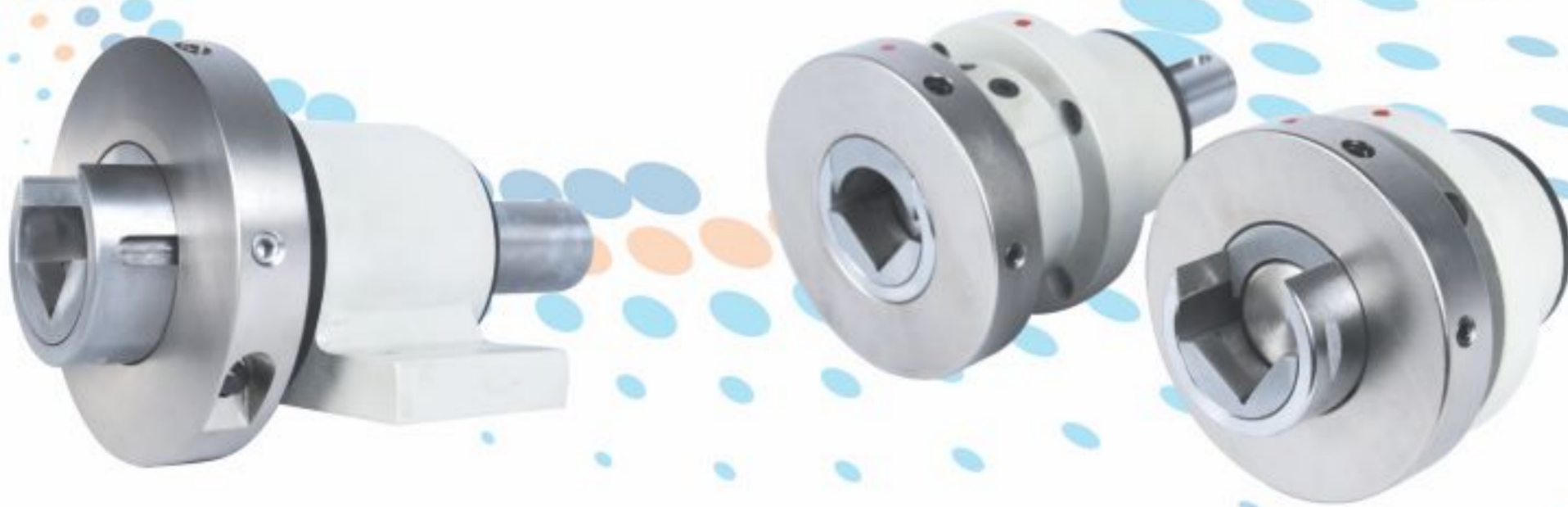
Automatic locking upon Rotation

Safety Chuck offers precise concentricity and less noise.

Replaceable Insert feature the customer cost saving and flexibility of Servicing

Extra Locking Pin with Finger Guard





SAFETY CHUCK - SLIDING Series 321

A variant of classic Safety Chuck. The sliding flange allows the shaft to be locked in position while transferring torque at High RPM.

Material:

Body: Graded Casting,
Forged Steel, Harden Alloy Steel
Rubber Finger Guard

Available Size:

Square-Round
(35-50, 40-55mm),
Square (20 – 50mm)

Options:

Pneumatic Locking Flange,
Safety Sensors,
Rotary Joint,
Non-standard Mounting

With Dual holding mechanism - Square for Torque transferring & Round for load Handling

Designed for higher speed applications

Automatic locking upon Rotation

Offers precise concentricity than the standard square type safety chuck

Better concentricity means less noise & vibration during the run, and greater life

Very little damage to shaft journals

Replaceable Insert feature the customer cost saving and flexibility of servicing

Extra Locking Pin with Finger Guard





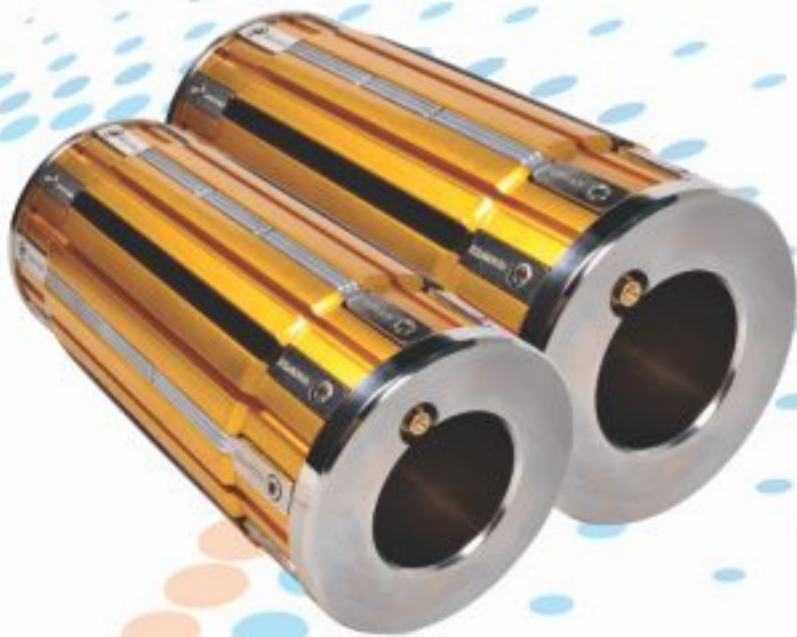
SAFETY CHUCK - TILTING Series 301

A holder with Tilting Flange for safe shaft resting. The square cavity allows the torque to get transferred to shaft and drive. A much needed safety for Operator & Processed Material.

Widely used design in the industry.

The Square cavity for shaft holding is harden upto 50 Hrc.

Preferable design for slow speed machine.



MULTI BLADDER CHUCK Series 221

Variant of the Multi Bladder shaft with through bore inside for holding on a shaft

No direct contact with Rubber Bladder

Less Maintenance cost

Highly Reliable & concentric

Great option for retro fitting existing Shaft or rod

Material

Body : Aluminum, Steel in special case

Gripper : Rubber, Plastics and aluminum

Available Size

8", upto 12"



AIR CHUCK Series 561

It is a simple bellow type chuck mounted on an aluminum body for holding up the reel. It is used with a side clamp or a set screw on the base shaft.

Economical & light weight solution for core holding

Widely used for low torque unwind operation

Absolutely no damage to core

Easy mounting on shaft

Material

Body : Aluminum Alloy,
Bladder : Rubber Polymer

Available Size

Core ID 6" onwards
Bore ID square or round as per
customer requirement

Option

Dual non return valve-common
air valve for multiple chucks
by tube Stopper plate for core
alignment.
Bore can be with key-way
Clamping by split collar clamp



BALL LOCK Series 401

Most widely used friction elements for Differential winding. Steel, Aluminum or Engineering Plastic body specially manufacture to act as gripper with Ball.

Usable for various differential shaft as replacement

Designed for high speed and Concentric holding

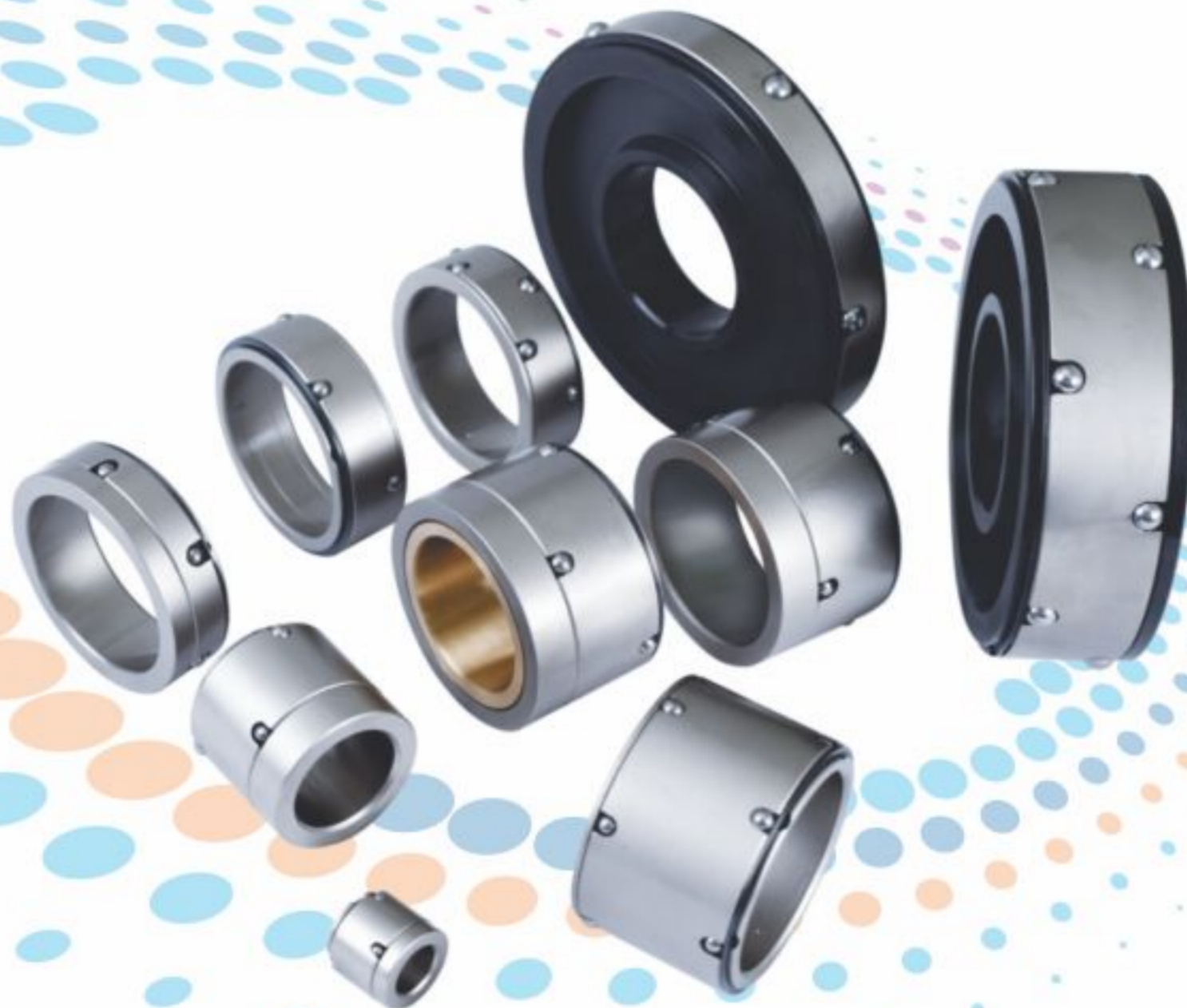
Fully covered ball makes the dust problem almost nil

Material

Base : Alloy steel & bronze
& Engineering Plastic
Ball : Stainless steel

Available Size

Core : 25mm, 50mm, 70mm
3" , 4" , 5" , 6" , & 8"
Width: 24mm onwards



FRICION SHAFT Series 451

A Shaft specially designed for slitters to handle constant tension on multiple slit. The base steel shaft has multiple bladders, mounted with Ball Locks for reel holding.

Small width winding possible at very low web tension -

A solution for Sensitive Material.

Each slit material can slip at different speed and same tension.

Ball lock with spring design minimizing side movement while setting and running.

Automatic tension controlling through rotary union in dynamic condition by signals from machine drive.

Available Size

50mm, 70mm, 3", 4", 5", 6" -
any size possible
Minimum ball lock width
24 mm onwards





Material
Alloy steel

Available Size
3", 4", 5", 6", up to 12"

Option
Flange diameter as per customer requirement

TORQUE CHUCK Series 501

Cam type shaft makes the chuck hold core in positive gripping position.

Concentric chuck expansion

No side arm force required

Gripping is better at high torque application

Comparatively lesser damage to the core



Material
Base and Flange : Alloy steel
Grippers : Hardened steel

Available Size
Core : 3" to 12"

THRUST CHUCK Series 551

Thrust chuck is a taper wedge design used for core holding where the force is applied through the arms. It is truly mechanical and fool proof.

Best suited for rolls using fiber and metal cores

Based on mechanical load provided axially, So fail proof and reliable

This chuck provides absolute holding of the core





AIR POWER CHUCK Series 531

One of the most heavy and durable core holding option where mechanical advantage of taper wedge is used through high pressure pneumatic cylinder.

Best option for avoiding core damage in shaft less machines

Rotation of the chuck in either direction is possible

No axial force is applied: hence better life of winding and unwinding station.

Concentric expansion and gripping force

Quick-Change between core sizes with slide-on core chuck adapters.

Unmatched torque capacity at higher speed & jam free operation

Can be used for any core material without alteration

Material

Body : steel

Lugs : Alloy steel

Springs : Spring steel

Available Size

3", 6" up to 12"





REWIND ARM CHUCK Series 505

Mainly used on Primary slitter – Rewinder. It has a basic Cam design with very narrow gripping width.

Concentric Expansion with separate gripper

Gripper with and without Rubber Cover

Customize as per Machine Requirements

Material

Body : Steel. Gripper : Steel

Available Size

3", 6" up to 12"

QUICK LOCK Series 481

Quick Lock is one of the products where maximum advantage of cam is used for concentric holding of the reel.

Most ideal for slitting rewind where slippage is usual used for solving web tearing and stretching problem of plastic films

Better core contact compared to one point contact

Material

Bush : Bronze

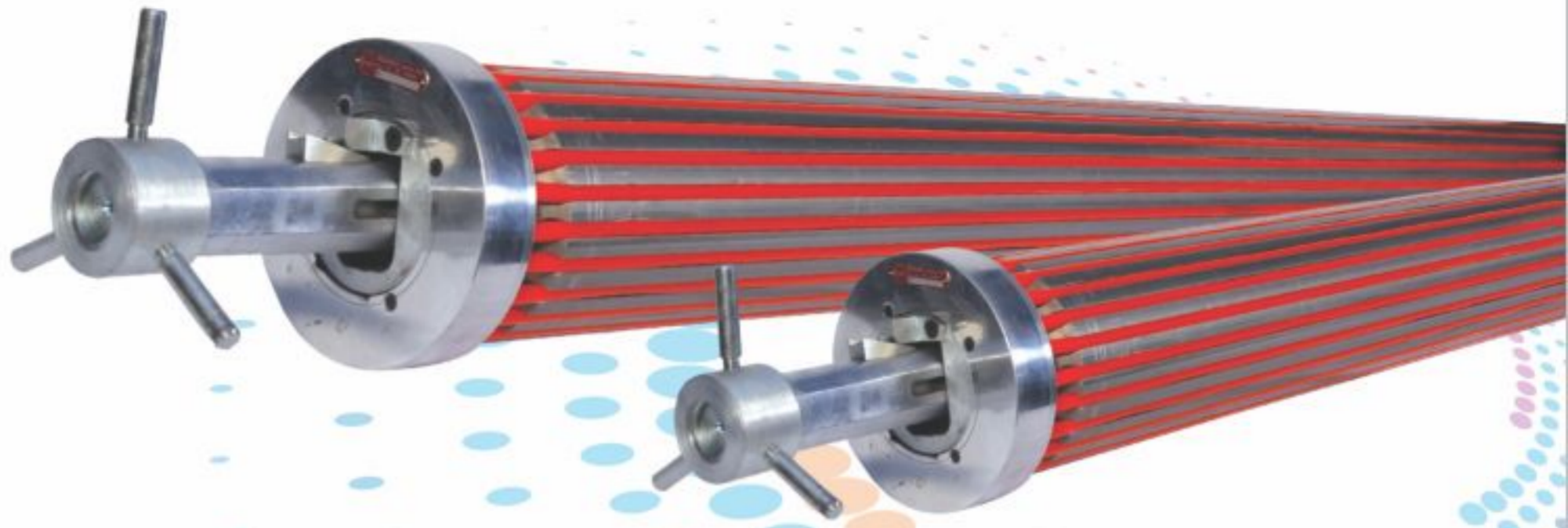
Lugs : Alloy steel

Springs : Spring steel

Available Size

3", 4", 5", 6",
onward as per requirement
Width : 45mm, 75mm
& 100 mm





POLY EXPANDER Series 601

Poly Expander is a roller with PU Cord mounted in the grooved roller. The cord stretches in & out as the roller rotates.

The amount of spreading is adjusted on each side with separate cam to avoid stretching in the center

Designed to remove wrinkles without angular stretching

Solution for Thin film where low friction is coefficient cord type design achieves ideal expansion for relatively wide variety of material

Material

Roller : Aluminum, Cord :
Poly Urethane
Journals : Steel

Available Size

Diameter : 140mm
Length : Up to 3000mm

BOW ROLLER Series 631

Curved steel roller with a rubber sleeve unit for removing wrinkles from the web.

One of the oldest and most widely used wrinkles removing option.

Gear box given for online adjustment for wrinkle setting.

Can be used for separating the slits.

Material

Base : Steel
Spool : Aluminum, Steel, Plastic

Available Size

OD 3" to 6"
Length up to 3000mm





REEL LIFTER Series 705

Mechanical clamping shaft is designed to lift reels from floor. Once can simply lock the reel by locking Latch on the top.

Eye bolt on the top is provided for lifting by Crane.

Fail proof Mechanical design for Paper Cores

Material

Body : Steel, Grippers : Steel

Available Size

3", 6" up to 12"

REEL SHAFT EXTRACTOR Series 701

An innovative tool for Handling Longer and Heavier shaft. The mechanism is designed with flexibility to hold various designs of shafts in a single stand. The mechanism is purely mechanical and could be automated upon request.

Any type of shaft could be held with minor adjustments

Manpower usage could be reduced by almost 50%

No heavy handling by operators



SPARES & PARTS

AIR VALVE



RUBBER BLADDER / TUBE



ALUMINUM LUG



CLAMP FOR RUBBER TUBE



AIR GUN

AIR NIPPLE



PU TUBE



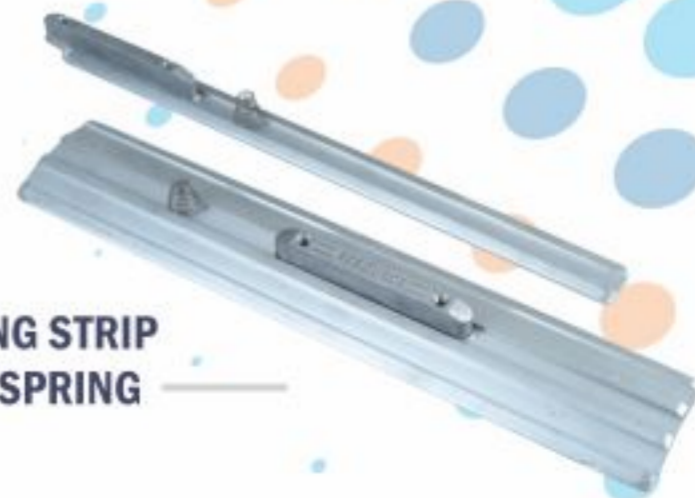
AIR CHUCK PARTS



RUBBER LUG



LUG HOLDING STRIP & CONICAL SPRING



SPARES & PARTS

RUBBER LEDGES & FLAT SPRING



FLAT TUBE (PU, RUBBER)



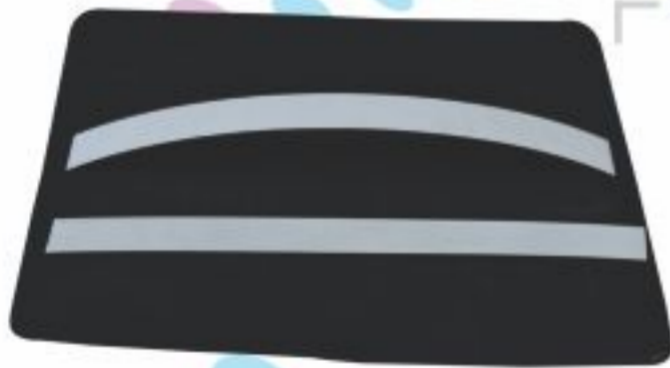
LOCK PIECE



AIR CONNECTION



FLAT PLASTIC STRIP



PU CORDS



TORQUE CHUCK LUG & THRUST CHUCK LUG



ALUMINUM & PU GRIPPERS



SPARES & PARTS

UPPER & LOWER LOCK PIECE



DOWEL, SPRING, LOCK PIECE



BALL, FLAT SPRING, LOCKING CIRCLIP



AIR POWER CHUCK



COTTON FELT

SAFETY CHUCK PARTS



TEFLON RINGS





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