

# Hindustan Automation

*Building & Innovating your ideas !!*



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(Business & Automation Solution Head)  
**Date:** 30th Oct'2014



# Content





## Founded in India 1997



## AW Hindustan Automation, Today

Award & Rajiv Gandhi Excellency Award

Presence since 1997,  
Strength + 30 Trained Engineers / Staff  
No. of Satellite Office – 4 Nos  
An ISO 9001 : 2008 Registered Company  
Recognition Awards: Udyog Ratna

## Location: Pune, India



**Specialized In The Art Of Material Handling !!**

Hindustan Automation ranks among India's top three material feeding solution provider in automation. Our is a German based technology with capability to provide low cost automation

- Founded in 1997 & over the past decade, **Hindustan Automation** has been the proven partner & name in part feeding & assembly automation.
- +25 years of experience in bowl fabrication & tooling contribute H+A's ability to offer customers a single source solution to parts feeding & orientation application
- H+A products have been helping all major vertical markets to move, assemble, pack, count & weigh their products. Custom engineering capabilities include – complete part orientation & delivery systems



## Group Business Activities

### Feeder Division



**Leaders in Feeding  
Technology !!**

### Conveyor Division



**Innovating your  
Ideas !!**

### SPM Division



**Designing your  
Future !!**

### Trading Division



**Your Engineering  
Solution !!**

**We are the extension of your business, organised around 4  
business areas**



## Group Turnover Details

Sales [KINR– Entire Group]

2013	14,560
2014	<b>20,188</b>

## Turnover Year 2013-14

We keep exploring opportunities in the field of material feeding & automation technology

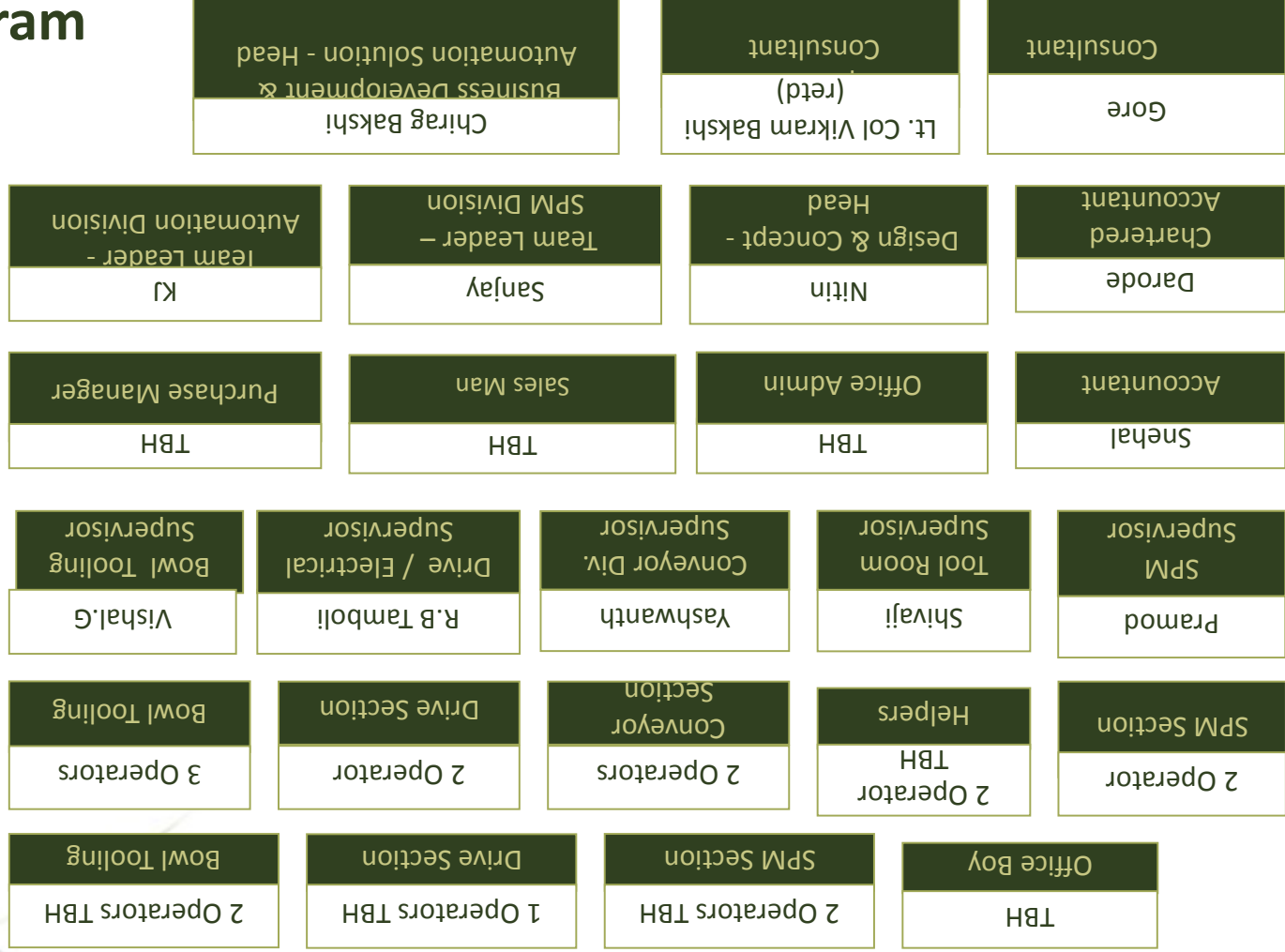
Managing Director  
Col. R.S. Bakshi (Retd)



## Team - Oranogram

### Set-up Dedicated Team

- Total FTE's in Yr 2013-14 – 24
- Total FTE's in Yr 2014-15 - 32





# Our Presence In Major Vertical Market

*The Smart Approach !!!*

**Aviation**



**Marine**



**Oil & Gas**



**Bearing / Industrial**




**Automotive**



**Healthcare & Cosmetics**



**Textiles**



**Retail**



**High-Tech Brown Goods**



**White Goods/Home/Leisure**



**Chemicals/Industry/Aerospace**



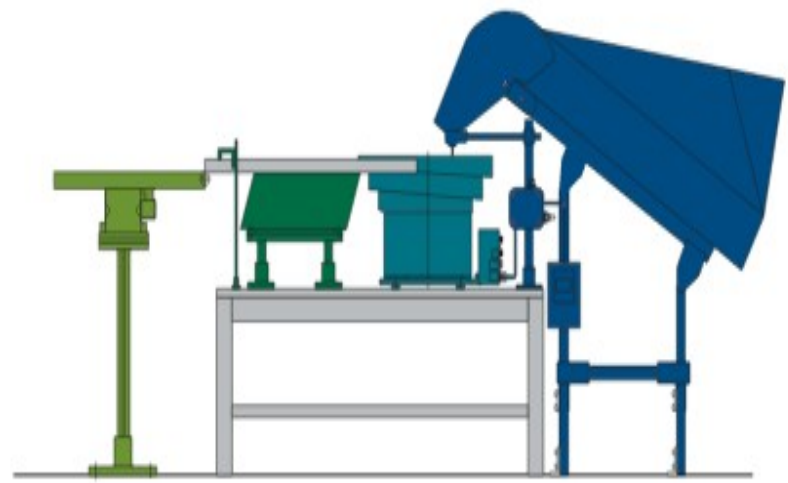
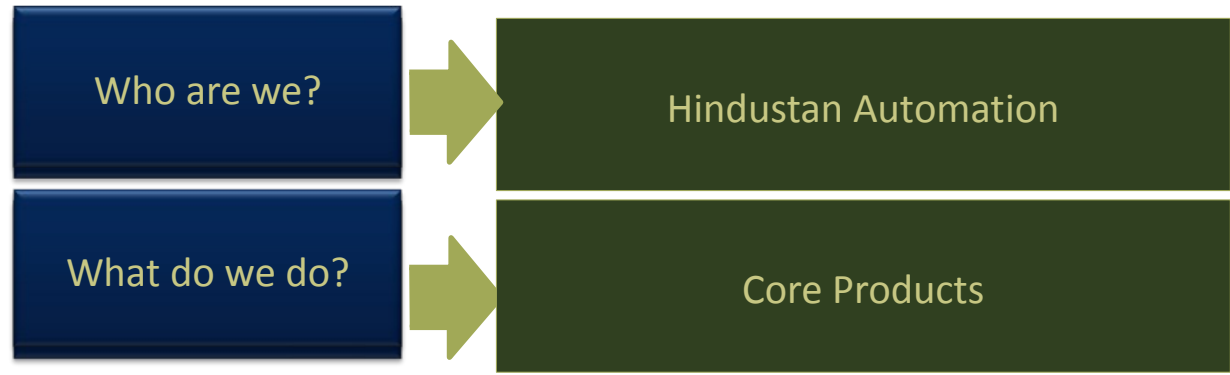
**Consumer Goods**



**Wines & Spirits**



## Contents







## Core Business – Product Portfolio

### Vibratory Feeding System



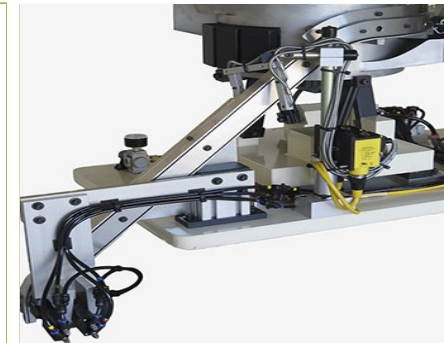
### Motorized & Pneumatic Feeder



### Auto Assembly Machines



### Value Added Product



#### Vibratory Bowl Feeders

Bowl Material: S.S 304, S.S 316, Al Casting

Bowl Coating: PU, PVC, Nylon, PTFE, Rubber Lining

#### Vibratory Linear Feeders

#### Vibratory Stock Feeder

Frequency / Voltage Controller

#### Stepper Feeders

(Variants - Motorized & Pneumatic, Hydraulic)

#### Centrifugal / Rotary Feeders

#### Turn Table

#### Forging Billets Feeders

#### Bar Feeders

#### High Speed Part Feeder

#### CRC – Inner /Outer Cap Assembly M/c

#### Wad Cap Insertion Machine

#### Wad Cutting Machine

#### Rivet Assembly Machine

#### Screw Assembly M/c

#### Inline Dropper Machine

#### Magnetic Separator

#### Escapement System

#### High/Low Level Sensor Stand

#### Adjustable Feeder Stands (Lead Screw)

#### Silence Hood Enclosure

#### Magnetic Coils

#### Fiber / Spring Steel



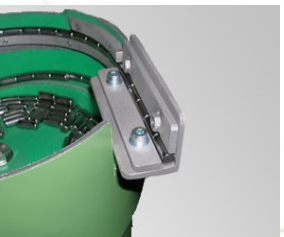
## Product Overview

### Vibratory Bowl Feeders

**HA BOWL UNITS:** Bowls have distinct tooling features & the most important factors to consider when selecting the best type of bowl for your particular applications is by determining the component size, its configuration



**HA DRIVE SYSTEM:** HA drive units are correctly engineered to give stable performance at high speed with minimum maintenance.



Totally Encapsulated Type coils with adequate power for particular models, are used. An easily removable Safety Guard / Cover giving easy access is provided for the Drive Unit.



## Product Overview

### Vibratory Bowl Feeders

**BOWL SELECTION:** The Bowls have many distinct tooling features & the most important factors to consider when selecting the best type of bowl for your particular applications is by determining the component size, its configuration



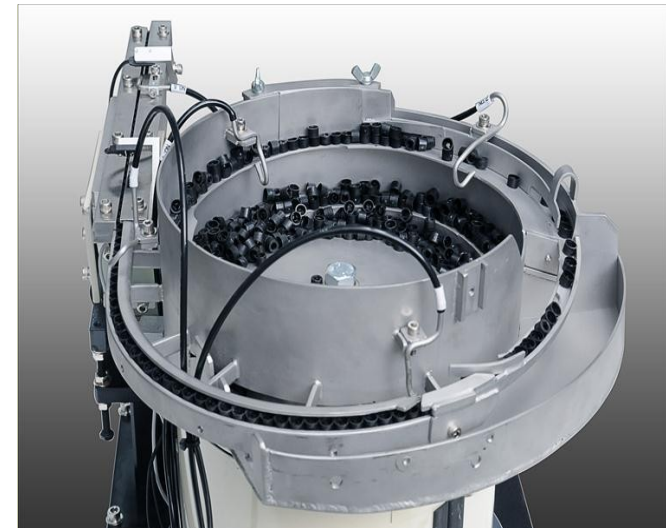
**Hindustan Automation will help you in selecting the correct model for your needs !!**



## Product Overview

### Vibratory Linear Feeder

**HA Linear Feeders:** HA in line/linear feeders can be installed in all sorts of environment. We recommend linear feeders with replaceable guides for different sizes of the components. This will again give you trouble free feed rate.



- They are best suited for high-speed conveyance of small & thin precision pharmaceutical, automobile, glass, electronic & battery parts.
- Models are available from light duty to heavy-duty type depending upon the component size, thickness, & material type.



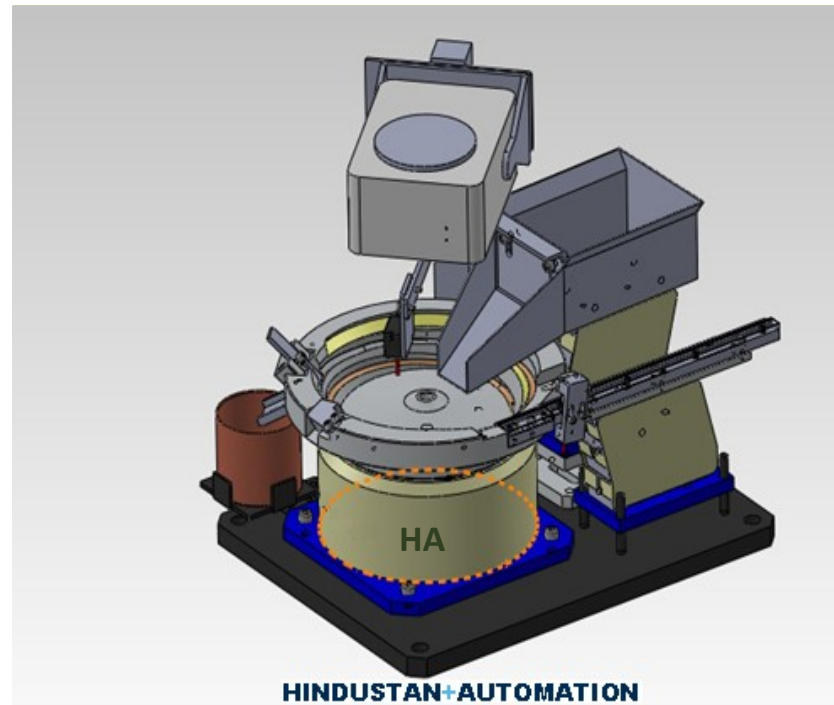
## Product Overview

### Vibratory Stock Feeders

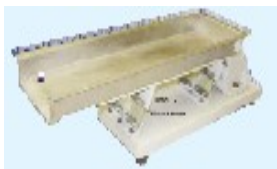
**HOPPERS / STOCK FEEDERS:**



**HA** eliminate the problems associated with vibratory bowls being overfilled.



- They provide a consistent supply of parts as well as reduce the need for frequent operator attention to parts level in the bowl.
- The reduce attention requirements & allow operator to focus on more productive functions of a production line





## Product Overview

### HA Rotary Feeders



The **HA range of centrifugal feeders** are non vibratory and operate by a continuous rotary motion. They are ideal for orientating and feeding many different types and sizes of components at very high rates of feed compared with other types.



**HA Centrifugal feeders** are quieter in operation and offer much smoother handling of components, therefore less component damage is caused.

The components are fed by the centrifugal disc and distributed onto an outer rim where they are selected and orientated into the required position.

They then discharge via the feeder outlet into a gravity discharge track or take off transfer conveyor.

### HA Bar Feeder



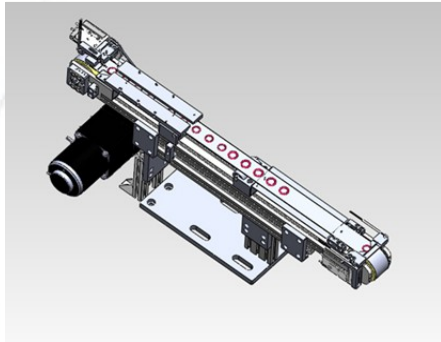
**HA can assist our customers with bar feeding applications.** Here the Pneumatic Bar-100 handles stock up to 1 in. dia and provides fully automatic loading of single bars up to 6 ft long using air-driven push rod.

When push rod is removed, bars up to 12 ft long can be loaded for manual feeding using bar puller. Draw-tube liner handles bar stock from 0.125-1 in. dia. Tray incorporates scale for measuring bar length. Setup is provided via 3-point leveling system, while control interface runs complete bars or fixed number of parts

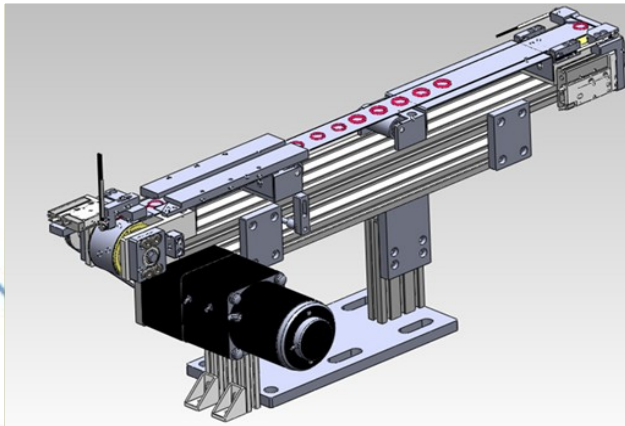


## Product Overview

### HA High Speed Feeder



HA high speed Feeders are used for vision system application & in Pharma & Plastic Industries . We have various models for your application



### HA Turn Table



**HA Rotary Turn Table** are constructed in stainless steel making it suitable for the food, beverage and pharmaceutical industry amongst others.

**HA** Rotary Tables are fitted with a fixed speed 4.7 r.p.m. gearbox as standard. Special speeds can be offered at no extra cost.

**HA Table Tops** run true to 1.5mm in deflection. This therefore ensures a very close transfer from or to the feeding conveyor.

All of **HA Rotary Turn Tables** are fitted with a stop start button as standard. The tables can be fitted with a variable speed controller and can be made mobile if required both of these options are extra.



## Product Overview

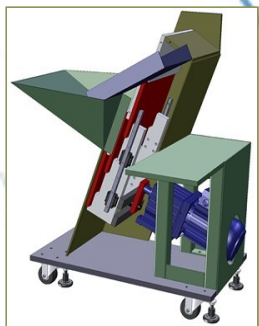
### HA Stepper Feeder



HA's range of stepped feeders operates on the principle of a series of interrelating blades that lift the components from the integral bulk hopper.

The movement is electrically, pneumatically or hydraulically powered, depending on the application.

The components being handled are discharged from the top blades onto a vibratory linear feeder or conveyor transfer track, where they are selected and orientated into the required position for presentation to machines or equipment for further operations.



### HA Forging Billet Feeder



We offer three types of billet feeders. Hydraulically operated billet feeders, motorized or pneumatically operated. The type to be used depends on billet size.

Hydraulic Billet feeders are ideal for billets ranging in size up to 100mm, round or square and up to 500mm long. Motorized or pneumatically operated billet feeders are suitable for billets up to 30mm in diameter by 80mm long.



Standard discharge height can range from 1,000mm to 3,000mm to suit specific applications





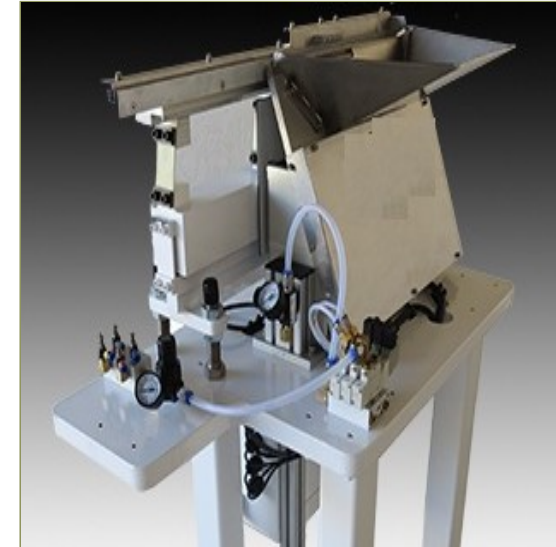
## Product Overview

### HA Single Step Feeder Model

This model is a “single-step” step feeder capable of feeding small cylindrical and spherical parts. It offers numerous advantages over conventional feeding methods, including quiet operation, space savings and gentle handling of parts. This is available as a standalone unit, but is usually integrated with other components.

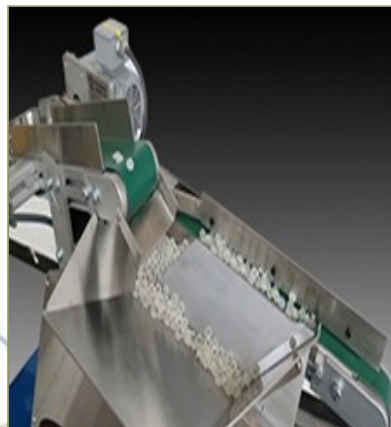


**HA – Single Step Feeder Model - Low Cost Automates Feeding of Small Cylindrical and Spherical Parts**



#### How it works ?

Bulk parts are lifted out of the integrated hopper bin by the step. The step thickness is selected so that a single row of parts is lifted. At the top of the step stroke, the parts drop onto a straight line track (vibratory inline, belt conveyor or air track), where additional orientation can be performed. Mis-oriented parts ejected from the orienting track can often drop directly back into the bin, or can be returned to the bin via gravity slide, air track or conveyor in situations where more complex orientation is performed on the orienting track.

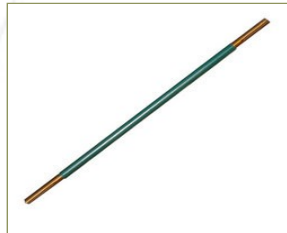




## Product Overview

### HA Special Purpose Vibratory Feeders

#### HA SHAFT AUTO FEEDER FEEDING SYSTEM



We have designed this special purpose machine to dispense shaft size 7 mm to 1 inch thick automatically for grinding etc. purposes. we can feed the shaft up to 13inch long shaft up to 50 shafts at a time. For more information on spring feeding technology, please contact the team, who will be more than happy to advise.



#### HA SPRING SEPRATOR AUTO FEEDER SYSTEM

**HA** continues to fulfill the requirements for its customers who require spring feeding . Here we produces our own patented range of spring feeding technology, which it sells worldwide. This technology continues to enable manufacturing and assembly companies throughout the world to accurately and reliably feed and insert springs into the most complex of assemblies.

CPR prides itself on the continued supply of this equipment after many decades in the market. **H+A** produces equipment which will separate and feed springs of many varieties, for both integration into assembly equipment or for utilizing on operator load positions.

For more information on spring feeding technology, please contact the team, who will be more than happy to advise.





## Product Overview

### HA Special Purpose Vibratory Feeders



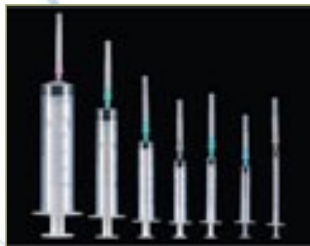
#### HA "O-RING" AUTO FEEDER SYSTEM + AUTO ASSEMBLY

Hindustan Automation has added a new product to its range of labor saving devices in the form of an O-ring feeder that is ideal for reducing labor costs, increasing assembly quality. The new O-ring feeder is a cinch to use – simply drop an O-ring into the machine, place the shaft/tube/pipe onto the holder and press the switch. The O-ring is then automatically expanded and pushed into position - no sore fingers, tired thumbs, lost parts or twisted O-rings! Note: Semi-auto and fully automatic versions of the O-ring feeder are also available.

#### HA SYRINGE AUTO FEEDER

We have designed this special bowl feeder to feed various sizes of assembled syringe from 3ml to 10 ml in single bowl or directly through roller shaft for bulk feeding requirement.

For more information on Syringe Feeding Technology or for individual parts requirement **i.e Barrel, Plunger, Rubber Gasket, Needle** please contact the team, who will be more than happy to advise.





## Product Overview

### HA Special Purpose Vibratory Feeders

#### HA SCREW / BOLT / NUT / WASHER FEEDER

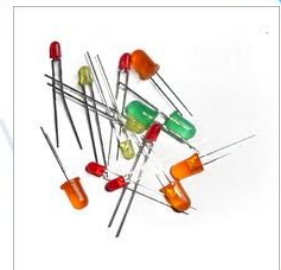


**Hindustan Automation** has introduced a new feeder that can feed screws, bolts, nuts and washers of all different sizes in a single bowl of each type. Common bowl is used for all the variant sizes of each type which varies from M4 to M12. You simply dump the screws, Bolts and Washers into the bowl feeder and they come out in desired orientation. This vibratory bowl feeder adds tremendous value for users of fasteners who presently have to assemble screws and washers by hand or have to use costly assembly equipment.



#### HA DIODES / THERMAL COMPONENT AUTO FEEDER

HA has developed new age technology Bowl Feeder for feeding Diodes in Rolling Orientation. Diodes being very thin having diameter of dia 1 mm and length of 50 mm have a tendency to come out of the Vibratory Bowl Feeder in Axial manner. However, Hindustan Automation has been able to design a novel Vibratory Bowl Feeder which feeds the Diodes in Rolling orientation. Additionally, singling or escapement can be provided which in turn helps in releasing the Diodes one at a time. 100 Diodes per minute can be achieved. This Vibratory Bowl Feeder has received tremendous response from all Diode manufacturers as well as user industries for automating their various processes.





## Product Overview

### HA CRC Inner Cap & Wad Cap Insertion Machine



**Hindustan Automation** manufactures and supplies a wide range of wad insertion machine which is extensively used to be fixed under plastic cap of any bottle specially used in cosmetic packaging industry. Some of the models we offer have peripheral equipment (**HA Hopper, HC Elevator & HA Bowl Feeder**) integrated to the main lining system offering you a fully compact machine built onto a mobile platform. These are well suited to insert the wads into plastic caps that saves manpower and precious time of our esteemed customers. These are rigorously examined by our in-house experts to ensure its flawless functioning.

As a leading wad insertion machine manufacturer, we are offering an extensive range of products at affordable prices. The machine is capable of inserting liners or wads into metal and plastic closure.

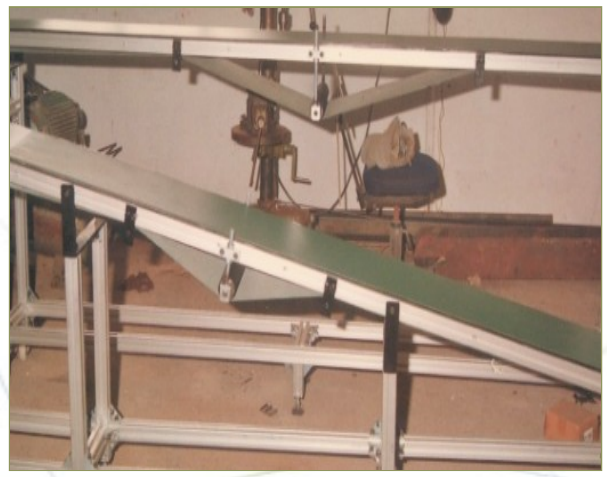
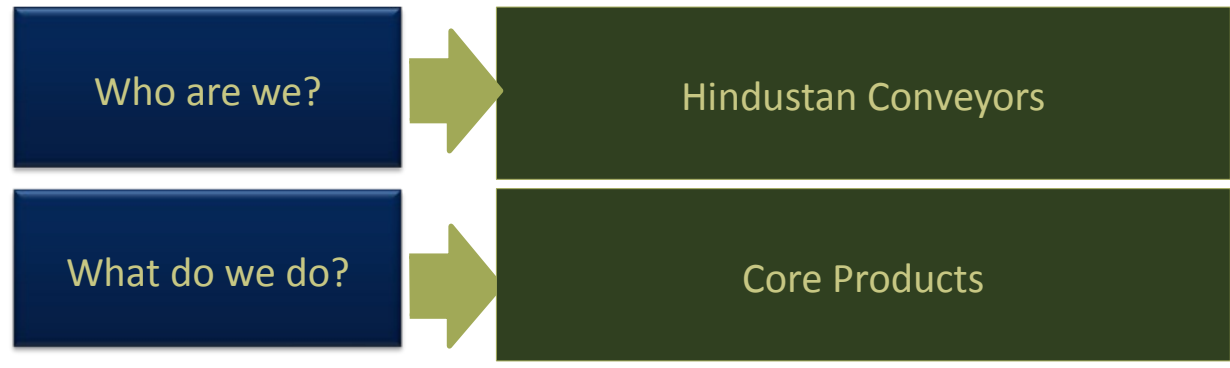
- pre cut liners
- punching from reel fed tape
- universal tooling for both of the above

Speed: 60-200caps/min





# Contents





## Core Business – Product Portfolio

### Elevators



- Cap Sorting Elevator
- Slatted Elevator for Fasteners
- S.S Chain Elevator for Medical & Surgical Components
- Plastic Modular Belt Elevator for plastic Moulding Components

### Flat/ Incline Conveyors



- Flat Belt Conveyor
- Inclined Belt Conveyor
- Pellet Conveyor
- Chain Conveyor
- Slat Conveyor
- Bucket Conveyor
- Wire-Mesh Conveyor

### Roller Conveyors



- Powerized Roller Conveyor
- Gravity Roller Conveyor
- Overhead Conveyor
- Wheel Rail Conveyor
- Semi-Curved Roller Conveyors

### Value Added Product



- Cooling Conveyor
- Warehouse Conveyor
- Waste Conveyor
- Vehicle Loading / Unloading Conveyor



## Product Overview

### HC Cap Sorting Elevator



#### Special Features:

- 1) **Feed Rate:** Several versions for up to 1000 c per minute (depending on cap size)
- 2) **Capacity :** 8000 to 10000 caps
- 3) **Discharge height** as per request.
- 4) **Continuous** running
- 5) **Belt:** Modular Belt or PVC belt.
- 6) **Clear covers** on hopper and conveyor.
- 7) **Options available** for electrical control.
- 8) **Exit on** right or left side.
- 9) **Option for** easy cap size change



#### HC CAP SORTING ELEVATOR:

The Cap/bottle caps Sorting Elevator is our most common and economical Sorting System capable handling a wide variety of flat caps up to 110mm. **Correctly positioned caps are carried up the universal.**

**HC Cap Sorting Elevator** can also be upgraded to handle caps larger than 110mm.

#### Technical Details:

- 1) 304/316 S. S Construction
- 2) Universal cleated belt accommodates a wide variety of flat caps
- 3) Sensor controlled cap by demand
- 4) Knob adjustments of cap delivery system up to 110mm caps
- 5) Inclination range from 0 to 20 degrees
- 6) 304SS Bulk Hopper
- 7) Bonfigoli gear box motor
- 8) Speed controlled by Delta Make VFD
- 9) Also available for oversized, large caps





## Product Overview

### HC Slated Belt Elevator



Slatted belt elevator feeders are suitable for the selection, orientation and feeding of components to automatic machines, or for bulk loading of components to vibratory bowl feeders and hoppers.

When components are to be selected, orientated and fed direct to automatic machines or billet heating furnaces etc., the selection and orientation is carried out on a linear vibratory feeder, which is an integral part of the belt elevator feeder or alternatively on a gravity discharge track.

This will depend upon the components to be handled and the automatic machine layout. The slatted belts can be case hardened mild steel, stainless steel or plastic. Belt elevator feeders are manufactured to customer's specific requirements.



## Product Overview

### HC Pallet Conveyor

Our Model Includes –

#### HC Pallet Conveyors



#### HC Turn Table Pallet Conveyors



#### HC Transfer Conveyors



**HC Pallet conveyors** are heavy unit load conveyor systems that have the durability and versatility to work efficiently in a wide variety of applications and industries.

Whether you need to transport, stop and accumulate, reorient, or stage loads, **HC** has the technology and expertise to develop and maintain the ideal pallet conveyor system for you.

**HC** pallet handling equipment is available in Medium Duty and Heavy Duty model ranges to cater for variations in the weight of loaded pallets.

**HC** pallet conveyor systems have the strength and versatility to work efficiently in a wide variety of applications and industries.

#### Special Features:

- 1) **Flexible** for ease of customization
- 2) **Can be easily** integrated into existing pallet handling system
- 3) **Discharge height** as per request.
- 4) **Adapted** for different standard pallet sizes



## Product Overview

### HC Flex Conveyor

#### HC FLEX CONVEYOR:

Ideally suited for loading and unloading, distribution centers, packaging, mobile assembly lines, shipping and receiving.



#### Technical Specifications

- 1) **Length:** Available in any length to fit your applications
- 2) **Standard Lengths** Compacted to Expanded:  
1.42m – 3.7m / 2.9m – 7.3m  
4.4m – 11m / 5.9m – 14.6m
- 3) **Width:** 450mm-600mm-750mm
- 4) **Continuous Duty Multiple Drive Motors** – Line speed is adjustable from 0 to 36 meters per minute.
- 5) Start/Stop cycle 300 times per hour. On/Off switches at both ends.
- 6) Durable Bonfiglioli Drive motors.

#### Special Features:

- 1) **Capacity:** 150kg capacity per linear meter (level)
- 2) **Self Tracking** – Cartons follow the twists and turns of the conveyor path without using engineered curves.
- 3) **Adjustable Height** – Adjustable locking bolts to raise or lower the conveyor bed height.
- 4) **Square Tubing Legs** – BEST offers heavy duty square tubing legs for longer service life.  
50mm rollers – Heavy duty 16 gauge precision bearing rollers on 12mm axles for greater durability.



## Product Overview

### HC Modular Belt Conveyor



**Special Features of HC Modular Belt Conveyors:** modular belt conveyor avoids pollution problems and use the carbon steel which is up to hygienic standard. There isn't any capillary interstice in structure. modular belt conveyor can make a safe manufacture environment to avoid the pollution osmosis SMEFE as the blood and slime that is brought from pork, chicken, duck, fish and shrimp in conveying.



**HC MODULAR BELT CONVEYOR** is widely used in various industries such as beverage bottles, aluminum pots, pharmaceutical, cosmetic and food industry.

Choose different modular belt, we can make special used equipments like storage bottle tables, elevators, sterilization machines, vegetable washers, cold bottle machines and food conveying. Suitable for many industries whose crafts are drying off, dewetting, cleaning, and quick-freeze etc.

Material of modular belt conveyor: PP, PE, POM and other materials.

Structure form of modular belt conveyor: horizontal conveying, inclining conveying, turning conveying etc. Can also add lifting baffles and side plates on the belt to satisfy requirements of various crafts.



## Product Overview

### HC Flat/Inclined Belt Conveyor



### HC FLAT BELT CONVEYOR

- Used for any type of product. Boxes, sacks, tote pans, steel/plastic components and bulk items. Can be used for packing or assembly of items. Generally PVC or rubber belts running
- on steel slider bed or roller bed. Drives can be at discharge end or under slung at any point along the conveyor.
- Set horizontally or at inclines up to 30° max, depending on product.
- Belt Elevators Uses – Granular, bulk material, components, to be elevated to other levels, into hoppers, into skips etc. Drives at discharge end only.



## Product Overview

### HC Cooling Conveyor



**HC COOLING CONVEYOR**, equipped with a fan, which allows a quicker cooling of the components, in order to obtain immediate stiffening. This accessory prevents any deformation of the bundles coming out of the machine, especially during the transfer onto the conveyors and during the palletization operations. It is an ideal solution for high-speed lines; it can be 800 or 1500 mm long and can be equipped with the pack turning device.

### HC Slat Conveyor



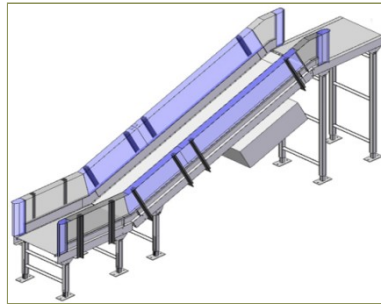
**HC SLAT CONVEYOR** are ideal for applications where belt or roller conveyors are not suitable, i.e high temperature ovens, heavy products or dirty and arduous conditions. Slat Conveyors work on a basic simple design, twin stands of conveyor chain run parallel within guides and around sprockets either end. The drive is mounted on one end and the tension device the opposite end.

Slats made of steel (normally galvanised or stainless), hard wood or plastic are bolted between the chains, effectively making a moving 'table' surface. The length of the conveyor and width of the slats is made to suit the product being carried.

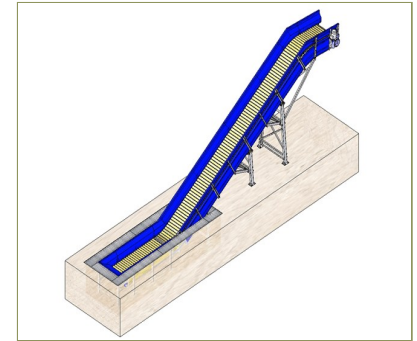


## Product Overview

### HC Waste Conveyor



### HC Plate Link Chain Conveyor



**HC WASTE CONVEYOR:** HC designs and manufactures waste conveyor systems for waste management companies and local authorities.

The conveyor shown here is designed to carry waste material from a floor level load area up the incline and into a waste compacting machine.

The belt is fixed to steel slats running across the conveyor between 4" pitch conveyor chains. Steel flights are bolted to the belt to aid the waste up the incline.

**HC Plate link conveyors** are normally used in arduous applications to move bulk items like waste material, swarf and scrap metal. The belt is constructed from heavy duty steel links connected by steel rods. This makes the belt strong but flexible. The links are fixed to conveyor chains either side that run in steel guides on over sprockets at each end. The length of the conveyor and width of the plate link belt is variable depending on the product being carried. The conveyor can be level or inclined to feed material in to hoppers or skips.



## Product Overview

### HC Wire Mesh Conveyor



**HC WIRE MESH BELT CONVEYOR** are used in many industries to move products through process equipment or production lines. Steel mesh belts are made from strips of steel assembled onto rods, and can be mild, galvanized or stainless steel.

The length and width of the belt is made to suit the product and application. The belt runs on a steel chevron flat bed with drive sprockets at one end and a tension drum and sprockets at the other. The mesh belt and chevron bed are particularly suited to spraying or drying application as the open design allows air to pass through easily.

### HC Vehicle Loading/ Conveyor



**HC - low cost vehicle and container unloader:** These are adapted from used conveyors or made from new for specific requirements where the budget is tight or the application is unique. New or used basic conveyors are made or reconditioned to give low cost simple solutions without for example the expanding elements seen on more expensive units. Call us to discuss your requirements.



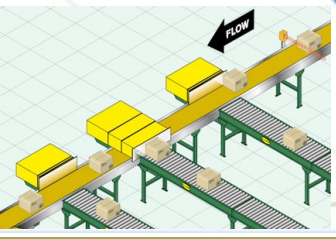


## Product Overview

### HC Warehouse & Factory Conveyor

#### HC Warehouse & Factory Conveyors

HC Logistics providing solutions for your product handling and transportation. All our conveying systems are custom designed for handling your products in warehouses & Factory.





## Product Overview

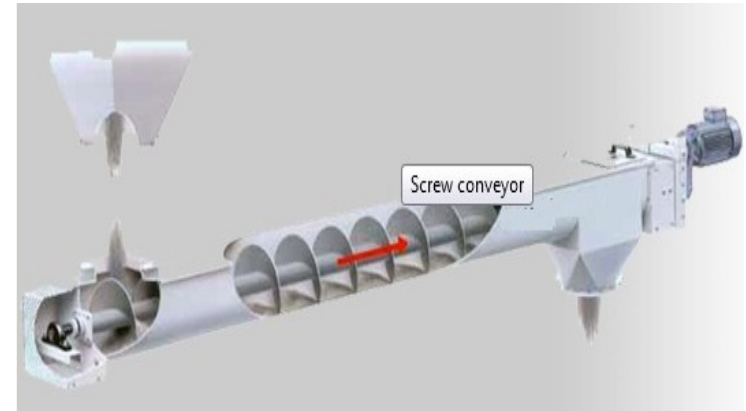
### HC Chain Roller Conveyor

HC chain driven roller conveyor, is a drag chain conveyor typically used for pallets with bottom configurations not conveyable on roller conveyors. Its design is suitable for extreme environments because of the low number of moving component parts and limited amount of required maintenance.



HC Model, multi-strand chain conveyor, is a drag chain conveyor typically used for pallets with bottom configurations not conveyable on roller conveyors. Its design is suitable for extreme environments because of the low number of moving component parts and limited amount of required maintenance.

### HC Screw Conveyor



Screw conveyors provide an efficient and reliable method of conveying a wide range of industrial bulk materials such as grain, flour and feed stuff to industrial products as e.g. limestone, fly ash & wood pellets

The screw conveyors are of modular construction consisting of inlet and outlet sections, trough section with screw flight and the drive assembly.



## Product Overview

### HC Idler Roller Conveyor



#### HC ROLLER CONVEYOR

We make a wide range of Roller Conveyors classified as – Powered and non powered version conveyors using standard Precision bearings for heavy loads (250 kgs and above) and pressed bearings for lighter loads.

- Many combinations offered in terms of Roller Pitch, Roller Diameter, Roller Moc, between frame width. Rollers are spring loaded with Hex axle or round axle. Please ask for our detailed catalogue

- Roller conveyors consist of a series of rollers attached to a rigid, horizontal frame. Goods move over the top of the rollers from one point to another. Transported items generally have a flat base (pallets, containers, boxes, cartons). A choice between motorized and mechanical rollers is available. The application will determine the best configuration: gravity, curved or line shaft..



## Product Overview

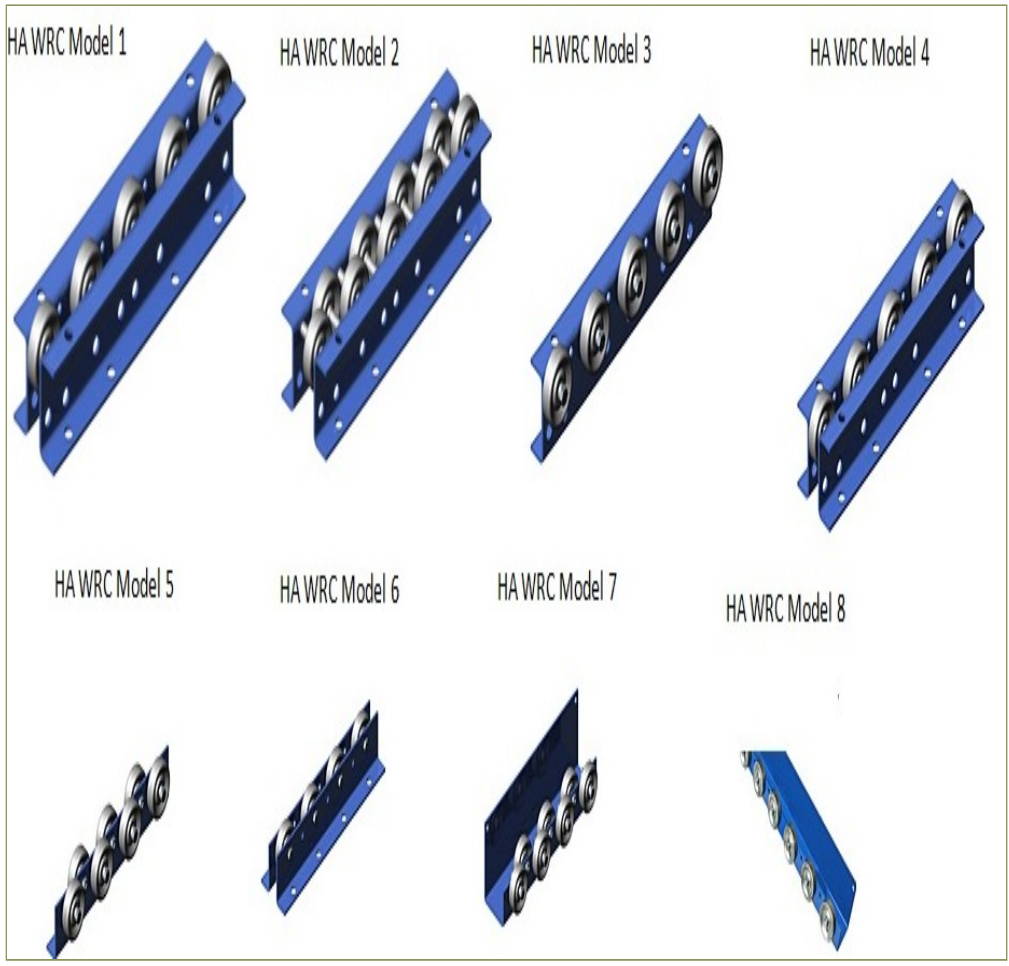
### HC Wheel Rail Conveyor

**HC WRB Model 1** Wheel Rail Conveyors provide an economical means of conveying products in flow racks and other gravity applications.



**HC WRB Model 2** can be utilized as a heavy duty pallet rail. The opposing channels offer a sturdy configuration to cover longer spans, while the staggered wheel pattern conveys irregularly shaped loads.

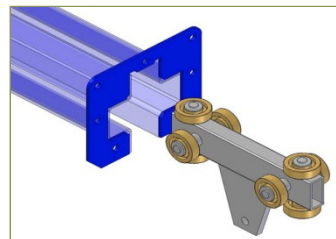
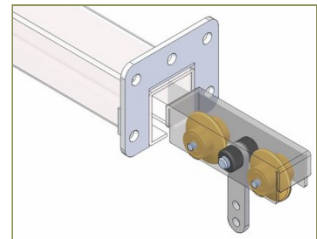
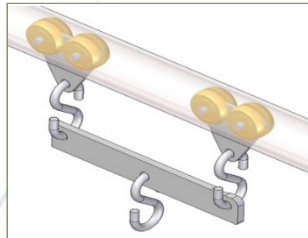
**HC WRB Model 3** Wheel Rail Conveyors provide an economical means of conveying products in flow racks.





## Product Overview

### HC Overhead Conveyor



#### HC Model – 4 Wheel Trolley

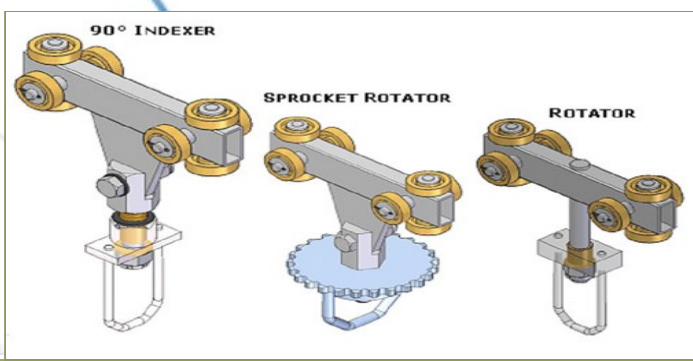
Consists of a 4 wheeled trolley with load capacity of 37.5Kg running through a high quality mild steel tubular track section of 41mm o/d and 3mm wall thickness. Trolleys can be doubled up over a load bar to take greater loads depending on product dimensions.

#### HC Model – Two Wheel Trolley

One of our best selling systems the 228FT has become a great success in the window and door industry. The trolleys are rated at 50Kg and run through the 50mm<sup>2</sup> 228 track.

#### HC Model – Eight Wheel Trolley

The heavyweight of the free track systems taking loads of up to 1000Kg. Consisting of an 8 wheeled trolley running through our 406 track. The track section is fabricated from dual top hat sections at maximum 3m lengths with bridge plates incorporated every 750mm.

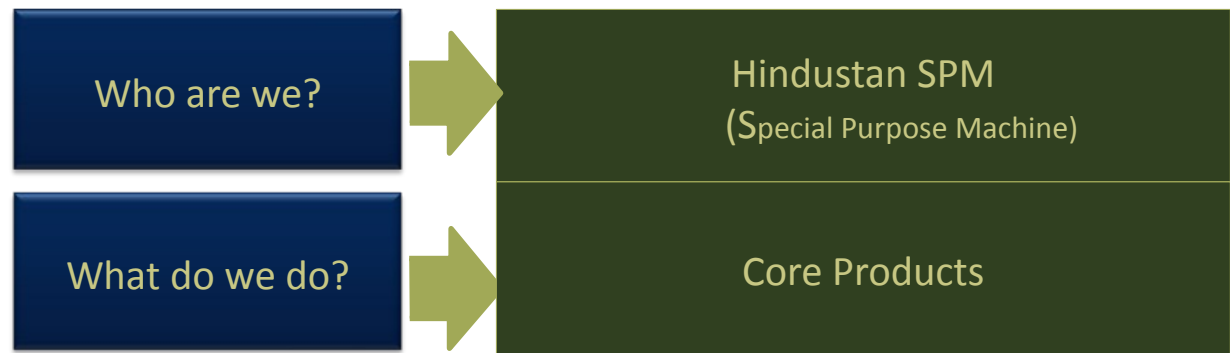


#### HC Model - Carriers

Multiple types of carriers can be applied to trolleys or load bars. Manual rotators, indexers, sprocket rotators are all available for your specific needs.



# Contents





## Core Business – Product Portfolio

### Pharma & Surgical Médical Equipements



- Syringe Assembly Machine
- Drip Chamber Assembly
- Scalp Vein Assembly Mc
- IV wing Assembly Mc
- High Speed Tube Cutting Mc
- Tip Forming / Flaring Mc
- Hub Needle Assmb. MC
- Flash Cap Ass. Machine

### Automotive Spécial Purpose Machines



- Pointer Bobbin Assembly Machine
- Valve Piston Assembly Machine
- Leak Testing Machine
- Flow Rate Test Machine
- Speedo Meter Pointer Assembly Machine
- Performance Checking Machine

### Hi-Tech Special Purpose Machines



- Weather Shed Assmb. Machine
- Glass Coating Machine
- Capacitor Cold Pressing Machine
- Bi-Metal Tapping Machine
- U-Clamp Machine
- Riveting Machine

### Value Added Product



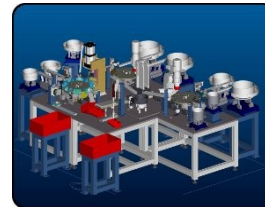
- Pick & Place Equipment
- Assembly Line Automation
- Robotic Based Applications
- Ultra Sonic Cleaning Machine
- Vision Camera inspection Machine
- Fixtures, Dies



## Product Overview

### H-SPM Assembly Line Automation


**H-SPM** supplies semi or fully automatic systems using intermittent motion to assemble different components. The systems can be designed as rotary indexing, or linear with nests or pucks that allow flexibility to assemble different configurations of the same product or completely different ones.



### Single Source Responsibility

We provide a complete solution by integrating our proprietary feeder bowls to position the parts to be assembled, along with a vision system that qualifies acceptable & defective assembled parts before being packed. In this way, we take full responsibility to deliver a fully tested and functional turnkey system that feeds, positions, assemble, inspect and pack the final marketable products.

We have successfully installed assembly lines, on pan India basis, for the Plastics, Metals, Medical Devices, Writing Instruments and Cosmetics & Personal Care industries. Some examples include powder & eye shadow compacts, lipsticks, mascaras, lip-gloss tubes.



**हिं**  
**HINDUSTAN AUTOMATION**

Other operations such as filling, labeling, mark coding, wrapping and inspection can be integrated on the machines. Components can be secured by the application of adhesives, welding, ultrasonic or induction sealing. We can also incorporate slitting, drilling, tapping or screw stations.

#### Such SPM Includes:

- 1) Lipstick Assembly Machine
- 2) Writing Instrument Assembly Machine







## Product Overview

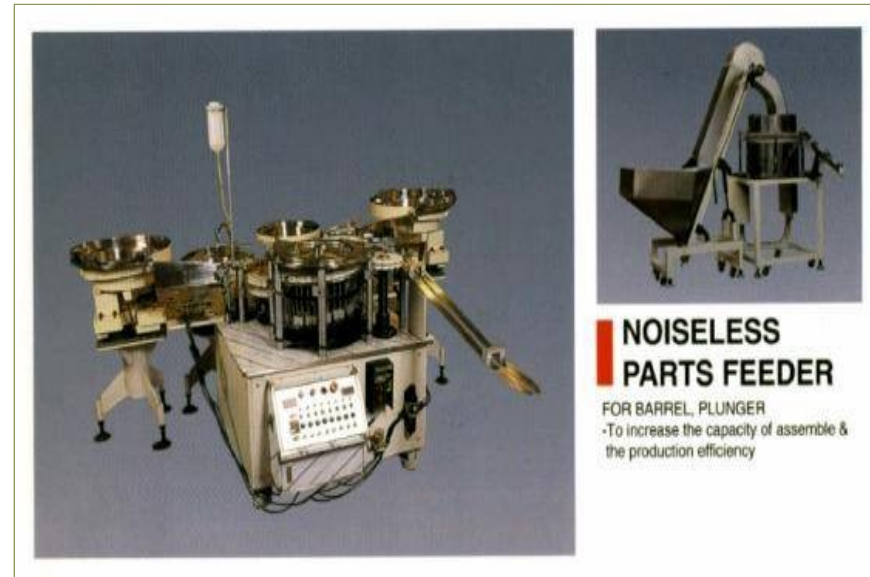
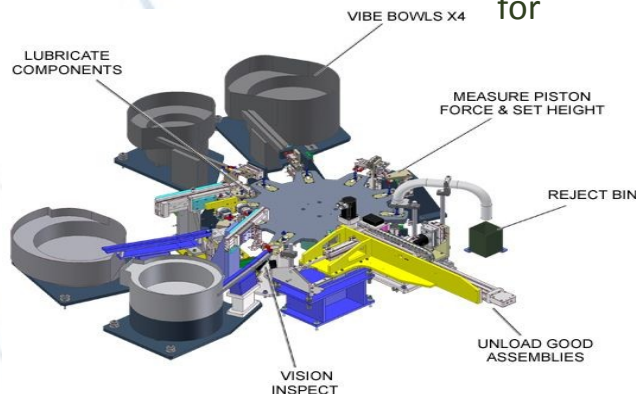
# H-SPM Disposable Syringe Assembly Automation

### AUTOMATIC SYRINGE ASSEMBLY MACHINE

(MULTI-USE) **H-SPM** provides noiseless part feeder & Auto assembly of Disposable Syringe. Syringe Assembly Unit with Electronic Control Circuit

#### Configuration

HA Parts Feeder for Barrels ,  
HA Parts Feeder for Cap  
With Needle  
HA Parts Feeder for  
Gaskets , HA Parts Feeder  
for Plunger



#### NOISELESS PARTS FEEDER

FOR BARREL, PLUNGER  
-To increase the capacity of assemble & the production efficiency

**Production Capacity :** 7,000 pcs ~ 8,500 pcs(multi-use) , ..13,000 pcs ~ 18,000 pcs (mono-use) , **Air Consumption :** 7 kg/?, 600 L/MIN, **Electric Power :** AC220V **Electric Power Consumption :** 1 kw , **Machine Dimension :** 800(W)x1300(D)x1200(H) mmx1500 kg, System



## Product Overview

### H-SPM Automatic Needle Assembly Machine



The machines offered by us are designed and fabricated under the supervision of professionals. Assembled needles are unloaded automatically on the stands and the output of machine is approx 1400 pcs per hour with approx 99% needle orientation along with plus/minus 0.1 mm length variation (which is very precise needle length)



Our organization is counted among the most distinguished manufacturers and suppliers of **Automatic Needle Assembly Machine**.

#### Other information

**Production Capacity:** 1320 - 1500 pcs per hour

**Delivery Time:** 15 -16 weeks

#### Technical specifications:

PLC & sensors Mitsubishi, omron and hmi pro face/delta.  
Out put of the machine is between 22~25 pcs. Per minute or 1320 ~1500 pcs per hour

Pneumatics used in this machine are festo/smc  
Needle orientation approx 99%

For long life of grippers, we are using indian/custom make

Length variation plus/minus approx 0.1 mm



## Product Overview

### H-SPM Luer Lock & Flash Back Chamber Machine



#### Technical specifications:

Machine frame size 850\* 1250 \* 800 mm  
PLC Mitsubishi/OMRON make & sensors imported from Japan or German, For 2 tracks 2 nos and for 4 tracks 4 nos of separate motors are used to feed the FBC in Pin feeders, For pin feeders 25 watt ORIENTAL geared motors with AC drives are used Pneumatics of FESTO/SMC make are used Output of the machine is between 4,500 ~ 9,000 pcs per hour depending upon the tracks selected

Owing to the sophisticated manufacturing facility, we have been able to offer **Automatic Luer Lock and Flash Back Chamber Assembly Machine**. The offered machines are fabricated under the strict surveillance of our professionals in accordance with the international standards. These machines are widely used to assemble two parts (luer lock & flash back chamber). Moreover, our offered machines have two tracks as well as four tracks in order to meet the requirements of customers. Both parts are assembled with help of pick & place unit and discharged through chute. Further, our machines have the capability of gives output from 4,500 pcs. to 9,000 pcs. per hour depending upon the nos. of tracks.

**Required man power:** 1 Person

**Production Capacity:** The Output of the 2 Tracks Machine is 4500 Pieces Per Hour and the Output of the 4 Tracks Machine.



## Product Overview

### H-SPM Body Assembly Machine



Innovation is our forte and we strive to design and develop **Body Assembly Machine**. These are designed on two tracks and double station and two stations are fixed on one table. Further, three components are assembled at our machines such as slip ring, cup formed teflon & wing housing/body. Cutting at wing assembly is clear and straight in length then the customers get very good tipping quality subject to the die quality.

#### Technical specification:-

PLC Of Mitsubishi, Keyence, Omron, Delta make  
Output of single station is between 600~650 pieces per hour/station. It means 1200~1300 pcs per hour  
MS Plate with Electro Less Plating (Very Long Life) machine  
table size 700\* 650 \* 800 mm  
Maximum length variation plus/minus 0.3mm  
Power consumption 0.25 Kw  
Pneumatics used FESTO/SMC/CKD Make  
Air consumption 3.0 cfm at 6.0 bars  
Required manpower is 02  
Output: Approx 600~650 pieces per hour/station that means 1200~1300 pieces per hour



## Product Overview

### H-SPM Tip Forming Machine



We are engaged in manufacturing wide range of Tip Forming Machine. These are developed using high grade machines and equipment following the set industry standards and quality norms. These are widely acclaimed in the market for their low maintenance, easy installation, high performance and durability.

#### Technical Specifications of the products are:

PLC of Delta, Omron or Mitsubishi make  
Touch screen monochrome Delta or Proface  
Air consumption 3.0 cfm per minute  
Chilled water consumption 3.0 liters per minute  
Manpower Requirement=01, Power consumption 2 KW,  
Output approx 750 pieces per hour  
Table Top Plate, MS Plate with Electro Less Plating (Very Long Life) (750 \* 700 \* 12 mm)  
Machine Frame manufactured from Imported Aluminum Extruded Profiles, Induction Heating Generator Indian or Taiwan make Pneumatics used FESTO/ SMC/ CKD make, Machine Table size 750\* 700\*700 mm, Exair cold air gun for proper die cooling.



## Product Overview

### H-SPM Automatic Silicon Tube Cutting Machine



Owing to the hard work of our professionals, we are capable of offering **Automatic Silicon Tube Cutting Machine**. These are designed with utmost perfection by our engineers using advanced machines and equipment. Our raw material for the product are sourced from some of the most reliable vendors in the industry. The machine is very compact with a table top design and comprises a output capacity of 4000 to 4200 pieces per hour.

#### Technical Specification:

Fully Automatic  
25 watt variable speed geared motor  
Cutting Length as per Clients requirements, otherwise 9 mm  $\pm$  0.2mm

#### Other Information

**Production Capacity:** 4000 -4200 pcs per hour



## Product Overview

### H-SPM Cup Forming Machine

With thorough knowledge of the industry, we are engaged in manufacturing and supplying **Cup Forming Machine**. Cup is formed at one end of teflon tube to fix slip ring. These machines have double stations and each station having six tracks.



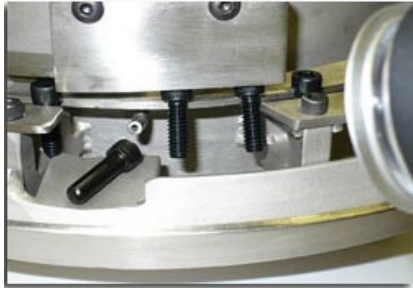
#### Technical specifications:

Machine table size 1000 \* 850 \* 800 mm  
Table top plate, ms plate with electro less plating  
(very long life) (1000 \* 850 \* 12 mm)  
Pneumatics used of Festo/ SMC/ CKD make  
Reed switches of FESTO/SMC/CKD and sensors of sick optics/Omron  
Machine frame manufactured from imported aluminum extruded profiles  
6 Tracks & souble station  
PLC Mitsubishi/Omron/Delta 24VDC & HMI Pro face/delta  
Output: Approx 2250~2500 pieces per hour per station, hence capacity is 4500~5000 pieces per hour  
Air Consumption 3.5 cfm per minute at 5.0 bars  
Chilled water consumption 3 liters per minute  
Cup forming pins are used highly polished & hard chrome plated  
Power consumption 2.5 Kw  
Manpower requirement is 01



## Product Overview

### H-SPM Vision Inspection System



**H-SPM offers & integrate** a wide range of inspection systems, including contact and non-contact inspection systems. Our systems can verify marking on a component, verify the presence of the components, verify height and depth and flatness and much more.

We utilize high speed vision, laser inspection, depth and height sensors, gage plate inspection and other components in our automated inspection systems.

#### Applications where vision systems are useful include:

- Parts that must be oriented or sorted based on internal features.
- Parts with different colors.
- Sorting for quality issues such as missing or malformed threads.
- High-speed sorting.

#### General Features:

- Smart Camera Technology
- Component Feeding Flexibility
- One Touch Component Programming
- Contour Scanning or Full Image Inspection





## Product Overview

### H-SPM Robotic Integrated System

**H-SPM** builds and integrates robotic systems for your precise and high-speed applications. We offer robotic systems (2,3,4 axis) made from combinations of linear slides and rotary actuators to handle part placement, stacking, machining, inspection, welding, and much more.

Industrial robots, especially six-axis robots, provide flexibility and dexterity which is unsurpassable for some operations. The true worth of a robot is realized only when it is integrated with our **HA feeding equipment** and tooling in a production cell.



At **H-SPM** we have experience in integrating robots from a number of different manufacturers in a variety of applications which includes installation & programming support for application such as:

- Loading / unloading assembly and test machines
- Applying adhesives, sealants and surface preparation agents.
- Handling products to / from packaging
- Assembly operations.
- Laser welding.
- Furnance Loading & Unloading
- Articulated Part Placement & Positioning
- Articulated Part Positioning
- Inspection & Verification





## Product Overview

### H-SPM Automated Test Machine



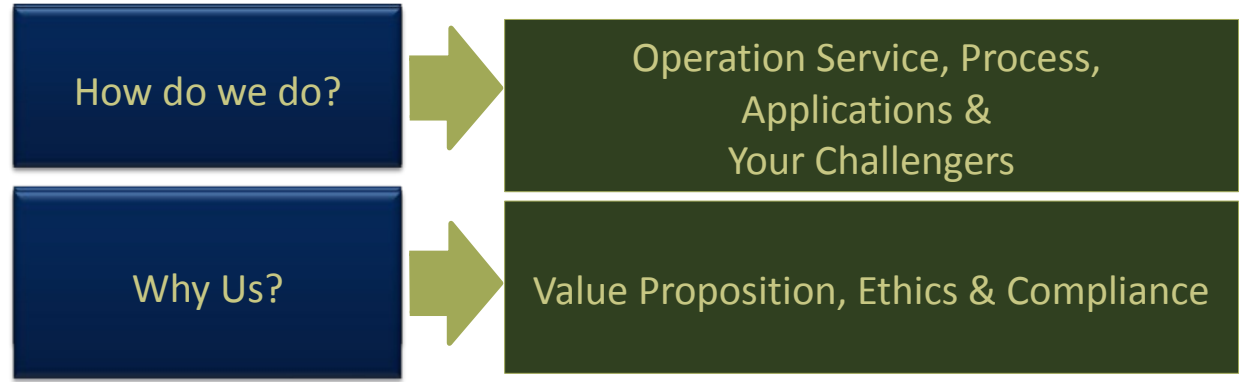
It is vitally important to our customers that products they manufacture are of good quality. Often it is also necessary for our customers to demonstrate to their customers that robust quality checking procedures are in place. To complement our process automation machines we also produce test machines. They may be stand-alone units or incorporated into assembly machines and may store test data locally or upload it to a customer's host system, according to needs.

In process and post process tests performed by **H-SPM** machines are diverse, including:

- 1) Force, torque, distance and angle measurement.
- 2) Pressure, flow and leak testing.
- 3) Electrical testing.
- 4) Functional and endurance testing.
- 5) Machine vision checks (product variant, completeness, quantity, etc).



## Contents





# Major Players

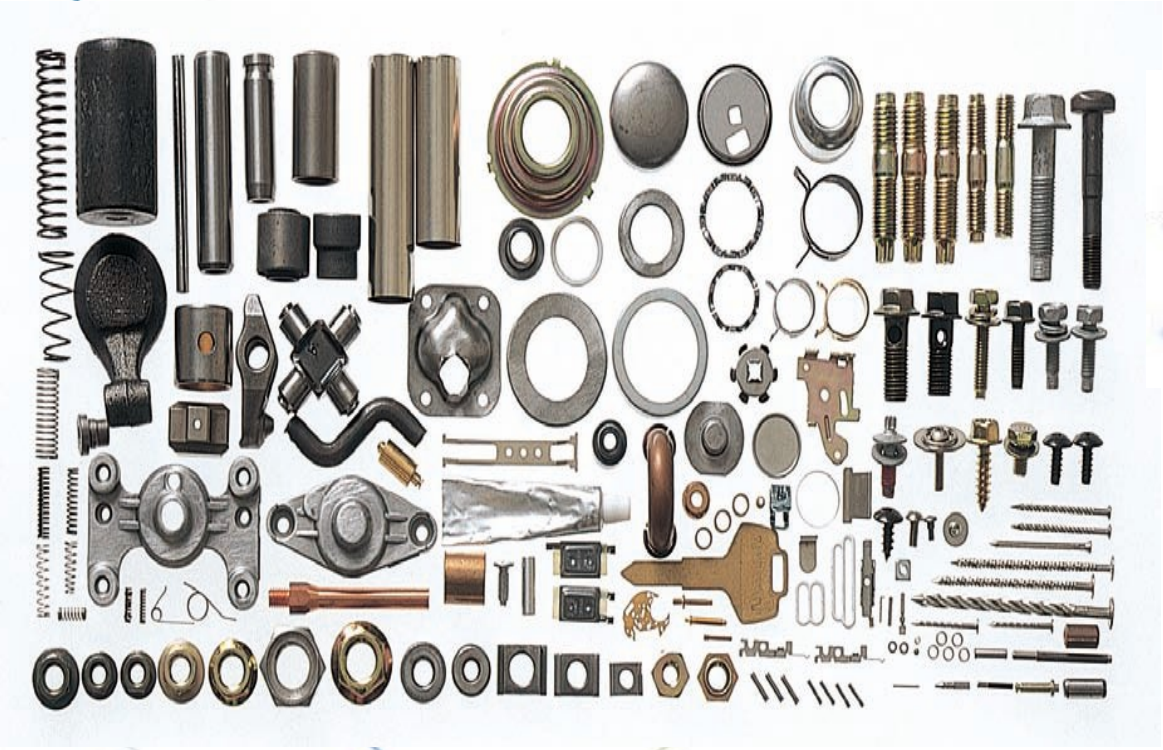
## Trust us here in INDIA....

**SKF** **TATA** **TVS** **Sundram Fasteners Limited** **INA** **FAG** **BOSCH** **BARC**  
**sona** **GB AMBIKA FORGINGS** **VICTOR Hand Tools** **Trinity Forge** **TW** **SURYA**  
**TAN** **ESSAR** **Finolex** **JK Files & Tools** (A division of Raymond Limited) **LT** **LARSEN & TOUBRO**  
**POLYMED Medical Devices** **MEDIKIT The better life** **HMD** **Johnson & Johnson** **WIMCO**  
**Luxot® Leadership Since...1963** **Stic** **RITA PAD Printing-Systems** **MINDA** **Godrej & Boyce** **Kirloskar**  
**KEIHIN** **SIEMENS** **Henkel** **UFLEX** **SAMTEL**





# Application Metallic Parts



HA Feeder's & Systems can help you to align and feed anything from general nuts , bolts & to specific industrial metal parts like entangled springs, high precision metallic parts.



## Application Health Care / Pharmaceutical



HA feeders & systems are important contributors to the clean environments required in the manufacture of medications in pill or tablet form, as well as for medical equipment, such as syringes.

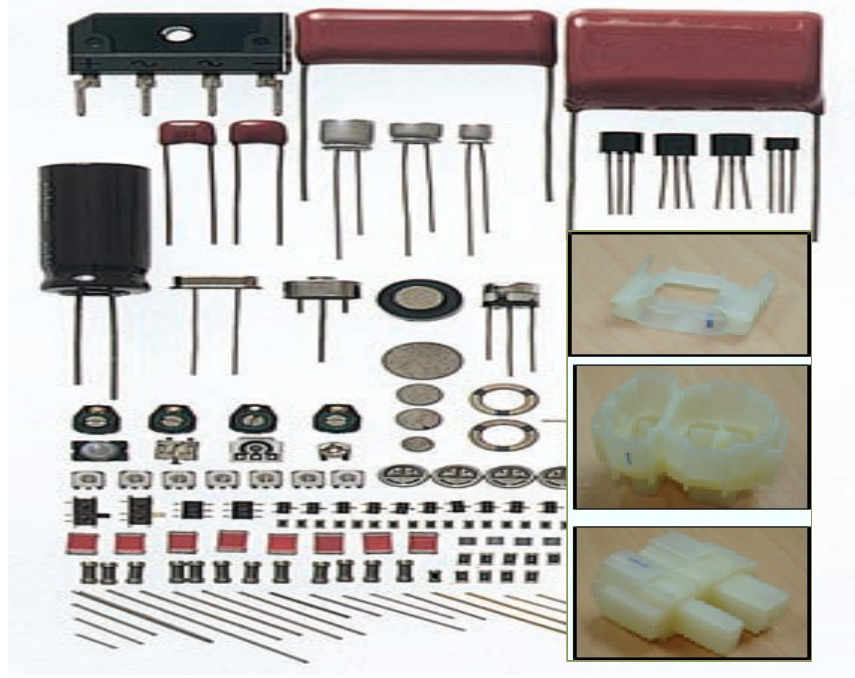


## Application Rubber Parts



HA feeders & systems can help you to align and feed anything from soft rubber parts which are thought to be difficult to feed due to rubber's large coefficient of friction.

## Electronic Parts



HA feeders & systems can help you to align and feed anything from electronic parts from transistors to condenser or microchip components.



# Application Plastics



HA feeders & systems can help you to align and feed anything from various molded plastic parts to more complicated shapes



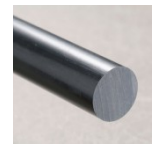


# Application

## Forging Industries



HA can help you **conveying** any forged parts with customized **conveyors & stepper feeders** used in assembly stations especially in **manufacturing & forging industries.**





## Value Proposition

### Daily Status Report (DSR)

A daily Project status update sheet will be sent to client shows precise status of the manufacturing of your product including the final inspection & delivery of the feeding system up till site . This is sent via e-mail.

The Hindustan Project Team sends the following sheet in excel format with daily updates :



Hindustan Project  
Team will ensure  
timely delivery !!

#### Key Benefits:

- Product mfd updates including Orientation & Feeding inspection report
- Image upload & customized reports as per client's requirement
- Final Delivery planner details
- Will ensure smooth operation to avoid unexpected delay
- Will ensure smooth coordination & seamless information flow
- Greater potential for overall cost reductions and savings





## Project Implementation Our Methodology



- Repair / refurbishment
- Customer service management
- Warranty management
- Visibility services



## Our Customer Challenges ?





# Move to one automation solution provider who can provide Material Feeding & Auto Assembly Solutions...

**Core Service** – Vibratory Feeding Systems, Material Handling Conveyor Systems, Auto Assembly machines & Other customized special purpose machines

**DSR Report** – Daily status report submitted to our clients

**Dedicated** Key Account Managers **for your projects**

.....one stop solution for all your SPM requirements



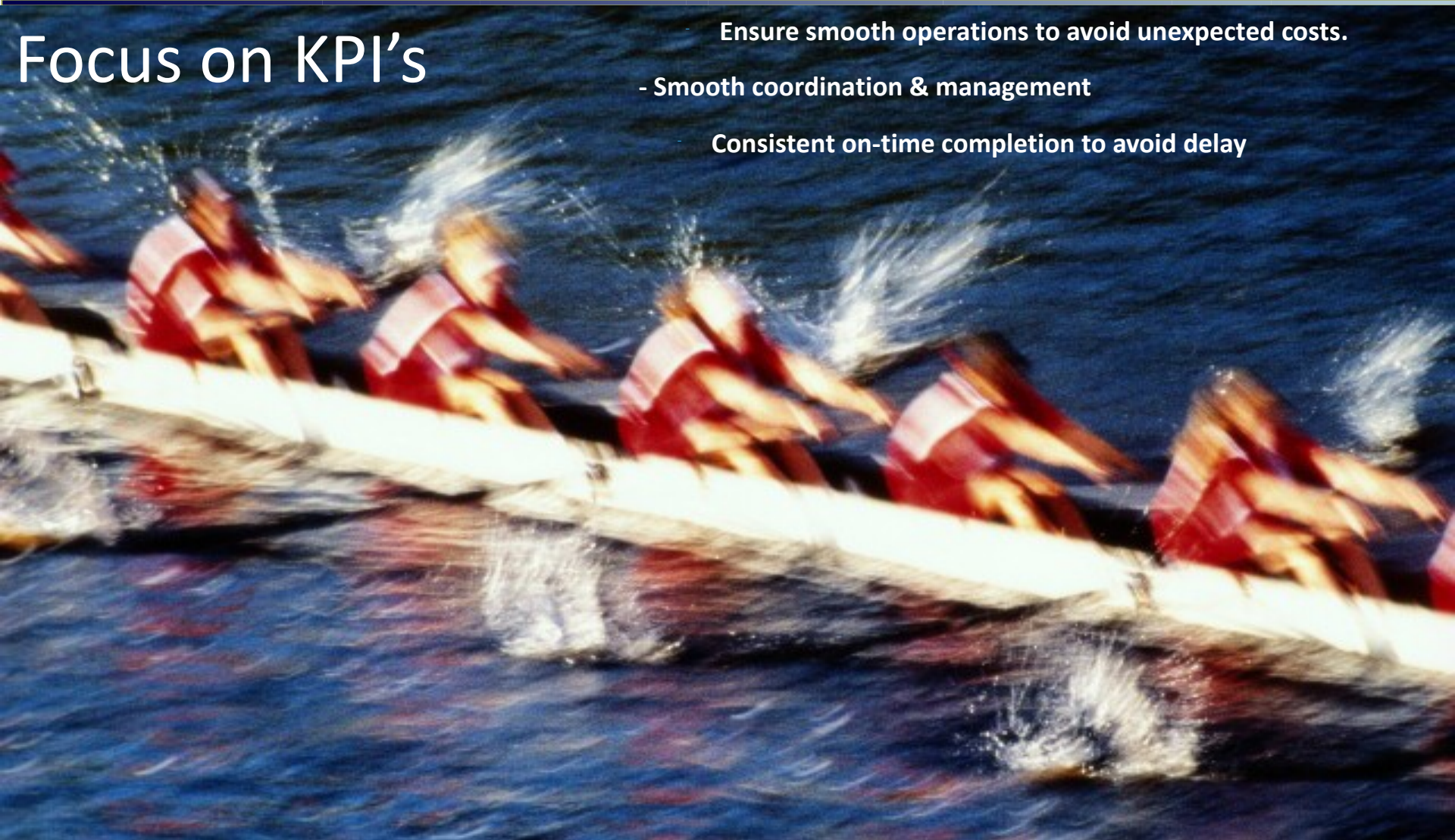
**Need to be ensure that SOP's is in place for timely completion of our projects...**

We have a dedicated Hindustan Project Operation Team to manage communication and reporting process....supported by E-Mail, to ensure Visibility and Alert Management.



# Focus on KPI's

- Ensure smooth operations to avoid unexpected costs.
- Smooth coordination & management
- Consistent on-time completion to avoid delay





# Cost reduction programs



Price Stability  
& Competitive pricing





# On Time Project Completion Commitment..



**Hindustan Project Team will give commitment along with design support for your projects**



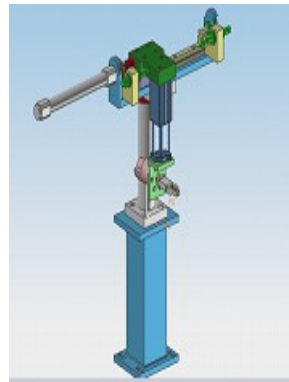
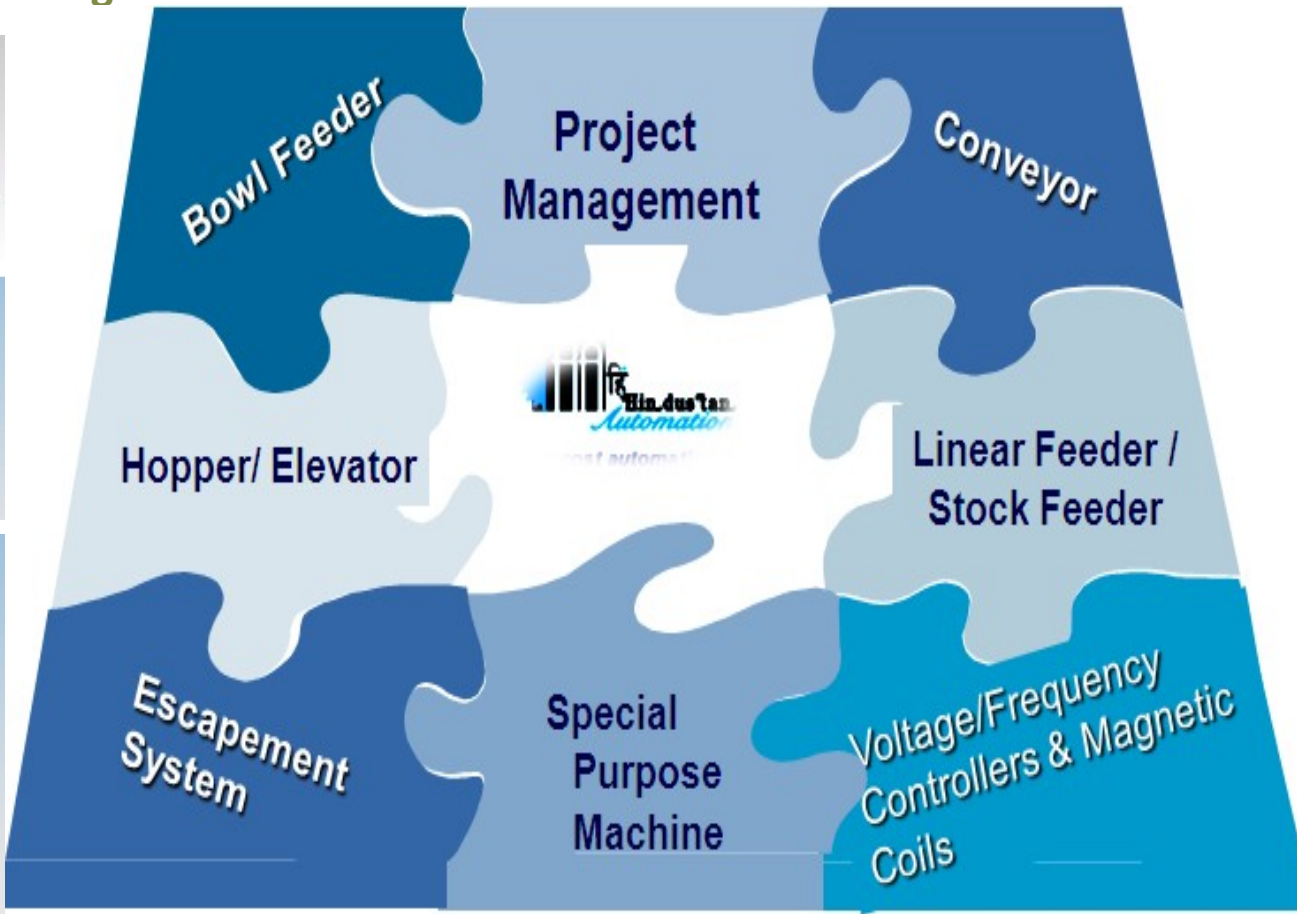
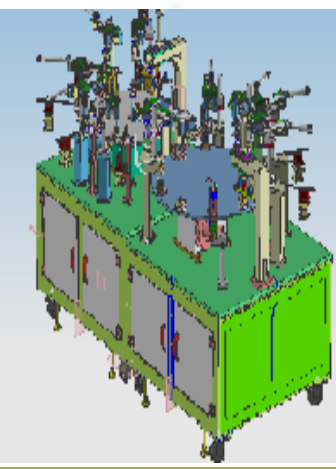
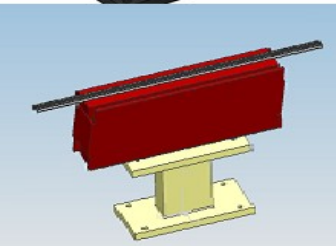
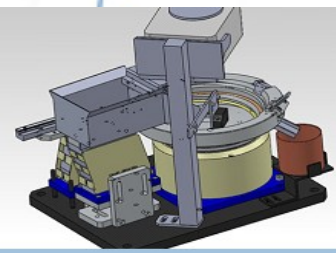
## R&D Division

Hindustan Project Team has a in-house R&D division where continuous process of product development, technology proving is there to ensure 100% success ratio for our special purpose machinery





**Hindustan Business Solution**  
We put all pieces together





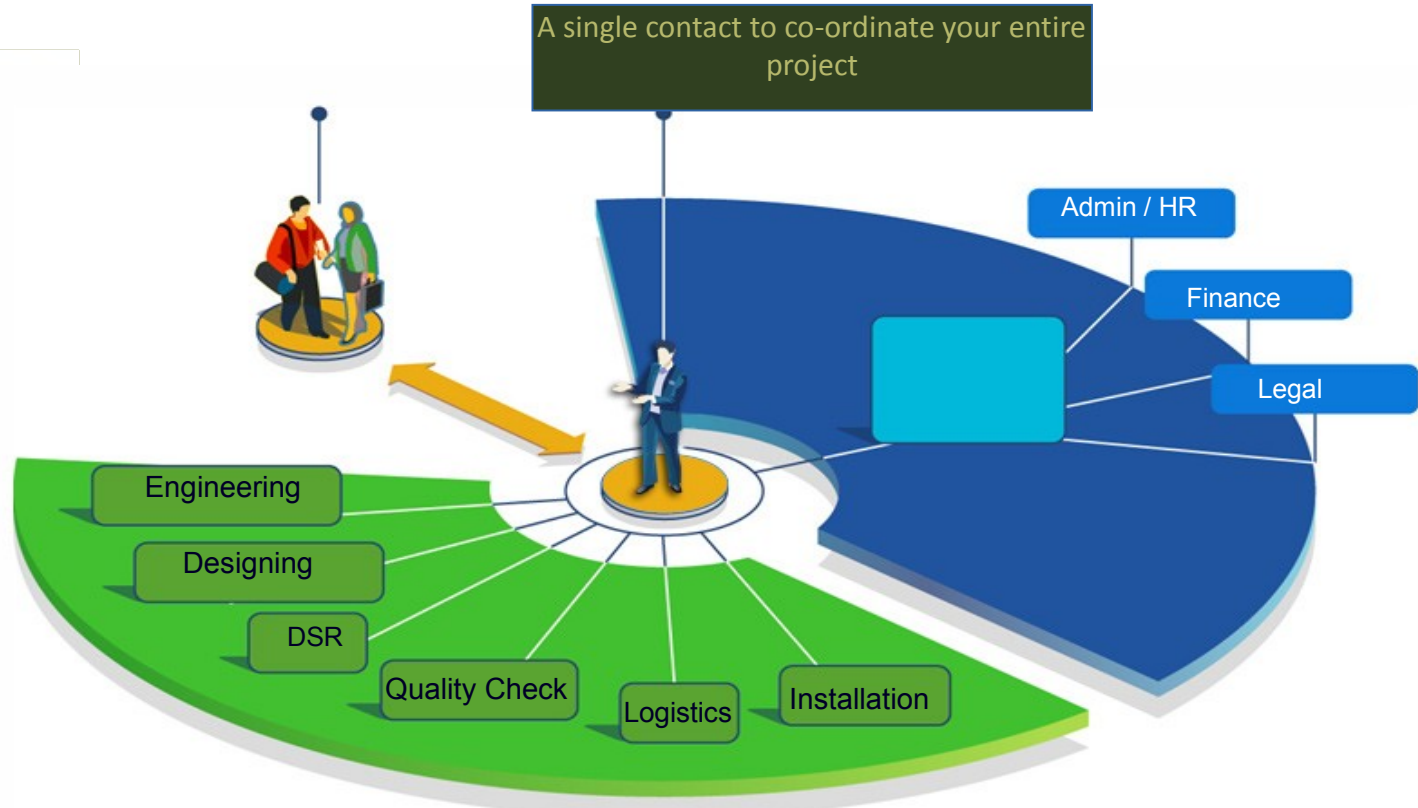
# Why Hindustan Team ? What's in it for me ???

## Project Implementation Mission

A single contact to co-ordinate your entire project

### The Anchor Princ

1. Act as an extension of your customers' business
2. Improve, constantly.
3. Collaborate.
4. Keep your promises.
5. Be accountable.
6. Control costs.
7. Respect others.
8. Have fun.



To ensure a **smooth transition** and integration of our customers' business through a **proven methodology**, using experienced project **specialists**, **standardized tools** and systematic **knowledge transfer** to manage, control and report implementations **globally**.



## Customer

### Experience & Feedback

- + 50 larger implementation projects per year

*"We are very happy to have chosen H+A for our project. They were very professional and flexible, in particular during the critical installation phase of the feeding system "*



*" Initially was reluctant to award this project but really surprise to see their efficiency & dedication to complete our entire assembly line at Okhala & Haridwar plant within the deadline,, - Luxor Pen Industries Ltd, New Delhi*



## Your Key Contact Details

**Site/Office Address:**

**Hindustan Automation**

S.No 26, Barne Industrial Estate,  
Opp. Pudumjee Paper Mill, Thergaon, Pune – 411030,  
Maharashtra, India



**Contact: HP 91 9930006365 / 91 - 9823055983**

Proud to be  
**INDIAN**

## We are the extension of your business.

### Your Contact:

**Mr. Chirag Bakshi /**

Business & Solution Development -  
Automation Projects Head

Email :- [chiragbakshi@hindustanautomation.com](mailto:chiragbakshi@hindustanautomation.com) /  
[sales@hindustanautomation.com](mailto:sales@hindustanautomation.com) /  
[spm@hindustanautomation.com](mailto:spm@hindustanautomation.com) /  
[hindustanautomation@outlook.com](mailto:hindustanautomation@outlook.com)



## QSHE Policy



**Hindustan Automation** understands the health, safety and environmental (HSE) requirements of the automation industry. We have implemented industry best practices to provide a risk free working environment for our employees, business partners and customers.

The standards we uphold and enforce are defined by the global certifications ISO 9001 and requirements in the markets where we operate.



## Our Mission

Leaders in feeding technology !!



### *Mission Statement –*

To be the best in automation field of material handling – the best for **Hindustan + Automation** customers and vendors





## Our Vision

YOU THINK WE BUILD

### *Vision Statement –*

**Hindustan + Automation** is the most innovative trendsetter in feeding & automation management, delivering integrated customized solutions for the customers, enabling them to deliver innovating ideas

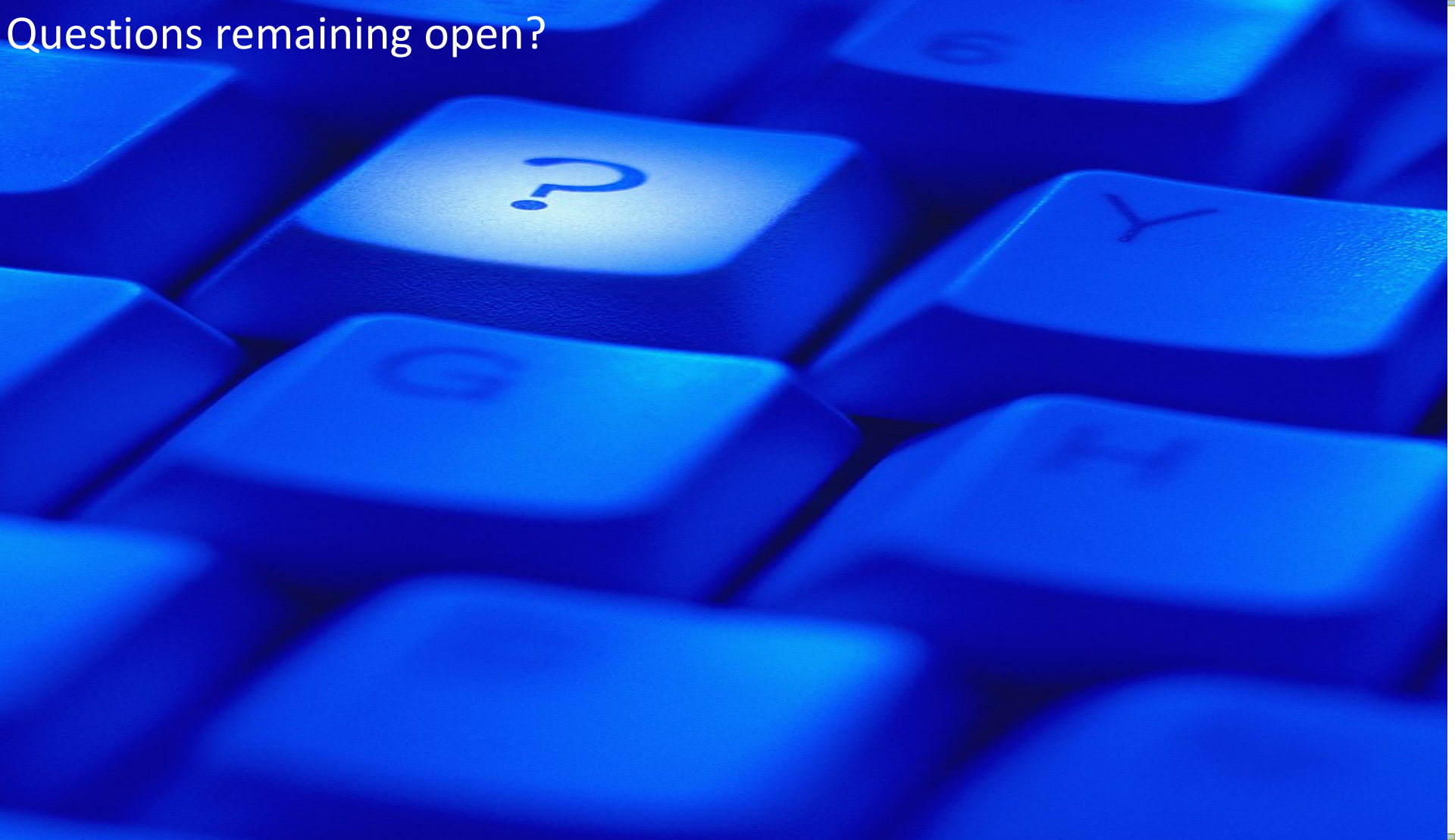


**Team Snap-Shots**





Questions remaining open?





We keep **exploring** opportunities in the field of feeding technology & automation

Our deeper knowledge & experience brings new efficiencies to your operations at every level

Thank you for your attention

<http://www.hindustanautomation.com>