

# Company Profile

#### SEPHENN

"A DRIVE FOR QUALITY"

- Background With a combined industry experience of four decades, the promoters of Nishi Techno-sys established this entrepreneurial venture in 2004. The company started designing & manufacturing vibratory screening machines and process equipment such as Belt Conveyors, Magnetic Separators, Lumps Breakers, Rotary Valves under the brand SEPREXN
- Profile Started with an aim to provide the domestic process industry with global-quality chemical equipment customized to client requirement, Nishi Techno-sys has over the last decade become a leading supplier of industrial separators and chemical plant machinery.
   We develop necessary jig & fixture customized as per client requirement, and use facilities such as Argon welding, Gas welding, Arc welding, cutting machine etc. We also undertake structural jobs.
- Capability With its integral manufacturing unit at Thane (Mumbai), Nishi Techno-sys manufactures and delivers 6 to 10 equipment per month domestically and globally.
- Operational Reach With a client base spread across Maharashtra, Gujarat, Madhya Pradesh, Rajasthan, Uttar Pradesh, Tamil Nadu, Andhra Pradesh, Karnataka, Kerala, NCR, Haryana, Sikkim, Bihar and West Bengal, Nishi Techno-sys now has a credible client base in Europe (Russia), Middle East (Iran, Saudi Arabia, Oman, UAE), Africa (Nigeria, Angola, Zimbabwe, Tanzania, South Africa) and South Asia.

## Why Nishi Techno-sys

- Customer Focused Operations With a strong belief in partnering its customers in their work, Nishi Techno-sys' entire process has the customer as its primary focus, from getting a thorough understanding of the specific operational requirement right up to post-delivery paper work.
- Customized Solution Nishi Techno-sys customizes its proven designs to the client's process-specific requirements, capitalizing on its technological expertise and experience to deliver state-of-the-art equipment.
- Precision Engineering And Quality Control With its twin strengths of standardized processes and trained team, Nishi Techno-sys uncompromisingly follows industry best-practices and global standards.
   All our products undergo stringent end-to-end process based as well as post-production quality control by qualified professionals.
- Products With products spread across categories such as vibratory screens, Rectangular screens, Industrial conveyors, Rotary valves, Magnetic separators, Plant & Machinery, Mixers and Breakers, each of these comes with:-
  - Proven Design.
  - Proven Performance.
  - Economical Pricing.
  - Low Maintenance Cost.

#### **Product Range**



Vibro Screen

Vibrating Screen





Rectangular Separator

Rotary Screen





Belt Conveyor

Screw Conveyor





Chain Conveyor

Pneumatic Conveyor





Slat Conveyor

Roller Conveyor





Rotary Air Lock

Magnetic Separator





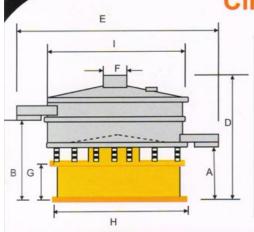
Motorized Magnetic Separator

Lumps Breaker

### **Vibratory Screening Equipment**



#### **Circular Vibratory Screens**



Model	Motor	Diameter MM (in)	À	В	С	D	E	F	G	н	T
NT - 24	0.5	600(24")	400	530	640	780	880	150	275	450-530	625
NT - 30	0.5	760(30")	400	580	730	825	1110	150	300	530-610	780
NT - 36	1	900(36")	525	720	830	880	1300	150	350	560-640	925
NT - 48	1.5	1220(48")	600	790	945	1105	1780	250	400	825-925	1240
NT - 60	2	1510(60")	625	850	1030	1220	2080	300	450	1020-112	1535
NT - 72	2	1800(72")	650	885	1065	1250	2480	300	450	1200-1300	1835

Function	Solid – Solid Separation		Mesh Size: 5 mm – 200 mm		
	Solid – Liquid Separation		Mesh Size: 4 mm – 400 mm		
Models Available		Diameter 600 mm - 2100 mm In SS304 and MS contact parts			
Vibratory Motor		0.5 hp - 3.0 hp			
Suitable for		Solid-solid Separation: 30 Tons/ hour			
Capacity		Solid-liquid Separation: 50000 Litres/ hour			
Deck(s)		One - four			

The Special Vibratory Motor with top and bottom eccentric weights that comes fitted with our equipment creates vibrations in three dimensions and the resultant motion causes the material to cover maximum surface area and varied material flow patterns. Our screen operates with a continuous feed rather than in batches, thus leading to a much greater output. Industry use — Food, Mineral, Pharmaceutical, Cattle Feed, Sugar, Ceramic, Salt, Polymer, Steel, Detergent & Soap, Fertilizers, Paint, Paper, Catalyst, Ash, Coal.

Flow patterns of material can be fine-tuned for screening efficiency by repositioning the bottom eccentric weight relative to the top eccentric weight.

0° Out of Phase

30° Out of Phase

45° Out of Phase

90° In Phase









From a central feed, material flows to screen periphery in a straight line. Material spirals slightly from the center to periphery, increasing retention time. Recommended for general purpose screening Material flows from center in a distinct spiral pattern, further increasing retention time. Recommended for classification of particles and screening of wet Spiral flow prevents oversize material from discharging.

#### **Belt Conveyer**



A DRIVE FOR QUALITY"



Types Available	Flat Belt Conveyor     Inclined Belt Conveyor     Inspection Belt Conveyor
Belt Material	Natural/ Synthetic Rubber
Ply	3 Ply to 6 Ply
Utility	<ul> <li>Packing Department</li> <li>Soap Pellet Feeding</li> <li>Powder Feeding in Hopper/ Reactor Vessels</li> <li>Loading/ Unloading material from Godown/ Truck</li> </ul>
Capacity	200 Kgs/Hr - 20000 Kgs/Hr (for powder/ granular material)

### **Screw Conveyer**



Material	SS 304 / SS 316 / MS contact parts
Speed	100 kgs/ hr to 5000 kgs/ hr
Utility	For total close material handling to reduce chances of contamination
	Circular/ Trough type shell covered Flights.
Construction	<ul> <li>Flights mounted on hollow pipe shaft, connected to direct gear motor or through sprockets.</li> </ul>
Screw Diameter	<ul> <li>Diameter - 100 to 300 mm</li> <li>Pitch • 70% of Diameter</li></ul>
Industry Used	Cement, Food, Ceramic, Detergent, Soap, Chemical Powder, Bulk Drag, Mineral, Polymer

Nishi Techno-sys is an organic Designer and Manufacturer of Industrial Conveyors from Mumbai. The Industrial Conveyors we make are known for their high tensile strength and long functional life. To meet the bulk and urgent requirements of our buyers, Our expert technical team and well-documented processes ensure a quick turn around time. The entire range of the Industrial Conveyors is reasonably priced by us.

#### **Automated Packing System**

- As per the customer's need, Nishi Techno-sys provides the Lumps-Breaking, Storage and Screening System.
- This System is developed with a combination of equipment like Lumps Breaker, Storage Silo, Rotary Valve, Vibratory Screen, Weighing & Jumbo Bag Lifter.
- System Capacity: 500kg/hr 10,000kg/hr



#### **Bucket Elevator**

Bucket Elevator helps to convey material from ground level up to the desired height in a vertical direction. Single strand chains with rough metal form buckets are used with guide track for chain. It can be used for elevations up to 25 feet. Capacity 1 – 10 T/hr. Utility: Oil Mill, Ceramic Industry, Food Industry, Mineral Industry and Bulk Drug Handling.

### **Roller Conveyor**

### **Slat Conveyor**

"A DRIVE FOR QUALITY



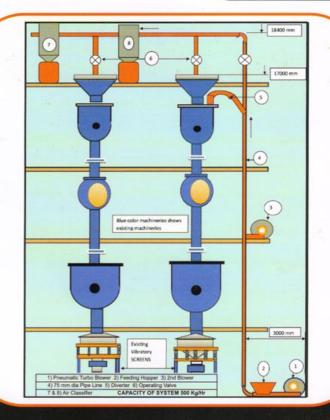
- Link slats are made of SS304 or MS
- Conveyor speed: 1m/ min to 3 m/ min
- Useful in Pharmaceuticals and Oil / Refinery Industry for Filling, Labeling, Tagging, Printing & Packing Lines



Types	<ul><li>Motorized Roller Conveyor</li><li>Gravity Roller Conveyor</li></ul>
Material	Stainless Steel     MS with Powder Coated     MS with Sleeves Coated
Utility	<ul> <li>Packing Line for Box Packing</li> <li>Loading of Heavy Material into Trucks</li> <li>Internal Movement of Heavy Bags</li> <li>Movement for Machining in Auto Industry</li> </ul>

### **Pneumatic Conveyor**

We manufacture Pneumatic Conveyors for movement of dry bulk solids for the process industries, like Powder Chemical, Sugar Powder, Silica, Ash, Coal powder, Bulk Drug, Maida, Rawa, Confectionary. Powder density: 0.3 gms/cc to 0.9 gms/cc Sizes: 100 mesh to 400 mesh.



### Lumps Breaker

#### What is a Lump Breaker?

Lump-breaking equipment is able to reduce lumps created in the production, storage or transportation of bulk solids and powders - without generating excessive dust and fines. The rotation of specially shaped blades through a fixed comb gives an efficient lump breaking action.

#### Conceptual Design

Nishi Techno-Sys develops Lumps Breakers as per properties of material provided by customers, taking into consideration Size of Lumps, Softness or Strength of Lumps,

**Lump Crushing Applications** 

Moisture Content and Capacity per Hour. On this basis, we design Breaker Rollers, Single or Double Roller Lumps Breaker.

Lumps size: 100 mm and below.

Particle size: approx. 30% between 15 to 8 mm

and 70% below 8 mm size.



- Bicarbonate
- Soda Ash
- Coal
- Sodium
- Pet Coke
- Fertilizer Foundry Ash
- Herbicide
  - Gypsum

- Sugar

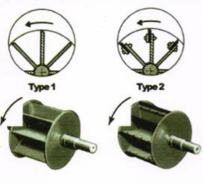
Salt

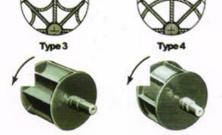
Detergent

Filter Cake

# Rotary Airlock







Material	SS304 / SS316 / MS Contact Parts				
	FLP and Non-FLP Designs  Direct Gear Motor with Chain Sprocket Drive.				
Design					
Туре	Square to round opening Round to round opening				
	for Inlet and Discharge.				
Size	Diameter				
0120	•75 mm				
	•100 mm				
	•150 mm				
	•200 mm				
	•250 mm				
	Larger sizes can be designed as per customer				
	requirement.				
Wall Thickness	6 mm – 12 mm				
Capacity	100 kgs/ hr – 10000 kgs/ hr				
Pressure Tolerance	Up to 8 kgs				
Clearance	<ul> <li>0.5 / 1 mm clearance between body wall &amp; rotor</li> <li>3/4" clearance between close end rotor and casing end plate.</li> </ul>				
Features	<ul> <li>Split Packing Glands offer easy access to stuffing boxes, reducing maintenance time.</li> <li>Assembly of end plates with interlocking arrangement to avoid spillage of material. Integral stuffing boxes, packing rings and air-purge inlets in the end plates increase packing life &amp; reduce maintenance costs.</li> </ul>				
Utility	For regulating flow of any powder material on constant feeding (from silo/ hopper/ storage tank/ machine-to-machine.)				
Industry	Cement, Powder Chemicals, Food Processing, Polymer, Pesticide, Dyes, Fertilizers, Pharmaceuticals.				

#### Ribbon Blender

Made of a U-shaped horizontal trough and a specially designed Double Helical Ribbon Agitator rotating within it. The ribbons rotate at 40-100 meters per minute and move the material both in up and forward direction to ensure thorough blends in short cycle times. Paddles are positioned to move the material in opposing lateral directions as well as radically. Our designed Ribbon Blenders are used for blending 70%- 75% of volume. Ribbons are made of stiff SS or MS Plate. We developed both models, continuous ribbon blender and batch type blender.



#### **Features**

- · Continuous operation feeding point · Centrally located Flush bottom discharge valve
- Top cover with vent nozzles, Nitrogen purging nozzles and feeding point
- Rack n pinion Discharge point
   Automation possibility at discharge point
- Dual finish SS Polish Three Phase Induction Motors suitable for 415 Volts, 50 Hz
- Worm reduction gearbox, helical reduction gearbox
   Variable speed possibility with Single Speed Drive
- Available in working capacity 0.5 M3 to 12 M3

# **Magnetic Separator Grill**



- Size customized as per client requirement
- 100 Gauss 10000 Gauss power
- Used to avoid iron particle contamination during packing.
- Directly mounted on silo / storage or in between 2 pipelines in liquid flow
- Magnetic Separator can be directly mounted below outlet of Vibratory Screen.



### **Motorized Magnetic Separator**

Motorized Magnetic Separator is used online where percentage of Iron Particles is high. Magnetic Drum Separators are of self-cleaning type and provide continuous removal of ferrous contamination from a wide range of free-flowing bulk and granular materials in high-volume applications

As material reaches the drum, the magnetic field attracts and holds ferrous particles to the drum shell. As the drum revolves, it carries the material through the stationary magnetic field. The non-magnetic material falls freely from the shell, while ferrous particles are held firmly until they are carried out of the magnetic field by interrupters / cleats. The tramp metal is discharged separately, creating continuous self-cleaning separation. The end result is purified product ready for processing without the worry of costly damage caused by tramp metal.



#### Utility

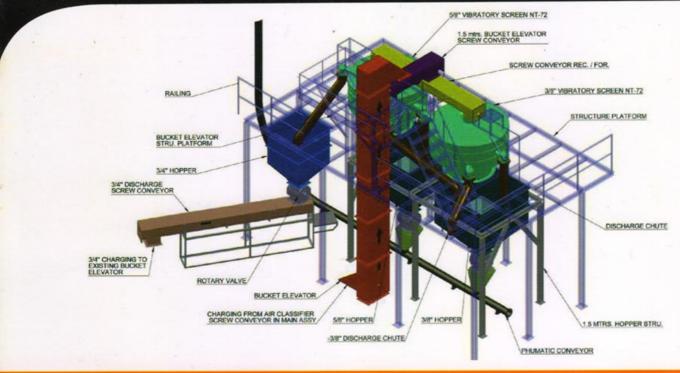
- Plastics
- Fertilizers
- Sand
- Glass

- Slag
- Rock & Ores
- Grain
- Minerals & Chemicals

- Food and Flour
- Abrasives
- Refractory
- Ceramic Slurry

### **Automated Screening-Conveying System**







Screw Conveyor





Cross Flow



Rotary Valve SS304



elt Conveyo SS304













Vibrating Scree



# **Solutions Provided To**





















Abrasive	Bagasse	Coal	Food	Paint	Metal
Acrylic Beds - Resins	Biscuit Reprocessing	Ceramic	Glass	Paper	Cashew
Activated Carbon	Black Powder	Dyes	Metal	Pharmaceutical	Oil
Ash	Blasting Media	Detergents & Soap	. Mineral	Polymer	Copper Sulphate
Adhesive	Bone	Fertilizer	Oxides	Sugar	Explosive













Regd Address: Solitaire Towers, B-901,

Ghod Bunder Road, Manpada,

THANE (W) - 400 610 MAHARASHTRA (INDIA)

Factory Address: Upavan Industrial Area, Patil Industrial Compound, Gala No.2,

THANE (W) - 400 606 MAHARASHTRA (INDIA



Tel.No.: (+91) (22) 25891412 Mobile: 9223525016 / 9821328438

nishitechnosysindia@gmail.com

www.vibroscreens.net