

GERMAN LEVEL ENGINEERING, MADE IN INDIA

# 2023-24 PRODUCT BROCHURE











# FROM FOUNDER



"It is with great pleasure that I welcome you to experience our wide product range. As the Founder of this remarkable manufacturing company, I am honoured to share with you the passion and dedication that drive our every endeavour.

At PANCHSHEEL INDUSTRIES, our commitment to innovation is at the heart of everything we do. Our Team of skilled engineers, designers, and technicians work tirelessly to craft products that not only meet but exceed expectations. With a strong emphasis on quality, precision, and cutting-edge technology, we have earned a reputation for delivering solutions that stand the test of time.

As we introduce our latest product brochure, you will find a diverse range of offerings that showcase our expertise across various industries. Each of our product embodies the essence of our dedication to customer satisfaction and optimum output.

THANKYOU for considering PANCHSHEEL INDUSTRIES as your partner in innovation."



"We look forward to collaborate and create a brighter, more efficient future together."

## Shri Rameshbhai P. Panchal

Partner & Founder, Over 55 years of Manufacturing and Industry Experience

## ABOUT COMPANY

Since it's foundation in 1960, PANCHSHEEL INDUSTRIES, earlier known as HARIHAR INDUSTRIES has been an impactful manufacturer and supplier in India and Abroad. OurOffice and Workshop are located at Nagarwada, Vadodara, Gujarat; where we have been manufacturing highest-quality products with an advantage of complete customization as per your requirements.



With decades of industry experience, Panchsheel Industries has established a strong reputation as a trusted provider of high-quality machinery. We bring a wealth of knowledge and expertise to every project we undertake.

-~\*-1 OUR VISION : To become a leading manufacturer of chemical and pharmaceutical equipment both locally and internationally.



At PANCHSHEEL INDUSTRIES, we are focussed on Managing our Production Methodologies from procurement of material, managing Outsourcing and doing all of that within a mapped time-frame. To achieve the same, a meticulously formulated Production Plan has been designed by our Production Planning Engineer.



We are setting our focus to the global market in view of growing demand for Maintenance-free, fairly-priced products which is highly achievable with the support of Government of India. We have been manufacturing and supplying ourmachinery all-over India as well as to Congo, U.K., Canada, Indonesia, Dubai & Sharjah.



OUR MISSION : To offer cutting-edge technology to the chemical and pharmaceutical industries. Deliver products of the greatest calibre. Satisfy the unique requirements of our clients. Ensure adherence to the strictest environmental and safety requirements. Keep up with trends and never stop innovating. Assist in our clients' and partners' success. Ensure our stakeholders have a sustainable future.





## CENTRIFUGE | Hydro-Extractor

3-point suspended pendulum type & 4-legged full/half lid opening type

### **AIR-KING LIGHT Series**

Laboratory Centrifuges; also known as the Air King-Light; are available in 12" Basket and 18" Basket. The AKL range is widely accepted for Pilot-plants and ETP / STP Plants. The Centrifuge is a three-point suspended pendulum type Top Discharge Centrifuge with fluid discharge from the bottom.



#### Salient Features:

- · The machines have a simplistic working procedure.
- The machines are easy to relocate.
- The AKL series do not require a Platform and can be placed on a Uniformly Flat Surface on Anti-Vibration Pads.

Model	Basket Dia. (mm)	Basket Depth (mm)	Capacity	Motor (HP)	Basket RPM	Filter Area (ft <sup>2</sup> )
AKL/12	305	203	5 kg	0.5	1100	3.5
AKL/18	458	254	15 kg	1.0	1100	4.5

At Panchsheel Industries, we take pride in our rich legacy as pioneers in the manufacturing of Centrifuges. It all began under the esteemed banner of Harihar Industries, where the manufacturing of Centrifuges first gained popularity. With a strong foundation built on years of expertise and innovation, we have continued to carry forward the legacy, further enhancing the quality and reliability of Centrifuges. Today, as Panchsheel Industries, we continue to uphold the same values and commitment to excellence, ensuring that our Centrifuges stand at the forefront of the industry.

### **AIR-KING Series**

Model	Basket Dia. (mm)	Basket Depth (mm)	Capacity	Motor (HP)	Basket RPM	Filter Area (ft <sup>2</sup> )
AK/24	610	305	50 kg	3.0	1100	6.2
AK/36	915	432	150 kg	10.0	1000	9.5

## **AIR-KING JUMBO Series**

For companies with a large batch-size production and with a requirement of sturdiness and rigidity of a three-point suspension system, our AKJ Centrifuge comes as a pleasant surprise. With a standard output capacity of 250-300 kg, this is our flagship product manufactured and supplied to major Chemical and Pharma companies in various MOCs.

Model	Basket Dia. (mm)	Basket Depth (mm)	Capacity	Motor (HP)	Basket RPM	Filter Area (ft <sup>2</sup> )
AKJ/48	1220	508	250 kg	12.5	850	12.5

# **AIR-QUAD Series**

Panchsheel Industries believes in Upgrading and Optimizing as per the client's requirements and hence the promoters of HARIHAR Industries have now developed the four-point mounting Centrifuge with the same Quality and Sturdiness of the three-point suspended pendulum type centrifuges, known as the AIR-QUAD.

The Air-Quad Series is available with round-lid opening, full-lid opening mechanism and can be availed with Bag-lifting mechanism. The complete lid opening mechanism has hydraulic-powered hinges for easy opening. The centrifuge is sealed with high quality gaskets to eliminate the possibility of leakages and to enable an air-tight atmosphere within the machine.

The AIR-QUAD series is compliant to cGMP-Norms and shall be provided with all necessary certifications and third-party warranties.



M.S. Rubberlined Centrifuge The M.S. parts are Rubberlined inside as well as outside with 5mm thk Natural Hard Rubber



M.S. Plate Centrifuge The Basket and Main-Casing are fabricated from Heavy-duty M.S. Plate and hold option of FRP-lining from inside as well as outside.



Model	Basket Dia. (mm)	Basket Depth (mm)	Capacity	Motor (HP)	Basket RPM	Filter Area (ft <sup>2</sup> )
AQ/36	915	432	150 kg	10	1000	9.5
AQ/48	1220	508	250 kg	15	900	12.5

#### Advantages of 4-point mounting:

- Relocation of machines is extremely easy as there is no requirement of a Base-structure or Bolting. The machines are provided with hooks at the four corners for easy-lifting.
- · Mounting of the machines in upper-level floors is easy and safe.
- Vibration is negligible and the operation of the machines is smooth.
- Since the machine is GMP complied, the Motor, Pulley and other moving parts are covered with high-quality Stainless-Steel cases, hence, a clean and safe working atmosphere is achieved

## **REACTION VESSEL**

To satisfy the unique needs of our clients, we specialize in the design and production of Reaction Vessels. High-quality materials are used in the construction of our vessels to ensure their dependability and longevity.



- M.O.C. : S.S. 316-L, S.S. 304 (GMP, Non-GMP) as percustomer's requirements. Insulation as per industry standards provided at plant.
- Design Code: ASME SEC VIII DIV 1
- Documents: Gear-Motor Warranty, Hydro-Test Report, 1 yr. Warranty

Nominal	Total	Jacket	Heating/Cooling	Motor	R.P.M.
Vol (Ltr)	Vol.	Vol.	Area (m2)	(H.P.)	
	(Ltr)	(Ltr)			
250	325	80	1.50	1.5	48
500	710	130	2.56	3	48
1000	1450	230	4.45	5	48
2500	3485	435	8.30	7.5	48
5000	6745	695	12.90	10	36



#### Design

Our Reaction Vessels are fabricated from high-grade S.S. or M.S. as required in standard universally accepted design with all fitting arrangements made.



### Jacket

Standard Jacket is provided with Stiffeners for rigidity and support. Option of Half-pipe Coil Jacket is also available.



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#### **Agitator Systems**

Standard: Impeller-type with Baffle Arrangement Alternate: Anchor-type with Baffles and Thermowell Pocket Stirrer is connected to Main Shaft resting on Teflon Bush Arrangement in Bottom

#### Safety & Convenience

Additional Nozzles are provided in order to incorporate Pressure Relief Valve, Temperature Gauge, Level Gauge, Nozzle inlet for Cleaning & Purging, etc. as part of Safety and Convenience of use.

#### Support

Side Brackets are provided, however the support options of Pipe Legs or Support Rings are also available.



## **RIBBON BLENDER**

The heavy-duty horizontal blender/mixer is well designed and simple in operation. The machine's uniqueness lies in its Ribbon-type Blades with C.I. Spiders.

The gap between the ribbon's outer edge and the internal wall of the container rangesfrom 3 to 6 mm depending on the application. The ribbon spiral agitator is powered by a drive system comprised of a motor, gearbox, and couplings.

The Blender is fabricated from M.S. or S.S. material as per the requirement.

The outer case and the mixing blade are manufactured from M.S. or S.S. material according to the need.



Sin Sino		C		
Sr. No.	Size (ft-in/mm)	Lts	Powders (Kgs.)	HP
1	8' x 2.5" x 3' / 2440 x 762 x 914	1500	1000+	10
2	5' x 2.5' x 3' / 1520 x 762 x 914	1000	500	7.5
3	4' x 2' x 2.5' / 1220 x 610 x 762	500	300	5.0
4	3' x 1.5' x 2' / 914 x 460 x 610	225	100	3.0
5	2' x 1.25' x 1.5' / 610 x 380 x 460	100	50	2.5

## **INDUSTRIAL WASHING MACHINE**

For traditional laundry washing in the textile industry as well as for tools / equipment like rubber stopper cleaning, etc. in the pharmaceutical industry, we offer heavy-duty washing machines.

- Our washing machines have an inner and outer cylinder made of premium stainless steel and are automatic reversing types.
- In addition to a water level gauge, a steam gauge, a soap or chemical insertion point, and a wastewater exit, the outer cylinder has provisions for inlet, steam inlet, and soap or chemical insertion.



- To ensure stability and dependability, the complete assembly is placed on robust M.S. Channel with self-designed pedestals (Bearing Housing).
- An electric motor and reduction gearbox power the machine, ensuring effective operation and reliable performance.

Model	Basket Diameter (mm)	Basket Length (mm)	Basket Capacity (kg)	Motor (HP)
WK-1	510	610	15	1.5
WK-2	610	760	30	3.0
WK-3	760	915	50	5.0
WK-4	915	1220	100	7.5



## SHELL-AND-TUBE HEAT EXCHANGER

Condenser Oil-Condenser Water Cool Condenser



Panchsheel Industries manufacture Shell & Tube Heat-Exchangers with multiple pass arrangement. Accepted widely in Pharmaceutical, Chemical and Petro-chemical industries, we have catered to a wide customer-base and varied requirements.

 Our team is well-equipped with latest design tools and are in constant search of latest industry standards and upgrades.

## **AGITATOR ASSEMBLY**

Our agitators are utilized for mixing liquids-to-liquids and solids-to-liquids in agriculture, chemical, paints, pigments and pharmaceutical industries.

- Oustomisable Tank Size
- Range of Blades to chose from
- Customised to operate in existing tank
- Extremely sturdy and economical

Also available:

- CONICAL BOTTOM AGITATORS
- PRESSURE VESSEL AGITATORS





We at PANCHSHEEL INDUSTRIES believe in providing all-round solutions to our customers, and hence, apart from the machines mentioned in Product Catalogue, we are also involved in manufacturing / fabricating following Machinery:

- 1. Storage Tank (Cylindrical / Conical)
- 2. Evaporating Pan with Agitator
- 3. Lumps Breaking Machine
- 4. Receiver for Distillation Unit
- 5. Nutsche Filter
- 6. P.P. Filter Press
- 7. Planetary Mixer





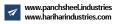
Your Trusted Partner for Engineering Excellence and Customised Solutions since 1962





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