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THE KUMAR BULLETIN

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Kumar's innovation update



Elevating Extraction Efficiency with Anderson Technology

Anderson's Solvex™ Expander represents a significant advancement in oilseed processing, delivering unparalleled efficiency and cost-effectiveness.

Advanced Product Description:

The Solvex™ Expander is expertly designed to compress material into a dense yet highly porous structure, optimizing solvent access to oil within the seeds. This innovation results in up to a 50% increase in extractor capacity, a 40% reduction in solvent retention within the solid product (marc), a 20% decrease in solvent in the liquid product (miscella), and a

notable reduction in overall solvent losses.

Efficiency and Cost Reduction:

By lowering overall plant energy consumption and reducing the load on the extractor, the Solvex™ Expander significantly cuts operational costs while increasing processing capacity. It also excels in reforming dense pre-press cake into a porous collet, enhancing extractor efficiency for high oil content materials, with benefits similar to those observed in soybean processing.

The Solvex™ Expander utilizes steam as its primary heat source, which reduces the horsepower required per ton of material processed. This allows for increased throughput, enabling operators to handle more material within a given timeframe.

Versatile Application:

The Solvex™ Expander is ideal for processing various oilseeds, including soybeans, cotton seeds, rice-bran, sunflower, canola, rapeseed, and oilseed pre-press cake.

FEATURES

- Die Plate or Adjustable Cone Choke Discharge: Provides precise control over the discharge process, enhancing efficiency.
- V-Belt or Gearbox Drive: Ensures reliable and durable operation.
- Base for Mounting and Aligning Components: Facilitates easy installation and maintenance.
- Pin Barrel Mounting: Allows for thermal expansion while maintaining system integrity.
- Instrumentation Package: Enables remote operation through existing control systems for seamless integration.
- Pre-Piped Steam Supply Skid: Offers local or remote control options, adding flexibility.
- Hardened Wear Liners, Worm Segments, and Shearing Bolts: Ensure durability and extended equipment life.
- High Capacity: Capable of processing over 800,000 metric tons of oilseeds without maintenance downtime.

Preparation



**10 ton
per batch
Hydrogenation
plant in Mexico**

**150 ton
Oil Mill
Machinery for
CNSL in Ivory
Coast**



New business

Project update



**300 TPD Solvent
Extraction Plant
for soybean
process in India**

**100 TPD
Continuous
Physical Refinery
for crude palm
and palm kernel
oil in Nigeria**



Afro World Agri Food Expo 2024 in Dar Es Salam, Tanzania!



Kumar at the Poultry & Livestock Expo 2024 in Bangalore, India!



What we did

Innovation update

KUMAR'S INNOVATIVE FILTOKX® FILTER RECEIVES TRADEMARK REGISTRATION

We are thrilled to announce that Kumar has successfully received trademark registration for our in-house innovation, the FiltoKx® Filter. This remarkable achievement marks the introduction of the first in-house filter by Kumar, designed explicitly for the dewaxing and winterization processes in the edible oil industry.

DEWAXING AND WINTERIZATION

Both are crucial processes in the edible oil industry, involving crystallizing non-glyceride components and long-chain high-melting compounds. Some oils contain significant quantities of wax, which causes the oil to become hazy and appear cloudy at room temperature and must be removed to ensure oil transparency.

INTRODUCING FILTOKX® FILTER SERIES

The FiltoKx® Filter series is Kumar's latest innovation for the dewaxing and winterization filtration process. The sturdy and robust design has several features that set it apart:

1. Drape-over filter cloth for easy assembly

2. Low utility consumption.
3. High filtration efficiency achieved without any filtration media
4. Hydraulic cylinder for opening/closing plates
5. Pneumatic/mechanical lever-operated wax discharge valves
6. Feed mechanism without pump at natural elevations
7. Maintenance-free performance ensures longevity and reliability

APPLICATIONS

The FiltoKx® Filter is suitable for a variety of oils, including sunflower, corn, rapeseed, canola, and rice bran. Additionally, we offer customized pilot-scale filters to meet specific needs.

This innovation reinforces our commitment to technological advancement and excellence in the edible oils and fats sector. The FiltoKx® Filter is a significant milestone in our journey, and we look forward to many high-quality, efficient, and reliable innovations to come.



Our Partners

Kumar believes in strategic partnerships that make cutting edge technology accessible to businesses in our industry across geographies.



ANDERSON
INTERNATIONAL CORP



Technological partnership with CPM-Crown for preparatory and solvent extraction processes and refining.

Manufacturing and sales license for Anderson designed Dox Extruders and Solvex Expanders and spare parts in India

Controlled flow cavitation for oil refining and biodiesel processes

Let's meetup

**IX International
Congress Oil Industry
– Oils & Fats**

29 – 31 July 2024
Dar Es Salaam, Tanzania

**International Soy
Conclave 2024**

Booth no 41
13 – 14 Oct 2024
Indore, India

**Oils & Fats
International
Congress 2024**

Booth No A21
22 – 23 Oct 2024
Kuala Lumpur, Malaysia



KUMAR METAL INDUSTRIES PRIVATE LIMITED

Turnkey Solutions: Oils Mills - Mechanical & Solvent Extraction Plants | Refining | Oils & Fats Processing | Oleo-Chemicals | Bio Diesel | Feed Mills

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