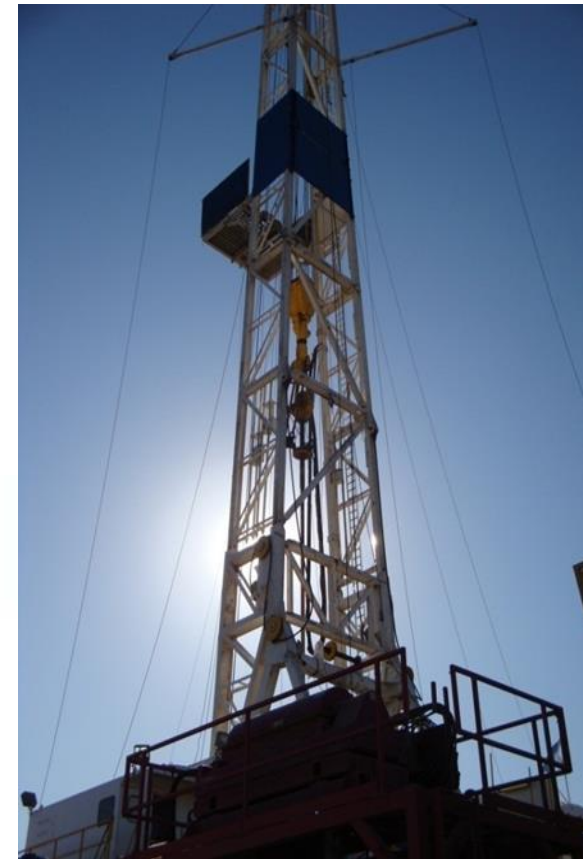


BMS – Separation

Centrifuge technology for the Oil&Gas Industry

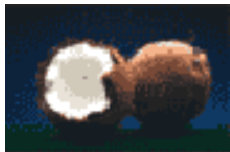


BMS - Applications in Separation Technology



Foods and beverages

- olive oil production
- juice production
- distillation residues
- vegetable treatment
- meat industry



Oil, gas and regenerative Energies

- oil sludge treatment/ oil production
- drilling fluids
- biodiesel production
- digestates from biological waste fermentation
- bio ethanol



Chemical and process Industry, pharmaceutical Industry

- catalysts
- Pigments
- Production and treatment of cellulose I
- coal and steel industry
- paper industry
- fertilizer production
- antibiotics production



Environmental Technology and waste water treatment

- municipal and industrial sewage sludge
- sludge from water works
- leakage water sludge from dump sites
- sludge removal from water
- waste from livestock husbandry



Mining and tunnel construction, mineral raw materials

- tunnel drilling fluids
- sand, gravel and ballast mills
- calcium carbonate
- caolin



Origin of oily sludges and waste from Petroleum Industry Mud Separation



Oilfield / Drilling on-shore



Crude Oil Tank Farm



Refinery



Oil Lagoons



Sea Transport



Dry Docks

What can be expected from BMS Separation ?

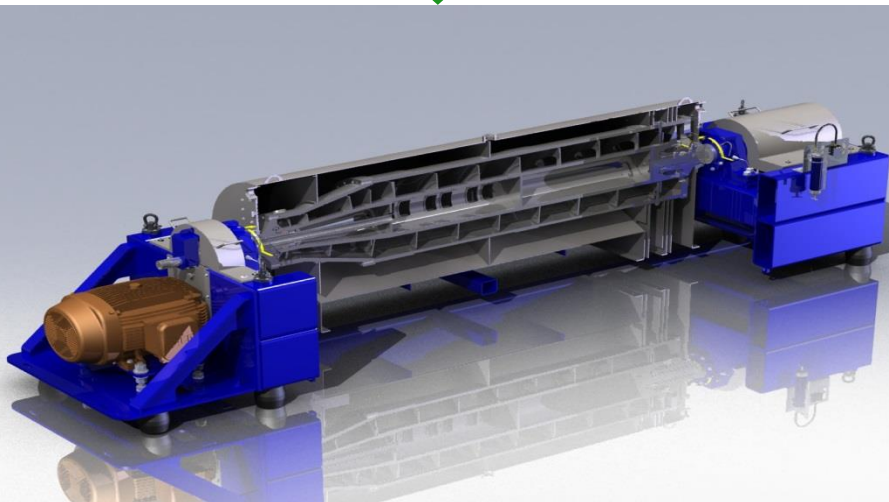
- **BMS** today is Specialist to deliver **Centrifuge Technology** - to **Optimize your Process Needs** and to deliver full **Service** on **In-House-Installation** and **Mobile -Plants** as well
- **BMS** has **Technology -Experience** to **Improve your Process** and to **Engineer the complete Plant** as newly build or **Up-grade of existing Process** as well
- ***BMS Key-Applications are***
 - **Process and Waste-Water** Clarification and Sludge Dewatering
 - **Mining Process Separation** needs with Classification, Washing , Extraction and Dewatering for production process, tailing process, re-cycling of existing lagoons or deposits
 - **Construction and Drilling Mud** slurry-Circuits
 - **Mineral Oil treatment** of crude oils, oil spills, drilling injection water, baryte and fracking oil to re-cycle clean oil or to produce clean water
 - **Green Energy** to produce oil, fuel and gas from vegetable oils, plants and organics



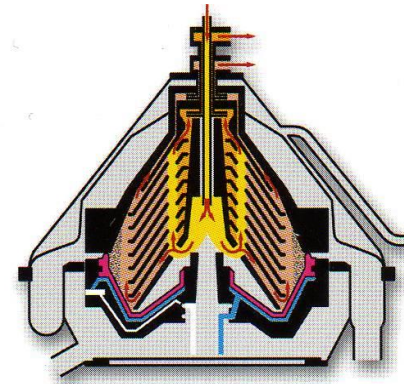
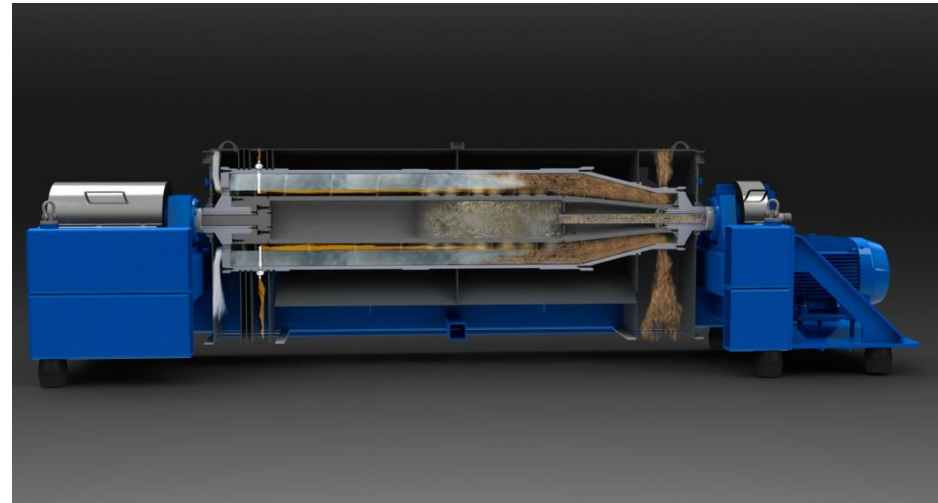
Individual Separation Solution



Single „Step-Separation“

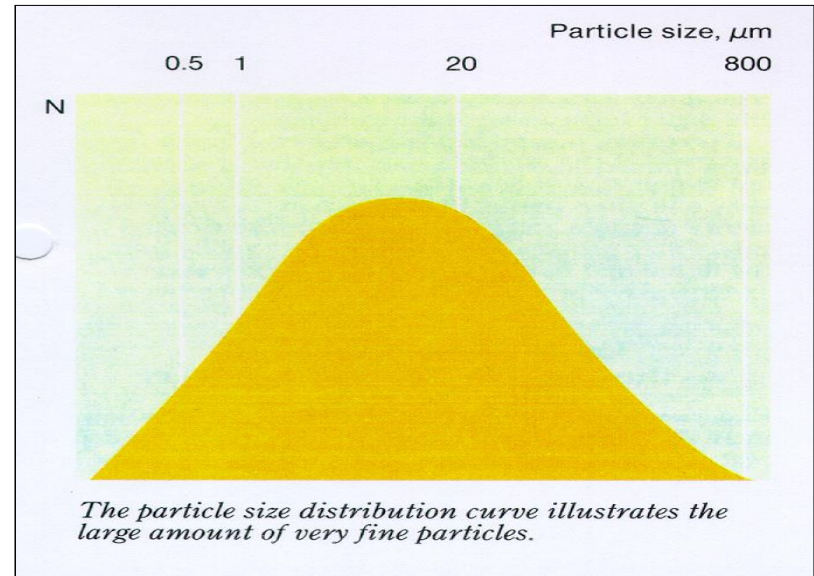
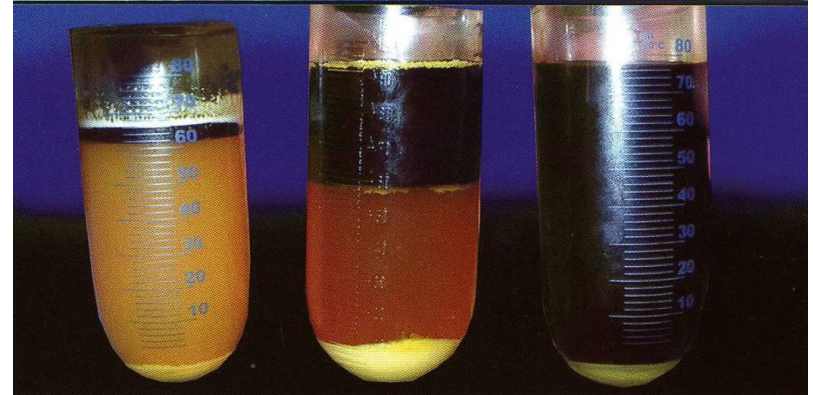
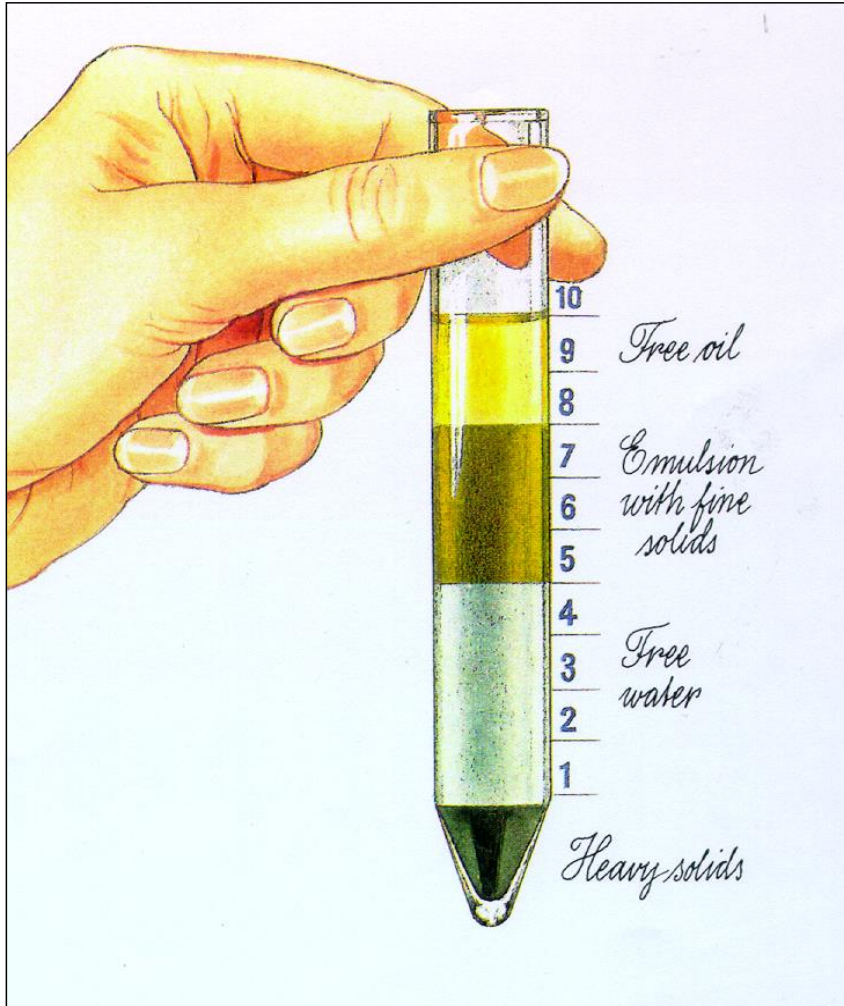


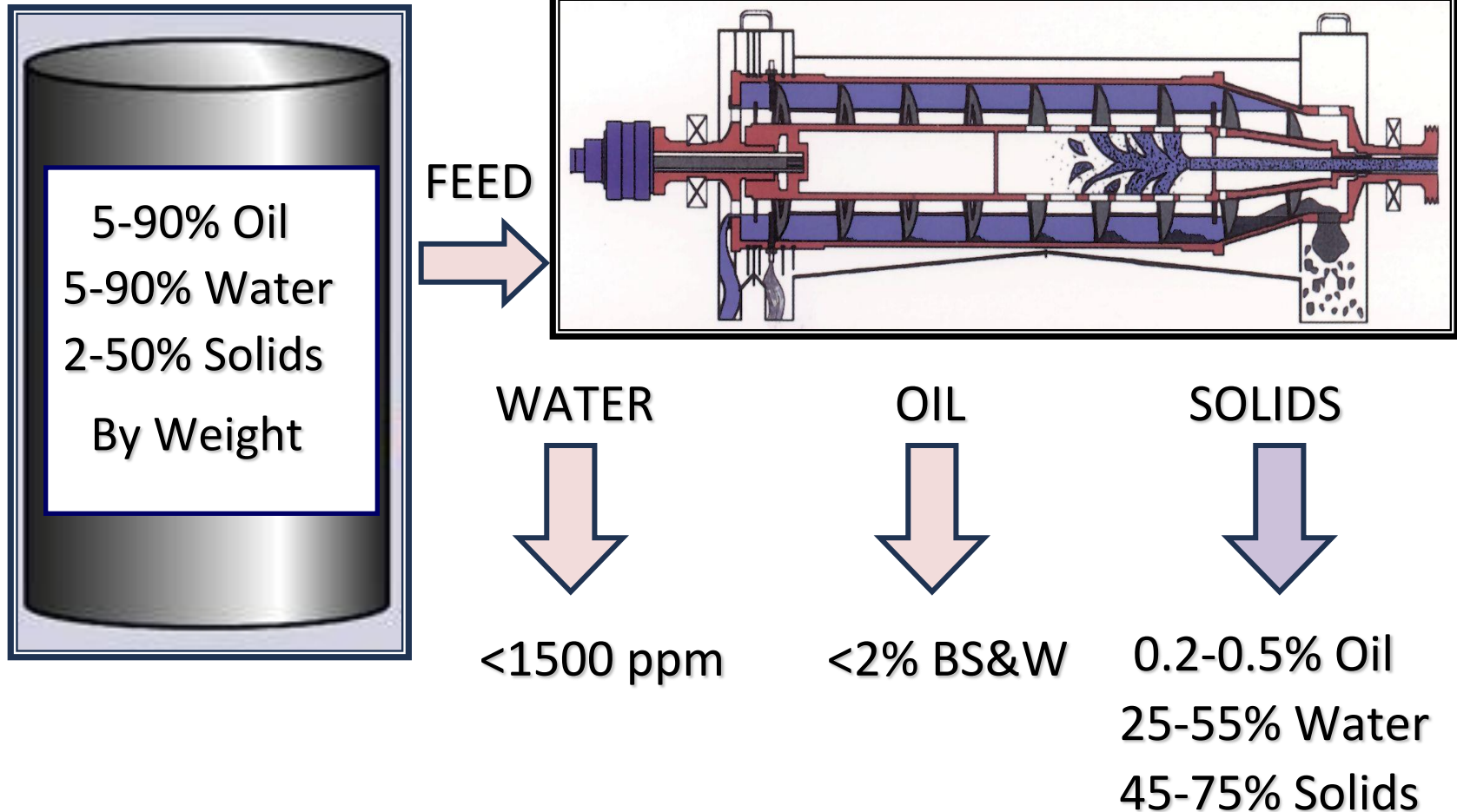
Mud Separation Double-Stage Processing



Origin of oily sludge and waste from Petroleum Industry Mud Separation

Slop oil samples







Production rate of Oil Recycling from Crude Oil lagoon storage in Sudan

With BMS-Crude-Oil-Separation Plant

Work period:

Production Rate:

In Barrel:

Sales Value on stock market prices 100 bbl =

Sales Value at intermediate value 75 \$/bbl =

Sales Value at intermediate value 50 \$/bbl =

Sales Value at service prices of 25 \$/bbl =

Type BMS-54

May 2013-November 2013

5.858.805 litre recycled oil

5.859 m³/h = 36.325 bbl

3.800.000 US-\$

2.725.000 US-\$

1.800.000 US-\$

900.000US-\$



The production of Mineral Oil causes waste sand and soil due to their storage requirements.

For the cleaning of those sand and soils BMS offers the Technology to clean and regeneration or incinerate the soil for the elimination of contaminations.

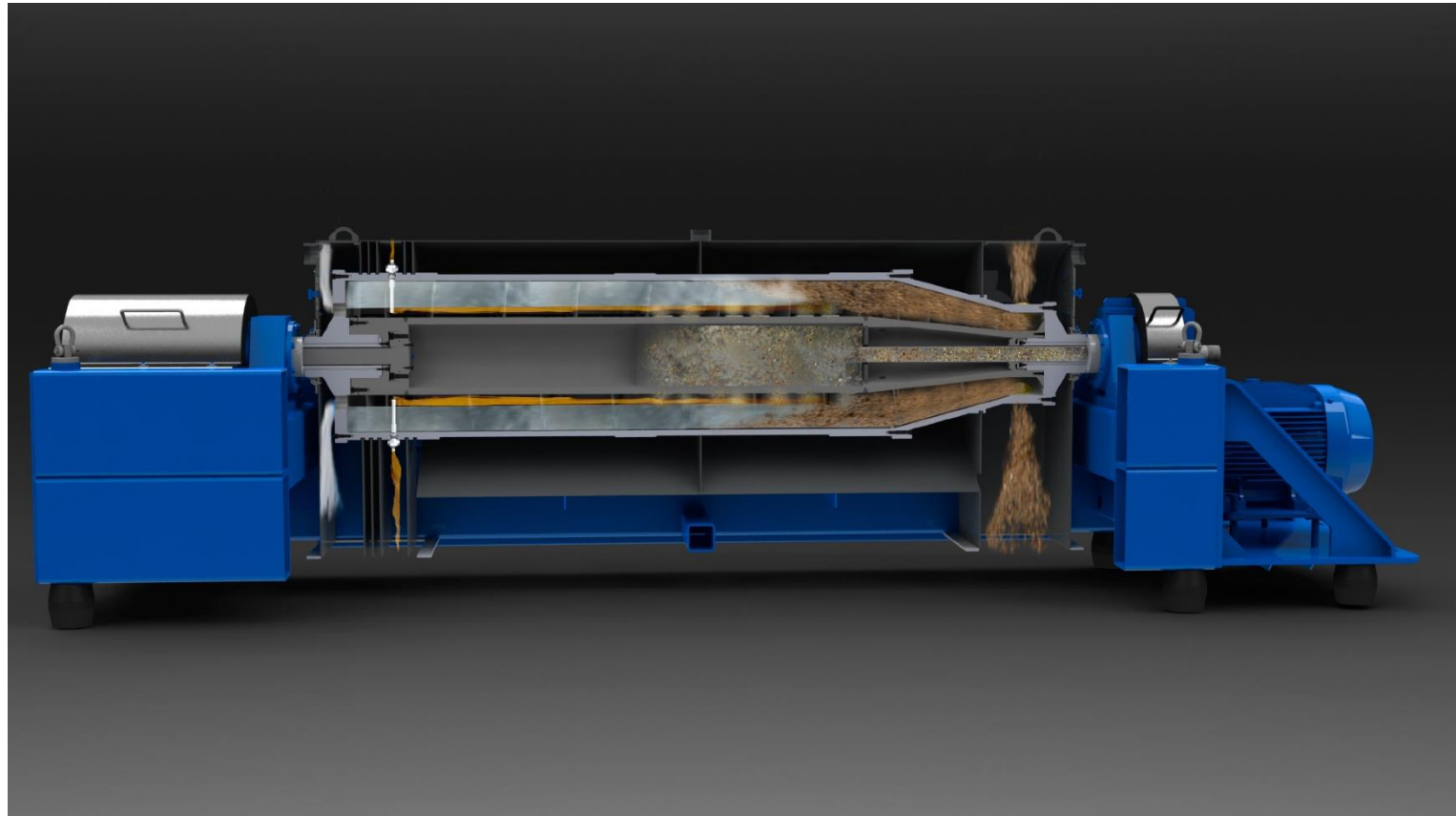
The regeneration of soil can be done with incineration
- with thermal desorption or bio remediation process -

The Soil remediation Process allow to recycle Oils
- Sand washing - separation of oil and Water are main process steps -

Projects Feasibility Study to varify for the best way to go

- Local situation
 - Space available
 - Legal aspects and regulations
- Priorities of Requirements
 - Environmental aspects - to go for clean sands
 - Economical aspects - to earn clean oil
- Technology for the requirements
- Basic Engineering and design of the operation
- Requirements for the documentaion and analysis
- Contamination of site conditions and Deconatmination requirements
- Cost evaluation and planning
- Future use of the remediated area

Three-Phase Decanter



Machine features

Mud Separation

MOST COMPACT
DESIGN AVAILABLE

HINGED END MOUNT MOTOR
FOR EASE OF ADJUSTMENT &
MAINTENANCE

BALDOR PREMIUM EFFICIENCY
MOTORS WITH ALLEN
BRADLEY VARIABLE
FREQUENCY DRIVES





Mud Separation

TRAILER MOUNTED DEWATERING SYSTEMS



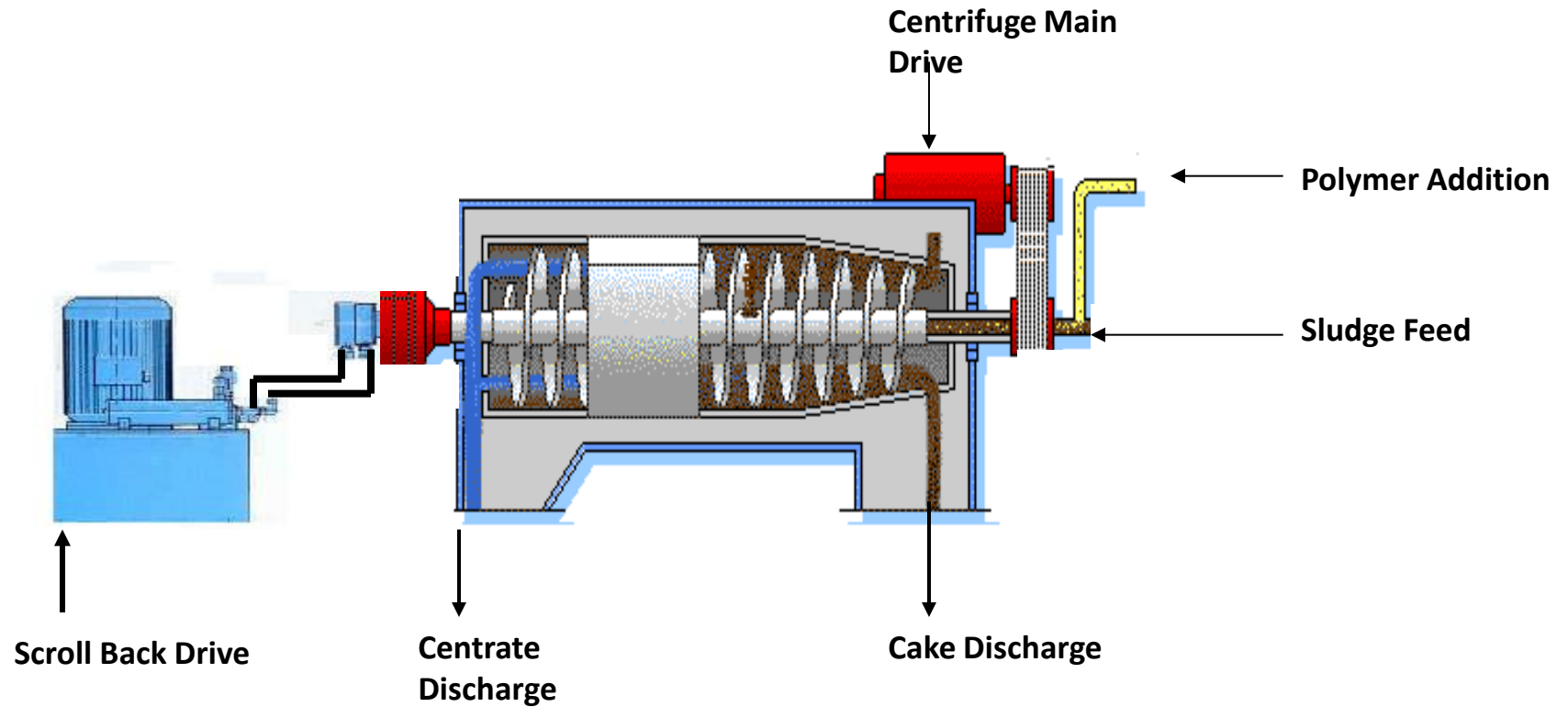
Technology and Applikations- Roadmapping



DECANTER CENTRIFUGE IN OPERATION



Mud Separation



BMS Mud Separation

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