

ePack: Enhancing Separation Capacity & Performance

The background features various 3D geometric shapes in shades of blue, red, and brown, scattered across a dark blue surface. These shapes include circles, squares, triangles, and semi-circles, some appearing as flat surfaces and others as raised blocks.

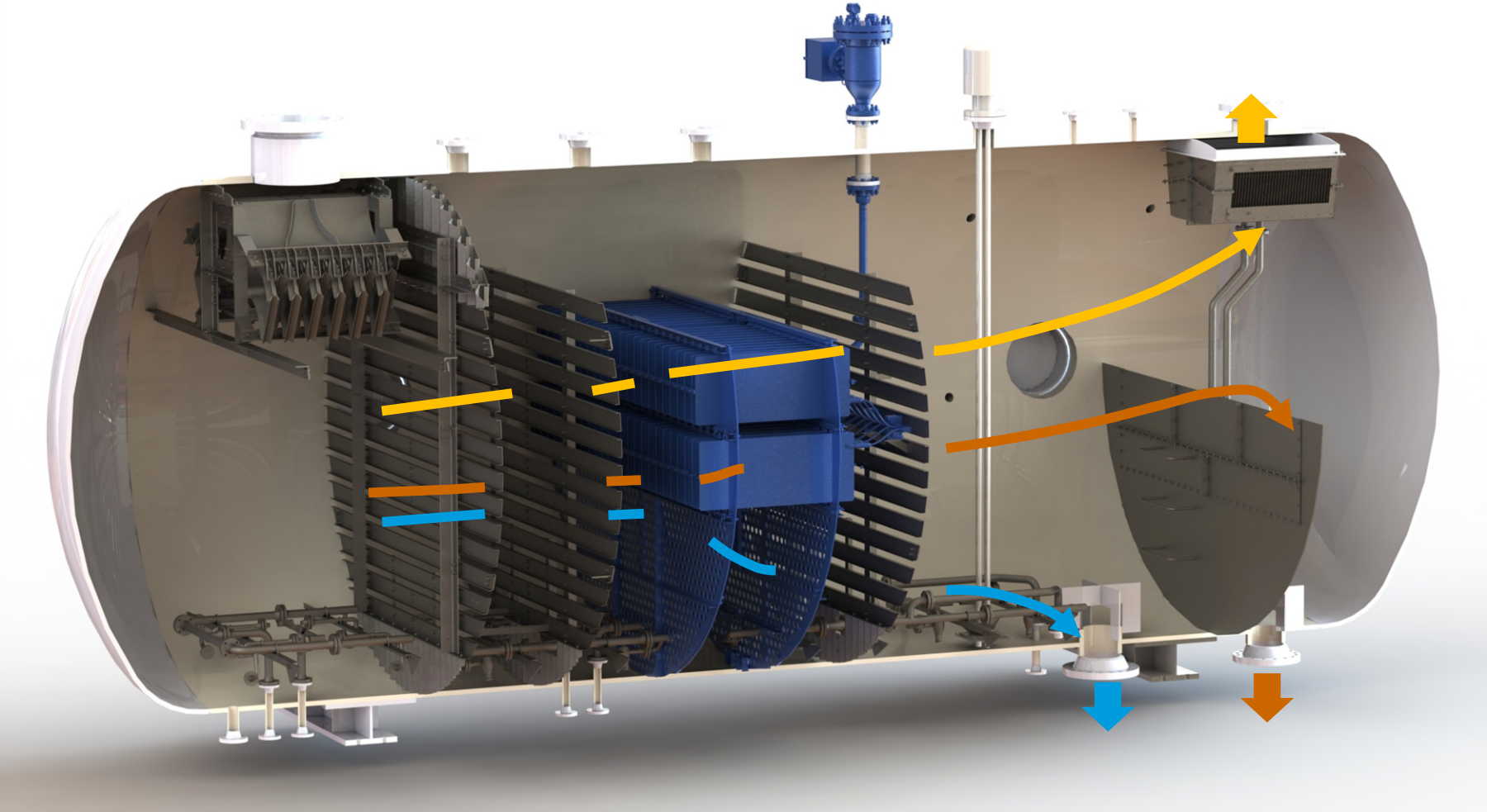
28th May 2026
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ePack Animation Video

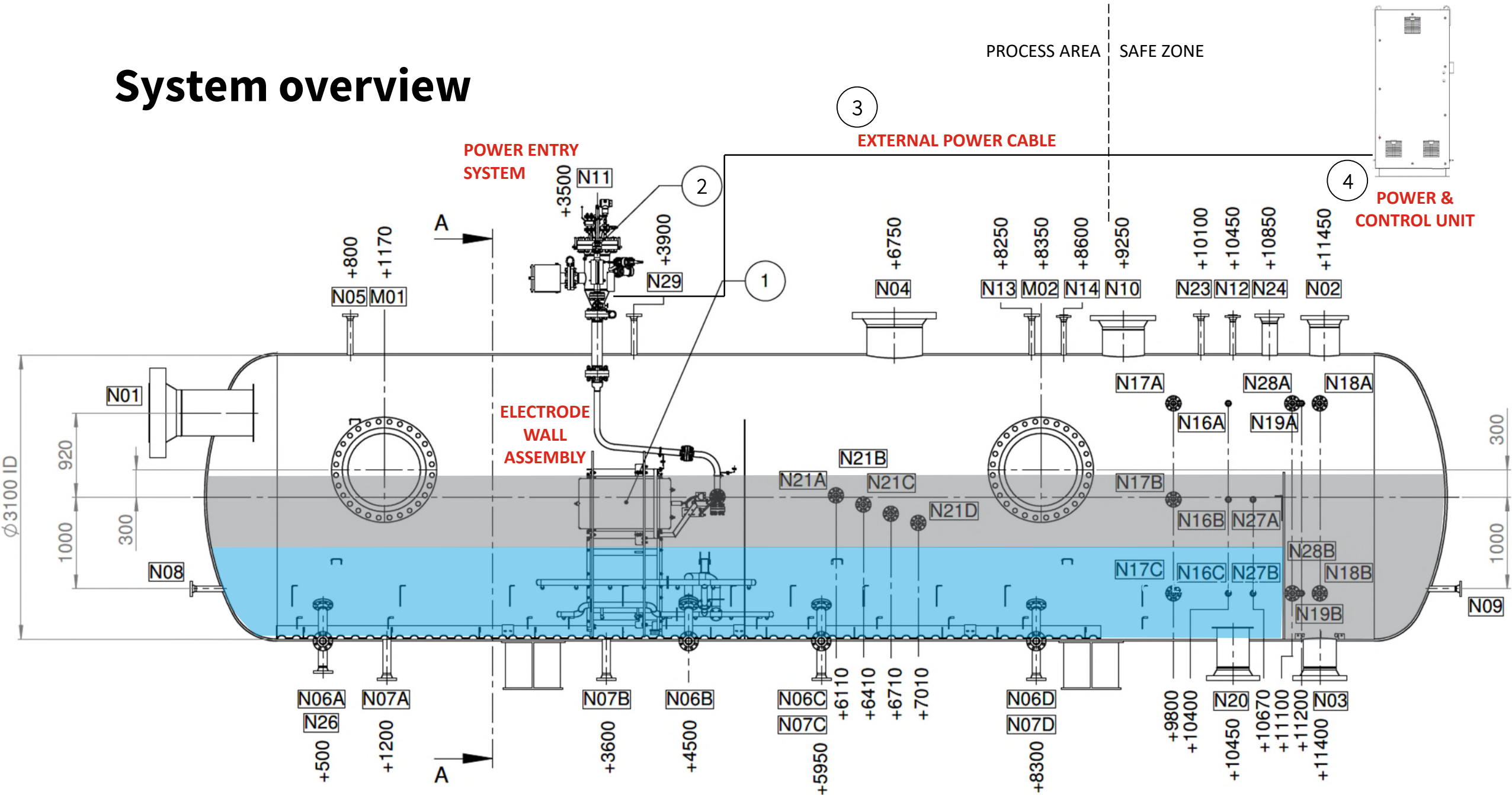
https://www.youtube.com/watch?v=c8XyhG-bL_A

ePack working principle



- Gas
- Oil
- Water

System overview



MCT Power and Control Unit

Closed-loop voltage control for stable operations

Alarm and status signals

Communication with control room via Ethernet TCP/IP and option for local control and HMI

Continuous logging of ePack voltage, current, alarms and status signals

No calibration or adjustment needed

Industrial PLC



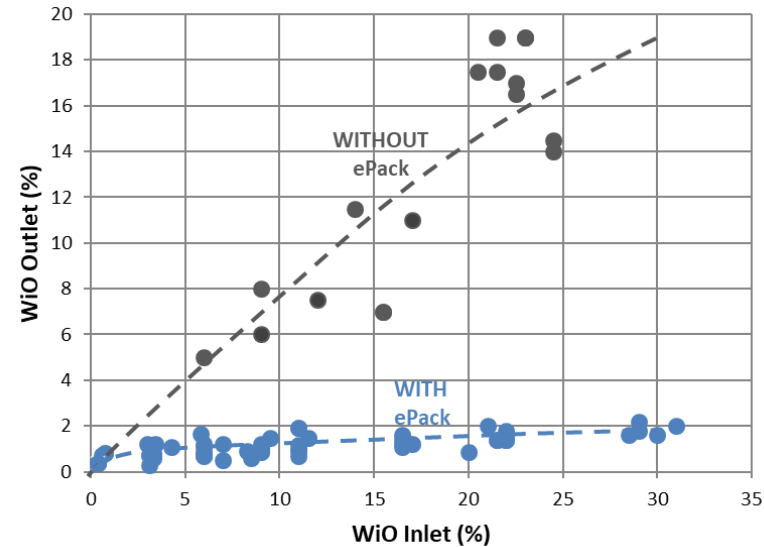
Key technology features

- Enabler for **increased separator throughput**, **reduced heating costs** and **reduced footprint** of equipment
- **High water tolerance** due to electrically insulated electrodes with **non-stick coating**
- Non-stick coating **reduces risk of clogging**
- Electrostatic coalescence can be performed in a conventional separator **with gas presence**
- **Robust power supply** with stepless load control
- **Low power consumption**
- **Cost efficient** design compared to alternative solutions
- Internals installation **without hot work (2 days)**



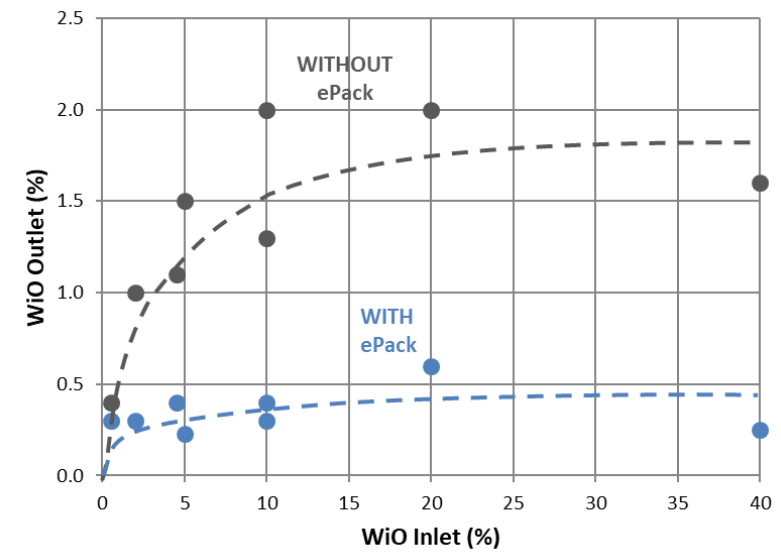
Key Applications

- Capacity or performance increase of production separators
- Bulk water removal in heavy oil treatment systems
- For test separator
- Enabler for compact oil trains
- Desalting applications



Typical results for **heavy-** or very stable oil emulsions. Residence time 5-10 minutes.

Typical results for **conventional** oil emulsions. Residence time ~5 minutes.



Production Efficiency

ePack enables operators to sustain and increase production from existing assets while reducing operating cost and avoiding major capital expansion

- Ability to increase throughput of vessel with ePack installation
- Reduced OPEX
- Debottlenecking of processes
- Compact design
- Reliability
- Brownfield optimization

Operational Envelope

Parameter	Unit	Best operation	Operational envelope
Watercut	Vol%	0 – 50	0 – 100
Water droplet size	microns	All	All
Op. pressure	barg	< 30	< 60
Op. temperature	°C	< 120	< 140
Op. oil viscosity	cP	< 20	< 100*
Op. oil density	kg/m ³	< 850	< 900*
Water salinity	mg/L	All	All
Crude oil conductivity	S/m	<1E-7	5E-6*
Gas volume fraction	%	0 – 95	0 – 100
Steaming temperature	°C	< 150	< 150

(* No definite limit)

Thank You – Questions??



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