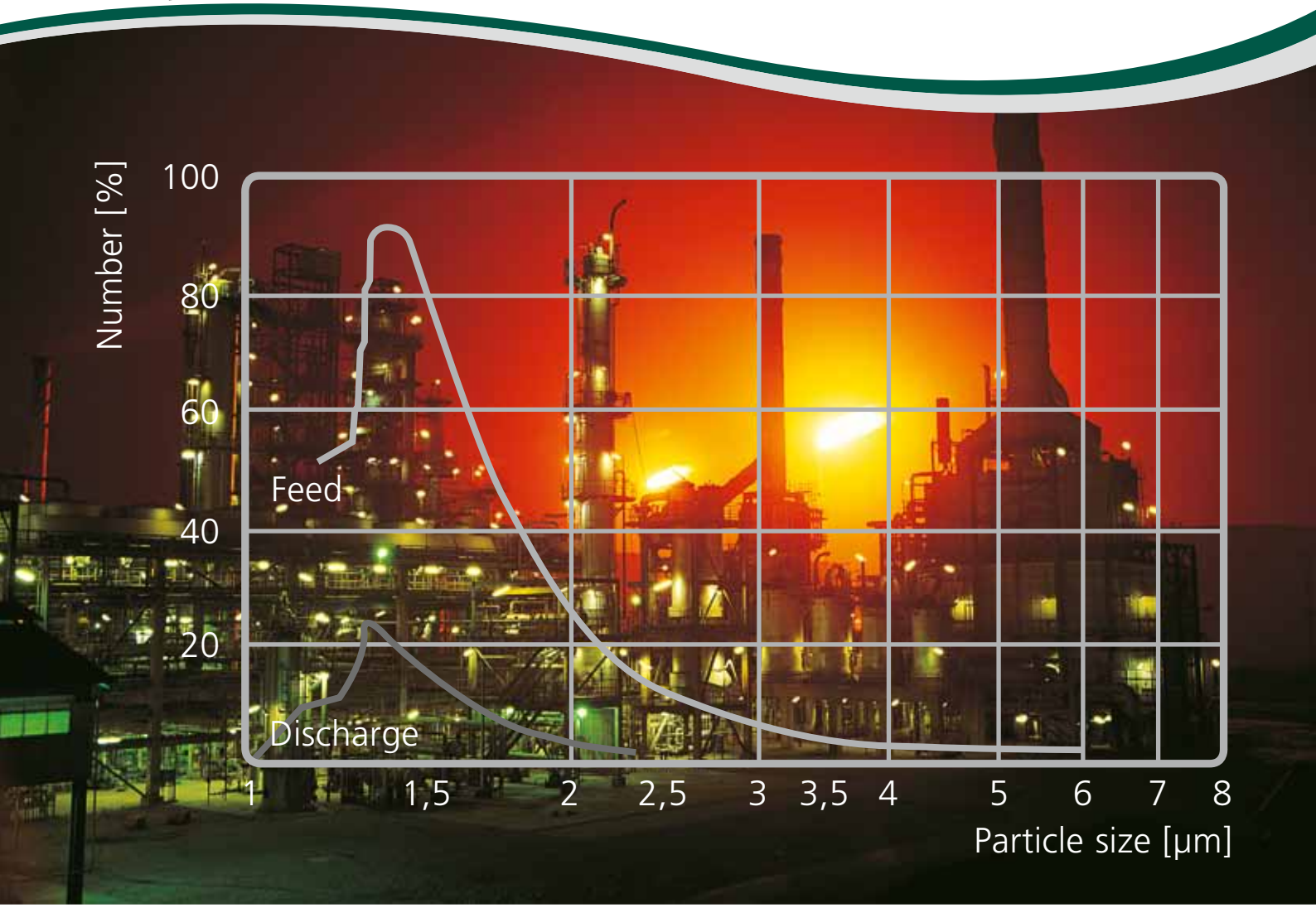
Liquids to Value



Cat Fines Separation

Systems from GEA Westfalia Separator for cat fines removal
from residual oils in refineries

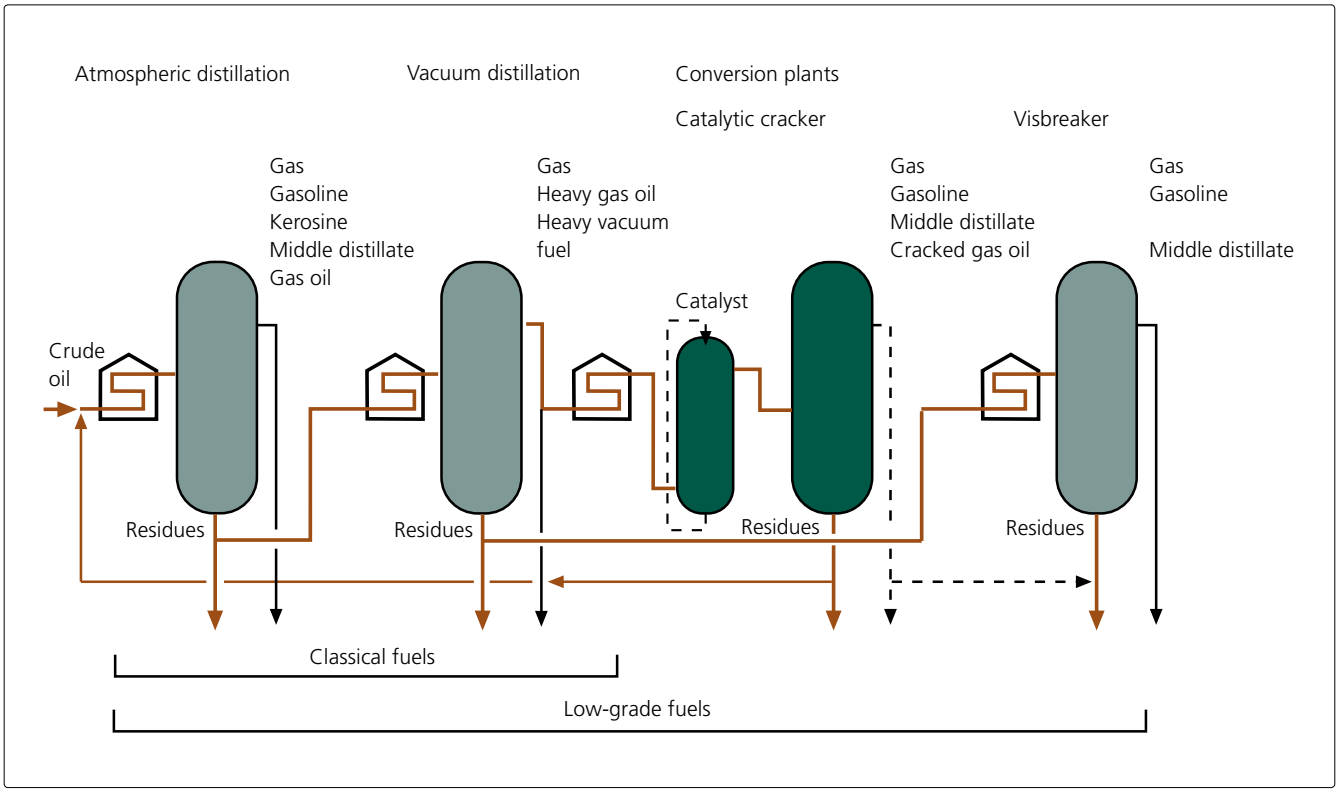
Improve Oil Quality

Refining cat fines

During modern refining processes the residual oils from atmospheric and vacuum distillation are sent to a cracking tower. Here the long hydrocarbons are cracked with the help of pulverised catalysts such as aluminium silicates which are mixed with the oil. This cracking process takes place at a temperature of approx. 500 °C (930 °F). A lot of these cat fines remain in the residues of the cracking tower and the distillates coming from the cracking process.

These cat fines can be separated from the oils to recover them and/or to improve the oil quality.

Cat fines removal plant in special design



Typical refinery process

Effective Refining Principle

Combining disk stack centrifuges and decanters

- Disk stack centrifuges for cat fines removal (operated as clarifier)
- Due to high product temperature oil instead of water as operating liquid recommended
- Downstream cat fines concentration with decanters possible

Separation Results	Customer Benefits
Catalyst fines removal from residual oils	Reduction of disposal costs
	Higher sales prices for refinery product obtainable
Catalyst particles are recovered	These cat fines can be reinjected into catalyst tower and re-used

These top results can be achieved only with oil and water treatment systems from GEA Westfalia Separator.

Check Investment for an Economical Solution

Receive an individual estimate

Please fill in the following questionnaire and send it back to fax no. +49 2522 77-5058 or e-mail to ws.systems@geagroup.com

Company:

Contact:

Phone: Fax:

E-mail:

Slop oil specification

Viscosity: c St @ °C

Density: g/ml @ °C

Solid content (cat fines): %

Site conditions

Temperature min.: °C

Temperature max.: °C

Humidity: %

Hazardous area classification:

Voltage/frequency: V Hz

Heating medium available on site: (electricity, thermal oil, steam)

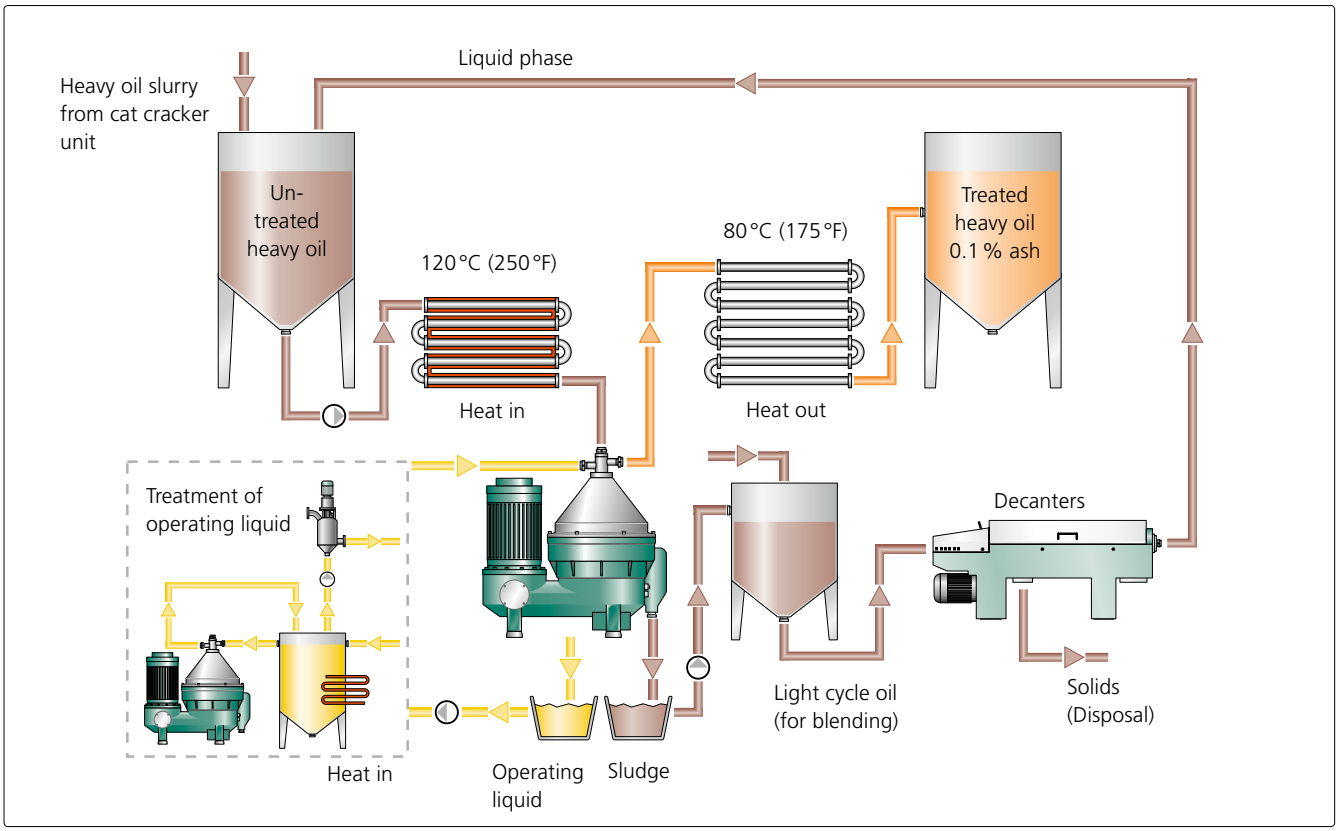
Product infeed conditions

Temperature min.: °C

Temperature max.: °C

Required capacity: l/h

Special remarks



Complete cat fines removal plant

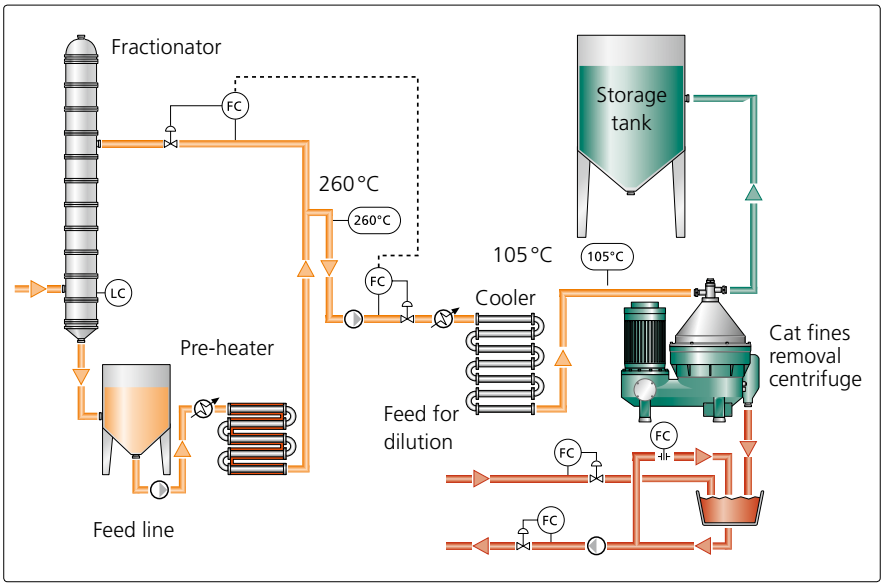
Payback in No Time

Only oil treatment systems from GEA Westfalia Separator boost your profit

Exemplary scope of supply

- Self-cleaning disk stack centrifuges operated as clarifier for cat fines removal
- Solid bowl separator for the treatment of the operating liquid
- Complete plant with auxiliary equipment

Whole plant in Ex-design. Payback within a short time – the solution is the cat fines removal system from GEA Westfalia Separator.



Flow chart of cat fines in the cracking process

- Beverage Technology
- Dairy Technology
- Renewable Resources
- Chemical / Pharmaceutical Technology
- Marine
- Energy
- Oil & Gas
- Environmental Technology
- Engineering
- Second Hand Machinery
- Original Manufacturer Service

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GEA Mechanical Equipment

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