



aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Oil & Gas | Downstream Applications

Filtration products for Hydrocracking



ENGINEERING YOUR SUCCESS.

Filtration for process efficiency

From crude to final production

When refining presents complex challenges, Parker domnick hunter filtration systems present solutions which respond to today's demanding worldwide market. We offer innovative and application-specific filtration to help ensure integrity and purity throughout the downstream process.



Downstream demands

After upstream drilling and transport, crude oil must be processed in a refinery. Efficient processing of several hundred thousand barrels of crude oil a day – essentially a non-stop operation – demands filtration solutions that perform reliably, even under extreme conditions. Parker domnick hunter meets these needs with filtration systems that get the job done with minimal maintenance and downtime.

Hydrocracking process

Refineries use hydrocracking to break down heavy hydrocarbon molecules into light, shorter chain, hydrocarbons to produce valuable fuel products. Hydrocracking is done with heat, catalyst and hydrogen. Hydrogen is used to purify the hydrocarbon stream from sulfur and nitrogen.

Filtration in refineries

Filtration and coalescing plays a significant role in improving the fluid quality of the hydrocracking process fluids by removing contaminants from sour water, reactor feeds, and hydrocracker feeds.

Filtration and Coalescer products are designed to:

- Reduce process upsets and downtime
- Extend catalyst life
- Improve production and operation efficiency
- Protect processing equipment
- Lower maintenance costs
- Minimize product impurities,
- Remove haze caused by water

Committed to process optimization

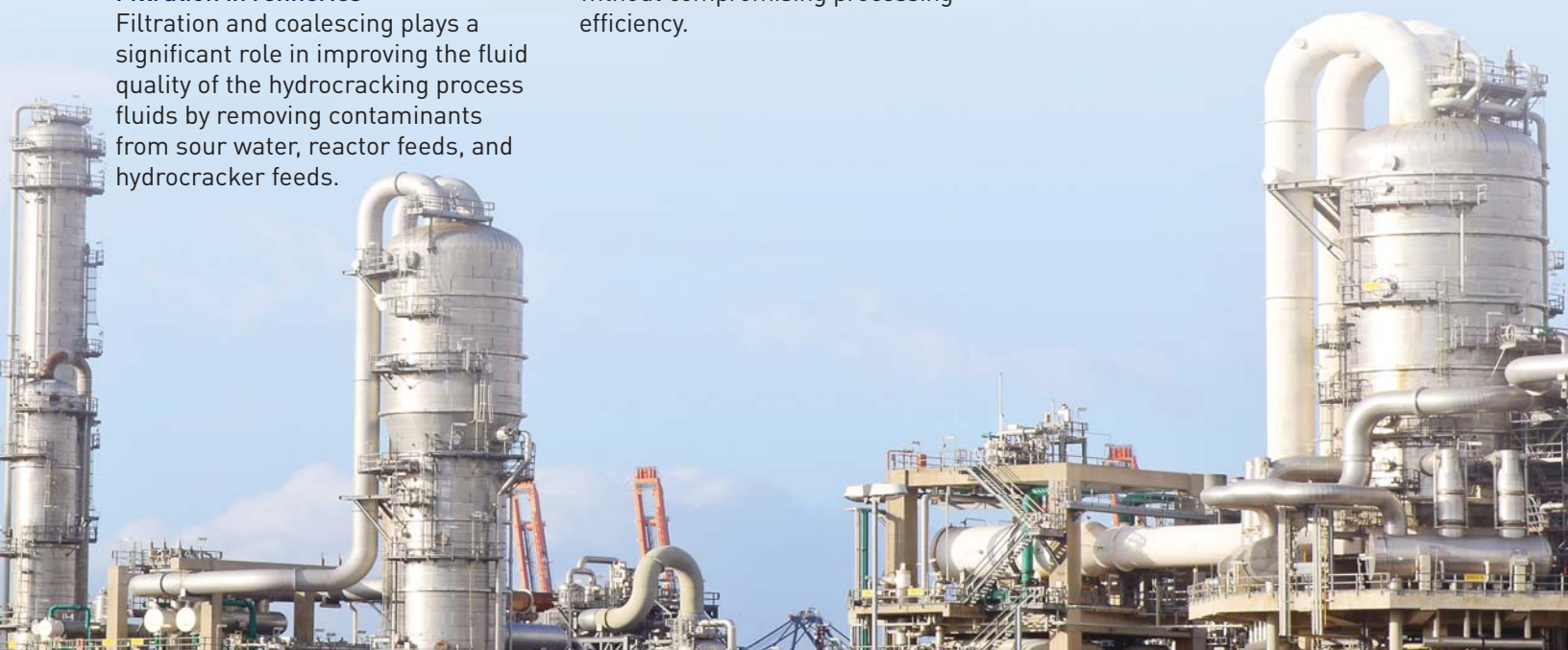
Parker domnick hunter recognizes that due to the hazards associated with maintenance in petroleum production facilities along with high disposal costs, minimizing both change out frequency and process downtime are of utmost importance. That's why we optimize filtration systems to ensure that the total cost of ownership for contaminant control is balanced, without compromising processing efficiency.

Global support with local perspective

Wherever you are in the world and whatever the process requirements, Parker domnick hunter's dedicated support team is there to help you get the most out of your filtration systems. We have a presence in all of the major petroleum processing regions offering local and technical support for refinery applications.

PROCESS APPLICATIONS

- Hydrocracking feedstock
- Diesel fuel
- Jet fuel
- Naphtha

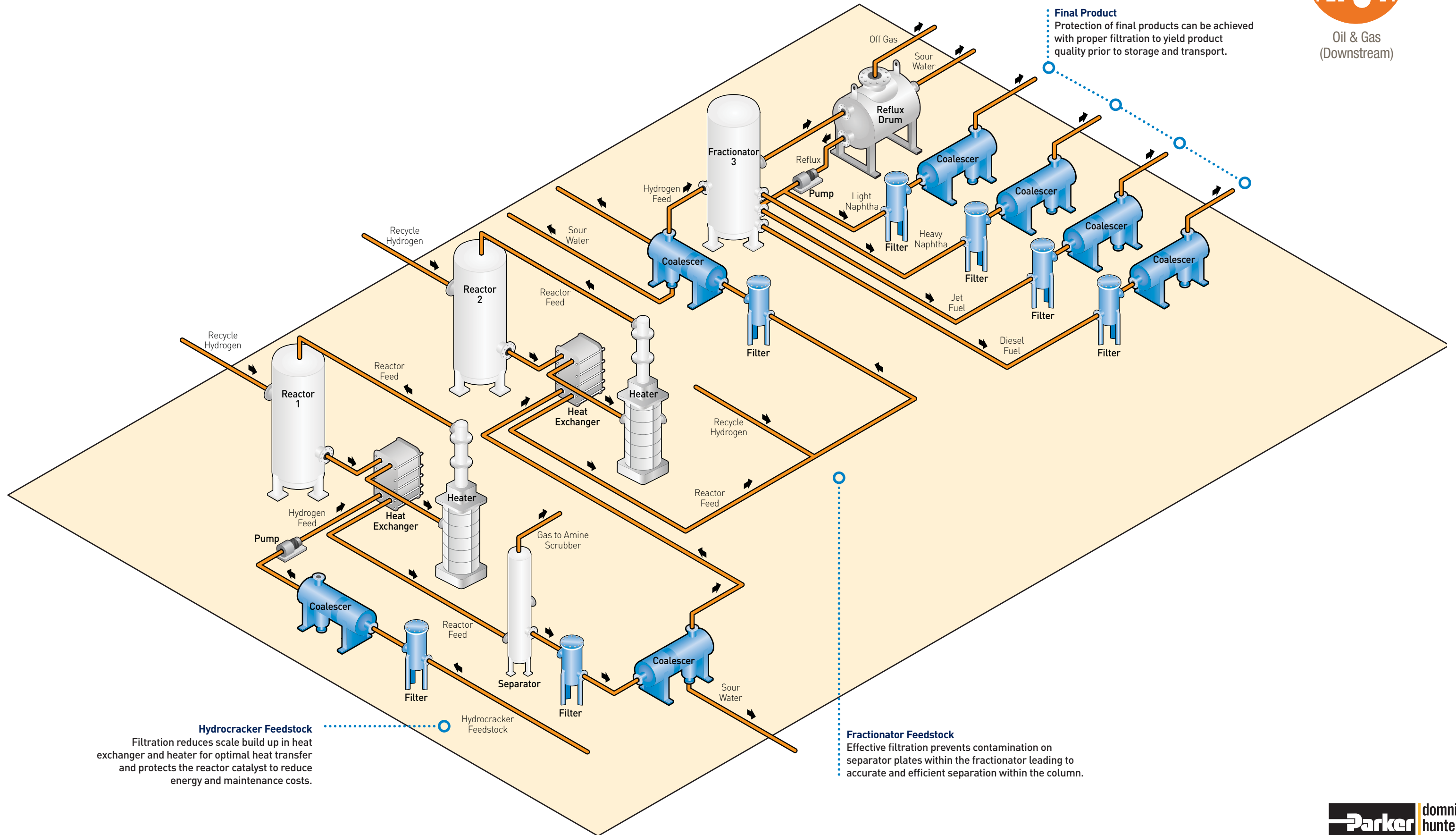


Hydrocracking

Process Overview



Oil & Gas
(Downstream)



Final Product
Protection of final products can be achieved with proper filtration to yield product quality prior to storage and transport.

Hydrocracker Feedstock
Filtration reduces scale build up in heat exchanger and heater for optimal heat transfer and protects the reactor catalyst to reduce energy and maintenance costs.

Fractionator Feedstock
Effective filtration prevents contamination on separator plates within the fractionator leading to accurate and efficient separation within the column.

Filter Products for Hydrocracking

PLEATED



Fulflo 1401

Absolute rated cartridge available in cellulosic or polypropylene media designed to offer maximized surface area which retrofits compatible housings using 1401 style cartridges.



Flo-Pac & Flo-Pac +

Pleated cartridge containing premium grade, phenolic impregnated cellulosic filter media. for critical filtration applications to provide long service life, high flow rate and low pressure drop.



Large Diameter

ParMax & ParMax Select

Large diameter, high capacity cartridges with polypropylene pleated depth and microfiber glass media. The unique layered construction provides excellent retention across a range of flux rates.

DEPTH MEDIA



Stringwound

Honeycomb

Offer superior quality for effective particulate removal from 0.5 to 150 μm in a wide variety of materials for process compatibility.

LIQUID/LIQUID COALESCERS



Fulflo® LC Coalescers

High performance microfiberglass media designed to remove dispersed and free water from hydrocarbons.

FILTER VESSELS



Fulflo® cartridge filter vessels

304 or 316 SS filter vessels designed for filtration in downstream applications

- Single and multi-cartridge housings
- GMP Industrial design with coded options (ASME, CRN, PED-CE)
- Vessels available as standard or custom design

Worldwide Filtration Manufacturing Locations

North America

Compressed Air Treatment Filtration & Separation/Balston

Haverhill, MA
978 858 0505
www.parker.com/balston

Finite Airtek Filtration Airtek/domnick hunter/Zander

Lancaster, NY
716 686 6400
www.parker.com/faf

Finite Airtek Filtration/Finite

Oxford, MI
248 628 6400
www.parker.com/finitefilter

Engine Filtration & Water Purification Racor

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Beaufort, SC
843 846 3200
www.parker.com/racor

Village Marine, Sea Recovery, Horizon Reverse Osmosis

Carson, CA
310 637 3400
www.parker.com/watermakers

Hydraulic Filtration Hydraulic Filter

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419 644 4311
www.parker.com/hydraulicfilter

Laval, QC Canada
450 629 9594
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Process Filtration domnick hunter Process Filtration

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805 604 3400
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608 824 0500
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