

# Oil & Gas Industry Filtration / Separation Applications

Offshore Exploration  
& Production



Gas Production  
& Transmission



Refinery  
& Petrochemical



Power  
Generation



**Quality Filtration Made Simple**

# Oil & Gas Industry Filtration / Separation Applications



In the **Oil & Gas Industry**, an efficient filtration/separation system is critical to the reliability and performance of the physical assets that produce, transport, and process oil and gas, as well as, their derivative and finished products. Optimizing the reliability of these filtration systems is essential in maximizing your operation performance.

**Jonell** has worked diligently to advance the economics of Oil & Gas Filtration, creating a knowledge-based company with an industry leading staff of experts capable of delivering a variety of filtration/separation solutions to fit your specific maintenance and operating needs. Utilizing this experience, **Jonell** has succeeded in developing thousands of different filter elements covering a wide variety of filtration applications.

## **BENEFITS** of an Optimized Filtration/Separation System include:

- Increased Overall Process Performance
- Lower Maintenance Costs
- Decreased Down Time
- Improved Operating Efficiencies

**Jonell's filtration/separation products and services are used throughout the Oil & Gas Industry in a wide range of applications.**



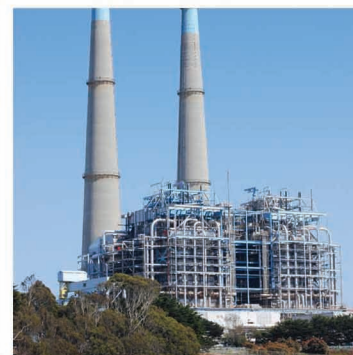
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## Offshore Exploration & Production

**Jonell** is a leading designer and manufacturer of filtration/separation products and services for the Offshore Exploration & Production Industry. Our emphasis on providing the most advanced technologies in the market place has made our filtration products among the most sought after in the world.



### Typical Offshore Exploration & Production applications include:



- **Injection Water** – contaminant removal for membrane protection and to prevent plugging of downhole formation.
- **Produced Water** – removal of both solid and hydrocarbon contaminants to prevent environmental problems associated with surface disposal and plugging in re-injection.
- **Compressor Protection** – suction filter separation for removal of solids, as well as, free and entrained liquids to prevent mechanical and associated problems.
- **Turbine Protection** – ultrafine coalescers for entrained liquid and solid contaminant removal to protect turbine blades.
- **Other Applications** – including Intake Air Filtration, Gas Sweetening Systems (Amines), Gas Dehydration (Glycols), HC Condensate Separation, etc.

## Gas Processing & Transmission

The Gas Industry is constantly changing, requiring the latest in modern equipment design and innovation. At **Jonell** we aggressively pursue new technologies to provide state-of-the-art filtration and separation products designed specifically for the Gas Industry.



### Typical Gas Production & Transmission applications include:



- **Glycol Dehydration** – removal of costly glycol carryover.
- **Compressor Protection** – removal of hydrocarbons, water, and solids.
- **Amine & Glycol Purification** – activated carbon and solids filtration for the removal of hydrocarbon and particulate contaminants.
- **Condensate Dewatering** – two phase liquid separation products for separating free water from a hydrocarbon.
- **Flow Meters and Meter Runs** – removal of natural gas contaminants ensuring accurate flow rate measurements.
- **Other Applications** – minimizing losses downstream of gas purification process, mol sieve protection, fuel gas filtration, lube oil filtration, etc.



# Oil & Gas Industry

## Filtration / Separation Applications



## Refinery/Petrochemical

In the highly competitive Refinery and Petrochemical industry, efficient maintenance, process operations, and reliability techniques have a direct effect on the bottom line. **Jonell** helps clients improve their bottom line by optimizing filtration operations, thereby minimizing downtime and increasing operating efficiencies.



### Typical Refinery/Petrochemical applications include:



- **Catalyst Protection** – coalescers and particulate filters are used to remove liquid and solid particulate from hydrocarbon streams.
- **Ultra Low NOx Burner Protection** – removal of solid and liquid contaminants to prevent plugged burners, flame out and thermal volatility.
- **Activated Carbon Units** – removing solid contaminants upstream and carbon fines downstream, as well as, providing and replacing activated carbon.
- **Wastewater** – removal and reduction of organic compounds from water and wastewater for disposal or reuse, cleaning auxiliary fluids, and hydrocarbon removal.
- **Final Products Filtration** – Jonell offers a wide range of filtration/separation technologies designed specifically for final products purification in all applications including storage, transport, and processing.

## Power Generation

**Jonell** has a long history of working in the Power Industry. Whether it's working directly with power production companies or co-generation facilities, we provide decades of experience and a variety of filtration technologies designed specifically for energy producing applications.



### Typical Power Generation applications include:



- **Hydraulic and Lubrication Fluids** – removal of corrosion contaminants for the protection of rotating equipment and other critical components.
- **Clean Fuel Gas** – filtration of oil, water, and solids protecting gas engines and turbines.
- **Water Treatment Systems** – removal of resin fines to prevent fouling of the deaerator internals and filtration of water borne contaminants.
- **Turbine and Generator Protection** – contaminant removal from intake air systems, as well as, gas streams.



# Oil & Gas Industry Filtration / Separation Applications



Since 1987, **Jonell** has focused on understanding the specific filtration/separation needs of each of our customers. Our custom-designed solutions, applied as part of a comprehensive production strategy, have consistently proven to enhance maintenance operations while increasing operating efficiencies. To meet the most demanding Oil & Gas applications, **Jonell's** filter elements are available in a wide variety of materials, including: polyester, polypropylene, cotton, nylon, Teflon, metals, micro-fiberglass, resin-bonded cellulose, etc. With decades of accumulated knowledge in replacement OEM filter cartridges, our experienced staff can quickly replace over 36,000 OEM element part numbers making us a one-source supplier for your filtration/separation needs. Regardless of your application, **Jonell's** filtration/separation products and services can maintain and enhance your operational performance.



## Air Filter Elements

- Pleated Rounds
- Pleated Panels

## Gas Filter Elements

- Pleated Media Filters
- Depth Style Filters
- High Temperature Filters
- Sewn End Filters

## Gas Coalescing Filter Elements

- Pleated Coalescing Filters
- Depth Style Coalescing Filters
- Synthetic Coalescing Filters
- Multi-stage Coalescers

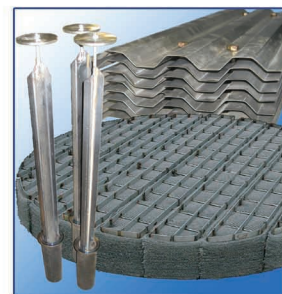


## Liquid Filter Elements

- Pleated Media Filters
- Hydraulic Filters
- Sock Filters
- String Wound Filters
- Melt Blown Filters
- Resin Bonded Filters
- Bag Style Filters
- Activated Carbon Filters

## Two Phase Liquid Separation

- Coalescing Filters
- Separation Filters
- Liquid Absorption Filters
- Full Diameter Coalescing Wafer Packs



## Filter Vessel Internals

- Wire Mesh Mist Eliminators
- Vane Style Mist Eliminators
- Filter Element Support Risers
- Mesh – Vane Assemblies



## Filtration Process Optimization

- Feed Consultation
- Product Customization
- Filter Element Dissection
- Problem Shooting



**Quality Filtration Made Simple**

## **Jonell Filtration Products & Service Are Applied In Numerous Industries Worldwide**

- Refining/Petrochemical
- Gas Processing
- Water Treatment
- Industrial
- Exploration & Production
- Offshore / Marine
- Power Generation
- Alternative Energy

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