

Colfax Americas



**Power Generation
Solutions**



« Colfax at a Glance »»

Colfax Corporation

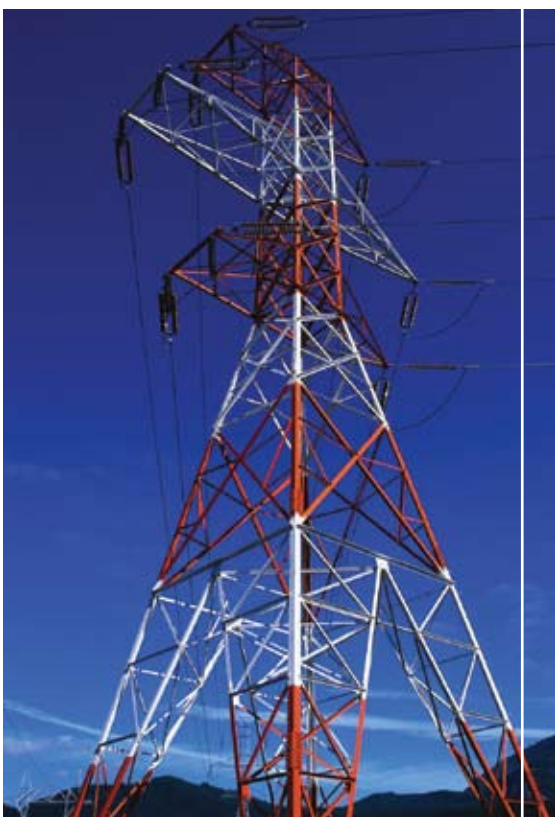
Colfax Corporation is a world leader in the development, engineering, manufacturing, distribution, service and support of pumping and fluid-handling systems. Specializing in positive displacement and centrifugal technologies, our products support a wide range of industries, from Power Generation and Oil & Gas to Commercial and Navy Marine to a broad range of Industrial applications. For over 10 years, Colfax has remained at the forefront of fluid-handling management by focusing on customer needs for reliable performance around the world.

Colfax Corporation has built the company on strong legacy brands, those that lead the industry with cutting edge pump technologies and fluid handling solutions. While Allweiler, Houttuin, IMO, Portland Valve, Tushaco, Warren and Zenith represent a full-spectrum of diverse pump products and extensive expertise in critical and demanding applications, they share a single-minded focus on commitment to customers.

Colfax Americas

Colfax Americas serves as the solution provider in fluid handling applications throughout North and South America. Our comprehensive network of direct salespeople, independent distributors and representatives allows us to provide our customers with the local sales support and inventory they require.

Our customers represent diverse end use markets including power generation, crude oil transport, refinery, machinery manufacture, marine, hydrocarbon processing, pulp and paper, polymer and various other process industries. Colfax products meet the strict requirements of our customers' applications and can offer precise, pulseless, and reliable performance. Our experienced engineering staff can help you solve complex design, application, and process issues. We design and develop systems to meet our customers' unique needs – in the Americas and throughout the world.



Applications



Unloading

The application requires the transfer of liquid fuel from a railcar, truck or vessel to a storage facility. This will typically involve high flow pumps operating under low pressure. Depending on fuel type and location, pumping at elevated fluid temperatures may be required

Fuel Forwarding

The application requires the movement of liquid fuel from a storage location to the (Turbine Island). Often, the storage location is remote and fuel must travel some distance before reaching the injection or boost pump. In cases such as this, pumps are needed to ensure that positive pressure at the inlet of the injection pump is maintained.

Fuel Injection

The application requires the injection of liquid fuel into either the fuel flow divider or directly to the atomization nozzle on smaller gas turbines. Typically, system pressures range from 800psig to 1500psig.

Jacking

The application requires lifting of a turbine or generator rotor shaft prior to and during operation. Typically, rotor shafts rotate in journal bearings. This design requires hydraulic oil be pumped into bearing clearances, usually at high pressure, so that the rotor shaft may rotate freely.

Control Oil

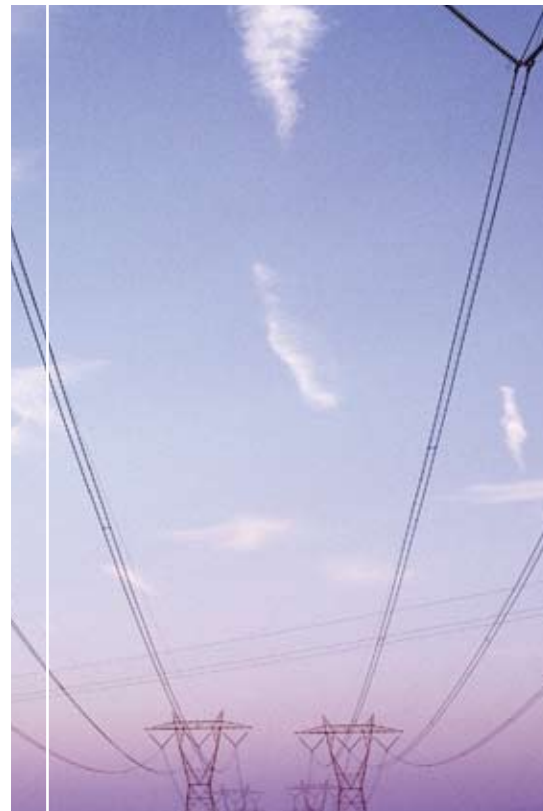
The application is typically found on steam turbines and requires oil to be pumped under low system pressure into a governor to control the speed of and/or load output of the turbine.

Lube Oil

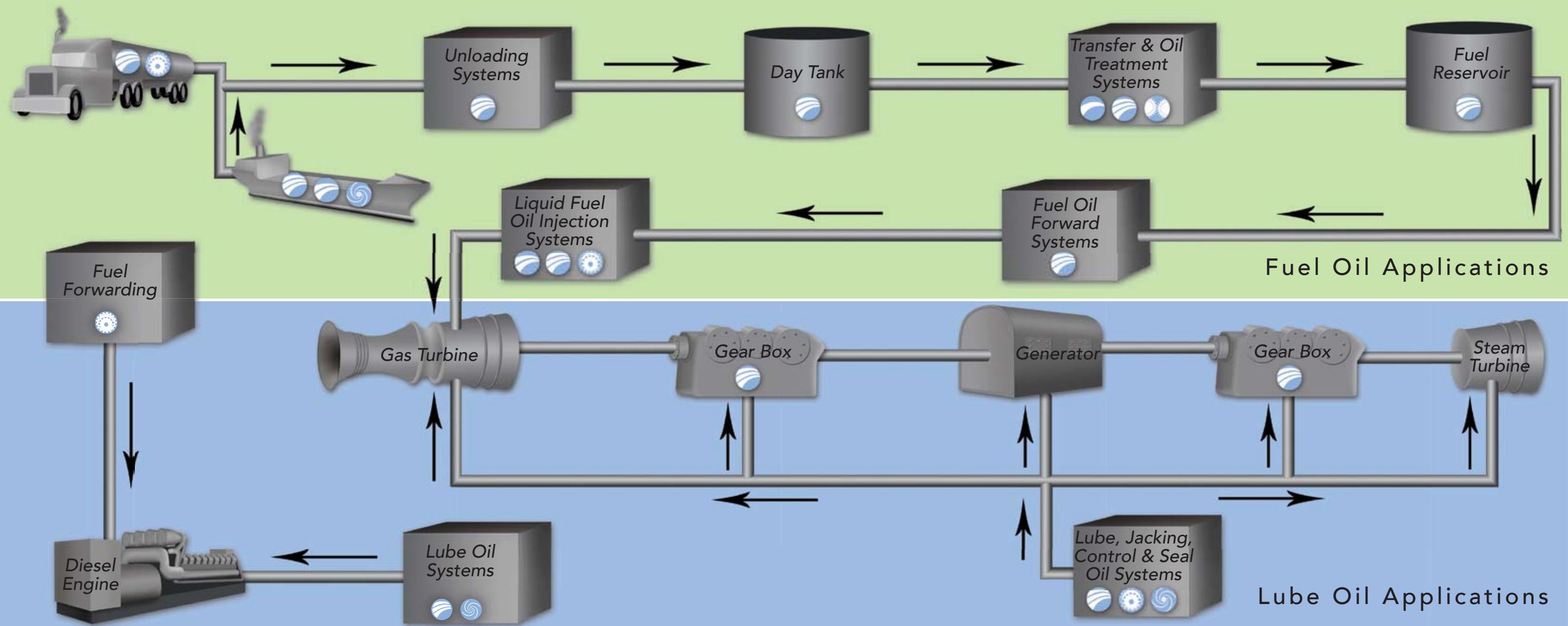
The application requires lubricating oil to be pumped under low system pressure to the rotating element of the gas turbine and/or generator during operation. Standard systems include a main and auxiliary lube oil pump. For emergency service, a DC powered lube oil pump is typically included in the system.

Seal Oil

The application requires oil to be pumped under high system pressure into the seal housing cavity of a generator or compressor. The force of the oil against seal rings located within the housing cavity limits the amount of hydrogen consumption within the generator or compressor.



>> OIL SYSTEM SOLUTIONS FOR POWER GENERATION



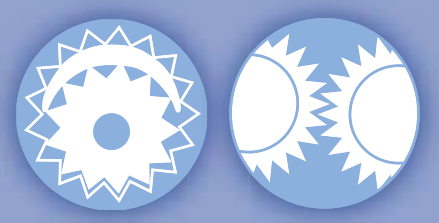
**Progressing Cavity
Pumps & Systems**

Max Flow: 2000 gpm
Max Pressure: 600 psig



**Two-screw
Pumps & Systems**

Max Flow: 5000 gpm
Max Pressure: 1200 psig



**Precision Gear
Pumps & Systems**

Max Flow: 230 gpm Max Flow: 7 gpm
Max Pressure: 5000 psig Max Pressure: 2500 psig



**Three-screw
Pumps & Systems**

Max Flow: 3300 gpm
Max Pressure: 4500 psig



**Centrifugal
Pumps & Systems**

Max Flow: 6000 gpm
Max Pressure: 400 ft/head

Max flows and pressures shown are independent pump ranges



« Products »

Location: Northeastern US
Application: Fuel Forwarding
Pump Model: 8L-400
Pressure: 800 psig
Flowrate: 220 gpm



Location: Thailand
Application: Fuel Unloading
Pump Model: 236 Series
Pressure: 500 psig
Flowrate: 530 gpm



Location: Western Canada
Application: Fuel Treatment
Model: AE4N
Pressure: 350 psig
Flowrate: 50 gpm



Location: Florida
Application: Lube Oil
Model: NSSV
Pressure: 125 psig
Flowrate: 800 gpm



Location: Latin America
Application: Fuel Injection
Model: 86200RIW039A
Pressure: 1100 psig
Flowrate: 70 gpm



Features & Benefits



Feature

Benefit

3-Screw

- | | |
|--|---|
| <ul style="list-style-type: none"> • Hardened rotor set • Bimetal construction • Replaceable rotor housings • Carbide coated high velocity areas • Single seal & bearing • Axial flow design • Balanced hydraulic forces • No ball bearing (double suction design) | <ul style="list-style-type: none"> • Long life on contaminated product • Increased pressure capability • Field repairable • Increased wear resistance • Reduced maintenance costs • Reduced NPSHR • Long bearing & seal life • High temperature operation |
|--|---|

2-Screw

- | | |
|--|--|
| <ul style="list-style-type: none"> • Double suction • External bearings & gears • Non-contacting rotors • Very low axial velocity • Large flow cavities • High temperature materials • Hardened rotor set | <ul style="list-style-type: none"> • Balanced forces / Low fluid velocity • High fluid contaminate capability • Dry run capability • Excellent NPSH capability • High viscosity capability • Operational capability to 600° F • Long rotor life |
|--|--|

Progressing Cavity

- | | |
|---|--|
| <ul style="list-style-type: none"> • Ductile chrome plated rotor • Various stator elastomer materials • Oil filled & sealed con rod joint • Equal wall stator • Open hopper design available | <ul style="list-style-type: none"> • Increased wear resistance • Increased fluid compatibility • Long life on contaminated fluid • High pressure capability • Extreme high viscosity capability |
|---|--|

Centrifugal

- | | |
|--|---|
| <ul style="list-style-type: none"> • Internally lubricated upper thrust bearing • Anti-vortex vanes • Large hydraulic selection • Lower ball bearing located close to the impeller | <ul style="list-style-type: none"> • 25,000 hours of maintenance free operation • Prevents air entrainment in the oil • Selections at Best Efficiency Point • Reduces axial loading |
|--|---|

Precision Gear

- | | |
|--|---|
| <ul style="list-style-type: none"> • High tolerance dimensions • Hardened gears • Stainless steel materials available | <ul style="list-style-type: none"> • Precision metering capability • Increased pump life • Ability to pump aggressive fluids |
|--|---|





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