



# GLOBAL SOLUTIONS FOR OEM

ORIGINAL EQUIPMENT MANUFACTURERS





## YOUR SINGLE SOURCE PARTNER

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CIRCOR is redefining what's possible in fluid-handling and transfer for OEMs like you, building systems to support power or industrial applications. You're faced with demanding clients, under increasing economic, competitive and regulatory pressures. We understand you need more than a pump. You need a partner who can help you design and deliver the most reliable, efficient and innovative solutions. And you can count on CIRCOR for:

- Pump technologies and custom engineered systems for every application
- Reliable performance to grant maximum uptime for your customers
- Commitment to environmental responsibility and regulatory compliance
- Solutions to keep your products competitive in a tough global economy
- Innovative engineering solutions and cross-functional teams to support the concept process
- Experts who understand your business needs and solve your problems

As your single source global partner, we call this value to you and your customers, Total Savings of Ownership.

## BEST-FIT SOLUTIONS

### FROM ONE RELIABLE RESOURCE ANYWHERE IN THE WORLD

For you, it's about uptime, building systems that ensure run-time consistency without fail, despite operational and environmental challenges. CIRCOR lives in your world of short-cycle projects and lean resources. We understand the value of a global single-source supplier, one who can work with you from the beginning of the design process to help build the specifications. Our mission is to maximize your Total Savings of Ownership by proving pumps and fluid handling systems that reduce energy use, downtime, and costs associated with unscheduled maintenance, labor, and replacement parts.

### HIGH QUALITY, ON-TIME DELIVERY, AND COMPETITIVE PRICING.

In today's market these are no longer strategic advantages, but expectations from your customers. As a complete fluid-handling system provider, CIRCOR can help you meet these demands.

**Quality:** Ensured through rigorous adherence to CBS - the CIRCOR - and ISO 9001 standards

**On-time Delivery:** With manufacturing facilities worldwide, CIRCOR delivers the parts you need, when you need them.

**Competitive Price:** Is achieved by leveraging our broad product portfolio to find the best-fit solution for your application, whether for a single pump or a complete fluid-handling system.



### A GLOBAL REFERENCE

#### PROJECT:

Yanbu II Gas Turbine Power Plant  
Saudi Arabia



#### CHALLENGE:

The OEM providing systems for the Yanbu II power plant in Saudi Arabia needed pumps that were suitable for moving Arabian Light Crude (ALC) and lubricating oil, which require special seal types and materials. Seals must comply with API standards and diagrams, sometimes in the form of double-acting mechanical seals and flushed seals. Material compatibility is also a critical factor for reliable performance with these fluids.

In addition to the technical challenges, the OEM required a partner who could provide on-site support at their facility during the equipment build and also at the power plant in Saudi Arabia for installation, startup, and ongoing support and maintenance.

#### SOLUTION:

Due to their positive past experiences with Allweiler screw pumps, the OEM approached CIRCOR to evaluate the application. Working closely together to ensure that reliability and material compatibility requirements were satisfied, CIRCOR Fluid Handling and the OEM determined that the Allweiler screw pump was the best solution for this application.

The Allweiler pumps are operating reliably on three gas turbine generators, each providing 230MW of output.

*Power and Industry Products & Services*

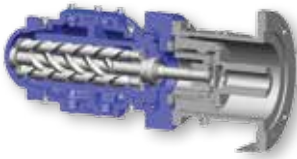
ALLWEILER® HOUTTUIN™ IMO® WARREN®

# CUSTOM FLUID HANDLING SYSTEMS

## WITH THE RIGHT PUMPING TECHNOLOGY FOR EVERY APPLICATION

With a broad portfolio of pumping technologies and the engineering and application expertise to design innovative, customized systems, CIRCOR delivers the right solution for power generation and industrial applications.

### COLFAX FLUID HANDLING TECHNOLOGIES



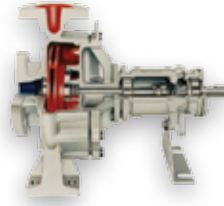
#### THREE-SCREW PUMPS

Simple design with only three rotating parts. Pulse-free flow with extremely low vibration and noise levels and high-pressure boost capabilities even when handling low-viscosity fluids.



#### TWO-SCREW PUMPS

Versatile, self-priming horizontal and vertical screw pumps with tremendous product viscosity range, for lubricating and non-lubricating liquids.



#### CENTRIFUGAL PUMPS

Custom designed to specific application requirements with a wide range of viscosities and both aggressive and non-aggressive fluids. Dynamically balanced impeller to reduce vibration.



#### PROGRESSING CAVITY PUMPS

Simple and economical pump design requiring only one shaft seal. Able to handle fluids contaminated with large percentages of abrasive solids.



#### PROPELLER PUMPS

Horizontal or vertical pumps with large flow rates up to 12 meters. Materials, installation and drive can be adapted to the operation and assembling conditions.



#### GEAR PUMPS

CIG (Crescent Internal Gear) pumps deliver long life and maintenance-free operation. Modular, single- or multiple-stage design handles low or high pressures and viscosities as low as 0.5cst.



#### PERISTALTIC PUMPS

Dry, self-priming, sealless, valveless rotary displacement pumps for pumping or dosing liquids with high solids content.



#### ENGINEERED SYSTEMS

Design and manufacturing of packaged systems according to API, Non-API and client- or project- specific requirements.



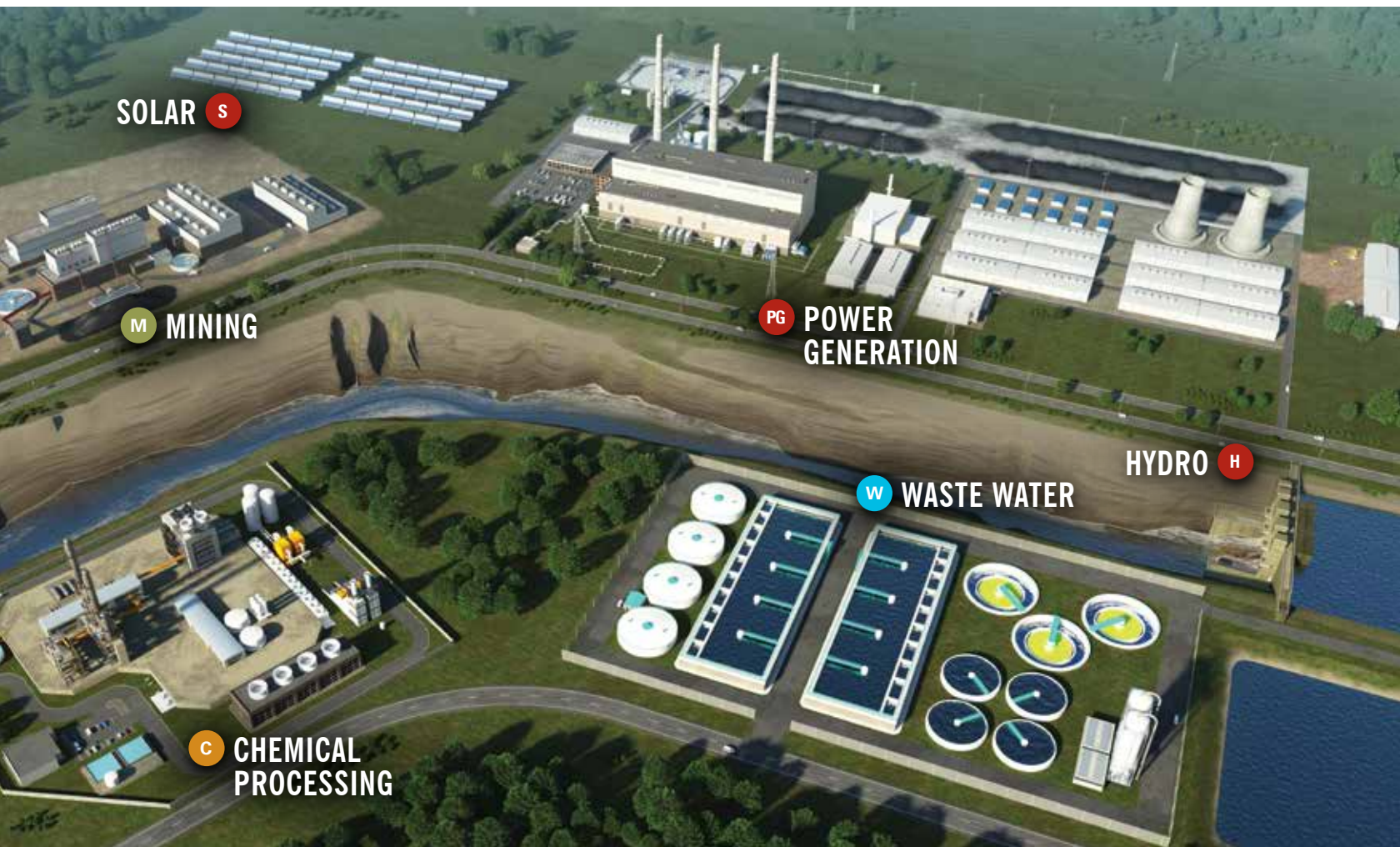
#### SMART TECHNOLOGY

Fully automated electronic monitoring and control system that provides Total Savings of Ownership by preventing hazardous running conditions, optimizing processes, and lowering maintenance and spare parts cost.

P  
PULP  
& PAPER







## APPLICATIONS

### PG POWER GENERATION

- Fuel Uploading/Forwarding/Transfer
- Rotor Jacking
- Lubrication
- Fuel or Burner Injection
- Chemical Metering
- Hydrogen Cooled Generation Seal Oil
- Oil Service
- NOx Reduction

### H HYDRO

- Bearing Lift
- Hydraulic Governor
- Turbine Blade Pitch Control
- Hydraulic Wicket Gate Control

### S SOLAR

- Heat Transfer Fluids

### M MINING

- Chemical Treatment
- Fuel Oil Transfer
- Rotating Equipment Lubrication
- Explosives Transfer
- Waste Treatment
- Ball Mill Lubrication
- Flocculant Addition

### W WASTE WATER

- Primary Treatment
- Sludge Treatment
- Final Treatment
- Industrial Wastewater Treatment
- Communal Clarification Plants

### C CHEMICAL PROCESSING

- Reactor Vessel Transfer
- Chemical Dosing
- Process Support
- High Temperature Fluids
- Extrusion

### P PULP & PAPER

- Impregnation
- Powerhouse
- Cooking
- Recovery Process
- Coating Kitchen
- Calendaring
- Rotating Equipment Lubrication



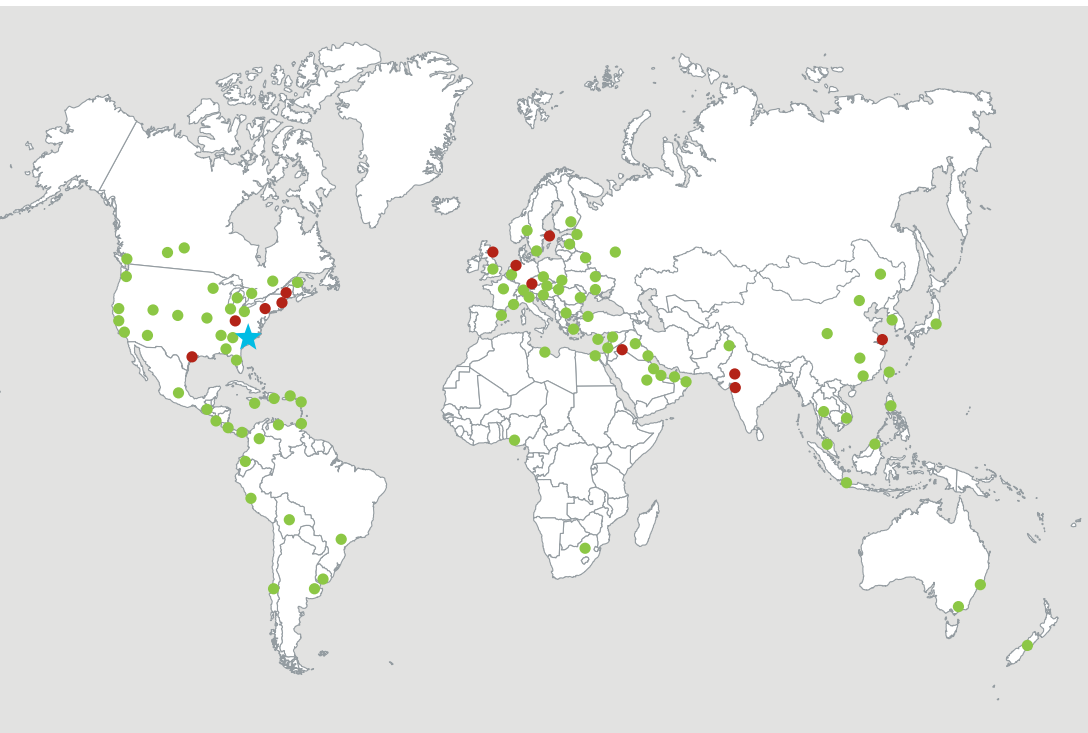
# REDEFINING WHAT'S POSSIBLE

## A PARTNER IN YOUR SUCCESS

Your CIRCOR team focuses on developing and delivering the best solution for you and your customers, whatever the challenges, wherever they are in the world. We call this value Total Savings of Ownership. Savings from CIRCOR begins with a fair price. But Total Savings of Ownership is so much more, a value equation that includes bottom-line improvements and maximum performance of your product offering, made possible by more efficient and reliable CIRCOR pumps and systems.

With our deep base of knowledge, engineering experience and application expertise in power generation and industrial applications, you have the reassurance of a partner who will focus on the needs of you and your customers. And with our unparalleled service and support, you have the reassurance of immediate response, knowing that you and your customers will have what they need when and where they need it. CIRCOR is committed to being a partner in your success by redefining what's possible for you and your customers.

### REDEFINING GLOBAL SOLUTIONS



CIRCOR maintains regional engineering and manufacturing facilities to support you around the world and around the clock.

- ★ Global Headquarters
- Regional Manufacturing and Engineering Support Facilities
- Global Distributor Network

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