

# John Crane Couplings

*Your Partner in Power Transmission*



John Crane's flexible couplings have been providing a rugged and reliable service to industry for over fifty years, helping rotating equipment operate at optimum levels and providing maximum availability.

As a result, John Crane couplings have become the first choice of many of the world's leading companies. John Crane's policy of constant innovation and product development serves to ensure that we continue to satisfy the changing demands of the market while fully complying with all relevant industry standards.

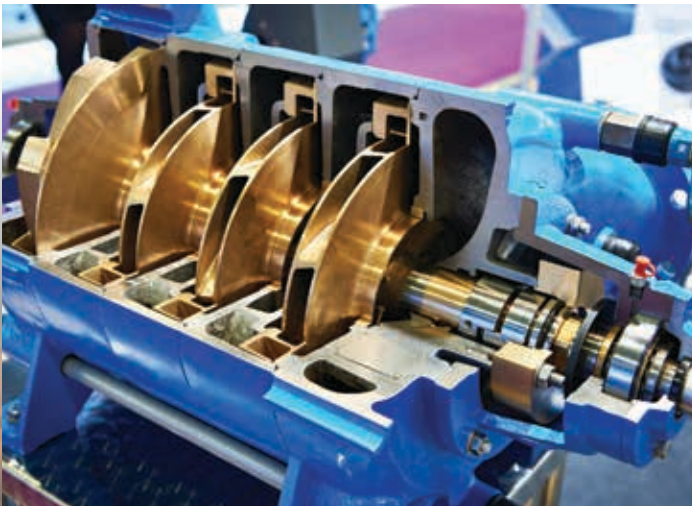
# Your operations never stop, and

Today's operators are faced with great challenges — less downtime, reduced maintenance budget, longer operating periods, increased process parameters — all while running a safe and efficient process. At John Crane, we understand that careful selection and design of your power train is important to ensure your process starts up the first time and operates every day through the most stringent conditions. Together, we will work with you to keep your mission critical operations up and running.

**Designed to fit your needs:** No two operations or machines are exactly the same, and John Crane is ready to find the optimum solution for your specific needs. John Crane has engineering expertise and support available around the world with experts who can provide selection, design, and troubleshooting advice to help keep you running. With experience in Oil and Gas, Chemicals, Pharma, Power Generation, Water / Wastewater, Pulp & Paper, Mining and Marine, you can design with confidence knowing John Crane has the knowledge and experience to meet your needs.

**50+ years of performance:** Making a change to your critical machine drive trains creates uncertainty. You can rest easy knowing that John Crane disc membrane couplings revolutionized flexible power transmission over 50 years ago with a simple focus on reducing maintenance and extending operating life. We still maintain that focus today — every coupling we sell is maintenance free and many will outlast the machines they are installed on.

**A history of innovation:** Your operations and machines continue to evolve, and so do we. John Crane is committed to continuous innovation and R&D leveraging our years of experience, multiple test rigs, and extensive FEA analysis capabilities. We work every day to improve our technology to make sure you receive the most robust coupling solution possible.



# neither should your couplings

## JOHN CRANE PRODUCT RANGE

### A Series: Powerstream Elastomer Couplings

- Reduced downtime with urethane elastomers that can be replaced in minutes
- Available in sizes 6 – 1800 kW at 1,000 rpm
- Spacer and close coupled arrangements
- **Available options:** high temperature materials, high torque materials
- **Ideal applications:** ANSI pumps, conveyers, rolls, fans, blowers



### L Series: Metastream Disc Membrane Couplings

- Disc membrane performance in an easy to install component design for a wide range of industrial applications
- Available in sizes 7 – 25,000 kW at 1,000 rpm
- Spacer and close coupled arrangements
- ATEX compliant
- **Ideal Applications:** industrial compressors, marine drives, process pumps



### M Series: Metastream Radial Spoke Disc Membrane Couplings

- Peace of mind with drive disconnect designs in the case of torque overload
- Meets API 610, can be supplied to API 671
- ATEX compliant
- Available in sizes from 3 – 10,000 kW per 1,000 rpm
- **Available options:** spark resistant, low temperature materials, enhanced corrosion resistant materials, limited end float, axial adjustment, torsional tuning
- **Ideal applications:** critical pumps, low speed compressors, generators, electric motor drives



### T Series: API 610 Metastream Disc Membrane Couplings

- Proven API 610 performance with optimized power to weight ratio
- Available in sizes from 14 – 49,000 kW at 1,000 rpm
- Metric and imperial designs available
- Spacer or close coupled arrangements
- Meets API 610, can be supplied to API 671
- ATEX compliant
- **Available options:** spark resistant, electrically insulated, low temperature materials, enhanced corrosion resistant materials, adjustable shims, axially rigid, torque limiting
- **Ideal applications:** process pumps, small industrial compressors, low speed turbo-compressors, boiler feed pumps



### H Series: API 671 High Performance Disc Membrane Couplings

- Premium performance with optimal power to weight ratios for API 671 Turbomachinery applications
- Fully API 671 compliant
- ATEX compliant
- Standard designs for transmission unit, light weight, low moment, and co-planar solutions
- Available in sizes from 129 – 60,715 kW per 1,000 rpm
- **Available options:** spark resistant, electrically insulated, low temperature materials, enhanced corrosion resistant materials, demagnetization, axial shims, torque limiting designs
- **Ideal applications:** gas and steam turbines, high speed compressors, turbo generators, high speed gearboxes



### C Series: Metastream Rigid Couplings

- Protects vertical pumps, turbines, and mixers by eliminating shaft distortion
- API 610 compliant
- ATEX compliant
- Standard designs for spacer and close-coupled designs
- Available in sizes from 2 – 1613 kW per 1,000 rpm
- **Available options:** enhanced corrosion resistant materials, electrically insulated
- **Ideal applications:** vertical pumps, vertical turbines, vertical mixers



### ZMH: Composite Spacer Couplings

- Composite spacer, non-lubricated, flexible coupling for humid environments of cooling tower fan drives
- Shaft separations up to 6.7m
- Available in sizes from 27 – 313 kW per 1,000 rpm
- **Ideal applications:** forced draft cooling tower fans



# 50 Years of Performance and Reliability

## PULP & PAPER



- Rolls
- Lime kiln
- Vacuum pump drive
- Screens
- Digester screw drive
- Fan pumps

## MARINE



- Main propulsion systems
- Tanker loading pumps
- Bow thrusters
- Ballast pumps
- Winch drives
- Water jets

## MINING



- Slurry pumps
- Ball and SAG mills
- Blowers
- Blast hole drills
- Sizers and feeder breakers

## POWER GENERATION



- Turbo generators
- Condensate extraction pumps
- Waste water sump pumps
- Circulation pump
- Boiler feed pumps
- Cooling tower fans
- Nuclear handling equipment

## CHEMICAL



- Process pumps
- Centrifugal compressors
- Mixers
- Agitators
- Reactors
- Cooling tower fans
- Blowers

## OIL AND GAS



- API 610 process pumps
- API 671 turbomachinery
- Steam and gas turbines
- Centrifugal compressors
- Reciprocating compressors
- Cooling tower fans
- Blowers
- Boiler feed pumps

## WATER / WASTEWATER



- Main pumping station
- Transfer pumps
- Sludge and digester pumps
- Sediment tanks
- Clarifier
- Blowers
- Digester mixers

## PHARMACEUTICAL



- Mixers
- Agitators
- Reactors
- Dryers
- Process pumps

Together, we will work with you to keep your mission critical operations up and running, with support and guidance from our experienced power transmission couplings team. Plus, our 200+ rapid-response facilities can also minimize unplanned downtime by providing service, repair and support worldwide. Contact us today for a consultation with one of our couplings engineers.

[www.johncrane.com](http://www.johncrane.com)



### Global Service Network

- » Over 200 facilities in more than 50 countries
- » Close proximity to customers' operations
- » Local service and expert global support

**smiths**  
bringing technology to life

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