

OIL

CIRCULATING

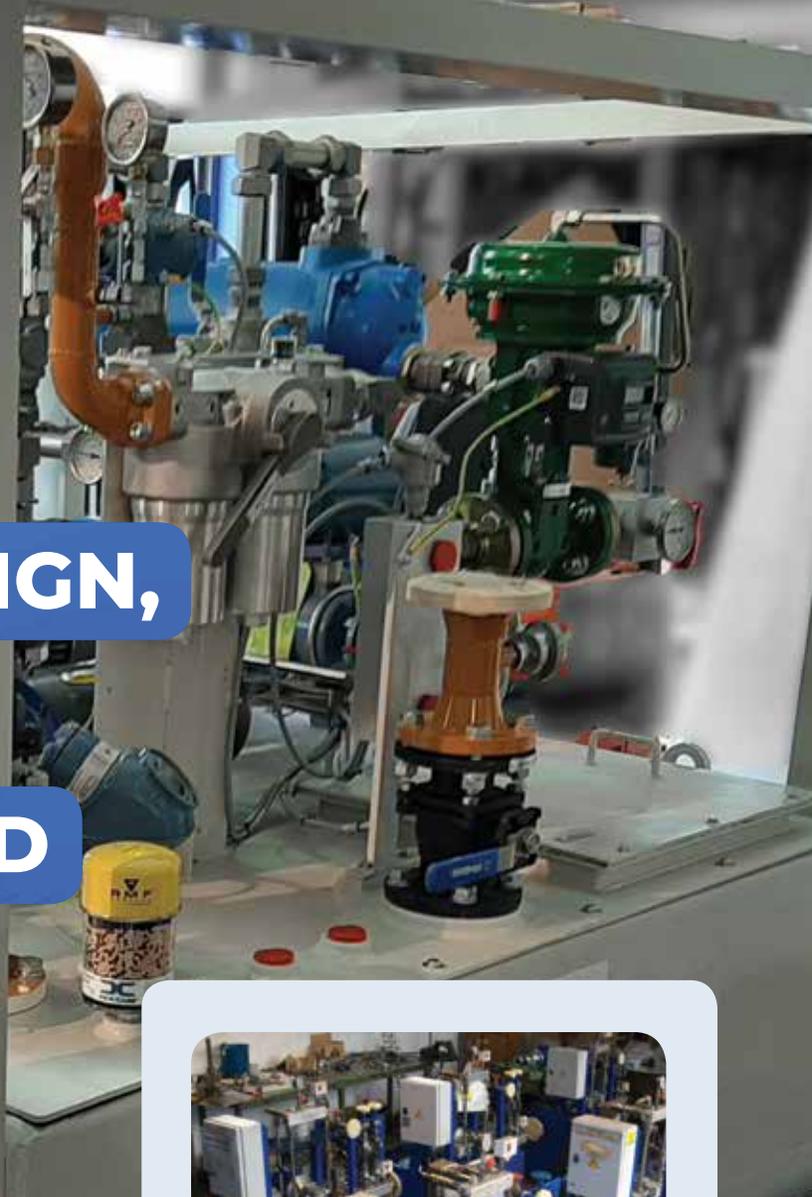
SYSTEMS

LUBRICATION, COOLING AND FILTRATION
for Optimum Utilization of Machinery and Equipment



OIL CIRCULATING SYSTEMS

A BRAND OF **BIJUR DELIMON**
INTERNATIONAL



COMPLETE DESIGN, ENGINEERED & MANUFACTURED SOLUTIONS

Bijur Delimon International is well established as one of the leading companies in the supply of Oil Circulating Systems and equipment for the optimum lubrication of bearings and gear trains.

Reliability has been the key to our success, achieved by utilizing proven design techniques, coupled with product quality and competitive pricing.



OVERVIEW OF SERVICES

- *Design of Systems*
- *Engineering*
- *Manufacture*
- *Product Offering*
- *Services & Spares*

DESIGN OF SYSTEMS

Bijur Delimon has recognized that the reliability and efficiency of a successful Oil Circulating System requires it to fulfill the following key functions:

LUBRICATION

Supplying the appropriate quantity of lubricant of the required viscosity, temperature and pressure to a bearing or gear train to prevent failure.

COOLING

By maintaining the system oil temperature and flow rate at the required parameters, the heat generated by the motion and load of bearings and gear trains is removed, ensuring that lubrication is provided at the optimum performance level.

FILTRATION

It is critical to remove contaminants, such as dust, wear particles, water, and other extraneous materials that build up during the operation of bearings and gear trains. The lubricant needs to be continually filtered to the correct cleanliness level prior to being recirculated.

Bijur Delimon Design and Support Teams work closely with customers, component suppliers and lubricant manufacturers to ensure our Oil Circulating Systems achieve the system performance levels required.

COMPLETE DESIGN SOLUTIONS

We pride ourselves on our ability to deliver the complete engineered design solution. Using the latest CAD technology, our innovative design team works together to bring your specifications to life. Through the use of technical drawings, 2D and 3D modeling, our designers ensure all specifications are met with precision without ever compromising the systems efficiency or the manufacturing process. With over 70 years of commercial experience, our dedicated team can cater for any set-up requirements and will guide you every step of the way from concept through to completion.

**TIME SERVED
EXPERIENCE
& INNOVATION**

TYPICAL SYSTEM PARAMETERS

Suitable for Mineral Oil

Applications	Industrial
Oil Viscosities	Up to and including 1500 cSt at 40°C
Oil Flows	1 to 2000+ LPM
Maximum Pressure	20 Bar+
Motor Power	Up to 75 kW
Voltage	380 / 400 / 440 / 460 / 480 V
Phase	Single & 3 Phase
Frequency	50 Hz / 60 Hz
Filtration	Simplex & Duplex: 3, 6, 10, 16, & 25 Micron - Absolute and nominal ranges
Oil Coolers	Shell & Tube, Plate Type and Air Cooled
Monitoring	Level, flow, pressure, temperature switches, transmitters and visual

ENGINEERING



In providing the key functions of an Oil Circulating System, the system is built from primary equipment as outlined below.

RESERVOIRS OR TANKS

To allow for settlement, de-aeration and heating with the ability to facilitate a change of lubricant at the appropriate interval. Tank materials are typically carbon steel or stainless steel, and sized based on the system flow rate and application.

PUMPS

Normally gear or screw type, motor driven to ensure the correct amount of lubricant is delivered to the friction points. In some cases, standby pumps are provided as part of the integrated design. These can be electrical or shaft driven, dependent on the application.

HEATERS AND COOLERS

To ensure the lubricant reaches the points of application at the required viscosity. The heaters can be tank mounted or inline electric. The coolers can be plate type or shell and tube with the medium being water or water/glycol. Air can also be utilized for cooling using a fan and radiator.

FILTRATION & STRAINING EQUIPMENT

To maintain the system cleanliness. Typical oil filters will be either simplex or duplex type in the delivery line, suction line strainers, return line strainers, and tank breather/filters.

JACKING OIL PANELS

Jacking Oil Panels produce a small flow rate of oil at high pressure to lift the shaft of a bearing before it starts to rotate. Typical applications are large generators, cement kilns and ball mills.



ENGINEERING

In addition to the main primary equipment, a number of optional system components can be included, depending on the customer specification and technical requirements.

RESERVOIR LEVEL MONITORING

Visual indicators, electrical switches and/or transmitters to alert the operator of low or high oil level, and protect the pump and tank immersion heater(s) from operating when the oil level is too low.

PRESSURE MONITORING

Visual gauges, electrical switches and/or transmitters to alert the operator of low or high pressures in the oil system delivery circuit, and similar pressure differential instruments to monitor the pressure drop across the main supply filter.

TEMPERATURE MONITORING

Visual gauges, electrical switches and/or transmitters to monitor the reservoir and delivery line oil temperatures.

FLOW MONITORING

Visual indicators, electrical switches and/or transmitters to monitor the oil flow to the friction point(s), oil return to the reservoir and cooling water supply. To support this Bijur Delimon has developed the DS405 iPM Lubrication Monitor; a highly configurable product that can be used on Oil Circulating Systems and Total Loss Oil or Grease Systems respectively. Oil Circulating Systems are real-time monitoring of the flow rate of oil, typically through an oval gear flowmeter. Alternative vane or spring operated flow meters are available.

OIL CIRCULATING SYSTEMS

CONTROL VALVES

Pump relief valves to protect the pump against excessive back pressure, system pressure control valves to control the flow and pressure of the lubricant to the friction point(s), and temperature control valve to either modulate the water flow to the water/oil cooler or by-pass the cooler when fitting in the oil supply line when the oil does not require cooling.

ISOLATION VALVES / CHECK VALVES

To isolate the oil or water supply, and prevent the oil from returning to the reservoir.

AIR PRESSURE VESSELS

Used in large systems to ensure sufficient pressure exists in the system to provide lubrication to all application points during operation and run down of the parent machine in the event of a power cut.

RUN DOWN TANKS

To provide lubrication to all application points during run down of the parent machine in the event of a power cut.

RUN DOWN PUMP

Pump operating from DC voltages can be employed during run down.

MANUFACTURE



SMALL UNITS



MEDIUM UNITS



LARGE UNITS

ELECTRICAL CONTROL PANEL ASSEMBLY

Our electrical engineering team are able to provide bespoke solutions for electrical. Design service from power supply to control panel and beyond. As standard, and if required, our systems are pre-wired at the factory.



OIL CIRCULATING SYSTEMS

SERVICES & SPARES

Maintaining Systems Throughout Their Lifetime

Bijur Delimon, either on a fixed contract or call-out basis, can maintain systems throughout their lifetime.

Our Service Department also operate contracts to provide labor to maintain plant in their client's works including system repairs, filling automatic grease systems, manual grease systems, manual greasing, and checking/filling oil reservoirs, gearboxes, etc.



**ROBUST
SYSTEMS
DESIGN**

**ENGINEERING
EXCELLENCE**

**MANUFACTURING
QUALITY**

**SERVICE
& SPARES**



Innovators of engineered lubrication technology since 1872

Bijur Delimon International has ISO 9001:2015 and ISO 14001:2015 quality certified manufacturing facilities around the world, so your centralized lubrication system meets the highest industry quality standards. It's all part of our commitment to quality and customer service.

OUR INDUSTRY LEADING FAMILY OF BRANDS



DELIMON

Farval



USA

Bijur Delimon International
2685 Airport Road
Kinston, NC 28504

(252) 527-6001 TEL
(800) 227-1063 TOLL-FREE
(252) 527-9232 FAX

GERMANY

Delimon GmbH
Arminstrasse 15
40227 Düsseldorf

(+49) 211 / 77 74-0 TEL
(+49) 211 / 77 74-210 FAX

CHINA

Nanjing Bijur Machinery
Products, Ltd.
#9 Hengtong Road
Nanjing Xingang Economic &
Technical Development Zone
Nanjing 210038

(+86) 25-85801188 TEL
(+86) 25-85802288 FAX

UNITED KINGDOM

Denco Lubrication Limited
Ramsden Court
Ramsden Road
Rotherwas Industrial Estate
Hereford, HR2 6LR

(+44) (0) 1432365000 TEL
(+44) (0) 1432365001 FAX

IRELAND

Bijur Lubricating Ireland Limited
Gort Road
Ennis, County Clare

(+353) 6568-21543 TEL
(+353) 6568-29667 FAX

FRANCE

Bijur Products, Inc.
PB 50 - 9 Avenue du Quebec
ZI de Courtabœuf
Villebon Sur Yvette
F-91942 Courtaboeuf Cedex

(+33) (0)169298585 TEL
(+33) (0)169077627 FAX

SPAIN

Bijur Delimon International
- Lubrimonsa
Avenida Txorierrri 38
48150, Sondika, Bizkaia

(+34) 94-453-2000 TEL
(+34) 94-453-2500 FAX

INDIA

Bijur Delimon India Private Limited
Gat No. 448/13, Village Nigoje
Behind Mahindra Plant - Gate No. 8A
Taluka-Rajgurunagar (Khed)
District-Pune, Pin: 410 501
Maharashtra

(+91) 2032319149 TEL
(+91) 2027451725 FAX