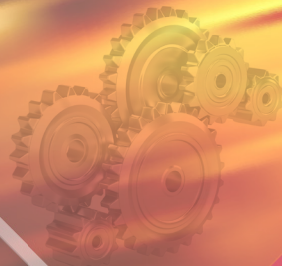


DYNAMATIC TECHNOLOGIES LIMITED



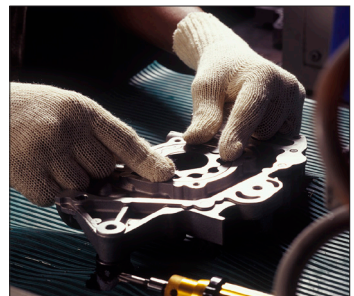
PERFORMANCE  
**THROUGH**  
REVOLUTION



**Dynumatic Technologies Limited designs and builds highly engineered products for Automotive, Aeronautic, Hydraulic and Security applications. With futuristic design, engineering and manufacturing facilities in Europe and India, the company is able to meet customers' exacting requirements on 6 continents.**

**Dynumatic Hydraulics®, a division of Dynumatic Technologies Limited, is the largest manufacturer of hydraulic gear pumps with over 1.5 million pumps produced between its state-of-the-art facilities in India, UK and the USA.**

**Dynumatic has one of the most expansive range of pumps (Gear Pumps, Axial Piston Pumps in Aluminium & Cast Iron Construction) for the most rigorous hydraulic applications and designed bespoke for pressure, flow, efficiency, size, weight and noise requirements. Dynumatic Hydraulic® has 34.3% share of business globally on the Agricultural Tractors produced and has 75% share of business on the tractors produced in India. Dynumatic also designs and builds a wide range of Control Valves, Rockshaft Assemblies and Integrated Hydraulic Solutions.**



# EXTERNAL GEAR PUMPS

## ETA SERIES HIGH PERFORMANCE

These pumps are in 3-piece construction with extruded or cast Aluminum Alloy Bodies and CAST IRON Flanges and End covers. Available in a number of frame sizes and pressure ratings of up to 220 Bar and flow range of 1.23cc/rev to 151 cc/rev in single section. These are designed for high volumetric efficiency, high mechanical efficiency and high overall efficiency and have low HEAT LOAD characteristics. These pumps come in a wide range of shafts, flanges and ports, in compliance with all international standards (SAE, DIN and EUROPEAN) and can be offered in single or multiple sections.

Pumps can be offered with a wide range of pressure, flow and priority controls integrated on board and tested in simulated conditions for the actual applications and outboard bearings for Heavy- duty requirements & mountings with indirect drive. Applications include Agricultural tractors and Harvester Combines, Material Handling, Construction Equipment, Metal cutting and Metal Forming machines, Mining, Transport fan drive and power steering systems, Plastic and Rubber Molding machines, Ground support Equipment and Test rigs.

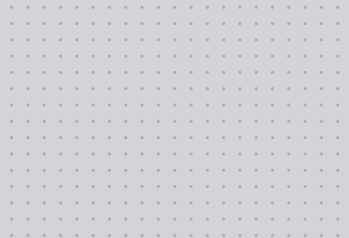
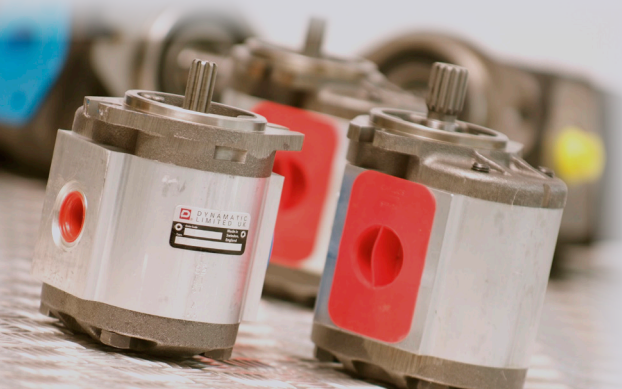


## **DURA SERIES** HIGH PRESSURE

The high-pressure external gear pumps are available in Aluminum construction and have figure of 8, pressure balanced floating bearings, rated for peak pressures of up to 275 Bar and flow range of 5.1cc/rev to 31.5 cc/rev in single section. The HP series pumps are designed for speeds of up to 4000 rpm. These pumps come in a wide range of shafts, flanges and ports, in compliance with all international standards (SAE, DIN and EUROPEAN) and in single or multiple sections.

Pumps can be offered with a wide range of pressure, flow and priority controls integrated on board and tested in simulated conditions for the actual applications and outboard bearings for Heavy- duty requirements & mountings with indirect drive.

Suitable for industrial & off highway vehicle applications, presses, plastic & blow molding applications, test rigs and ground support equipment, drilling rigs, material handling, mining, Agricultural & turf machinery.

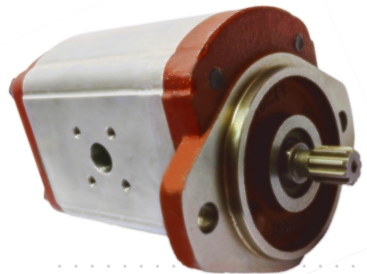


## SILO SERIES LOW NOISE

**SILO series** pumps are designed with optimized pressure pulsations and profile matched for reduced noise emissions of up to 5 dBA compared to the standard series and oscillations in the system. The S series of pumps are available in 4.5cc/rev to 32 cc/rev in single section and can be offered in multiple combinations. These pumps are rated for peak pressures of up to 250 bar and maximum rpm of 3500.

These pumps come in a wide range of shafts, flanges and ports, in compliance with all international standards (SAE, DIN and EUROPEAN) and in single or multiple sections.

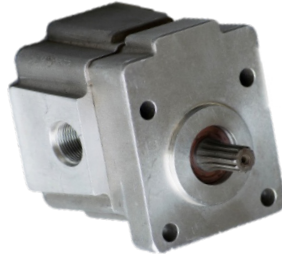
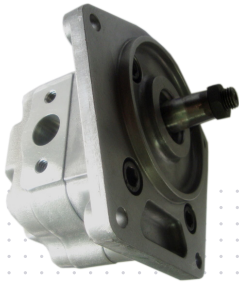
Pumps can be offered with a wide range of pressure, flow and priority controls integrated on board and tested in simulated conditions for the actual applications and outboard bearings for Heavy-duty requirements & mountings with indirect drive. Suitable for a wide range of applications especially with low noise as a key requirement.



## **ATOM SERIES** COMPACT DESIGN

The Compact ATOM series pumps are available in 2 piece, all Aluminum construction. These pumps are available either in monolithic Flange & Body with end cover or monolithic body & end cover with flange configuration. These are light weight and smaller in form factor and thus have a lower energy footprint.

These pumps are available in flow range of 2cc/rev to 27 cc/rev in single section and peak pressure rating of up to 250 Bar. Designed for continuous rated running speeds up to 3500 rpm and wide range of shafts, flanges and ports, in compliance with all international standards (SAE, DIN and EUROPEAN) and in single or multiple sections. They are suitable for use on Agri Tractors, Harvester Combines, Industrial and Off Highway applications.



## **LITTLE MASTER**

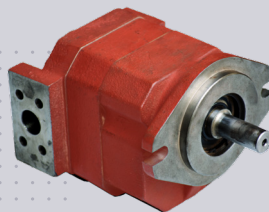
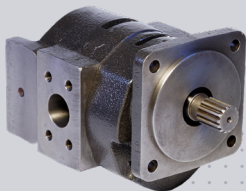
LITTLE MASTER pumps are ultra compact and have smallest form factor for their specifications. These pumps are available in flow ranges of 0.8 cc/rev to 5 cc rev and peak pressure ratings of 175 bar. They are designed for use on mini battery operated power packs, tippers, piggyback charge pumps.



## **KRATOS SERIES CAST IRON PUMPS**

Dynumatic Heavy duty Cast Iron Pumps designed for continuous operating pressure ratings of 250 bar and peak pressures of 280 bar for rigorous load and duty cycles and tough operating conditions.

These pumps are available in various frame sizes and mounting options for use on off highway vehicles, material handling, mining, forestry, turf, mining and offshore applications. The flow range is 12cc/rev to 112 cc/rev and running speeds of 3500 rpm.

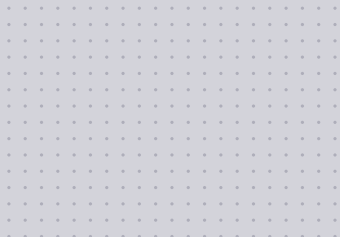


# INTERNAL GEAR PUMPS

## IGP SERIES

IGP series pumps are compact and have high energy density. These pumps have very low-pressure pulsations and considerably reduce noise compared to external gear pumps. Available for a wide range of flow and pressures.

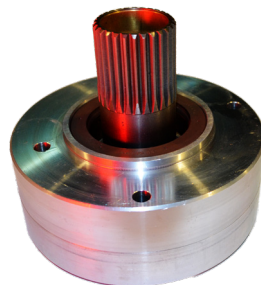
These pumps are available in flow range of 2cc/rev to 27cc/rev in single section and peak pressure rating of up to 120 Bar. Designed for continuous rated running speeds up to 3500 rpm and wide range of shafts, flanges and ports, in compliance with all international standards (SAE, DIN and EUROPEAN) and in single or multiple sections. They are suitable for use on Agri Tractors, Harvester Combines, Industrial and Off Highway applications.





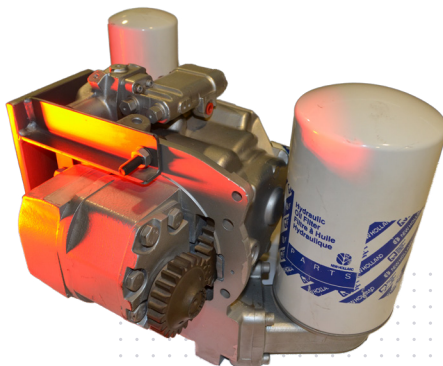
## GEROTOR PUMPS

Designed for low pressure requirements, these pumps have very low noise and can be used in wide range of fluid viscosity and speed.



## AXIAL PISTON PUMP

Dynapac designs and builds variable delivery Axial piston pumps with peak pressure rating of 350 bar and with various on board controls for use on energy efficient Mobile and Industrial applications. These pumps are available for flows up to 72cc/rev.



# HITCH CONTROL VALVES

A core function of tractors is the efficient and soil-preserving transmission of machine forces during field use. The attachments required for field use are connected to the tractor's hitch and can be lifted or lowered using the hitch control. This hitch control plays an important role and is a standard feature on today's tractors. It gives farmers numerous useful functions for efficiently and conveniently managing their tasks.

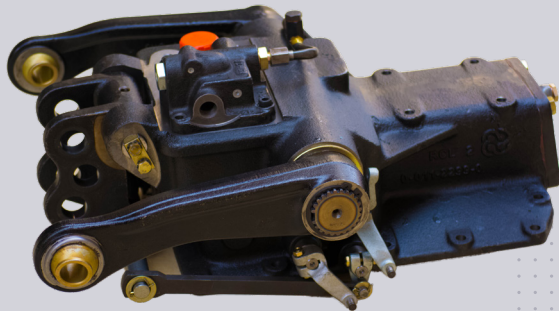
Dynamatic designs and builds hydraulic hitch control valves for Agricultural tractors and is an OEM supplier to large tractor manufacturers. These valves are designed for different pressure and flow capacities.



# TRACTOR LIFT ASSEMBLY

Dynamic designs and builds complete Rock shaft assembly with integrated hitch control valve for Agricultural Tractors and is currently supplying these to leading OEMs in the Industry.

These assemblies are designed bespoke for the tractor and are tested as per the actual load and working cycles of the tractor. They come with depth and draft sensing options and are available for a wide from of tractor horse power.



## STEERING VALVES

Dynamatic designs and builds hydraulic steering units with various integrated valve options. These units are designed keeping in mind highest standards of safety and operator comfort and are ideal for smooth driving and maneuvering. Dynamatic Orbitrol steering control units are designed for use on closed and open loop hydraulic circuits for work and propel systems. These are offered bespoke for agricultural, Off- highway vehicles, construction, forestry, lawn and garden equipment.



## CONTROL VALVES

Dynamatic designs and builds a wide range of mobile control valves with flow range up to 80 lpm and pressure range of up to 315 bar. These valves come in a number of configurations of spools and actuation controls, spools with metering notches, in monobloc and sectional construction and are designed considering operator fatigue and ease of operation. These valves are designed for low pressure drop and low internal leakage characteristics.



# HIGH SPEED LOW TORQUE MOTORS

Dynamatic designs and build Low torque high -speed gear motors in various frame sizes and displacements. These motors are available in uni-directional and bi-directional configurations and also come with integrated valve and circuitry options.



## **HELIX** LUBE OIL & SCAVENGING PUMPS

HELIX range includes large helical gear pumps for displacement upto 1800 lpm and pressure ratings of less than 50 bar for lubrication and scavenging applications on high horsepower engines.



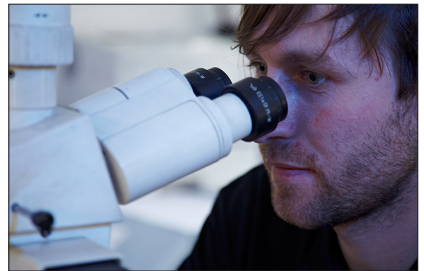
## DESIGN AND DEVELOPMENT

Dynamic has state-of-the-art R&D capabilities in India and UK and houses very advanced labs for rapid proto-typing. The company also has very hi-tech metallurgy labs in Germany and India.

The R&D Center at Bangalore, has been certified by the Department of Scientific and Industrial Research (DSIR), Government of India, since 2001.

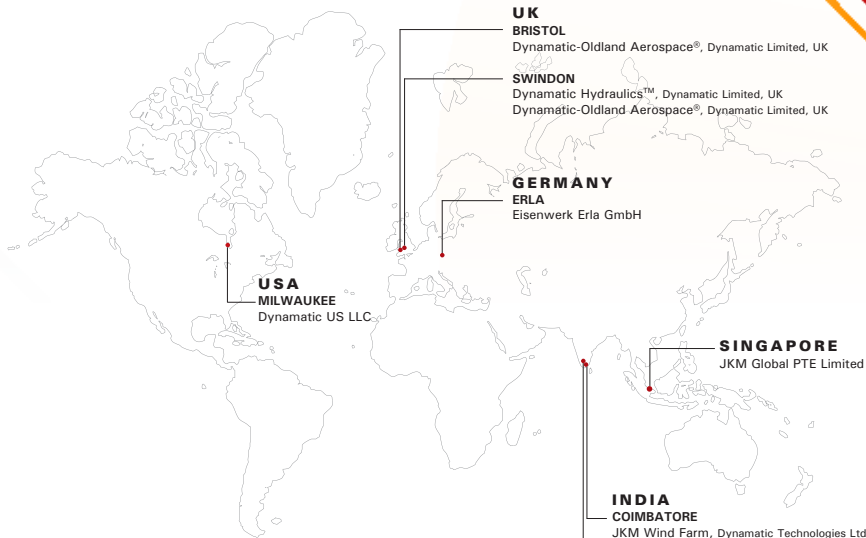
The Material Science Laboratory in Germany holds several patents on special metals and alloys with high thermal capabilities.

The Dynamic Engineering, in Swindon, UK, specializes in designing product and solutions for the Mobile Hydraulics Sector and holds a number of patents to its credit. This facility houses comprehensive product testing and validation capabilities.









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## GERMANY

### ERLA

Eisenwerk Erla GmbH

## SINGAPORE

JKM Global PTE Limited

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Technologies Ltd.

JKM Research Farm Limited

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