

# Key Product Data



**Our precision machined components** are incorporated into a wide range of finished assemblies **produced by industry leaders around the world**



**Piston Pump**



**Gear Pump**



**Vane Pump**



**Brake Valve Assembly**



**Hitch Control Assembly**



**Hydraulic Valves**



**Hydraulic Control Systems**



**Steering Valves**



**Tractor Lift Assembly**



**Control Valves**

# Control System Components



**Spools**



**Manifolds**



**Bolts**



**Sleeves**



**Sleeve Assemblies**



**Relief Valves**

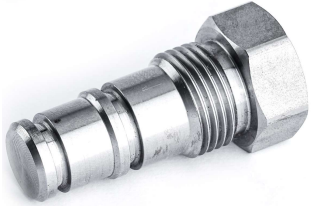


**Cages**



**Tie Rods**

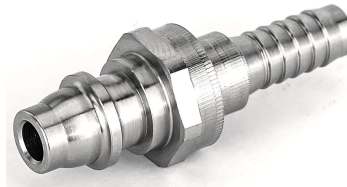
# Hydraulic System Components



**Adaptors**



**Pistons**



**Nozzles**



**Plungers**



**Splungers**



**Tension Rods**



**End Caps**



**Poppets**



**Cartridges**



**Lash Adjusters**



**Pins**



# Piston Pump Components



**Piston Shoe and  
Barrel Assembly**



**Piston**



**Piston and  
Shoe Assembly**



**Retainer**



**Squash Plate**



**Slipper**



**Control Sleeve**



**Control Piston**



**Compensator**



**PMAx Assembly**

# Turned Components



**Helical Gears**



**Oil & Gas Parts**



**Roller**



**Track Shifters**

# Shafts



**Drive Shafts**

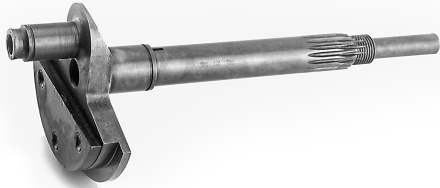


**Hydraulic Shafts**



**Rock Shafts**

# Aerospace



**Cam Shaft**



**Cylinder Head**



**Gear Housing**



**Housing**



**Inlet Fan**



**Nose Cone**

# Gear Pump



**Drive Gears**



**Driven Gears**

# Spools – Technical Data



**12L14/1215, EN1A, 1144,  
16MNCr5, 8620, 4140, SCM  
415/420**

Material

**Upto 300 mm**

Length

**0.001 mm**

Roundness

**0.001 mm**

Straightness

**4mm – 30 mm**

Diameter

**± 0.001 mm**

**(Need to co-relate with  
the gauge & measuring  
temperature)**

Tolerance

**0.002 mm**

Cylindricity

**(less than 0.4 Ra) Heat  
Treated, Hard Chrome  
Plated**

Finishing



# Sleeves | Cartridges | Cages – Technical Data



**12L14/1215, EN1A, 1144,  
16MNCR5, 8620, 4140, SCM  
415/420, Cast Iron**  
Material

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**Up to 100 mm**  
Length

---

**We can match assembly  
with OD & ID of 2 micron  
total tolerance**  
Match assembly

---

**0.001 mm**  
Straightness

---

**4mm – 25 mm**  
**(Honing/Hard turning)**  
Bore Diameter

---

**± 0.0015 mm**  
**(Need to co-relate with  
the gauge & measuring  
temperature)**  
Tolerance

---

**0.002 mm**  
Cylindricity

---

**(less than 0.4 Ra) Heat  
Treated, Casting**  
Finishing

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# Plungers | Poppets | Splungers – Technical Data



**12L14/1215, EN1A, 1144,  
16MNCr5, 8620, 4140, SCM  
415/420**

Material

**4mm – 25 mm**

Diameter

**Upto 100 mm**

Length

**± 0.0025 mm  
(Need to co-relate with  
the gauge & measuring  
temperature)**

Tolerance

**0.001 mm**

Roundness

**0.002 mm**

Cylindricity

**0.002 mm**

Straightness

**(less than 0.4 Ra) Heat  
Treated**

Finishing

# Gears | Shafts – Technical Data



**16MNCr5, 8620, 4140, SCM  
415/420**  
Material

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**12mm – 35 mm**  
Diameter

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**Upto 600 mm**  
Length

---

**Upto 6 module**  
Gear Module

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**DIN 7/8**  
Class

---

**Hobbing/Rolling**  
Spline

---



**OD super finishing**  
Polishing

**(less than 0.4 Ra) Heat  
Treated**  
Finishing

# Stay Bolts | Tie Rods



**Steel with Tensile Strength up to 1200 Mpa**

Material

**Up to 600 mm**

Length

**Up to 12 mm**

Diameter

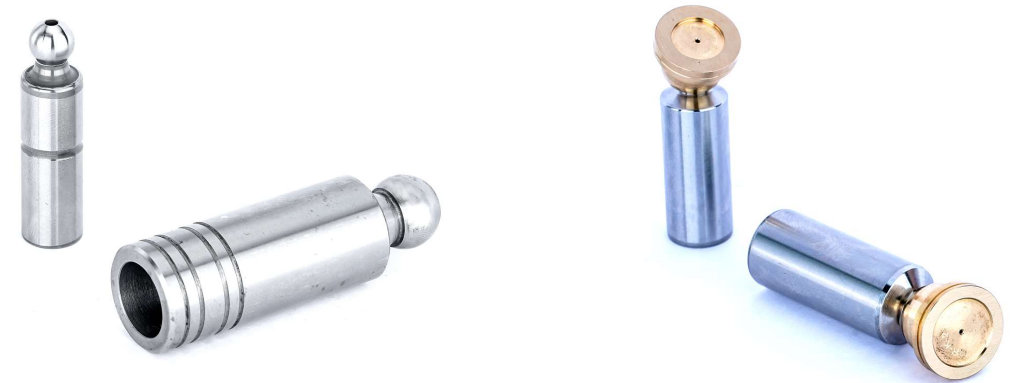
**Thread rolling for  
higher thread  
strength**

Thread

**Plating with  
Hydrogen  
de-embrittlement**

Plating

# Pistons | Shoes



**SAE 8620, 16MNCr5, Bronze**

Material

**8 mm – 28 mm**

Length

**Up to 100 mm**

Diameter

**less than 0.15 Ra**

Super Finish

**less than .07 end  
play & Up to 6000 N  
pull test passed**

Crimping



# Casting Machining



**Cast Iron, Continuous Die Cast**

Material

**100 g – 20 Kg**

Weight

**Continuous 5  
Axis Machining**

Capability

**High Pressure and  
Ultrasonic Cleaning**

Cleaning

# Manifolds



**Aluminum, Casting, Mild Steel**

Material

**Up to 200 x 200 mm**

Size

**Up to 20 Kg**

Weight

**Special deburring  
methods including  
thermal deburring is  
used for burr free part**

Deburring

**High Pressure and  
Ultrasonic Cleaning**

Cleaning

# THANKYOU



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