

# HYDRAULIC SYSTEM PARTNER POWERING YOUR BUSINESS



#### SYSTEM DESIGN

Southcott Hydraulic and Control Systems encompasses a team of hydraulic engineers and technical staff, capable of providing you with hydraulic system design. Through the use of Computer Aided Design (CAD) software, they can take your initial concept and turn it into a detailed design for prototyping and production

Our capabilities extend past just hydraulic system design through our Control Systems Group (CSG). Our engineers at CSG can design and integrate electrical control systems for complete machine automation.The entire project can be managed in-house through our engineering team.



#### 3D MODELLING & F.E.A.

Southcott engineers utilise the latest design tools available. We have standardised on SOLIDWORKS® across all our divisions for 3D modelling design. This shortens the design cycle, increases productivity and delivers innovative products to you faster through our seamless workflow.

With the use of Finite Element Analysis (F.E.A), our engineers are able to verify designs for linear stress buckling, deflection and thermal analysis. This reduces the development cost and development cycle.



#### ELECTRONIC CONTROL INTEGRATION

Through our internal Control Systems Group (CSG), we can work with you to design, manufacture and commission a dedicated electrical control system that can be integrated seamlessly with your hydraulic system.

Our electronic technicians can integrate various controllers, including industrial PLC, mobile CAN controllers, radio controls and complete wiring harnesses with feedback sensors, to deliver turnkey integrated automation of your hydraulic system.



#### INSTALLATION & COMMISSIONING

Our field technicians can be at your site to install your hydraulic system. They are equipped with hose crimpers, cut off saws, tube benders and flaring tools to be able to make tube and hose assemblies on-site. All assemblies are pellet shot cleaned and installed immediately.

We also provide system start-up procedures which include flushing all lines, filling the tank and case, winding back the system flow and pressure settings, followed by priming of the complete hydraulic system. We are equipped with diagnostic equipment to be able to set each part of the system to function at its peak performance.



#### SYSTEM ANALYSIS AUDITING

Understanding and documenting your current system is vital for reliability and system life cycle. Southcott engineers and technicians can come out to your site to perform a system analysis and provide you with any recommendations that can improve the performance.

All of our system analysis services include a detailed assessment report. We also document all parts of your system, so that you have a complete record of all components and replacement parts.



#### TRAINING

Southcott can provide a variety of training and awareness courses to ensure your staff are equipped with the required knowledge. If you are looking to become a manufacturer of hose assemblies, we can provide the training necessary to be a competent hydraulic hose assembler. We also provide training courses specifically on Southcott product knowledge, particularly suited if you have your own system designers.

As part of our total system supply we provide system training during the project hand over. These courses are tailored to the system to ensure safe operation, correct start-up and shut down procedures, and correct maintenance.



## **HOSE COUPLINGS & ADAPTORS**

Child Couplings & Adaptors are manufactured in Australia using primarily Australian sourced steel to ensure the highest quality. The manufacturing facilities are equipped with the latest CNC machinery, impulse, burst and salt spray testing equipment. 100% Australian owned.

- Permanent Crimp 2 Piece Hose Couplings
- Permanent Crimp 1 Piece Hose Couplings
- Field Attachable Hose Couplings
- Wide Range of Adaptors
- CNC Tube Bending
- Manufacture-to-Order Parts

## **HYDRAULIC VALVES**

Walvoil is a global manufacturer of hydraulic valves and complete mechatronic systems. All products are designed using the latest cutting-edge technologies and are UNI EN ISO 9001 compliant.

- Monoblock Valves
- Sectional Valves
- Pre-Compensated Load Sensing Valves
- Flow Sharing Valves

- Manual & Electrical Diverter Valves
- Bankable Solenoid Valves
- Hydraulic & Cable Remote Joysticks
- Electronic Control Units





#### **HYDRAULIC PUMPS & MOTORS**

Since 1952 Casappa has been designing and manufacturing aluminium & cast iron gear pumps, motors and piston pumps, which are compliant with ISO 9001 standards.

- Aluminium Gear Pumps & Motors
- Cast Iron GP2 Pumps & Motors
- Heavy Duty Cast Iron Pumps & Motors
- 2 Piece Cast Iron Pumps & Motors
- Truck Mount Cast Iron Gear Pumps
- Gear Flow Dividers
- Industrial Variable Displacement Piston Pumps
- Mobile Variable Displacement Piston Pumps

# HYDRAULIC POWER UNITS, MANIFOLDS & VALVES

Southcott manufacture and design custom hydraulic systems and components using the latest 3D design software with advanced CNC equipment.

- Standard Power Units
- Custom Power Units
- Integrated Manifolds (HIC)
- Variable Displacement Piston Pumps
- Fixed Displacement Piston Motors
- Transmission Pumps
- In-line Valves & Cartridge Valve Bodies
- 6HP & 9HP Log Splitter Kits





## HYDRAULIC BELL HOUSINGS & DRIVE COUPLINGS

Setco was formed in 2004 as a specialist manufacturer of power transmission components for hydraulic pump drives. Setco's range of products are manufactured using die-cast aluminium for optimum power-to-weight transfer of energy.

- SAE Mount Bell Housings
- DIN Mount Bell Housings
- Petrol Engine Mount Bell Housings
- Spider Type Drive Couplings

# HYDRAULIC CYLINDERS

PTE design and manufacture a wide range of cylinders to SAE and ISO standards. PTE cylinders are used in applications where continuous operation is required. PTE prides itself on commitment to quality.

- SLM Medium Duty Cylinders
- SLH Heavy Duty Cylinders
- Custom Welded Cylinders
- SLP Phasing Cylinders
- SHP Phasing Cylinders





# LOW SPEED, HIGH TORQUE MOTORS

Hydraulic torque motors are a low speed, high torque motor and their robust design is capable of withstanding tough operating conditions. They are designed in small and large frames to suit a diverse range of applications & machinery.

- Gerotor LSHT Motors
- Geroler LSHT Motors

- Motor with Brakes
- Wheel Mount Motors



## **HYDRAULIC HOSE & COUPLINGS**

Gates is a global corporation that manufactures hydraulic hose, systems, equipment and accessories to power the most demanding fluid power applications. Gates product meet over 20 international standards and quality certifications.

- . Hydraulic Hose & Couplings
- Industrial & Automotive Hose
- BOP Hose Assembly

- Fire Protection Sleeve
- Oil Diffusion Safety Sleeve
- Hose Accessories Range

## **QUICK-RELEASE COUPLINGS**

Faster is a world leader with over 60 years' experience in quick-release couplings and multi-connections from low to ultra-high pressure. Faster products are designed to international UNI EN ISO 9001 standards.

- Ball and Poppet QR Couplings
- Flat Face QR Couplings
- Screw QR Couplings
- Multi Faster Couplings

- BOP QR Couplings
- Stainless Steel QR Couplings
- Brass QR Couplings
- Ultra High Pressure QR Couplings





## HYDRAULIC INDUSTRIAL VALVES

Atos offers one of the most advanced lines of industrial valves and is a leader in proportional electro-hydraulic valves for industrial machine applications. Products are designed to international ISO, DIN, SAE standards to ensure quality and durability.

- Solenoid Cetop Valves
- Modular Valves
- Proportional Cetop Valves
- Stainless Steel Valves for Offshore Applications
- Safety Valves for Industrial Applications
- Explosion-Proof Valves for Hazardous Areas

#### SWAGE PRESS MACHINERY

Child crimp machines are designed and made in Australia, to meet Australian demand. These crimpers are versatile and powerful enough to solve all your crimping needs.

- 1" to 6" Crimping Capacity
- Electric version 12V, 24V, 240V & 415V
- NEW 18V Portable Power Pack for 1" Crimper
- Manual, Air/Hydraulic, Electric & Auto-Swage Control Options.
- Die, Die Rack & Quick Change Tool Available







## **HYDRAULIC ROTARY ACTUATORS**

Hydraulic rotary actuators are designed for heavy-duty, high torque motion applications. Rotary actuators are compact and efficient, and produce high instantaneous torque in either direction.

- Rotation of 90, 180 & 360 Deg.
- Drive Torque Capacity to 42,940 Nm
- Straddle & Cantilever Mount
- Load Hold Valve Mounted Directly

## **HYDRAULIC PRESSURE GAUGES**

Hydraulic systems are designed to work with a set pressure. Southcott pressure gauges are made to provide precise visual indication of your system's pressure. They are fitted with a snubber to provide stable indication and protect the gauge from pressure spikes.

- Glycerine Filled for Stable Needle
- Dial Face in 63mm and 100mm Diameter
- Dual Scale Dial Face

- Pressure Range 10 Bar to 700 Bar
- Bottom Entry, Flange Mount & Panel Mount





# HYDRAULIC PISTON PUMPS

Metaris is recognised globally as a provider of high quality hydraulic pumps for the mobile and industrial markets. These variable displacement piston pumps are interchangeable with competitor units.

- Displacement 18 to 140cc
- Operating Pressure to 280 Bar
- SAE & Optional DIN Mount

 Pressure Comp, Remote, Load Sensing & Power control

# HYDRAULIC FILTRATION

Ikron are specialists in the design and fabrication of hydraulic filters. With over 50 years' experience in designing filtration to optimise the efficiency of hydraulic systems to prolong components and system life.

- . Medium & High Pressure Filters
- Tank Top Return Filters
- Spin-on Return & Suction Filters
- In-line Pilot Pressure Filters
- Filler Breathers
- Level Gauges with Temperature Indicator
- Visual & Electrical Clogging Indicators
- Interchangeable Filter Elements





#### HYDRAULIC ACCUMULATORS

Southcott accumulators offer a reliable and efficient solution to storing hydraulic energy under pressure. They are manufactured to meet an extensive range of international and industry approvals including AS1210.

- Bladder Accumulators to 50L & 420 Bar
- Diaphragm Accumulators to 4L & 210 Bar
- Stainless Fluid Port for Special Fluids
  - . Gas Charging Kits with Regulator

## MINI POWER UNITS

Hydro-Tek manufactures compact, lightweight mini power units for industrial and mobile applications. They are a modular system designed for easy customisable configurations using the latest technology.

- 240/415V AC Power Units
- 12/24V Micro Power Units

• 12/24V DC Power Units

• Dock Leveller Power Units





## HIGH PRESSURE ROTARY SWIVEL JOINTS

Hydraulics Inc. has manufactured fluid power products since 1955, with a reputation for rugged dependability and superior quality. Designed for low-speed rotation applications and working pressures up to 3000psi.

- In-Line Swivel Joints Medium Duty up to 3000psi
- In-Line Swivel Joints Heavy Duty up to 5000psi
- Single Plane 90° Swivel Joints
- Dual Plane 90° Swivel Joints
- Parallel Plane 90° Swivel Joints
- SAE Flange Swivel Joints

## SAE FLANGE BLOCKS

Ciocca are experts in the production of hydraulic flanges compliant with SAE J518 & ISO 6162 standards. They are manufactured in Italy utilising CNC machines and are available on short delivery based on stocking policy.

- SAE Code 61 & 62 Split Flanges
- SAE Code 61 & 62 Flange Blocks
- 90° Flange Blocks

- Blanking Flange Blocks
- Flange Blocks with Test Port
- Available with UNC & Metric Bolt Kits





## HYDRAULIC CARTRIDGE VALVES

Hydraulic cartridge valves are centred on customer requirements and thus often result in tailor-made components and systems. By optimizing the layout of the overall design, we can offer compact and economic hydraulic systems that simultaneously raise the performance level of the application.

- Range Includes Pressure, Flow & Directional
- Proportional Range of Cartridges Available
- Logic Cartridges for Higher Flow Circuits
- SAE Cavity in 8, 10 &12 Size
- Pressures up to 350 Bar
- Line Mount Bodies in Alloy & Steel

# STAINLESS STEEL COUPLINGS & ADAPTORS

DBF is a premium supplier of stainless steel hydraulic fittings servicing a multitude of industries, with an extensive product range and capabilities for in-house design. Manufactured using 316 stainless steel to meet ISO 9001:2008 standards.

- SS Hose Coupling Range
- Wide Range of SS Adaptors
- . Hose Couplings Qualified on Gates Hose
- Manufacture-to-Order Stainless Fittings



## **RADIAL PISTON MOTORS**

Italgroup is a manufacturer of radial piston hydraulic motors and radial piston flow dividers with over 30 years' experience. All motors are bi-directional, customisable and interchangeable with competitor units.

- Motor Displacement 80 to 5384 cc
- High Volumetric Efficiency, Stable Output Torque
- . Working Pressure up to 250 Bar
- Splined Billet Available





## **HYDRAULIC TRANSMISSION PUMPS**

PWG has 30 years' experience in the planning, manufacturing and production of axial piston pumps and motors for hydrostatic systems and are supported worldwide through their distribution network.

- Pump Displacement 14 to 64cc
- Fixed Motor Displacement 14 to 64cc
- Variable Motor Displacement 46 & 64cc
- . Working Pressure up to 350 Bar
- Various Controllers: Manual, Hydraulic & Electric
- Through Drive Option for Tandem Configuration

## **DIAGNOSTIC HOSES & TEST POINTS**

Oleotec has been developing and producing test points for hydraulic systems since 1976. These are being distributed under the name "Mini Control System", together with a comprehensive product range of hydraulic hoses, manometers and other supplementary components.

Test Point M16x2 (Test 20 Type)

· 2mm Hose to 630 Bar WP

- · 4mm Hose to 500 Bar WP
- Available BSPP, BSPT, NPT, UNO & Metric





# BALL VALVES & FLOW CONTROLS

Gemels are world leaders that specialise in the design and production of valves for special & critical applications, providing quality customer solutions. With a wide variety of models, Gemel ball valves can be used for a variety of different applications, such as: agriculture, automotive, naval, fire-fighting and CNG.

- 2-Way High Pressure Ball Valves
- 3-Way High Pressure Ball Valves
- In-Line Needle & Flow Control Valves
- Flange & Manifold Mount Ball Valves

## **ELECTRO-HYDRAULIC CONTROLS**

Southcott's experienced electrical engineers can design and manufacture custom electronic control systems for a range of hydraulic machinery, providing a complete turnkey solution designed to complement our extensive hydraulic range.

- Kar-Tech Distributor
- Radio Control Systems
- Hand-Held Transmitters
- Push Button Pendants
- Belly Pack Systems
- Joysticks & Handles





## **HYDRAULIC TUBE CLAMPS**

Pi.effe.ci clamps are a perfect solution for hydraulic tube line clamping and fastening. The clamps are used to reduce the impact, vibration and noise in hydraulic systems. Pi.effe.ci has implemented a quality system that gives control guarantees for the whole production process.

- Light, Standard & Heavy Duty Series
- Single and Twin Line Clamps
- Multi Clamp Series

- U-Bolt Series
- Metal DIN Series
- Super Heavy Duty Series

## **HYDRAULIC MULTI-DISC BRAKES**

Hydraulic multi-disc brakes are a wet brake designed for static braking applications for your hydraulic drive. They are spring-applied, requiring hydraulic pressure to release during system operation. Designed to be coupled with our range of orbital motors.

- Static Torque up to 490 Nm
- SAE 'A' Mounting Flange
- Keyed Shaft Option 1", 1-1/4" & 32mm
- Splined Shaft 1" 6B Available



#### BRANCHES



#### **ADELAIDE**

243 Halifax Street, Adelaide SA 5000 Email: adelaide.sales@southcott.com.au

Ph: 08 8228 2411

#### **SYDNEY**

1/1A Gibbon Road, Baulkham Hills NSW 2153 Email: sydney.sales@southcott.com.au

Ph: 02 8814 2100

#### **NEWCASTLE**

4/14 Yangan Drive, Beresfield NSW 2322 Email: newcastle.sales@southcott.com.au

Ph: 02 4964 2123

#### **BRISBANE**

45 Fulcrum Street, Richlands QLD 4077 Email: brisbane.sales@southcott.com.au

Ph: 07 3022 3700

#### **EMERALD**

77 Macauley Access Road, Emerald QLD 4720 Email: emerald.sales@southcott.com.au

Ph: 07 4988 1800

#### **MACKAY**

10/30-36 Margaret Vella Drive, Paget QLD 4740

Email: mackay.sales@southcott.com.au

Ph: 07 4847 8800

#### **MELBOURNE**

13-15 Nicole Way, Dandenong South VIC 3175 Email: melbourne.sales@southcott.com.au

Ph: 03 8793 6400

#### **LAVERTON**

1/9 Everaise Court, Laverton North VIC 3026 Email: laverton.sales@southcott.com.au

Ph: 03 9371 9000

#### **PERTH**

1/1110 Abernethy Road, High Wycombe WA 6057

Email: perth.sales@southcott.com.au

Ph: 08 6216 4600

#### **TASMANIA**

Lot 4, 6183 Frankford Road, Wesley Vale TAS 7307

Email: tasmania.sales@southcott.com.au

Ph: 03 6427 0908



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