

**In this month's Hydrafile:****Products of interest:**

**Eaton 420 Piston Pump...** Eaton 420 Series mobile pumps are open circuit, axial piston designs. They come standard with load sensing controls and the optional manual de-stroke controller gives the end user a pump which provides maximum power and efficiency.

*420 Series mobile pump***Typical Applications**

- Loader backhoes
- Vibratory cable plows
- Mining machinery
- Dump truck lifts
- Agriculture tractors
- Chemical applicator trucks
- Railroad equipment
- Container handling, all-terrain, and truck cranes
- Vibratory cable plows
- Mining machinery and tunnel boring equipment
- Utility boom, off-road dump, and refuse trucks
- Material handling trucks and rough terrain fork lifts
- Concrete and asphalt pavers
- Feller/bunchers, forwarders, and log loaders
- Crawler dozers
- Articulate haulers
- Mini-excavators

**Features and Benefits**

- Long pump life
- Quiet pump operation
- Low installed and operating costs
- Reduced maintenance
- Flexibility in machine design
- Compact size saves space
- Design promotes leak-free system



A strong proven rotating group allows the pumps to handle pressures to 280 bar (4000 psi) continuous and 320 bar (4600 psi) intermittent. High load bearings and a stiff drive shaft help provide a pump B10 bearing life of 3320 hours at rated mobile conditions.

420 Series pumps feature a stiff saddle-type swashplate with steel-backed polymer bearings. This allows even loading of the bearings, improving life. A single control piston reduces forces acting on the swashplate, resulting in reduced package size, which allows pump installation into tighter locations. These design features also mean the 420 Series pumps operate at a level of quietness that exceeds the requirements of today's demanding work conditions.

**Featured Product Range:**

**Eaton Light Duty Hydrostatic Transmissions. Models 7, 11 and the 851 transaxle...** The Eaton Light Duty Hydrostatic Transmissions consist of a variable displacement radial ball piston hydraulic pump, a fixed displacement radial ball piston hydraulic motor and a system of valves, all contained in one housing. It can be used in many different types of applications where variable output speed is a requirement. It has many advantages over other variable speed drives (electric and mechanical) and gear type transmissions.

- Response — these transmissions respond faster than any other type of power transmitting system.
- Precise speed — has the capability of maintaining precise speed under varying load conditions.
- Ease of operation — One lever controls direction and speed smoothly without gear change.
- Low maintenance — Simple design keeps maintenance to a minimum.
- Increased Productivity and Versatility — it allows complete matching of power to load.

- Self contained — there are no external high pressure lines, separate drive components, etc.
- Simplified final product design — It reduces the number of mechanical drive components.
- Positive Braking Action — the lever that controls speed also provides braking. The output shaft speed decreases as lever is moved toward neutral. With lever in neutral, output stops.



Typical applications include ride on lawn mowers, lawn rollers, portable forestry equipment and specialised tools. Power inputs range from 4 - 20 HP.

### **News:**

[Hyspecs Auckland holds stage one seminar in late October...to register your interest please read on...](#)

Every year Hyspecs holds its much lauded Stage One Seminar in both Christchurch and Auckland. The course is designed for anyone interested in either learning hydraulic basics or those wanting a refresher course. The Christchurch seminar was held in early September and was a great success, with all in attendance finding the course informative and challenging. Those who attend also receive a certificate of completion which can be used to refresh the curriculum vitae.

The Auckland seminar is scheduled for two days on the 28-29th of October this year and there is still room for those interested in attending.

