

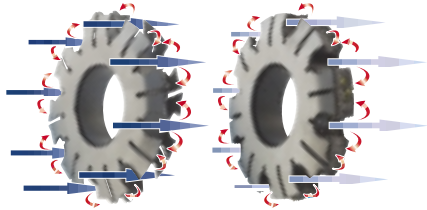
## REMOVING THE BARRIERS TO FLUID CLEANLINESS

**The Magnum™, as used in Formula 1, is a revolutionary product in advanced fluid conditioning. Using field effect technology, the Magnum™ reduces operating costs and simultaneously benefits the environment.**

Through its unique patented design, the Magnum™ removes contaminant particles of less than one micron from a variety of fluids. This includes the smallest and most abrasive particles that are responsible for the destructive chain reaction of wear in many processes.

Unlike conventional fluid conditioning components, the Magnum™ produces minimal pressure drop in the fluid. It has no moving parts and is 100% scaleable. It also functions in a diverse range of fluid pressures, temperatures and flow rates.

The Magnum™ is easily installed in a wide variety of applications - either as part of new systems or as a replacement to enhance existing processes.



**Magnum™ - The Process**

The Magnum™ has wide flow channels that allow the process fluid to pass with minimal pressure drop. As the fluid flows through the Magnum's™ field effect areas, ferrous contaminants are drawn into special collection zones. These zones hold significantly more contaminant than a conventional filter - without obstructing fluid flow or risking "wash-off". Therefore, the Magnum™ can operate for very long periods without service and - when contaminants need to be removed - is easily cleaned and re-used.



**"We made cost reductions, too, compared to the conventional disposable filters we normally supply and the end-user has the added advantage of reduced future maintenance costs. Also we've seen virtually no wear in our gear and bearing assemblies since adopting Magnum™ technology."**

*David McManamon  
(Managing Director, Printing Press Services)*

**"The Magnum™ unit has had a series of positive effects in the application. Previously the wheel successfully worked three components before it required redressing due to deteriorating surface finish. Since introducing the Magnum™ system, we have been able to obtain a minimum of 10 components.... In addition, an extension to the coolant life of 300% has been realised! Finally, Magnum™ has been observed to remove the majority of grease and carbon - amazing!"**

*Andy Sagoo  
(Components Manager, Brook Crompton)*

**For case studies relevant to your own application please contact:**



For further details or to order  
Telephone: +44 (0) 1926 623 170  
or visit: [www.magnum.com](http://www.magnum.com)

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## REMOVING THE BARRIERS TO FLUID CLEANLINESS





**The Benefits**

**The environmental award winning and cleanable Magnom™ delivers:**



**FAST PAY BACK**

(in some cases less than 1 month!)



by

**reducing consumable costs**

**reducing downtime**



by

**removing the most damaging contaminant**

(from less than a micron up to over 1cm)



**without incurring a pressure drop**



**without contaminant wash-off**



**The Products**



Module



Simplex



Duplex



5" HT Unit



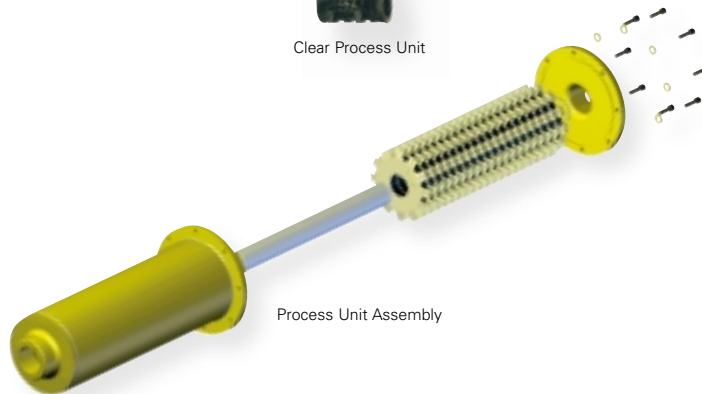
Process Unit



Pump Mate



Clear Process Unit



Process Unit Assembly

**Principal Applications**

**Large scale gearboxes**

- Coal fired power stations on coal crushing gearboxes and forced and induced fan circuit protection and epicyclic gearbox protection on the main turbine feedwater pumps
- Sugar mills on pulp press, diffuser tower and other gearboxes
- Cement plants on kiln gearboxes, coal crushing gearboxes and cement pulverising gearboxes
- Aluminium and steel plants on roller gearboxes
- Rubber manufacturing plants on mixing and drying kiln gearboxes
- Pharmaceutical manufacturers on mixing and drying kiln gearboxes
- Paper, pulp and plasterboard plants on roller and mixer gearboxes
- Mining and mineral extraction large scale gearboxes (crushing, grinding, milling...)

**Ferrous working machine tool coolant systems**

- Boring machines
- Grinding machines
- Honing machines
- Industrial cleaning and washing machines
- Milling machines
- Drilling machines
- Spark erosion machines
- Quenching systems

**Hydraulic systems**

- Off highway mobile hydraulic systems
- Marine
- Industrial static systems
- Mining

**Automotive**

- Recirculating oil transmissions
- Power steering systems
- Performance engines and turbocharger systems

**Water cooling and heating systems**

- Injection moulding cooling and heating systems
- Industrial heating and cooling systems
- Domestic heating and cooling systems

