

Transfer Barrier* Technology





Partner with Industry

The Oilgear Company is a global supplier of hydraulic drives and electronic control systems for diversified industries sharing a common need for the highest level of machine performance, reliability, economy and product support possible.

Since 1921, the world's most demanding applications have relied on Oilgear highperformance systems. Founded on the tradition of bringing only the most advanced engineering to our customers. Oilgear has facilities throughout the world to provide industry with the engineered solutions, products and services expected from the world's fluid power experts.

What is a Transfer Barrier* Pump?

A Transfer Barrier* pump acts as a pump with fluid powered pistons, the delivery pistons are driven by oil cylinders. This allows variable control of volume or pressure and a better overall efficiency compared to crankshaft mechanical fixed pumps



Advantages of a Transfer Barrier* Pump

- Variable flow system allows speed and pressure control.
- Works with a wide range of aggressive fluids (HWBF, pure water, skydrol...).
- Modular design allows the system to be configured to fit the available pump room.
- Power consumption (KW/h) reduced by approximately 15% (Savings based on a 12 month Open die Forging cycle).
- Accumulators can be avoided by direct pumping to cylinders.
- High pressures available (up to 650 bar/9,430 psi).
- No output ripple, unlike triplex pumps which require pulsation dampeners.
- Reduced maintenance costs due to slower operating speed of the rams.

	Triplex Pump	Transfer Barrier* Pump	
Average Speed of Rams	2.5 m/sec 8.2 ft/sec	0.25 m/sec 0.82 ft/sec	
Cycle Time	0.2 sec	8 sec	
Cycle Rate (inlet/outlet valving)	300 / minute	7.5 / minute	
Distance seen by seals in 1 minute	150 m 492 ft	15 m 49 ft	

Standard Configurations						
Model	Input Power	Input Power	Max Pressure*	Hydraulic Output		
	KW / HP	KW / HP	(@Full flow) Bars / PSI	KW / HP		
TB 05	500 / 600	500 / 600	260 / 3770	433 / 580		
TB 06	630 / 845	630 / 845	300 / 4350	500 / 670		
TB 07	750 / 1006	750 / 1006	260 / 3770	650 / 872		
TB 10	945 / 1267	945 / 1267	300 / 4350	750 / 1006		
TB 12	1260 / 1690	1260 / 1690	300 / 4350	1000 / 1340		

* Delivery pressures up to 650 bar/9430 psi available upon request.

Systems Approach

An Oilgear Transfer Barrier* pump is supplied as a complete system. Only Oilgear has the engineering and production capability to provide all of the necessary components as one fully integrated unit.

- Oil Hydraulic drive includes reservoir, manifolds pumps and electric motors.
- Transfer Barrier* Pump
- Outlet valving that is compatible with the working fluid.
- Electronic control with transducers and operator interface.

Vilgear Transfer Barrier* Technology

Documentation



- 1. Output ripple of a Triplex pump.
- 2. Output ripple of a Transfer Barrier* pump



Transfer Barrier* Pump Applications

- Forging Open and closed Die
- **Descaling Systems**
- Extrusion Water / High Water Base Fluids
- Test Stands Special Fluids, High Pressure





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For more information about your application or the products in this brochure, please contact your nearest Oilgear facility. A complete listing of our global locations can be found on the Oilgear web site.

Global Service Network

No matter where you are, Oilgear can quickly and efficiently provide service to you. Our regional sales and service centers are available in more than 50 countries. One phone call gets you help – fast. Factory-trained Oilgear service personnel are ready to provide timely on-site assistance.

Machine reliability can be further enhanced by an Oilgear custom-designed preventative maintenance program.

* "Transfer Barrier" is a Registered Brand of Oilgear Towler SAS

> Bulletin 11219-B Revised APRIL 2011 Printed in USA