



drive with us

News, events and informations from Headquarters

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New MFO (Mechanical Clutch)

Because of the growing demand, mainly coming from East Europe, Transfluid have recently introduced in its Clutch range a new line of mechanical disconnectable PTO based on a traditional and well known lever actuation system. The most popular applications will be "Power Units" for irrigation pumps, "Compressors", "Drilling Rigs", "Agricultural/Forest machines", "Crushers", "Centrifugal pumps", etc.

The new overcenter clutches have been developed for in-line and side loads, and are mountable on standard SAE industrial engine. The MFO are very simple either to be installed by OEMs or to be daily managed by the machine operator. The new product line enlarges our offer potential and in combination with the Oil Actuated Clutches


(HF), makes the Transfluid PTO's range one of the widest in the Global panorama. Competiveness with traditional manufacturers is granted even for large volumes. Main difference with all other mechanical PTO manufacturers is surely the type of discs. As a matter of fact, with the exception of the 10" size, the other models are equipped with Kevlar discs that significantly rise safety factors even for torsionally active applications.



Transfluid Hybrid and Electric propulsions system at Electric & Hybrid Marine Expo 2017 Amsterdam RAI

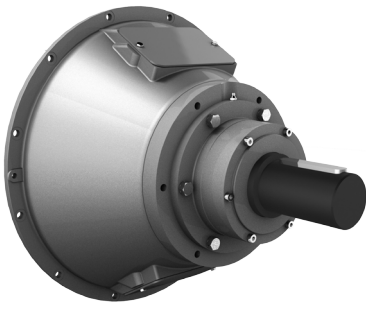


NEXT EXHIBITIONS...

inter airport europe  **OCTOBER 10-13, 2017**
Munich Trade Fair, Germany
TRANSFLUID WELCOMES YOU
at Stand n° 378 Hall A6

METS 2017  **MARINE EQUIPMENT**
TRADE SHOW
14-15-16 NOVEMBRE
AMSTERDAM, RAI
TRANSFLUID WELCOMES YOU
AT BOOTH 01.784 

Laurini officine meccaniche



Application & Products: New PF (Power Take Off)

With the exception of the largest size (PF18D), the whole range will be derived by different basic components that makes the relevant models more competitive than previous range.

The new PF are assembled with shaft and bearings mounted in a rigid cast housing.

Torque performances, up to 5300Nm, do not change since the elastic coupling is still the well known RBD ready for all SAE industrial engines.

The Italian Company Laurini Officine Meccaniche S.r.l. is a Transfluid's Customer since long time and just recently we supplied an MPD 18 complete with a 19 KFBD.

This gives us the opportunity to talk about Laurini as market leader in pipeline machinery and other products to be used in construction yards.

The above mentioned MPD 18 has been installed on a Grub 1,8 hammer-mill crusher (see picture 4740) self-propelled with remote control designed to work inside the trench: normally the 19 KFBD is installed but due to new tier 4 engine (CAT C9 Acert rating 240 kW@2200 rpm) they need to install the pumps for tracking on the MPD as the new engine cannot allocate them anymore. The MPD 18 with the standard

used 19 KFBD is perfectly matching their new need.

They also produce the Grub 2000 (see picture image 001) that is an hammer-mill crusher as the Grub 1,8 but designed to operate alongside the trench to produce on site the padding material for the trench backfilling: the 19 KPTO is installed on this machine where a CAT 13 Acert is mounted (328 kW@2100 rpm).

The relationship this Laurini is not only on the pipeline machinery as we supply them on regular base our HFR 318-0 to drive water pumps for pipeline test to check possible leakages. Laurini is a good and devoted Customer and they always found a quality and reliable solution for their different applications thanks to Transfluid's technical support.



New HF configurations (Oil Actuated Clutch)

To simplify the installation process of OEM's Engineering, we have defined new configurations that will increase the flexibility of relevant PTO's range.

All configurations are complete and ready to be mounted on the engine. With the exception of the 10" size all models are equipped with Kevlar discs.

The machine builder will be free to evaluate different equipments in accordance with their assembling convenience. Hence the Customer may better choose among semi-complete or fully equipped actuation system, by hydraulic block valves or oil/air power packs.

For heavy duty applications and

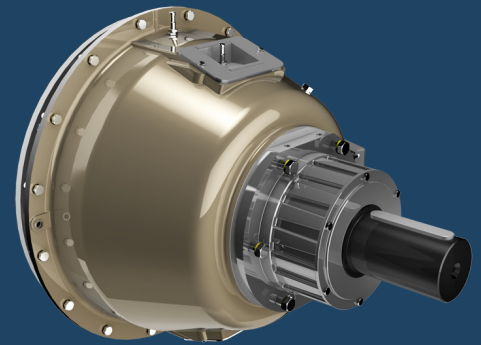
clutch monitoring, the Transfluid MPCB-R5 with its own software and Display is available.

For the HFR version, in alternative to the electronic controller, it is possible to evaluate our Air Power Pack which allows smooth engagements and purchasing cost saving.

To optimize clutch lubrication, bearings of HFR314 are now lubricated by hydraulic oil "OSO 32" instead of grease. A small amount of oil is needed and it is better spread in the lubricating circuit reaching all smallest areas and/or difficult tracks.

Oil temperature will remain within acceptable limits in each working conditions thanks to

an oil radiator mounted aboard. Through a small plastic canister the oil level will be always well visible making the oil refilling operation very easy.



TowerClutches for Metso-LiuGong (China)

Some years ago Metso and LiuGong signed a joint venture to produce truck mounted crushers, mainly for the Asian market. Dedicated production lines were built in Shanghai for this ambitious marketing strategy which involves two of most popular worldwide OEMs.

Their joint venture starts to bring the expected results and the Global potential of this "binomial" makes the Customer and Transfluid rather optimistic for coming years.

Thanks to the hystorical collaboration between Transfluid and Metso HQ in Finland, we have been requested to develop TowerClutches for two crushers, medium and large size.

The long field tests held in China are now over and all signs from the market seem to be promising. In July we have got the first order for series production of the largest crusher named "LM 1213", based on 3 x TC 18-314R, two pump heads (with 3 pump prearrangements) with MPCB

electronic controller.

The Customer should be now ready for field tests even of the smaller machine with our TC 14-3110, similar to the specification we deliver to Metso India since 2011.

This tangible relation-ship between Transfluid and Metso makes us very proud and also ready to rise our current business for the machines built in Finland by Metso HQ.





Transfluid Hybrid system for waste management service boats

The path to success of Transfluid's hybrid system has found a perfect combination on work boats dedicated to the collection and removal of floating and semi-submerged solid waste and oily waste from bodies of water.

Work boats used for port and coastal waste management services have exalted the benefits that can be achieved with the hybrid system. Navigation with ZERO emissions while cleaning in port and coastal areas or near beaches offers a truly eco-sustainable service; while transfers are guaranteed in Diesel mode, allowing for battery charging at the same time.

The French company VEOLIA has decided to transform its boats, making them ecologically sustainable, by installing the Transfluid hybrid system, with the collaboration of CONSO MOTEUR for the installation of the system on the boat.

The boat is fitted with a NANNI DIESEL 4.380TDI engine with a power output of 129 kW (175 hp) at 3600 rpm coupled with a TRANSFLUID HM560-12 hybrid transmission with 12 kW power at 3000 rpm and connected via a cardan shaft to the

CASTOLDIJET hydrojet.

Power is guaranteed on board with LI-FE-PO4 technology batteries with 96 V dc voltage and 100 Ah capacity. A storage capacity of 9.6 kWh allows navigation at approximately 4 kn for over 3 hours in electrical mode. In addition, the batteries can be recharged using the hybrid system in Diesel mode. The booster mode, on the other hand, adds the power of the Diesel engine to that of the electric motor, increasing the acceleration.

In addition to navigating in absolute silence using the electrical mode, the hybrid system allows for dual propulsion (diesel and electrical), which is useful in case of failure of one of the two propulsion systems.

The savings achievable with the hybrid system consist not only in reduced fuel consumption, but also in a reduction in the operating hours of the Diesel engine, reducing maintenance costs (less hours = less servicing) and an increase in the life of the Diesel engine (less hours = longer life).

Moreover, when using regeneration mode, the efficiency of the Diesel engine increases as the load increases,

allowing the engine to work with a lower specific consumption.

Standardising the hybrid system interface allows the shipyard to select, without constraints, the most suitable Diesel engine. The experiences gained with different propulsion systems (traditional propeller, hydrojet and stern-drive) make it possible to show that the hybrid system proposed by Transfluid is considered universally valid.

The increasing attention to the protection of the environment and to safeguarding the sea proves that Transfluid's decision to develop hybrid and electrical propulsion and traction systems is a concrete response to the needs of the sector's operators and allows us to look to the future with optimism.

The range of propulsion systems proposed by Transfluid can be divided into two groups: hybrid propulsion systems suitable for Diesel engines from 50 hp to 1650 hp, with electrical power from 10 hp to 200 hp, suitable for any transmission; and electric propulsion systems with power from 3 hp to 100 hp suitable for Sail Drive, Stern Drive, traditional propeller and POD.