

# ON THE RIGHT TRACK

THREE YEARS OF INTENSE R&D ACTIVITY IS BEGINNING TO PAY OFF AS THE RECENT LAUNCH OF NEW RANGES OF EXCAVATOR SWING DRIVES AND INTEGRATED MOTORS FOR TRACK DRIVES IS ALREADY BEING HAILED A GREAT SUCCESS

▶ After three years of research and development activity including field and laboratory tests, PMP introduced a full range of PMCI integrated motors for track drives at Germany's Hanover Messe in May 2011. The present range includes motors from 55-180cc.

These integrated motors are two-position/two-displacement motors with integrated counterbalance valves for operation in open circuits, integrated maximum relief valves and displacement change valves. An automatic speed change feature can be supplied on request, which enables the vehicle to automatically decrease travel speed and increase torque when this is required by tough working conditions, i.e. where pressure beyond certain limits is needed.

The above features make the PMCI integrated travel drives the ideal solution for hydraulic excavators from 6-50 tonnes, where they are coupled to gearboxes ranging from 10,000-100,000Nm. The same drives, with higher ratios, can be used for several other applications, such as travel drives for mobile crawler cranes, crushers, platform boom-lifts, pavers and soil compactors, etc. By using a PMCI integrated motor and gearbox, the use of expensive fully variable motors can often be avoided.

The basic rotary group used in the PMCI series is derived from heavy-duty hydrostatic transmissions, so it is suitable for pressure peaks up to 450 bar. The new PMCI series of integrated motors therefore positions PMP's offering at a higher level than competitors' travel drives, which are normally designed to work at only 300-350 bar. This not only results in higher efficiency of the hydraulic system, but longer life of critical components and the increased durability of the entire system.

## Swinging solutions

In the highly competitive field of excavators, PMP is also launching its new PMTE series for the swing drive of models from 6-50 tonnes, with several innovative solutions in terms of load



Drives with integrated high-pressure, high-speed motors designed for heavy-duty applications.

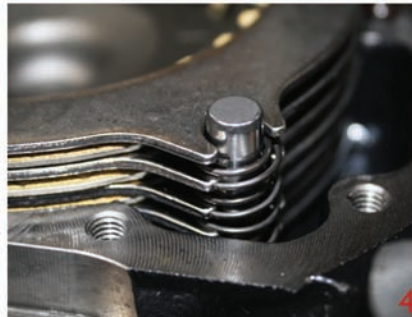
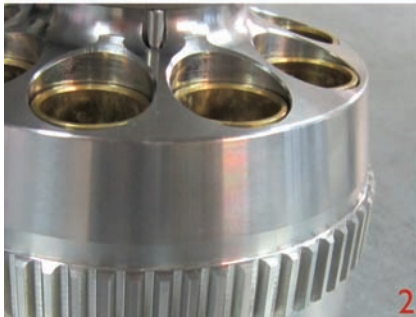
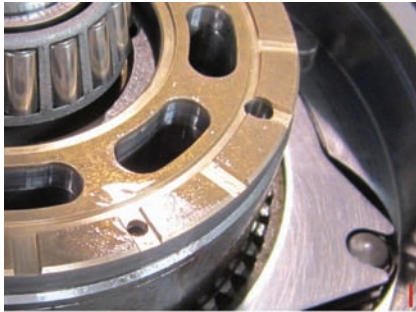


Rotation swing drives with integrated axial piston motors tailored for hydraulic excavator applications from 6-50 tonnes

capacity and compactness. Gearboxes from 10,000-60,000Nm are already in production and will soon be completed with hydraulic axial-piston motors from 55-180cc, featuring brake valves and special swing-control shockless valves, in order to provide customers with a complete solution for excavators.

The PMCI and PMTE series will be presented in India in November at the Excon 2011 exhibition. PMCI and PMTE drives are already in use by several OEMs around the world, which are fully satisfied not only with PMP's technology but also its flexibility in meeting customers' requests, short delivery times and overall competitiveness.

PMP may well be the fastest growing group in mobile transmission systems. With more than 1,000 employees worldwide and production sites in Italy, Bosnia Herzegovina, China, India and the USA, PMP is now a world leader in drive systems for earthmoving machinery, electric industrial vehicles and concrete equipment. In 2010 the group increased its total turnover by more than 40% from pre-crisis 2007 financial results, and an expected further growth of 40%



CLOCKWISE FROM TOP LEFT: **PMCI: bimetallic distribution plate; PMTE: rotary group piston; PMTE: wet disk brake patented technology; PMCI: rotary group**

is on the cards for 2011. Production volumes for transmission systems will exceed 200,000 units in 2011.

Besides its traditional markets of concrete mixers and forklift trucks, PMP

is also increasing its market shares for wheel drives, track drives and swing drives for construction machinery.

Along with its major technological developments, PMP is continuing in its

continuous process of globalisation. Being a major player in the Chinese construction machinery market, the company has decided to increase its investment in China over the next three years. In addition to the existing plant in Taicang, Shanghai, which has been in full production since 2009 and employs more than 250 people, PMP will open a new, bigger facility in a neighbouring location with triple the production capacity to satisfy the growing demand for its products in the Asian region.

Another production site will be opened in India – in Pune – in 2011, in order to capitalise on the rapid growth of the country's construction machinery market, where PMP is already playing a considerable role. Further steps include the opening of a production site in the São Paulo area of Brazil, which is forecast for the end of 2012. **ivT**

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