Electro-hydraulic hitch control now for lightweight tractors: The EHC-8 from Rexroth significantly reduces slippage and prevents drive wheels from losing traction. This lowers fuel consumption and tire wear. At the same time it protects the soil.

The market for small tractors in the power range up to 80 HP is starting to move. The segment represents about two thirds of all tractors produced worldwide. Bosch Rexroth has developed the first electro-hydraulic hitch control EHC for this power range. It meets the special demands in emerging economies for cost-effectiveness, functionality, and ruggedness. Tractor manufacturers can now reduce fuel consumption and significantly raise productivity, safety, and operator convenience. The EHC-8 was developed by Bosch Rexroth in close cooperation with a leading Indian tractor producer and will start series production in first quarter 2014.

In the past, modern electro-hydraulic systems were unavailable in the market segment for small tractors up to 80 HP, especially an electro-hydraulic hitch control. Instead, mechanical hitch controls were the only type fitted in this segment. The tractor driver has to turn his torso round to the rear to adjust the depth of the plow in the soil by hand, using the levers behind the seat. The plow gets hooked time and again and the drive wheels lose traction. This compresses the sensitive soil and fuel consumption skyrockets.
Press Release

unnecessarily. This state of the art has remained unchanged for decades. But things are now different since Bosch Rexroth in India developed and produced the electro-hydraulic hitch control EHC-8 for tractors up to 80 HP.

All electronic and hydraulic components in the EHC-8 system solution, the control valve, the control unit, angular and draft sensors, and the control panel, were completely revised or developed from new by Bosch Rexroth in India in close cooperation with a leading tractor manufacturer using tried and tested parts. The system solution is designed to meet local requirements and automatically controls the preset working depth without any driver intervention. The greater precision also permits tilling the soil at depths which would not be possible using wear-prone mechanical controls.

The electro-hydraulic hitch control EHC-8 also reduces slippage and significantly prevents the drive wheels from losing traction. This lowers fuel consumption and tire wear. At the same time it protects the soil.

The system also raises driving safety during trips between work sites. Heavy attachments shift the center of gravity to the rear on lightweight tractors to such an extent that the front wheels can lift up on poor roads and the driver is unable to steer the tractor in such moments. The active vibration damping system integrated in the EHC-8 prevents pitch on tractors fitted with attachments and improves handling in critical situations.

Most tractors up to 80 HP produced for emerging economies have no cab. Controls are exposed to rain and dust without protection. To adapt to local requirements, the first series application of the Rexroth system comprises a control panel which is integrated in the armrest of the driver’s seat. The driver operates the few rugged rotary knobs on the system one-handed. He can then concentrate on driving and no longer needs to twist himself to the rear to control the attached implements. The draft sensor of the top link sensing system is fitted high up to protect it from water when the tractor works in paddy fields.

A leading Indian tractor producer has completed the pilot phase with extensive practical tests in 2013. The system solution will be fitted to series production models from first quarter 2014. The modular system is a space-saving unit and can be integrated in various concepts without the need for major redesign.
Press Release

Economical, precise, safe, and energy efficient: drive and control technology from Bosch Rexroth moves machines and systems of any size. The company bundles global application experience in the market segments of Mobile Applications, Machinery Applications and Engineering, Factory Automation, and Renewable Energies to develop innovative components as well as tailored system solutions and services. Bosch Rexroth offers its customers hydraulics, electric drives and controls, pneumatics, gear technology, and linear motion and assembly technology all from one source. With locations in over 80 countries, more than 37,500 associates generated sales revenue of approximately 6.5 billion euros in 2012.
To learn more, please visit www.boschrexroth.com

The Bosch Group is a leading global supplier of technology and services, active in the fields of automotive technology, energy and building technology, industrial technology, and consumer goods. According to preliminary figures, more than 306,000 associates generated sales of 52.3 billion euros in 2012. The Bosch Group comprises Robert Bosch GmbH and its more than 350 subsidiaries and regional companies in some 60 countries. If its sales and service partners are included, then Bosch is represented in roughly 150 countries. This worldwide development, manufacturing, and sales network is the foundation for further growth. Bosch spent some 4.5 billion euros for research and development in 2012, and applied for over 4,700 patents worldwide. The Bosch Group’s products and services are designed to fascinate, and to improve the quality of life by providing solutions which are both innovative and beneficial. In this way, the company offers technology worldwide that is “Invented for life.”
Additional information is available online at www.bosch.com and www.bosch-press.com

Reader Inquiries:

Phone: +49 7308 8170-2262
Fax: +49 7308 8170-2683
Email: olaf.marshall@boschrexroth.de
Address: D-89275 Elchingen /Germany
Internet: www.boschrexroth.com