



COMER INDUSTRIES AT EIMA 2014: PRODUCTS ON SHOW

At the trade show in Bologna, Italy (12-16 November 2014), Comer Industries exhibits innovative and competitive solutions for agricultural mechanization.

Reggiolo (RE), Italy, November 4th 2014 – Comer Industries, on its booth at Eima 2014 (**Hall 20, Booth B13**), will be presenting new products such as the integrated solutions for trailed vertical feed mixer: the **A-613 parallel axis unit with electric actuator, ready for integration with the ISOBUS system** and the new **PGA-2100 VM series planetary drive**. Also on display the system for self-propelled feed mixers featuring the **S-238 axle**, which offers the best braking and efficiency performance in its category, and the **PGA-2503 VM planetary drive** for transmitting the vertical drive to the augers, a compact solution that can be combined with different types of hydraulic motor.

On display the **VP professional range of driveshafts**, featuring high safety performance, ease of maintenance and long greasing intervals, as well as driveshafts' **safety devices** such as automatic torque limiters and the **easy connecting system**.

For **grain headers'** application Comer Industries shows the **complete side transmission for cutter bars**, consisting of the **T-312 unit**, now **produced in aluminum** to obtain a significant weight decrease, the **wobble box OS-780** for blade operation and the **new "E-torque" driveshaft**, equipped with a rubber element device that damps vibrations and alternative loads coming from the grain header cutting system. Comer Industries will also be showing the transmission system for fixed and variable chamber **round balers**, consisting of the **VP Series constant velocity joint driveshaft** and the **new input T-290 HD unit**, with transmissible power up to 106 HP.

Other products on display include the solutions N-670, N-684 e L-170 for **corn headers**, developed by Comer Industries' Research and Development for important manufacturers in the industry.

The A-613 gearbox with electric actuator ready for integration with the ISOBUS system

The A-613 parallel axis unit, fitted for gear engaged position sensors and equipped with **electric actuator for gear change**, has the following characteristics:

- low-noise helical gear transmission featuring gears with high contact ratio;
- internal pre-load mechanism enabling gear change and automatic re-engagement;
- electric actuator with two or three positions (for neutral);
- integrated fitting for pump coupling.

The unit is available in the gear ratios 1:1/1.8:1 and 1:1/1.5:1, with 180 HP at 540 rpm and it is suitable for feed mixers with two or three augers, with capacities starting from 30 m³.

The A-613 transmission is part of the **Mix@tractor project** developed by IDEAgri, a network of companies (including Comer Industries) that manufacture integrated systems pursuant to the ISOBUS Standard (www.ideagri.net). IDEAgri will be exhibiting at the AEF (Agricultural Industry Electronics Foundation) showcase in the Eima Quadriportico area.

This system uses an **innovative hardware/software platform** for coordinated management of the tractor and implement functions during the Unifeed mixing stages.

Thanks to the **electrically actuated gear change system** and the **implementation of the ISOBUS torque sensor**, the IDEAgri solution allows for monitoring power absorption, **automating gear change stages** based on the progress of the mixing process. This way, an **optimized cycle** in terms of **fuel consumption, emissions, noise pollution, safety and duration of the operations** can be established without the operator needing specialized knowledge or skills.

New PGA-2100 series planetary gearboxes for vertical feed mixers

Comer Industries **has expanded its PGA line of planetary drives**, introducing the **new 2100 series for auger activation on trailed feed mixers**, with 2,100 daNm of continuous torque and maximum torque of 4,700 daNm.



This **compact, high performance** model was developed to offer **significantly greater load capacity and torque** in the same dimensions as the 1600 series, combined with **increased reliability** of the transmission components and **greater resistance under overload conditions**.

These results were achieved by combining design and technology solutions that had already been developed and implemented by Comer Industries on wind-turbine drives, with **specific solutions for feed mixer applications**.

The main **design and process innovation features** are:

- four-planet planetary stage with support bearings and pivoting carrier pins;
- steel planetary carrier with a specific vertical configuration (patent pending);
- higher precision and capacity gearing made possible by the special shot peening and finish machining on the teeth.

System for self-propelled feed mixers with vertical augers

For the sector of forage processing and distributing machines, Comer Industries will be showing a solution for self-propelled feed mixers consisting of **S-238 differential axle** and **PGA-2503 VM planetary drive** with hydraulic control.

The S-238 12-tonnes axle, featured by **compact dimensions**, is available in fixed and steering versions.

This product caters to the growing requirements of manufacturers in terms of **boosted efficiency** and provides the following benefits:

- better performance, even with the same total weight, thanks to increased dynamic load;
- greater compactness, for easier installation of the axle inside the machine.

This is a flexible solution, in line with customers' requests for a design aimed at **improving vehicle's configuration** and **increased productivity**.

The transmission system is completed by planetary gears for transmitting the vertical drive to the augers: the PGA -2503 VM, with compact hydraulic connection, can be combined with different types of hydraulic motor. A small size version - the PGA-1603 VM- is also available.

Complete side transmission for grain headers' cutter bars

For grain headers, Comer Industries will be displaying the complete side transmission for cutter bars, consisting of the **T-312 unit**, now produced in **aluminum** to obtain a significant weight decrease, the **new "E-torque" driveshaft**, and the **wobble box OS-780** for blade operation.

The driveshaft is equipped with a rubber element device that damps vibrations and alternative loads coming from the grain header cutting system.

The wobble box OS-780 provides for the handling of the cutter bars with alternate linear motion, universally used for combine harvesters' grain headers. The transmission transforms, via eccentric system, the input rotary motion into linear motion through the connection to the cutter bar by means of an arm and of a spherical knot.

VP driveshaft professional range

Comer Industries will be exhibiting the professional range of **VP Series driveshafts**, which features **new EC type-approved accident prevention protection**, **high performances** and **easy maintenance**.

This professional product line is versatile and available in many advanced solutions: transmissions are characterized by boosted efficiency and **attention to the environment**, thanks to reduced maintenance and less use of lubricants.

The VP range was created to meet the demands of high-performance, **intensive use**, typical of the contractor sector. To cover all needs of users, **nine** product sizes in the **standard version** and **four** sizes in the **constant velocity version** are available.

Maintenance is facilitated, thanks to the alignment of the access holes to the greasing points: lubrication can be performed without disassembling the driveshaft from the PTO. Maintenance intervals have been extended and, depending on the use conditions, can reach up to 250 hours.



New guard locking system with single chain guarantees quick and safety and offers the possibility of moving the bellows backwards, thus facilitating the assembly on the PTO of the tractor.

The version with **constant velocity joint VP7 CVJ** has a **new guard** that allows the PTO to operate as far as 80° working angles, without interfering with the tractor' master shield. The **new CVJ system**, thanks to the floating plates, provides excellent sealing of the lubricating grease, thereby reducing maintenance intervals.

Driveshaft **safety devices**, such as limiters and **easy connection devices** are also on display. They are designed and manufactured according to **quality procedures** in compliance with international standards. All Comer Industries' driveshafts protect the operator from any hazards associated with agricultural machine applications and provide **complete protection** thanks to counter-cones and to extended guards.

Heavy duty transmission system for round balers

Comer Industries offers a wide range of products for the operation of the fixed and variable chamber round balers. On display, a transmission system consisting of the **VP Series constant velocity joint driveshaft** and the **new input T-290 HD unit**, with transmissible power up to 106 HP.

Solutions for corn headers

For this application, on display the N-670, N-684 and L-170 units, developed by Comer Industries' Research and Development for important manufacturers in the industry.

N-670 model is a modular solution that equips corn headers. The transmission allows the handling of all the organs of the machine: stalk rolls, chains and cutting blades.

For corn harvesting headers in the fold-down version, Comer Industries will be exhibiting two engineering systems: the first, N-684 series, consists of two **ductile iron** connected elements. It is a basic unit for operating the cob-removing rollers and the conveyor chains and a flail mower unit, which can also be integrated as optional, at a later date, and can be disengaged when operation is not required.

The second, the gearbox series L-170, is a compact and light solution made of **aluminum**, including two separate modules: a main unit for driving the cob-removing rollers and chains, with integrated inside safety limiter device, and a secondary unit for driving the flail mowers.

Comer Industries – a turnover of 340 million euro and 1,367 employees at 31.12.2013 – is a global leader in the design and production of advanced engineering systems and mechatronic solutions for power transmission, supplied to major manufacturers of agricultural machinery, construction equipment, industrial and renewable energy applications worldwide. www.comerindustries.com

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