

Press release

BPW: Brake force of unsprung agricultural machinery finally completely under control

- Lever action: Adjust the brake force for harvesters, seed and fertiliser spreaders and the like simply with a handle
- Innovative implementation of the new EU regulation without the need for electronics and power
- Peter Lindner: "Breakthrough for the safety of unsprung agricultural machinery"

Wiehl/ Szombathely, 30/10/2019 --- Unsprung agricultural and forestry vehicles are feared obstacles on the road, and not only at harvest time: their brakes can only be adjusted awkwardly and by touch – an imprecise affair. The EU has therefore tightened regulations. The answer from BPW is as simple as it is ingenious: with a patent-pending fully mechanical system, drivers now have the brakes quite literally in their hands.

Nowadays, agricultural and forestry machines and their drawbar trailers are anything but rustic: highly technically advanced and in many cases fully digitally integrated, they represent the cutting edge of the commercial vehicle industry. Nowadays most drawbar trailers that usually operate between the field, forest and farm are fitted with suspensions that can measure the loading condition and automatically adjust the brake force accordingly. One exception however are unsprung drawbar trailers such as tilling or harvesting machines, fertiliser spreaders, seed drills – truly an "insupportable" condition, as the axle load of a single-axle spreader can typically vary between 3,300 and 10,000 kilogrammes.

The EU has responded with the directive VO (EU) 2015/ 68. If these vehicles have varying loading conditions, they may only be towed at a maximum of 30 km/h. Approval for higher speeds is only granted when the brake force can be adjusted based on the load. The range of the possible braking pressure applied is specified precisely by the EU ("brake band"). The conventional, rather primitive method currently used in which the braking pressure for empty running is only manually "cut off", will no longer be permitted in the future. BPW has therefore filed a patent application for a clever, purely mechanical solution: The brake power of the drawbar trailer can be easily adjusted to the loading condition with a single movement of the hand. An easily accessible lever controls the power of the brake valve. A scale firmly mounted to the handle indicates the correct locking position for each customer's individual load condition. The allocation of the scale is calibrated and determined along with the braking calculation by BPW in conjunction with the vehicle manufacturer for each respective vehicle type. To control the brake force, BPW engineers installed an ALB brake force control, such as is commonly used in spring mounted vehicles. This allows the braking pressure to be controlled manually but precisely across the entire brake band.

"The new mechanically adjustable brake valve is a real breakthrough in the safety of unsprung drawbar trailers and agricultural machinery," says Peter Lindner, Director Sales Customised Solutions at BPW in Wiehl, "it is economical to install and its use is self-explanatory. With this, our in-house development fulfills not only an EU directive, but the practical requirements of commercial vehicle manufacturers and operators as well."





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Along with the new mechanically adjustable brake valve, BPW will also be exhibiting a new generation of fully-LED tail lamps at the Agritechnica trade fair (10 to 16 November in Hanover), which feature a running light to maintain maximum visibility in road traffic. Peter Lindner: "Every autumn, automobile clubs warn against accidents caused by poor-braking and dimly lit agricultural drawbar trailers and harvesters. Our trade fair innovations help us make a relevant contribution in increasing safety – and not only at harvest time."



Picture caption: With BPW's brake force control the brake power of the drawbar trailer can be adjusted to the loading condition with a single movement of the hand. (Source: BPW)

About BPW Agrar

BPW-Hungária Kft. is a wholly owned subsidiary of BPW Bergische Achsen KG and specialises in agricultural running gear systems and specialist axles in the BPW Group. The company's product portfolio ranges from moving axle stubs to single axles and complete tridem running gears with frames, including suspension and fitted brake systems for a unit load of over 30 tonnes. Over 1,500 employees produce the high-quality and technically sophisticated axles and running gear systems in Hungary. The agricultural products are sold through the member companies of the BPW Group around the globe.

www.bpwagrar.com

About the BPW Group

The BPW Group researches, develops and manufactures everything needed to keep transport moving, safe, illuminated, intelligent and digitally connected. With its brands <u>BPW</u>, <u>Ermax</u>, <u>HBN</u>, <u>HESTAL</u> and <u>idem telematics</u>, the company group is a preferred system partner of the commercial vehicle industry around the globe for running gear, brakes, lighting, fasteners and superstructure technology, telematics and other key components for trucks, drawbar trailers and buses. The BPW Group provides a comprehensive range of mobility services for transport businesses, ranging from a global service network to spare parts supply and intelligent networking of vehicles, drivers and freight. The owner-operated company group currently employs 7,200 staff in more than 50 countries and registered consolidated sales of 1.48 billion euros in 2017. <u>www.bpw.de/en</u>

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