POLAGRA PREMIERY MACHINERY 2023 - Gold Medal laureates

1. AGRI JACOBUS. Autonomous laser system for non-chemical weed control in agricultural and vegetable crops.

AGROCOM POLSKA, Wrocław University of Technology, Jerzy Koronczok

AGRI JACOBUS is a pioneering response to the growing demands of food consumers and the progressive restrictions on the use of plant protection products. The autonomous AGRI JACOBUS robot, moving autonomously around the field, recognises weeds in real time using a vision system in row plant crops, e.g., sugar beets, and then, using precisely directed laser radiation, stops the life functions of undesirable plants. The AGRI JACOBUS system is powered entirely by electricity. This platform enables functional customisation and scaling to specific needs.



2. Digital grain loss metre for combine harvesters working with Isobus monitors

Mescomp

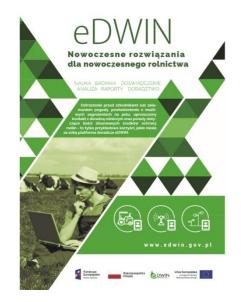
Mescomp's patented Digital Grain Loss Metre counts every lost grain hitting the measuring beam, does not require calibration and objectively reports losses in thousands of seeds per hectare. Designed to be installed on the latest combine harvesters with a radial straw spreader where traditional loss sensors requiring calibration are useless. The device has very clear graphics displayed on the Isobus monitor screen, a service centre located in Poland and, like all Mescomp devices, it is very easy to use.



3. Internet Platform for Advising and Decision Support in Integrated Plant Protection – eDWIN

Wielkopolska Agricultural Advisory Centre in Poznań

Four electronic services: warnings against hazards in the field, current meteorological data, support for decisions regarding the timing and amount of plant protection products used, and simplified contact with the agricultural advisor – such support is offered to farmers by the eDWIN advisory platform, which has been available on the market since June 2022. The eDWIN platform is another step towards digitisation, modernisation of Polish agriculture supporting farmers in their daily work.



4. EM LIZARD – AUTONOMOUS FEED PUSHING SYSTEM

GAMA GROUP SZEPIETOWSCY Sp. J.

The machine PREMIERED at this year's EUROTIER 2022 fair in Hannover, Germany. EM LIZARD is an autonomous vehicle manufactured and designed entirely in Poland. The machine and the auger are driven by brushless BLDC motors through planetary gears, which ensures maintenance-free operation.

5. FuelMaster® 2500 L

Kingspan Water & Energy Sp. z o.o.

The FuelMaster[®] 2500 L diesel fuel storage and distribution tank is characterised by reliability, trouble-free operation and a 10-year warranty. Its double-jacket construction ensures protection of the stored substance, and the lockable housing prevents unauthorised access. The ergonomic distribution box ensures convenient access and use. The intelligent level and flow measuring system provides full control over the operation of the pump, filler, liquid level management and alerts – everything from the level of an intuitive mobile application.





6. SKAVSKA HALE 13M ARCHED HALL

SKAVSKA Hale Sp. z o.o.

The SKAVSKA 13M arched hall is a well-thought-out, durable structure, which is universal in use. Innovative improvements to the structure, and at the same time care for the environment by optimising the amount of raw materials used are implemented, while maintaining resistance to weather conditions. Each stage of production is subject to TUV control and certification, which is important because the structure has been specially designed for all wind and snow zones in Poland and Europe. The innovations introduced in this model help to reduce condensation, increase the usable volume, as well as resistance to snow and gusts of wind. The 13M model allows you to store crops, machinery and is perfect for animal husbandry. The design assumptions allow expansion and change of purpose during operation.



7. Irriget.com – online satellite irrigation decision support service

Wasat Sp. z o.o.

Irriget.com provides precise information on the current moisture conditions in the fields. The results of satellite and meteorological data analysis, presented in an intuitive way, without the need for additional devices or measuring stations, allow you to estimate the amount of water that evaporates from each part of the field each day. This information enables quick and very convenient monitoring of the situation in the fields and making optimal decisions related to the date, place and dose of irrigation.



8. JCB 542-70 AGRI PRO TELEHANDLER

JCB / PPHU GAŁKOWSKI Sp. z o.o.

New AGRI PRO – 50km/h Parametres: 4.8 litre, 4-cylinder engine – JCB DieselMAX Stage V. 175 HP (129kW), 690Nm at 1500 rpm. High speed DualTech transmission – 50kph 160l/min – Variable flow hydraulic piston pump Larger heavy duty JCB 10 stud axles European type of tractor approved as T1B tractor.



9. MLT 850-145V+ Telehandler

Manitou Polska Sp. z o. o. (a branch of the French manufacturer Manitou BF) / Przedsiębiorstwo Usługowo-Produkcyjne AGROMIX Sp. z o. o

The MLT 850-145 V+ telehandler is a machine with a load capacity of 5 tons and a working height of 7.6 meters. It has the highest technical parameters in the class of comparable machines on the market! Intelligent and innovative solutions affect productivity, operator comfort and significantly reduce the total cost of ownership (TCO).



10. Mzuri Pro-Til 4Tx Combined cultivator and seed drill

MZURI-WORLD Sp. z o.o.

The Pro TIL 4Tx is a multi-tasking machine. This allows for a much larger, better and more effective use of the fields. With Pro TIL 4Tx, you can experiment with sowing of different types of fertilisers and plant seeds. This results in maintaining high fertility and capability of the soil. The Pro-TIL 4Tx machine also has the SELECT function that allows you to change the row spacing at the touch of a button. This feature allows for wide spacing of 72.6 cm necessary for sowing grain maize, sunflower or rapeseed.



11. A platform supporting harvest forecasting and monitoring on a regional scale

SatAgro Sp. z o.o.

The platform supporting harvest forecasting and monitoring was created for companies that contract, purchase and process agricultural produce on a regional scale. Its main goal is to support logistics and optimise the harvest at every stage. The platform is the result of several years of cooperation with large sugar mills in the United States. The solution has been adapted to the European market, which is characterised by smaller arable fields and a more diverse cultivation culture.



12. RAUCH AERO 32.1 Fertiliser spreader

KUHN-MASZYNY ROLNICZE Sp. z o.o.

A precise pneumatic fertiliser spreader. High level of fertilisation quality. The advantage of the RAUCH AERO 32.1 mounted pneumatic fertiliser spreader is efficiency combined with the highest precision, even in the case of fertilisers with problematic volatile properties. The AERO 32.1 precision spreader is characterised by the accuracy of dosing and spreading the fertiliser. External factors such as wind, fertiliser quality or slope do not affect the spreading pattern and thus the precision of spreading the fertiliser. The technology of spreading fertilisers currently introduced by RAUCH also makes a huge contribution to environmentally friendly agriculture. The RAUCH AERO 32.1 pneumatic spreader is designed for farms where the highest precision, exceptional cost-effectiveness of fertilisation and high efficiency regardless of weather conditions are important. For farms using variable dosing maps, this spreader allows the use of variable fertiliser dosing on each of the four sections separately, which is an ultra-precise solution.



13. MEPU M4-45 Mobile dyer

MEPU OY

The M4-45 mobile dryer is the best choice and one of the few such a highly advanced product designed for drying all kinds of cereal grains. A wide range of optional equipment allows you to configure a highly automated, environmentally-friendly and economical grain dryer that uses the latest solutions to guarantee work efficiency, unprecedented in other products of this type, with relatively low labour costs.



14. Directlnjekt System – Additional direct power supply

AMAZONEN-WERKE H.DREYER SE&Co.KG AMAZONE POLSKA Sp. z o.o.

The DirectInjekt system allows for the quick and flexible use of an additional plant protection product that meets the needs in specific field conditions. Its advantages include the saving of costs and working time, the cost of operating the machine, the reduction of plant protection products, environmental protection, as well as the optimal condition of crops and optimal yield.

