

4E-CONSULTING

IT SCORED FIVE GOALS



Paolo Patroncini is General Manager of 4e-consulting, which has joined the Zapi Group. “The role of 4e-consulting is that of an engineering company: we deal with system integration,” he says. “We have free reins in the technical management of projects, we interface with our interlocutors as collectors of information, which we bring back into the group, in order to identify the most suitable components and integrate them into the project. There is a big divide, which is also cultural, between high and low voltage, i.e. below 96 volts and in the upper range, up to 800 volts. Projects involving high power must necessarily be at 800 V and in this approach we also include hybridisation”.

Shall we talk about the details of your involvement at EIMA International? “Some manufacturers have turned to us in some cases to electrify implements, including high voltage; in

other cases, they wanted to electrify the actual machines. At EIMA, our partners will present five projects in which we have been involved in system integration. Let’s start with **Stellantis-VM Motori**, with the brand new super-compact 3-cylinder Multijet SDE 1.3-litre hybrid, R304 in the new denomination. The engine is of FPT origin and entrusted to the care of VM, for off-highway hybrid applications, to which an electric motor with permanent magnets and a Zapi inverter have been integrated. **Forigo Roter Italia** will present EnerG, a full-electric, seed drill-bed former rover which won the prize for innovation. The self-propelled vehicle is already prepared for autonomous driving. It is low voltage and controlled by a control unit for which 4e-consulting acted as a system integrator, using components from the Zapi Group: 10 electric motors and 10 inverters. With **Alpego**, a high voltage electrified harrow, Alysium, with 5

motors and 5 inverters. Together with **Ferri**, we developed a high voltage flail mower».

Grim completes 4e-consulting’s five projects at EIMA. “We’ll be presenting a self-propelled sprayer hybrid with them, with an FPT Industrial engine”. Patroncini makes some last comments. “Together with some partners, we have taken important steps towards a future called ‘precision farming’. Implement manufacturers are pushing OEMs to provide the indispensable source of energy to enable their applications to function, and so the propulsion systems must necessarily move towards hybridisation or electrification. We certainly perceive an acceleration in electrification, instead of a recession, even in the hybrid sector, by companies that want to show up at trade fairs not for a mere marketing issue, but to sell their products, as the benefits are tested both in terms of running costs and comfort and operability.”