



# LUKAS HYDRAULIK INNOVATING THE INDUSTRY

Daniel Engelhardt, Product Manager at LUKAS Hydraulik GmbH catches up with our Fire Buyer Features Editor to discuss the future of search and rescue technology

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**D**aniel Engelhardt has been working for LUKAS Hydraulik for 13 years after embarking on a three-year apprenticeship and progressing through Customer Service and International Sales. Daniel's extensive career with LUKAS allows him to be the perfect candidate for discovering the latest in innovations happening at LUKAS.

Rebecca Spayne, Features Editor for International Fire Buyer, catches up with Daniel, virtually, to discover more about the eWXT line and to discuss emerging trends in the market both digitally and product-based.

## AS ONE OF THE MARKET LEADING COMPANIES FOR RESCUE TOOLS, HOW HAVE YOU CONTINUED TO STAY AHEAD OF THE CURVE?

We, too, have been thinking about how we can promote the LUKAS brand in these times when customer contact is only possible to a limited extent. For one thing, we have done a lot on the product side. In April we followed up our complete eWXT range, which we had already successfully launched on the market last year with a few selected models.

Furthermore, we have launched two completely new cutters, our S 378 and S 789, which set new standards with their outstanding blade geometry combined with low weight and small dimensions.

**"Since we were the first company in the world to launch a complete battery-operated rescue kit in 2010, the world market has almost completely turned in this direction"**

On the marketing side, we have come out with our new book "Vehicle Extrication – The Next Generation", which we wrote together with the internationally renowned rescue expert Ian Dunbar. A new standard work especially designed for rescuing from new vehicles and available through our webshop and amazon.de. Due to the COVID-19 crisis, our customers have slightly more time to read than usual and we want to maintain that strong bond with them, even if customer visits are difficult to conduct.

We will also be shooting product videos around our eWXT range in September to be able to present our strengths to our customers again after this long break.

## LUKAS HYDRAULICS HAVE CONTINUOUSLY INNOVATED, EVEN SINCE CREATING THE FIRST HYDRAULIC CUTTER, IS THERE ANYTHING EXCITING THAT YOU CAN DISCLOSE FOR THE FUTURE?

It is generally known on the market that our focus is on the further development of battery technology.

Since we were the first company in the world to launch a complete battery-operated rescue kit in 2010, the world market has almost completely turned in this direction. Our success proves that we have chosen the right direction in technology development. The battery as a constantly available energy source offers many possibilities for the sector. I cannot reveal details yet, but we will of course continue down this path and already have many great ideas for the future for how we can make our rescue tools even more attractive for our customers.



## SEARCH AND RESCUE OPERATIONS ARE BECOMING MORE AND MORE DIFFICULT, AND COMMON, HOW CAN YOUR TECHNOLOGY HELP AID RESPONDERS?

The battery technology offers numerous advantages over conventional rescue equipment. Its high degree of mobility enables it to work in confined spaces and in hard-to-reach terrain.

In addition, the significantly lower noise level makes it easier for the emergency services to communicate on site, which is an integral component, especially with difficult terrain rescue operations.

Also, the lack of hoses makes working much safer, as there is no danger of tripping, halting flow or leakage of the hose line. Customers also save an enormous amount of space and weight on the vehicle if they opt for a battery-powered set compared to a conventionally powered set.

We now have 10 years of experience with this technology, more than any other company on the market. Customers appreciate the reliability of our products and our efforts to make them even better with every generation we launch. We are today the world's largest manufacturer of battery-powered rescue tools and our new developments repeatedly set the benchmark in this field.

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## WHAT ARE SOME OF THE KEY BENEFITS OF YOUR eWXT SERIES?

We are very proud of our new high-performance battery. With 9Ah it offers the highest capacity of all batteries on the market. In combination with our new brushless motor we have succeeded in almost doubling the runtime compared to the E2 series. A really fantastic result and a clear demonstration of the capacity of this technology.

Furthermore, our eWXT rescue tools can be operated up to 60 minutes in 3 meter deep fresh water with each component being completely watertight. Our innovation does not stop there, we have also been able to reduce the size and weight of all units even further compared to the previous series, providing an efficient product for the forefront of the market. ➔

## CASE STUDY: eWXT SERIES

Our eDraulic Watertight Extrication Tools offer the usual powerful performance, high speed and proven safety of LUKAS rescue tools combined with the technological innovations of an axial piston pump, an electromagnetic service valve and a brushless motor. In addition, there is our latest innovation: All eWXTs are liquid-protected rescue tools that enable operations in heavy rain, flood or even under water. Every single technical component has been made waterproof on its own.

Therefore, all eWXTs fulfil the protection class IP 58 and can be used for up to 1 hour at a water depth of 3m. The series includes the waterproof rescue battery with 5 Ah or 9 Ah battery, both

equipped with the longest operating time in the industry. This can even be replaced under water if necessary.

### WATERTIGHT

- All technical components have been made watertight
- All eWXT tools meet the IP 58 protection class
- Can be operated for up to 1 hour at a water depth of 3 m under water

### BATTERY 5 AH/9 AH

- Watertight 5 Ah battery, watertight 9 Ah battery: most powerful on the world market
- Improved handling of the slide-in or locking mechanism
- Both batteries are equipped with the longest operating time in the industry
- Can also be replaced under water if required

### CONTROL VALVE

- Proven star grip with simple handling

### BRUSHLESS ELECTRIC MOTOR

- Less noise emission and longer lifetime
- More torque and more power – with smaller dimensions
- A minimum of mechanical wear-and-tear parts
- Lower energy consumption and thus longer runtime with one battery charge
- Electronic speed control ensures that the working speed of the unit remains constant up to maximum load

### AXIAL PISTON PUMP

- Less noise emission
- More compact design – shorter tool length

**THIS TIME OF YEAR, WE WOULD HAVE BEEN GEARING UP FOR INTERSCHUTZ, WAS LUKAS PLANNING ANYTHING EXCITING FOR THE EVENT, AND ARE YOU ATTENDING NEXT YEAR?**

It is a great pity that Interschutz could not take place this year. The planning had already been completed and we could hardly wait to present our new developments to the customers.

Together with our sister companies Akron Brass, Godiva, Vetter and AWG we will have a joint stand under the big umbrella brand IDEX Fire & Safety. In our inside area with different sections for the Brands there will be a meeting area, info points, an entertainment centre and much more. For our outdoor area we planned to set up a kind of playground. The customers would not only have been informed about the new products but would also have been able to try them out for themselves. We consider this very important so that everyone can convince themselves of the quality of our products and get a personal feel for the product and brand. There will be cutting demonstrations and direct purchase of our merchandise and fan articles that are otherwise sold through our webstore at [www.lukas-store.de](http://www.lukas-store.de). Of course, we are planning to be present

at Interschutz next year as well, even though it is not yet possible to predict whether and in what size the fair will be held.

**WHAT TRENDS ARE YOU EXPECTING TO SEE EMERGING IN THE MARKET?**

Weight reduction will continue to play an important role. The decisive factor here will be above all not to achieve the savings by abandoning performance. Weight reduction is a core theme because of its ability to increase the safety of responders as well as increasing the ability to use a product. With the efficiency and safety heightened, customers are

**"We are also working on new concepts to reach customers without being on site. This area still offers a lot of potential for the future"**

able to continue to save lives at a potentially quicker and easier pace.

Using new materials can be the right approach here, with constant innovation and testing this could open up many opportunities. The same applies to the dimensions of the equipment.

The battery capacity is certainly not yet at its limit, and we intend to continue in this direction. Even if it must be noted here that the runtimes we have achieved already come very close to what is needed at maximum, but there is still great potential in battery capacity and technology.

**HOW DO YOU THINK COVID HAS IMPACTED THE INDUSTRY?**

Customer visits and product demonstrations are still the most important sales tools in our industry. The fact that these can no longer be carried out has forced manufacturers to break new ground. Digitalisation in marketing and sales has progressed further and faster than was foreseeable for our very traditional industry. The use of online tutorials, video presentations, live streaming and product videos has increased and will continue to increase. LUKAS has fully embraced the digital side of the industry and as mentioned previously, we continue to do so with new product videos and demonstrations in the near future.

We are also working on new concepts to reach customers without being on site. This area still offers a lot of potential for the future and, despite challenges, is an exciting time. **FB**

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