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## **Patented effectiveness – The new Insta Steel Eagle™ ER drone solution was tested and developed in collaboration with a Ukrainian partner company**

The Finnish [technology company Insta](#), which specializes in defence solutions and cyber security, has developed a new, more effective version of the combination of a drone and a patented explosive charge. The new version, the [Insta Steel Eagle™ ER](#) (Extended Range), is the result of international collaboration. Compared to the previous Insta Steel Eagle™ product, it brings a more capable and affordable solution to the defence technology market.

– The new solution combines broad expertise with state-of-the-art technology tested in harsh conditions. We have designed the patented explosive charge. The drone equipment that provides better performance as well as a longer range and higher load carrying capacity is supplied by our Ukrainian partner that operates in the wider drone ecosystem, explains **Tuure Lehtoranta**, Vice President, Sales and Customers, Defence at Insta.

With the drone, the explosive charge can be transported by air above the desired target, where it can then be detonated. The charge contains balls, and it delivers fragments across a wide area of effect, precisely striking the desired target from above.

– The requirements of modern electronic warfare, including the ability to tolerate interference, have been considered in the development of the system.

### **Agile development of state-of-the-art technology**

The changed security environment has created new opportunities also for Insta, which for years now has focused on developing critical defence technologies. A rapid development process and learning from others are essential in building future capabilities. Collaboration and agile productization enable applying these capabilities and lessons also in other countries' defence.

Currently, the solution is available for the Ukrainian market. In the future, however, the marketing licenses applied for as part of international collaboration allow selling and marketing the solution in Europe and in NATO countries as well.

### **Innovations that attract international interest**

Insta has plenty of experience and competence in the fields of cyber security, software development, and defence technology. This comprehensive expertise can meet the future needs of the international defence market in a versatile and tailored manner.

The patented [Insta Safe EOD™ drone solution](#) is an efficient approach to the safe clearing of mines and explosives. With the new method, the clearance personnel no longer have to enter the immediate danger area. The solution uses a drone for identifying the explosive ordnance to be cleared and delivering a clearing charge.

You can learn more about the new Insta Steel Eagle™ ER and our other solutions such as the new [Insta SafeLink Secret™](#), the most advanced encryption device on the market, allowing for protecting security classification SECRET level data at the SecD-Day event in Helsinki on January 29–30. The event promotes Finland's comprehensive security.

### **Decades of experience in defence technologies**

For more than 50 years, Insta has been a front-runner and a reliable partner in the defence technology market. The company is growing quickly, and it is a strategic partner to the Finnish Defence Forces. Insta's Defence services are related to the maintenance and service operations for the avionics and electronic systems in aircraft as well as to systems integrations in connected defence. Insta's AirC2 product family, for example, contains solutions for the integrated command of air defence.

This year marks Insta's 65th anniversary, and the company has a strong [role in the servicing of the avionics of the upcoming Finnish F-35 fighter fleet](#). The company has also signed a [contract](#) with Lockheed Martin on the implementation of a military data filtering solution. Moreover, Insta has [signed a collaboration agreement with the NATO Communications and Information Agency \(NCIA\)](#).

### **[Insta Steel Eagle™ ER](#) – more capable and effective flying directional explosive charge**

- Patented explosive charge with a drone designed and tested for demanding conditions
- Coming from above, the explosive effect can be freely adjusted according to the altitude of the drone; it has an opening angle of 90 degrees
- Charge contains steel or tungsten balls
- Delivers fragments across a specific area of effect, precisely striking the desired target from above
- More than 3,000 fragments over an area of effect of approx. 2,000 m<sup>2</sup>
- Explosive charge weighing approx. 3.6 kg

### **[Insta Safe EOD™](#) – Decisive efficiency**

- Unique, safe, and economic solution for clearing explosives with commercially available drones
- Especially suited for humanitarian demining but also applicable for military purposes
- Clearance personnel do not have to enter the immediate danger area
- Uses drones for identifying the explosive ordnance to be cleared, delivering a clearing charge, detonating the charge, and verifying the clearance event
- Cost-efficient: Affordable purchase price with simple manufacturing and logistics

### **Insta SafeLink Secret™ – Secured communications and high performance**

- The most advanced encryption device on the market allows for protecting security classification SECRET level data



- Next-generation Finnish encryption device that meets the requirements of TL II and FIPS 140-3 Level 3 as well as industry standards
- HW based red-black separation, active intrusion detection and response; Uses quantum secure encryption algorithms
- High performance and high data volumes without slowdown – 10 Gbps
- Life-cycle support for more than 10 years – even under exceptional conditions

**Read more:**

[Insta - Reliable partner in networked defence solutions and aviation](#)

[Insta Steel product family](#)

[Insta SafeLink Secret™](#)

**Further information:**

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Insta is a diversified technology company with in-depth expertise to enable secure and customer-focused solutions for the needs of industry, defence, software development, and cyber security. We are a reliable partner that develops future security and decisive performance in an ever more rapidly changing, networked world. We ensure the continuity of critical functions within society and companies and a smoothly running everyday life. Constant motion, experience and responsibility are at the core of our safety culture. In 2023, the net sales of our growing family business was 173.9 million euros and we employed approximately 1,200 people. Insta – Decisive Impact. Further information: [www.insta.fi](http://www.insta.fi)