

STRECON in Brief

Company Profile

STRECON A/S is a leading developer and manufacturer of high-strength prestressing tool systems based on the unique stripwinding technology. The technology is also successfully applied for hydraulic press systems, for example for tool assembly by press fitting and high-pressure/high-temperature applications.



The stripwinding process

Our key application fields are cold forging, high-pressure synthesis of industrial diamonds/CBN, and high-pressure geological experiments at universities.

Our company aims to develop and deliver innovative, high-performing, and durable tooling and press machine solutions. We value a close and trustful collaboration with our customers as well as with our suppliers and university partners for the benefit of true innovations and high-quality solutions for global industries.

STRECON is a Danish company, the headquarters and main manufacturing activities of which are located in Sonderborg, close to the German border.

Please visit www.strecon.com for more information about our company, technologies, and products.



STRECON Building in DK-Sonderborg

Prestressing Tool Systems

STRECON designs and manufactures high-strength prestressing tool systems for a wide range of high-pressure applications involving very high and even extreme tool loads. These include cold precision forging, where the automotive industry is a key end-user, high-pressure synthesis and sintering of industrial diamond/CBN products, and high-pressure experiments conducted at universities and research centers.

Our prestressing tool system is also known as the STRECON Container, and it is designed and manufactured with our unique stripwinding technology. It is the strongest prestressing system available on the market and engineered to optimize the stress state and service life of the forging dies and other high-loaded tools. Furthermore, a stripwound container can be reused many more times than a standard stress ring, offering improved durability and cost efficiency.

In addition to the stripwound container as a standalone prestressing tool, STRECON offers complete, ready-to-use tooling solutions and even complete tool holder assemblies.



Examples of STRECON Containers

High-Pressure Experiments

STRECON designs and manufactures hydraulic press systems for high-pressure experiments with several GPa of pressure. Over the years, the product portfolio has developed from high-strength pressure vessels to integrated equipment solutions including carbide tooling and cooling systems, and most recently to high-end and fully automated hydraulic press systems.

Both the pressure vessels and the hydraulic presses are made by our stripwinding technology for increased loadability in a compact design. The machine solutions include Piston Cylinder Presses and Griggs Apparatuses, each engineered for energy efficiency and state-of-the-art automation with the possibility to program, monitor, and control the entire test sequence.



Piston Cylinder Apparatus

Tool Assembly Press

STRECON makes compact presses designed specifically for the assembly of tools by press fitting. The product programme, called TAP, includes hydraulic press units with 150 – 650 metric tons in press force. Each press is equipped with proportional valve technique for smooth movement of the cylinder. The press controls system is either analogue or a PLC-based solution, which also includes force/distance measurement.

Except for the 150T press, the press frames are compressed by stripwinding, ensuring a very compact and strong machine design. Even at full load the press frame remains in a fully compressive state.

The TAP press requires just 1-2 m² in floor space, and it is designed ergonomically for easy and safe tool handling.



Hydraulic TAP for tool assembly by press fitting

Tungsten Carbide Parts from Japan

STRECON is collaborating with Silveralloy, a well-known Japanese developer and manufacturer of high-quality carbide tools and wear parts for different metal forming applications as well as carbide parts for other industrial usages. In addition to distributor sales, we also use Silveralloy's carbide materials in our own tooling solutions, for example high-pressure experiments.

Silveralloy can deliver carbide parts as sintered as well as finished parts ready for use by the customer. High-quality tools and components pay off in improved service life, machine uptime, and lower operational costs.



Carbide tools and wear parts from Japan

Felss Agent in Scandinavia

STRECON is a Scandinavian agent for Felss Systems, who is a leading German developer and manufacturer of machines and production systems for cold rotary swaging and cold axial forming of net-shape splines of hollow components. Felss has a long tradition and a leading position within the German automotive industry but is delivering their machine and equipment solutions to customers worldwide.



Felss Aximus machine solution