The World's 1st 45 MN Hybrex Press Line for the Automotive Sector

Behind the 34-year stable growth trend of ASAŞ lies in the passion of trying to foresee the future trends by following the innovations and always offering the best for its customers by investing in technology. With this perspective, The company will increase its production capacity by 18,000 tons of profiles with Europe's most advanced & world's first 45MN Hybrex Press production line, which is reinforcing its role as a comprehensive solutions provider in the aluminium sector. This new line, the second in the series following the successful deployment of the first Hybrex press last year, will feature cutting-edge die heating, billet heating and aging furnaces being used entirely electricity. This design not only enhances production efficiency but also underscores ASAŞ's commitment to sustainability and reducing environmental impact by reducing 530 tonnes of carbon emission annually.

The 45MN Hybrex Press Production Line, custom-built by the renowned German firm SMS GROUP, marks a significant advancement in manufacturing technology. It is designed to produce structural profiles specifically for the automotive industry, including body parts, battery casing profiles, crash management components, safety beams, and ABS/ESP blocks. This state-of-the-art facility will greatly enhance ASAŞ's production capabilities. The line is expected to commence operations with its first billet by the end of October, following a four-month mechanical assembly and a two-month setup for electrical and automation components. With advanced automation features, from billet storage to automated aging furnaces, the new line will significantly boost both alloy development and high-strength alloy production.

ASAŞ's commitment to quality is evident in its Continuous Ultrasonic Billet Testing Line, which rigorously tests billets used to produce structural profiles. The company's in-house billet casting line and R&D expertise enable specialised OEM alloy development, ensuring high-quality and tailored solutions for its clients. With its industrial expertise alloy development and R&D capabilities, ASAŞ is listed as an approved supplier among the leading OEMs in the automotive sector. Besides these, fully robotic CNC lines, integrated with ASAŞ's AMR network for intra-logistics operations, ensure precise and efficient production. These lines feature advanced capabilities in cutting, CNC machining, robotic welding, bending, and dedicated assembly, with all necessary fixture and tooling design and

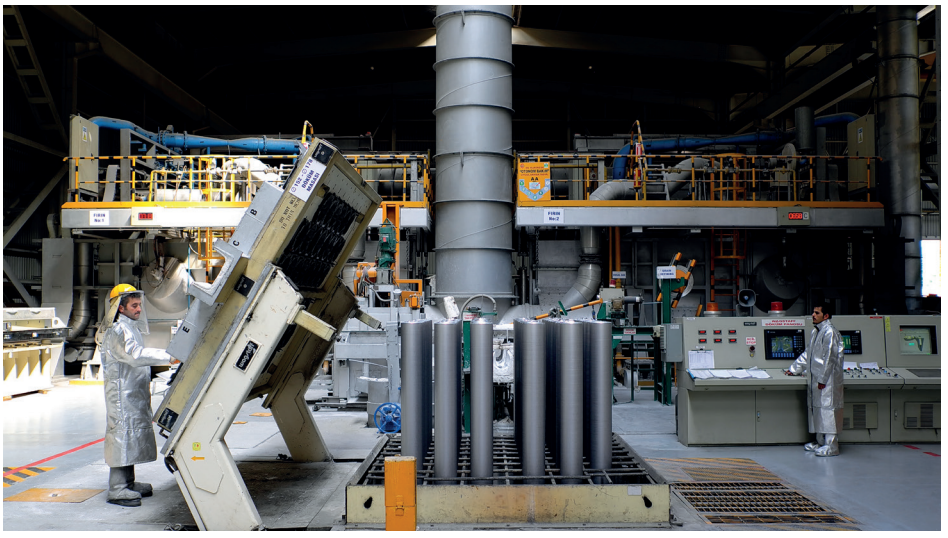
"Sustainability is at the core of ASAŞ's operations. In line with this approach, we have gained Aluminium Stewardship Initiative (ASI) certification, meeting all 11 principles of the ASI Performance Standard. This certification underscores ASAŞ's commitment to environmental stewardship, social responsibility, and economic sustainability."

Derya Hatiboğlu,
General Manager of ASAŞ

manufacturing managed in-house. This integrated approach simplifies the supply chain, offering significant cost and quality control benefits to customers.

ASAŞ actively calculates and reduces its carbon and water footprints and prepares Environmental Product Declarations (EPDs) while conducting Life-Cycle Assessments (LCAs) for its key products. The company's dedication to sustainability is further exemplified by its development of low-carbon aluminium billet, NEXAL. With a carbon footprint of ≤ 4 tCO_2e/tAl, this billet incorporates low-carbon raw materials, high post-consumer recycled content, and renewable energy. NEXAL billets not only supports ASAŞ's sustainability goals but also assists customers in meeting their environmental objectives.

The company's R&D capabilities are pivotal in driving these technological and sustainability advancements. ASAŞ's R&D Centre, staffed by over 70 experienced professionals, fosters university-industry cooperation through support for postgraduate education and technical training. Equipped with advanced engineering software for computer-aided design and analysis, the Centre also features sophisticated imaging devices such as SEM and optical microscopes, chemical analysis tools including spectrometers, FTIR, DSC, and mechanical measurement instruments like tensile and hardness testers. Additionally, the Centre has a foundry, laboratory-scale heat treatment furnaces, machining equipment, and 3D printers, facilitating the seamless transition from research studies to prototypes and advanced products.



By combining cutting-edge technology with a strong commitment to environmental responsibility, ASAŞ boasts a robust international presence. The company has been exporting to a diverse range of countries – including EU nations, Great Britain, Switzerland, and Eastern Europe – underscoring its global reach and reliability in the aluminium market. ■