

FOUNDRY REVIEW
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-SUMMARIES-



MODERN ALUMINIUM FOUNDRY: DATA-DRIVEN DECISION-MAKING AS A MANAGEMENT STANDARD

Today's aluminium foundries operate in an environment shaped by cost pressure, demand volatility, and increasingly stringent quality standards. These factors are driving a fundamental shift in management approaches. The key asset is no longer machinery alone, but above all data – accurate, consistent, and available in real time. In this landscape, ERP systems are evolving beyond administrative support tools to become the foundation of business growth and operational security.

INTEGRATED FOUNDRY AS THE FOUNDATION OF MODERN AUTOMOTIVE PRODUCTION

Founded in 1949 in Spain, Ficosa International has specialized in the design and manufacture of advanced systems for the automotive industry for decades. We have been operating in Poland since 2001 as Ficomirrors Polska Sp. z o.o., and the dynamic development of the company led to the launch of a modern production plant in Dąbrowa Górnicza in 2006, and then its expansion in the following years. Over the years, we have consistently developed our business – both through investments in new technologies and the expansion of infrastructure and team. Today, the plant is an important production center in Central and Eastern Europe, specializing in three main areas of activity: Rear View Systems – car mirror systems, Underhood Systems – tanks for washer systems, Command & Control Systems – manual gear levers.

A NEW CALIBER OF GROWTH – ODLEWNIE POLSKIE SA ENTERS THE DEFENCE SECTOR. INTERVIEW WITH LESZEK WALCZYK, PRESIDENT OF THE MANAGEMENT BOARD

Odlewnie Polskie SA has secured an order from a company within the Polish Armaments Group (PGZ) for the production of artillery shell bodies using ADI technology, or austempered ductile iron. This material is valued for its high strength and resistance to dynamic loads, making it well suited for defence applications. The contract is worth nearly PLN 28.5 million gross, and the project is scheduled for delivery between March and July 2026. We spoke with Leszek Walczyk, President of the Management Board of Odlewnie Polskie SA, about the significance of the contract, the potential of ADI technology, and the company's prospects for further growth in the defence sector.

WOJCIECH KOWALCZYK

LESS IS MORE – BUT NOT FOR EVERYONE: THE NEW REALITY OF DIE CASTING

High-pressure die casting of aluminum alloys is widely used wherever large quantities of components are needed. The automotive sector is the main customer for European die casting foundries, accounting for up to 80% of their production

capacity over the past two decades. The growing production of the European automotive industry has been the driving force behind the spectacular expansion of die casting. Therefore, as automotive production in Europe declines, die casting is also a natural victim of this trend. And this is precisely what we are witnessing today.

INNOVATIVE, COMPREHENSIVE SERVICE FOR MANUFACTURING AND FINISHING ALUMINIUM COMPONENTS FOR THE FURNITURE INDUSTRY – EXPERIENCES AND RESULTS OF ALUDESIGN SA’S R&D

The increasing demands of the furniture market regarding quality, aesthetics, and repeatability of aluminium components necessitate modern technologies in die casting and surface finishing. In response, Aludesign SA implemented an R&D project aimed at developing an innovative, comprehensive service integrating die design, aluminium pressure die casting, and automated surface finishing.

JAROSŁAW PIĄTKOWSKI

DEVELOPMENT TRENDS IN THE CASTING OF CAR WHEEL RIMS MADE FROM AL-SI-MG ALLOYS

Although advanced lightweight construction technologies allow for the production of wheel rims using flow forming, forging, spinning or gravity casting, the most commonly used method of manufacture is low-pressure die casting (LPDC). The advantage of LPDC lies in the high quality of the production process, due to its efficiency, precision and high-quality surface finish, as well as the relatively low casting costs (around 3–4 times lower than those for forged wheels). For these reasons, the global market for aluminium wheel castings is expected to continue to grow steadily.

WORLD ENGINEERS’ DAY AND THE GALA FOR THE 32ND ‘GOLDEN ENGINEER’ AWARDS

On the eve of the 7th World Engineering Day for Sustainable Development, a day sponsored by UNESCO – the United Nations Educational, Scientific and Cultural Organisation – a ceremony marking the occasion was held on 3 March 2026 at the Warsaw House of Technology (NOT). This year’s celebrations were held under the theme ‘Space research and sustainable development’. The event was held under the honorary patronage of Włodzimierz Czarzasty, Speaker of the Sejm, and Krzysztof Gawkowski, Deputy Prime Minister and Minister for Digital Affairs. Another cause for celebration was the 160th anniversary of *Przegląd Techniczny*, an engineering newspaper which organises the readers’ poll for the title of ‘Golden Engineer’.

4TH POLISH FOUNDRY CHAMPIONSHIPS IN SKIING AND SNOWBOARDING

On 5–6 March 2026, the 4th Polish Foundry Championships in Skiing and Snowboarding took place in Bukowina Tatrzańska, on the slopes of the Rusiń-Ski Ski Resort. The event was organised by the Polish Foundrymen’s Technical Association and the Foundry Chamber of Commerce. The championships were combined with a technical conference entitled ‘Current challenges for the foundry industry’.

MAREK SKOWRON

GATE BUMPERS FROM POLISH IRON FOUNDRIES IN THE 19TH AND EARLY 20TH CENTURIES. (PART 2)

The gates of the old-time tenement houses were at risk of being damaged by passing horse-drawn vehicles. This was prevented by placing hewn stone elements, or bumpers, at their corners. With the development of cast iron founding and its widespread use for everyday objects, gate bumpers also began to be made from cast iron. This second part of the article presents examples of their use in Poland during the second half of the 19th century, mainly in Łódź, the Old Polish

Industrial Region and Galicia. Examples of buildings in which they were used are given, as well as numerous samples of the bumpers used, with an indication of the Polish foundries that manufactured them.