ROLL CASTING AND
HAND-MOULD CASTING

MAXIMUM PERFORMANCE

since 1892
We aim to deliver maximum performance in roll casting and hand-mould casting. At COSWIG, we strive to deliver highest quality, absolute precision and ongoing innovation for our customers, both in terms of products and processes. We like to think outside the box. We like to keep developing and rethinking our approaches. We master even demanding challenges with know-how, reliability and passion. Whatever your plans – as your casting partner we will work with you to develop pioneering and cost-effective solutions.
COSWIG thinks ahead and pushes the boundaries. For decades we have kept setting new standards in the casting of rolls and special components, thus helping our customers to secure a permanent competitive edge. Since 2000, we have driven the development of state-of-the-art technologies and production methods from our own research department.

With a flexible and solution-focused approach, we can respond to new challenges of any magnitude. In the process, our engineers always keep a close eye on practical feasibility and the benefits for our customers.

Leading companies in a range of industries trust the innovation strength of COSWIG. These include steelworks and rolling mills, as well as manufacturers of wind turbines, printing presses, grinding machines and shredders and machine builders in a wide range of different areas.

Our motivation: to develop and produce all-embracing and profit-generating solutions for the casting processes of tomorrow.

Competitive edge through research

From our beginnings as a small ironworks to becoming one of the most modern foundries in Europe - COSWIG has constantly evolved as a company and redefined casting in the process.

Since 1892 traditional skills and craft have been fused with state-of-the-art technology at COSWIG. The result: pioneering solutions and successful customers:

- 2016: Development of hollow rotor shafts made of solid solution-strengthened cast iron
- 2012: In-house development and commissioning of the automated water quenching system for cast rolls
- 2010: Delivery of hollow rotor shafts for Alpha Ventus, the first German offshore wind farm
- 2009: Investment and opening of a new foundry with state-of-the-art equipment
- 2003: Development of the prototype of a hollow rotor shaft for the world’s first 5-MW wind turbine
- 2000: Setting up of an in-house R&D department
- 1914: Development of the world’s first hot blast cupola furnace by company founder Eduard Schürmann
- 1895: First smelter for the production of chilled cast iron for railway applications and hand-moulded grey cast iron for machine building

A tradition of innovation
MAXIMUM PERFORMANCE IN TWO AREAS
High-tech solutions for highest demands

The efficiency of any production line can be improved with rolls from COSWIG. Here, the key to success is profile rolls and edger rolls as well as rolling rings, which are carefully coordinated by our engineers to the production processes of our customers. For hydraulic press systems COSWIG produces ready-to-install pressure pistons and plungers that deliver long-term running reliability through perfectly accurate dimensions.

The unmatched quality of our products is a combination of our long-standing expertise, the skills of our highly-qualified specialists and our constant drive to refine and improve our production methods.

Optionally we can also offer our rolls with closely contoured quenching and tempering. We achieve maximum hardness through our automatically controlled water quenching system. With this in-house development from COSWIG we ensure uniform, well-controlled cooling of the roll right down into the smallest angles in the profile.

Engineering & production – cast from the same mould

COSWIG is the specialist for high-end and innovative casting solutions. Whether wind energy companies, milling and grinding plants or machine builders: with well-grounded engineering solutions and expert industry knowledge, we can help you to shorten development processes, reduce costs and improve your products.

In order to achieve the best-possible results, we will be by your side throughout the entire process as an engineering partner – from preparation of the original draft design through simulations and first casting to final delivery of the ready-to-install components.

Here, our customers can trust the capability and efficiency of COSWIG at every step along the project. With many years of casting experience, a state-of-the-art machine park and highly-trained skilled workers, we guarantee highest quality for every component. For maximum reliability. Around the clock.

1. COSWIG matches every roll exactly to the specific application parameters.
2. Every step in the project is comprehensively checked and documented in binding processes.
3. COSWIG invests continuously in the qualifications of its employees and in modernising its machine park.
4. Getting to the heart of it: Our capable and efficient machining centres guarantee ultimate precision.
5. Tailored solutions: For machine builders in a wide range of different industries.
MAXIMUM PRECISION

Top performance even under high pressure – guaranteed by COSWIG with precisely manufactured rolls and machine components. Surfaces that are machined to the finest level of accuracy ensure that everything runs smoothly. Around the clock. This ensures that every product becomes a hit.
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Perfect form. Total success.

Maximum accuracy in production is the basis on which we ensure that our rolls and specialist components operate absolutely perfectly. This is why COSWIG invests continuously in employee qualifications, the development of new technologies and modernisation of the machine park.

With high-performance CNC machining centres and precision lathe from Herkules, we have set the benchmark in terms of the accuracy and machining quality of our cast products. As a result, we can offer our customers a guarantee that the predicted performance potential will indeed be achieved in reality. Our certified quality management system guarantees consistently high standards for every casting – from the first prototype through extensive series production and on to professional recalibration.

Our skilled workers monitor over 1,000 different parameters with a trained eye and assistance from state-of-the-art laser measuring systems. Only when every detail is perfect do we allow our rolls and machine components to leave the plant on their way to destinations all around the world, where they deliver reliable performance for the clients who ordered them.

Rolls for every application profile

Whether for heavy, medium or light profile rolling mills – COSWIG matches every roll exactly to the specific application parameters. Our engineers determine the optimum material selection for your requirements on the basis of load calculations. As a result, our solutions offer ideal resistance to wear, absolute dimensional accuracy and unbeatable value for money.

COSWIG | MAXIMUM PERFORMANCE

COSWIG checks the quality of every roll with a trained eye and state-of-the-art measuring technology.

Closely contoured quenched and tempered profile rolls for maximum performance and durability.

COSWIG | MAXIMUM PRECISION
Nothing is impossible. Our engineers will find an efficient solution for every challenge. The use of digital technology guarantees high design quality and shorter development times. COSWIG supports the rapid developments in the wind energy sector with high-performance components.

Our engineers will accompany at every project step along the way to ensure that your idea is a success right from the word go. COSWIG is your reliable partner throughout the entire value creation chain – helping to maximise performance from construction of the first prototype through the first casting and right up to series production.

We guarantee a design and construction that are appropriate for casting and a custom-fit selection of materials for applications where the highest demands are made in terms of reliability – among others wind turbines, industrial mills and specialist machines. With our own research department and close cooperation projects with universities and research institutions, COSWIG is always a step ahead.

MAXIMUM ENGINEERING

You will need a strong team if you want to leave your competitors behind you. COSWIG works together with renowned machine builders to develop innovative solutions for new and innovative components. With our combination of engineering competence and casting expertise, we can help you successfully negotiate the process from start to finish.
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An innovative partner. In every aspect.

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Hollow rotor shafts from COSWIG can transmit even extreme forces with ease.

Tail wind for wind energy

For over 15 years COSWIG has been developing and manufacturing advanced machine components such as hollow rotor shafts and bearing housings as an innovation partner of leading international wind turbine manufacturers. We have always managed to overcome the growing challenges of the industry, e.g. by delivering the hollow rotor shafts for the 5-MW systems in Alpha Ventus, the first German offshore wind farm. COSWIG recently set new standards with the delivery of drive train components for several prototypes in the 6-MW class.
Tough and reliable castings

Europe’s leading mill manufacturers trust the engineering expertise and industry knowledge of COSWIG. For grinding systems, COSWIG develops and manufactures many different components that capably stand up to extreme mechanical loads: roll bodies, bearing blocks, fixed bearing housings, levers, forks, roll shells, grinding plates, bearing covers, pressure bars, retaining frames and grinding tables.

Roll shells from COSWIG impress with a particularly long service life.

MAXIMUM RELIABILITY

Special strength is needed in applications where extreme forces act. With the aid of high-quality alloys and innovative materials and compounds, the products from COSWIG are up to the challenge of dealing with even the toughest loads. We guarantee the best quality and performance – with a comprehensive, one-stop solution.
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Valuable materials. The perfect blend.

For our customers we work hard to increase service life, extend durability and maximise productivity. To do this, the engineers at COSWIG have developed innovative and high-strength materials that – in some cases – far exceed the requirements set out in the DIN standards. Our engineers recommend the optimum material selection for your requirements on the basis of load calculations. In this way, we are able to secure a long-term competitive advantage for our partners.

Our research work currently focuses on concepts designed to further improve service life and resistance to wear. Examples include innovative metal alloys and ceramic/metal compounds that redefine the limits of load-bearing capacity and durability.

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MAXIMUM FLEXIBILITY

Ultimately, long-term success is only open to companies who never shy away from new challenges. COSWIG manufactures customised machine components, special constructions and rolls based on the individual requirements of our customers. Our experienced engineers will also be happy to develop tailor-made solutions for your specific requirements.
Special solutions for machine building.

In the field of machine building, COSWIG can look back on know-how that has grown over time. For more than 40 years we have been assisting leading manufacturers of printing presses through the design and construction of innovative castings. With our experience, we are able to meet the needs of machine builders from different sectors – from general machine construction to machine tools and printing press construction.

Reach your goals safely. And on the fastest possible route.

For over 120 years we have been developing and manufacturing high-end castings for different industries and applications. Our engineers and skilled workers know all about a wide range of different sectors and industries. Our concentrated inter-disciplinary know-how unlocks synergies that accelerate solution-finding processes and improve the quality of results.

With a production capacity of 40,000 tonnes per year, unit weights of up to 55 tonnes of raw mixture and over 260 qualified engineers and skilled workers, COSWIG is perfectly equipped for highly complex tasks. As one of the leading foundries in Europe, we can respond to new challenges in any industry with flexibility and a focus on solutions.

In addition, COSWIG will also take care of all of your logistics needs. All around the world. With our representatives on almost all continents we can guarantee smooth processes and highest delivery reliability.
COSWIG in facts and figures

41,000 m² PRODUCTION AREA
40,000 t CASTINGS PER YEAR
260 EMPLOYEES

About 2014

INTEGRATED MANAGEMENT-SYSTEM
CERTIFIED

Always nearby – wherever you are in the world

You can rely on COSWIG – everywhere and at any time. And almost on every continent. Even after delivery of our castings we will continue to assist you with a comprehensive service offering and skilled and competent advice.

Your contact persons:
As a subsidiary of the DIHAG Group, COSWIG is part of a high performing group of companies: Hubs for wind turbines, 45-t rolls or the world’s biggest ship propeller – the cast products from DIHAG HOLDING GmbH can be found all over the world in applications that demand technological excellence and pioneering innovation. The group is in a leading position both in the shipbuilding industry and in the iron and steel industry.

As one of the largest independent foundry groups in Europe, the subsidiary companies of the DIHAG Group produce around 170,000 tonnes of high-end cast products every year. The range of products covers cast products ranging in weight from less than 1 kg up to 160 tonnes, as one-off pieces or in small, medium or large-scale production runs. In the process, the companies use a wide range of different casting materials such as grey cast iron, spheroidal graphite cast iron and cast steel as well as copper alloys. Together, the group can take full advantage of the available synergies in investment planning, materials procurement and market cultivation. As a result, customers of the DIHAG Group have access to a wide-ranging and comprehensive overall offer.