

Investment Casting
Sand Casting
Die Casting
Forging



#### **About**

Progress Engineers is a leading supplier of high-quality engineering components, specializing in forged and cast parts crafted through investment casting, sand casting as well as die-casting processes. With over 20 years of industry experience, we have honed our expertise to deliver precision-engineered solutions that meet the unique specifications of our clients.

At Progress Engineers, our primary focus is on supplying custom components tailored to the distinct needs of our customers. Our extensive experience and technical knowledge enable us to handle complex projects across various industries, including Oil and Gas, Mining, Railway, Automobile, Marine, Agriculture, Earth Moving, General Engineering, Machine Tools and more.

## **Quality Policy**

Quality is at the core of everything we do. We ensure that each component we produce undergoes rigorous inspection and testing to meet the highest industry standards.

Our processes include precise machining and heat treatment, guaranteeing the durability and reliability of our products. We are dedicated to continuous improvement and innovation, ensuring that we always deliver the best possible solutions to our clients.



#### **Industries We Serve**



Oil and Gas



Mining



Railway



Automobile



Agriculture



Earth Moving



General Engineering



# **Sand Casting**

Sand casting is a versatile and widely-used manufacturing process for producing metal parts. It involves creating a mold from a sand mixture and pouring molten metal into the mold to form the desired shape. Our sand casting services are designed to meet the diverse needs of various industries, providing high-quality, cost-effective, and efficient solutions for producing complex metal parts.

- Cost-Effectiveness
- Short Lead Times Scalability
- Material Versatility
- Quality and Consistency



### **Investment Casting**

Investment casting, also known as lost-wax casting, is a manufacturing process used to create complex metal parts with high precision and fine detail. This technique is valued for its ability to produce components with excellent surface finishes and tight tolerances, making it ideal for applications in aerospace, automotive, and medical industries. This method has been utilized in modern manufacturing due to its versatility and accuracy.

We at Progress Engineers, specialize in delivering high-quality investment casting solutions tailored to meet the unique needs of various industries. Our comprehensive service covers the entire process, from initial design consultation to final product delivery, ensuring precision, reliability, and efficiency.



(Benefits)

- Precision and Accuracy
- Material Versatility
- Flexibility

- Reduced Waste
- Customization
- Quality Assurance

## **Die Casting**

Die casting is a manufacturing process where molten metal is injected into a mold cavity under high pressure. Die casting is an adaptable and efficient manufacturing process, essential for producing complex metal parts with high precision and excellent surface finishes.

Our die casting service leverages advanced technology and experienced professionals to produce high-quality metal components tailored to your specifications. We serve a wide range of industries providing reliable and cost-effective solutions.



- (Benefits) Cost-Effective
- Versatility
- Efficiency

- Durability
- High Precision and Quality





## **Forging**

Forging is a manufacturing process involving the shaping of metal using localized compressive forces. It can be performed using various techniques, including open-die forging, closed-die forging, and seamless rolled ring forging. Each technique is chosen based on the specific requirements of the component being produced.

Our company provides a comprehensive solution to all your major challenges, offering a full suite of forging capabilities tailored to meet the specific needs of various industries. We leverage advanced technologies and a team of experts to deliver high-quality forged components efficiently and cost-effectively.

(Benefits)

- Cost-Effectiveness
- Versatility
- Enhanced Strength and Durability
- Customization and Flexibility
- Improved Reliability
- Material Efficiency







## **Casting Method Selection**

Die casting, investment casting, and sand casting each have unique advantages and disadvantages. Die and investment casting are ideal for small, intricate parts with tight dimensional tolerances, while sand casting suits larger parts that don't require complex machining. Investment casting, using disposable molds, accommodates both ferrous and non-ferrous metals and is suitable for low to medium-volume production with minimal secondary processing. In contrast, die casting uses reusable molds, is limited to non-ferrous metals, and is best for high-volume production, often requiring post-processing for final dimensions and finishes. Choosing the right method involves considering production scale and costs. Progress Engineers supports customers with sand casting, investment casting, and die casting solutions.

#### **PROGRESS** ENGINEERS PTY LTD

13 Collier Road, Morley WA 6062 08 6285 1565 progressengineers.com.au info@progressengineers.com.au