

Metal Fabrications



“Significantly reduces the cost of metal fabrications”

The investment casting process competes with most metal forming processes and offers some unique advantages. The process offers a multitude of benefits including cost savings, design freedom, close tolerances, superior finish, saving in machining time, reproducibility and assembly savings.

Investment Casting, also known as “Lost Wax Casting”, is a sophisticated casting technique that can produce complex and near net shape components. The degree of complexity achievable in the casting dramatically reduces the need for expensive machining and fabrication processes to finish the engineering component.

Investment casting also produces a very clean and sound metal component; an attribute not always associated with other casting processes.

The process saw its first major industrial applications with the advent of the jet engine which required a casting technique that could produce very accurate components in high-temperature alloys. To this date, investment casting is still used in the production of many jet engine components. The strict requirements of jet engine components are a testimony to the capability of the investment casting process.

Investment casting produces the closest tolerances of any casting process over a wide range of alloys. Only permanent mould casting methods compare but these methods are restricted to low melting point alloys and cannot be used with high melting point metals such as carbon steels, stainless steels, tool steels, cobalt and nickel-based alloys etc.

Today many industries are benefiting from the capabilities and cost benefits of the investment casting process. Unfortunately, many design engineers are not fully aware of the process and it is often overlooked as a production method when developing new components.

Supreme Precision Castings is one of the leading investment casters in Australasia and the premier investment caster in New Zealand. We have been producing precision investment castings since 1984. Through our commitment to quality and customer responsiveness, we have earned the business of customers in Europe, the USA, Australia, Asia, United Kingdom and Asia, servicing a wide range of industry groups.

The staff at Supreme Precision Castings Ltd are a dedicated team with over 20 years of experience in investment casting, engineering, metallurgy, casting techniques and tool making. The company has a philosophy of investing in the best equipment and the best people. Supreme takes an innovative

approach to provide customer solutions, this allows them to excel in producing technically difficult castings. Supreme's team of tertiary qualified Metallurgists, production and design professionals are here to assist, are committed to achieving the best results for their customers and ask that they "be made part of your design team".