

Custom Metal Fabrication





Baknor Provides Engineering Services Such As Thermal Analysis Thermal Design & Simulation Electro Mechanical Design

Precision Machining



Baknor provides precision custom components and enclosures to OEMs in the technology based markets. Our attention to detail and part accuracy is matched only by our exceptional on-time delivery rate. Customers are provided with innovative machined components and enclosures alongside committed customer service. Machined enclosures can include sophisticated mounting posts for internal components, grooves for water-tight seals, recesses, protrusions, logos, embossing and almost any feature that your design requires.

Fabricated Extrusions



We are experts in aluminum design and extrusion technology. Our services include the ability to identify opportunities to reduce material content, proposing simplified assembly and bringing you a variety of fabrication options, from both a performance and cost standpoint. Profiles may look the same, but each customer has a unique requirement. Baknor has a reputation for problem solving, all supported by extensive research and experience. Let us help you get your new product to market fast and effectively.

Metal Injection Moulding



Baknor is a provider of precision engineered metal components utilizing metal injection moulding technologies. We offer robust solutions to many OEMs in the technology field. Metal injection moulding (MIM) merges two technologies: plastic injection moulding and powdered metallurgy. MIM offers greater design freedom than many other production processes by freeing designers from the traditional constraints associated with trying to shape stainless steel, nickel iron, copper, titanium and other metals.

Baknor's original business was solving customer's thermal management design problems. Manufacturing was then set up in the Far East to support these solutions. By offering cost reductions on new and existing designs, customers then asked us to provide the same for their "build to print", custom metal fabrication requirements.

Cold Forging



Forging is a metal shaping process in which a malleable metal part, is worked to a predetermined shape by one or more processes. Cold forming is a precision category of forging which does the same thing without heating of the material (room temperature), or removal of material. Forging technology has a special place in the manufacturing process because it can be used to make parts of superior mechanical properties with minimum waste of material and provides greater dimensional accuracy.

Casting



Die casting is a manufacturing process for producing metal parts by forcing molten metal under high pressure into a die cavity. Generally speaking, these die or mould cavities are created with hardened steel tools that have been previously machined to the net shape or near net shape of the die cast parts. This process allows products to be made with a high degree of accuracy and repeatability. The die casting process also produces fine details such as: textured surfaces, logos, symbols etc. without requiring further processing.

Copper Steel Vaccuum Brazing



Customers face the need to join dissimilar materials when a part needs high-temperature resistance in one area, good corrosion resistance in another. Structures may need toughness or wear resistance in one area combined with high strength in another location. Baknor supplies vacuum brazing of stainless steel, copper, refectory materials and ceramics. When your products require an engineered process to achieve the highest level of quality and function, consider Baknor as your full service supplier. Baknor provides numerous value added secondary services that range from design and engineering support to finishing, assembly and packaging. To ensure that the given design is optimized for manufacturing, we can work with customers to create a design that functions as desired and is produced using the most efficient fabrication methods. Design specifications can be taken from CAD drawings, a sketch, or a physical part th at the customer wishes to be replicated. Once the design has been approved, a prototype can be made for further testing and approval before the entire order is manufactured. These engineering support services are designed to ensure that all customers' specifications are met prior to running full production.

Custom Stamping



Baknor offers a premium precision stamped metal service for customers looking to reduce their vendor base. As stamping is a very price sensitive commodity, Baknor has focused on requirements for existing customers that would like a premium service at a competitive price. We offer benefits derived from: internal tool development, single and progressive die production lines, internal semi auto wet and powered coating line, silk screening and assemblies. Our lead time, quality and attention to detail is second to none.

Finishing



Baknor can provide the finish you require, including where cosmetics are critical. From anodizing to chromating, electro plating, e paint and powder coating, Baknor ensures you have the quality finishing required for your customer. Finishing processes may be employed to: improve appearance, adhesion, solder ability, corrosion resistance, tarnish resistance, chemical resistance, wear resistance, hardness, modify electrical conductivity, remove burrs and other surface flaws, and control the surface friction.

Mechanical Sub Assemblies



Baknor provides additional value in helping our customers reduce their cost by assembling your electro mechanical components. As simple as two components to complex highly sensitive assemblies. In addition to reducing the number of line items you need to manage, our engineers can help you with: our expertise on designs, models of assemblies, analysis of mechanical constraint, assembly sequence analysis, tolerances, system-level design for assembly and JIT methods. Look to Baknor for cost reductions. Baknor Custom Metal Fabrication Includes Value Added Services such as custom latches for your faceplates, wire connections, nameplates, silkscreening, laser and stamped engraving, plating, packaging, assembly, engineering, vendor managed inventory and much more.

Fabricated Enclosures



Finding solutions for our customers, whether simple or complex, whether you have a need for heat dissipation or require the tuning of built in wave guides, Baknor provides you with additional value add to your fabricated enclosures. From designing and tooling up plastic component add-ons, or working with a variety of materials: including stainless steel, copper, aluminium, and magnesium, Baknor is committed to a successful project. From prototypes to mass production, including low volume, Baknor is focused on cost reductions.

Fabricated Components



With a wide range of manufacturing technologies, look to Baknor for cost reduction requirements for your "build to print" component needs. In addition to our flexibility for rapid prototyping needs, our design team can help to engineer a specific component for a complex assembly or as simple as a machined knob. As your business grows our skilled manufacturing group can transition designs from machining to casting to significantly reduce the component cost. Consistent quality and on time delivery with the best price.

Custom Faceplates



Put your best face forward. Baknor is your first choice in high quality, custom front panels and faceplates. A comprehensive range of solutions include extrusion, machined, stamped or casted faceplates. From simple metal components to detailed cosmetic parts, Baknor ensures industry leading value. By delivering rugged product quality through precision tooling design, process engineering and documented quality control, Baknor offers front panels and faceplates for virtually any electronic application.



Thermal and Electro Mechanical Engineering - Design As a support function, Baknor provides engineering services to customers at no charge in anticipation of delivering your thermal solution, custom metal fabrication, and/or electro mechanical assemblies.

Friction Stir Welding



Sealing Bonding, Gasketing

Friction stir welding, is a solid state joining technique that is used on metals where the original characteristics of the metal must remain as unchanged as possible. The benefits include the ability to join materials that are difficult to fusion weld. Additional advantages include low distortion and shrinkage, excellent mechanical properties when measuring fatigue, tensile and bend tests, no porosity, no filler required, no grinding, brushing or pickling required in mass production and can weld aluminium and copper of >75mm thickness in one pass.



Baknor can help you improve your system performance, simplify assembly and lower your system costs by providing additional value in the following processes. Adhesive Bonding is joining two work pieces with a liquid or semi-liquid material to create a long-lasting bond. Foamed-in-Place Liquid gasketing is a popular, cost-effective way to replace molded, die cut and other types of gaskets. Sealing is the process of closing or securing a part or assembly with a fluid-tight, air-tight adhesive.

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