



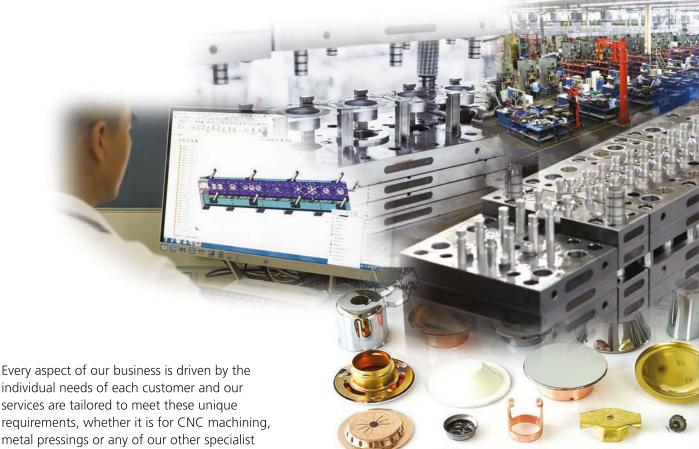
Professional Contract Manufacture of Pressed and CNC Machined Components



Precision - Performance - Perfection

For more than 45 years LHM Manufacturing has been providing professional contract manufacturing services and solutions to a diverse range of businesses and industry sectors.

With manufacturing, logistics and sales operations in China, North America, Mexico, Vietnam and the UK, we have built a reputation for the production and distribution of high quality, competitively priced components within a demanding global marketplace.



individual needs of each customer and our services are tailored to meet these unique requirements, whether it is for CNC machining, metal pressings or any of our other specialist manufacturing resources to achieve tight delivery deadlines and fine tolerances.

As our business is truly international, we have built an immense amount of experience and expertise in a wide range of markets. This has enabled us to become fully conversant with the appropriate standards, specifications and unique demands of each industry so that we can serve them effectively.

Our success isn't just accredited to the quality and precision of our manufacturing capabilities, as the skills, dedication and commitment of our 800+ skilled technicians, engineers and staff play an important role in every aspect of our business and everything we do for our customers.

This combination of manufacturing heritage, precision capabilities and integrated customer support services, coupled with the expertise of our global team, make LHM the ideal partner for your contract manufacture projects.

Capability and Capacity

With an area of more than **52,500** sq.m (**565,105** sq.ft), LHM's main manufacturing centre in China utilises highly integrated automation cells including over 200+CNC machines and 150+ presses, as well as a range of other process equipment from robotic manufacturing and cold heading to powder coating and wet painting.

The scope and scale of our manufacturing solutions and services are constantly being reviewed, updated and upgraded to ensure that our plant and supporting technologies continue to operate at the extremely fine tolerance levels that our customers demand.

Our manufacturing plants provide:

- Tool & die design, engineering and manufacture in house
- Stamping, pressing and progressive presswork
- Precision CNC turning and milling
- Cold heading
- Hot forging

- Quality assurance to ISO9001:2015 and ISO13458:2016
- CNC turning capacity up to 76mm (3") diameter
- CNC Turning –
 Positional accuracy:
 0.010mm (0.0004")
 Repeatability:
 0.002mm (0.00008")
 Diameter tolerance:
 +/- 0.006mm (0.0002"



Tool & Die

Starting with the receipt of a customer RFQ, we use the latest SolidWorks® 3D CAD software to design, model and visualise the tooling package required while also programming machines and generating fabrication drawings.

The manufacture of the final design takes place in our toolroom using the most up to date technology including our use of advanced wire EDM machines from Sodick and Seibu.

Stamping & Pressing

We manufacture conventional stamped and pressed parts on single action and progression tooling up to 400 tons, as well as producing high-speed pressed components with in-line assembly, at rates of up to 300 per minute.

As part of our ongoing programme of investment in the latest machinery, a range of AIDA presses have recently been installed with capacities from 110-ton to 400-ton with full progression production capability. Traditional pressing operations are employed, in addition to our fully automated Kawasaki robotic press line, as well as hot forging and cold heading.

Secondary Operation Manufacturing

Our multiple secondary operation capabilities enable us to provide a complete product supply solution to customers.

Included in the scope of these services are welding, brazing, abrasive flow machining and sub-assembly, as well as finishing options including powder coating, wet paint, plating and anodising. Together with our integrated global distribution network, we can supply your total production requirements.



Beyond Manufacturing

Contract manufacturing is the essence of our business and at the heart of everything we do for our customers. But, delivering high quality machined, pressed or deep drawn parts and assemblies on time and on budget, doesn't tell the entire story.

Behind the scenes, our team is constantly providing support to customers based on their specific and often unique needs. Whether it involves intricate and fine tolerance pressings with demanding profiles, for example, or where high volume production requires fresh thinking about tool design, we are constantly working outside the accepted manufacturing envelope to ensure we deliver against customer specifications.

This commitment to service and support is an essential aspect of what makes LHM Manufacturing the preferred partner for countless businesses that want the confidence of working with a high quality contract manufacturer that has the intelligence and adaptability to assist in other areas, such as product design, development and tool making.

Our resources, plant and capabilities are designed to be flexible, which enables us to deliver manufactured solutions to complex specifications and strict production timeframes. This flexibility and our technical expertise in a range of design and manufacturing disciples, including automated manufacture and robotics, enables us to advise customers on all aspects of product design for manufacture.

CNC Turning

Our extensive range of CNC turning machines is regularly updated and upgraded to optimise manufacturing performance and accuracy. Typically, we use multi-axis, multi-head Okuma and Tsugami turret turning centres, supported by offline remote programming, to manufacture dimensionally critical parts with extremely tight tolerances.

Our bar-fed machines enable us to manufacture from stock material of up to 76mm (3") diameter. This is also supported by our honing, gun-drilling, deep hole drilling and broaching capability.

CNC Milling

We currently run more than 40 of the latest CNC machining centres with multi-axis manufacturing to provide increased versatility, manufacturing flexibility and production speed. Supported by offline programming, we can design and manufacture parts with up to 5 axes of travel, enabling us to produce complex geometries and profiles.

Through our continual investment programme, we utilise the latest machines such as our newly installed Mazak machining cell with fully automated robotic handling system, which maximises the full production capacity of these machines.

Quality

All LHM production systems are supported by our total commitment to quality and traceability using a range of quality assurance and inspection solutions, including CMM, non-contact vision inspection, hardness and ultra-sonic flaw testing.

We also operate roughness testing and coating thickness verification testing to comply with our 'right first time and on time in full' policy.

Our systems are certified to ISO9001:2015 and ISO13458:2016 (medical) quality standards and when required, we can also provide PPaP, FMEA and control plans.



With some contracts, customers not only want access to our contract manufacturing services, but also require our experience and expertise in handling the process. This often includes the design and manufacture of special purpose tooling that is dedicated to their product.

Our in house tool-making facilities handle the complete process to ensure that all tooling is designed for optimum performance with our presses to give long life, accuracy and repeatable quality.

We also work with customer businesses to provide product design and development support, by integrating with their own design teams to evolve and develop effective manufacturing techniques for new and innovative products. In addition, our skilled and experienced product planners, production engineers, logistics team, quality managers and customer services team are continually providing a network of support to ensure our manufacturing operation achieves all our customers' demands and expectations.

As we have an international logistics business as part of our group, we can ensure that finished components and sub assemblies are transported to meet precise time frames to comply with regimes, such as JIT.