

Sub-Contract Manufacturing



Technology at work for you



Goudsmit UK is part of the Goudsmit Group of companies based in Eindhoven, the Netherlands. Founded in 1960 the group manufactures and supplies a range of products from components through to capital equipment. The group has subsidiary companies across Europe and into Asia.

Goudsmit UK was founded in 1998 and specialises in the design, industrialisation and manufacture of custom industrial components. The company can also design and sub-contract manufacture entire products and offers a comprehensive and global logistics service.

TS16949 and ISO9001 qualified the company works in a wide range of market segments including Automotive, Oil and Gas, Aerospace, Medical Devices and Green Technology.

Sub-Contract Manufacturing - An Introduction

Sub-contract manufacturing has become more popular since globalisation re-emerged as an economic trend in the early 1980's. It is a commonly misunderstood economic tool and is often referred to as low cost sourcing. However, true sub-contract manufacture and the reasons to use it are much more complex, and the decision making process to decide if sub-contract manufacturing is suitable for your company needs to be well considered.

A common misconception is that sub-contract manufactured goods will be of lower quality or will be entry level, low tech goods. Anyone who has picked up an Apple iPad will know this is not the case and Apple's choice of China as an assembly location has as much to do with a deep labour pool and proximity to suppliers, as it does with per hour employment costs given the labour content of it's devices is minimal.

Why Sub-Contract Manufacturing?

This section could stretch to multiple pages however some of the highlights are as follows:

- **Specialisation** – Often companies lack the skills needed to be a world class manufacturer. Using a specialist sub-contract manufacturer gives you access to these skills.
- **Capital costs** – If you use a sub-contract manufacturer you do not need to invest in the plant and machinery needed to make the product.
- **Increased cash flow** – Generally less stock and WIP is required when using a sub-contract manufacturer saving interest costs on borrowing.
- **Focus on core business** – Increasingly companies want to focus on product design and development and meeting client needs. Not having to use resources on manufacturing and logistics lowers company headcounts and allows for more focused and streamlined companies.
- **Proximity to markets** – As western markets stagnate and emerging eastern markets grow, companies want their manufacturing to be close to these growth markets. Moving entire plants is very difficult and costly. Therefore, it is cheaper to sub-contract manufacture to an Asian supplier.
- **Flexibility** – Fluctuations in demand when using a sub-contract manufacturer can be resolved by simply matching orders to demand. When a mismatch occurs in an owned plant, capacity, workforce, suppliers and many other factors have to be managed to allow for an increase or decrease in supply.
- **Start-up businesses** – Most companies starting up do not have the capability to manufacture for themselves. Partnering with a sub-contract manufacturer shares the burden and allows them to ramp up supply quickly and efficiently.
- **Asset utilisation** – As a sub-contract manufacturer, we utilise our assets much more than a stand alone manufacturer and can balance asset attribution between products. We sweat our assets harder to provide clients with cheaper prices.

What Can We Offer You?

PRODUCTION & ASSEMBLY SKILLS

Working within our competencies is very important when taking on any product. The key to getting the consumer/industrial products we make right, is to ensure that the parts we receive are correctly designed and manufactured. Most of these components are manufactured in-house but occasionally we need to look out of house for additional supply from our approved supplier list. Provided the assembly techniques specified are adapted to the requirements of the product, assembly and testing normally proceed without issue. When it comes to assembly, we work in different ways depending on the size and volume of a product. High volume lines will go on an assembly line with multiple work stations and hourly delivery of parts to the assembly floor. Heavy, large or low volume products will often be kitted and assembled uniquely by a single person. Test is hugely important and we try to have quantifiable measurements to define the correct functioning of the products we manufacture. 100% product test is common prior to the product being boxed and shipped.

QUALITY ASSURANCE

We are accredited to TS16949 and ISO9001 and aim to supply our clients with zero defect products. A short summary of the QA tools and documentation we use and can provide is shown below:

- Samples with ISIR submission
- Design and Process FMEA
- Inspection reports with all deliveries
- Environmental testing
- PAPP on pre-production parts
- APQP
- Thermal testing

PACKING AND LABELLING

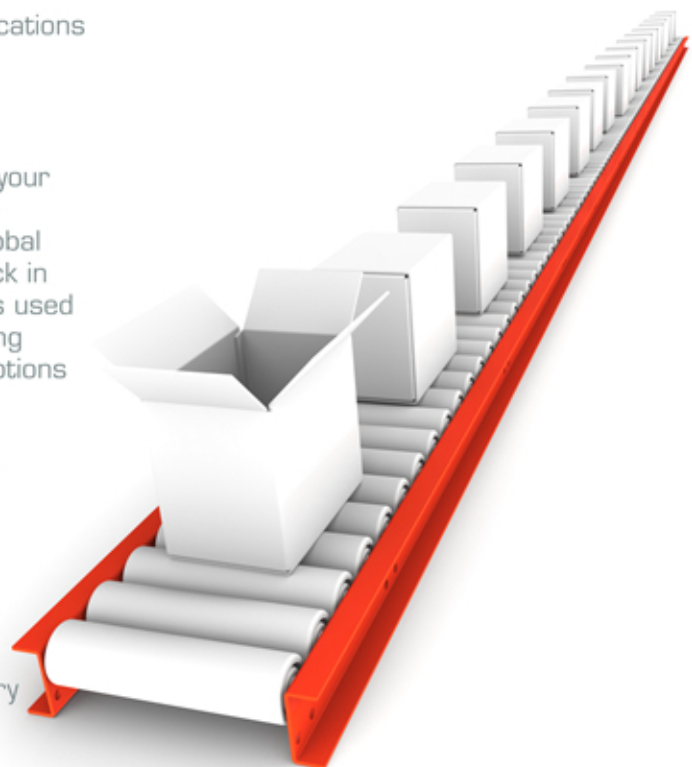
The look of the product as your client receives it is vitally important so we concentrate strongly on getting the print and packaging right. We work uniquely from digital formats and can also design print and packaging where none exists. Typical labelling and packaging solutions we can provide are detailed below:

- Carton
- Box
- Printed box
- Printed box with internal instructions
- Blister packing
- Packaging can be produced to pantone and recycling specifications

LOGISTICS

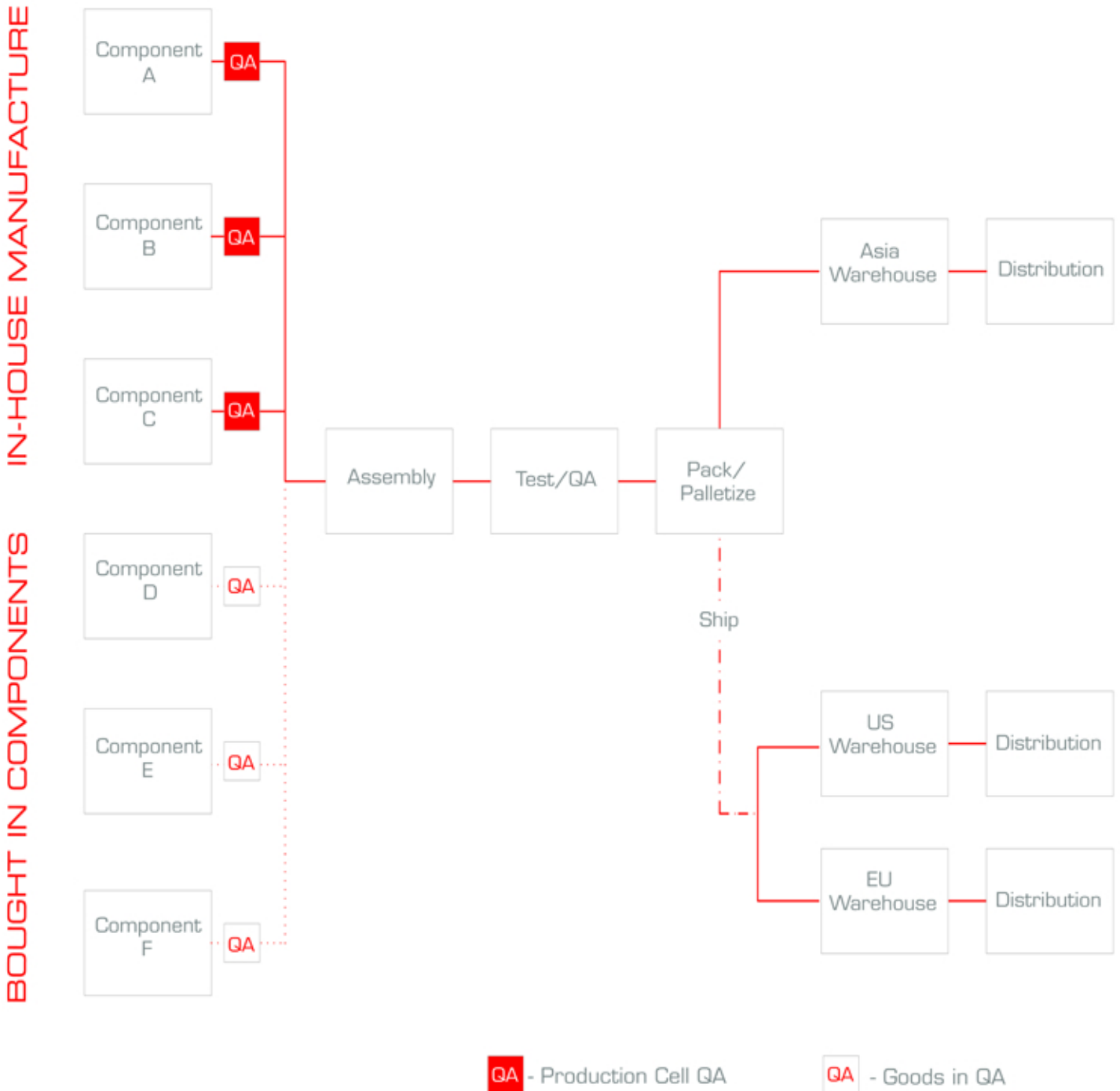
Simply making and packaging the product is insufficient to get your product to market. It also needs to be shipped and we need to match supply to your client demands. We do this through a global logistics and warehousing network which allows us to hold stock in Europe, Asia and North America. Demand planning software is used to ensure the supply chain is sufficiently full to meet the stocking levels desired in each location. Of course we can offer other options on logistics, some of which are listed below:

- Frame contracts with multiple drops spanning up to 2 years
- Demand planning system
- Consignment stock capabilities
- JIT delivery for automotive volumes
- KANBAN delivery for regular use items
- Global tracking system to monitor orders and parts through production and shipping
- Warehouses in Holland / USA / UK to allow ex stock delivery
- Buffer stock held locally to offer 3 day delivery



The Process

We currently sub-contract manufacture a range of consumer and industrial products in various market sectors such as building products, HVAC, consumer products, industrial filters and oil and gas. Each product, although very different and bound for very different markets, goes through the same process. This process is outlined below, and consists largely of the manufacture or purchase of all the components which are then QA approved and assembled. The assembly is tested, approved, packed and then shipped globally. There are of course some variations, for example some clients will free issue components, in some cases distribution may not be carried out by Goudsmit UK, or sometimes further testing or third party testing will be done. However by and large the process will be the same resulting in a sub-contract product being supplied to your clients.



Case Studies

CASE STUDY 1 - CLIENT A

This client is involved in the air movement business and is a long established company based in the UK. The decision to outsource was driven by several factors:

- A desire to release leased space thus saving expensive rental costs
- The cost saving from actual unit price of the product
- A reduction in stock and WIP
- Being released from capital expenditure on manufacturing equipment
- Savings derived from a reduction in headcount

The client has long since successfully outsourced manufacture to Goudsmit UK, who have been stocking and supplying an entire product range for over 8 years.

CASE STUDY 2 - CLIENT B

A small client with a very low head count, Client B wanted to grow but had limitations in terms of headcount and finance. Their product is a combination of machined, stamped and CNC turned parts boxed and delivered to the USA, Asia and Europe. They choose Goudsmit UK for sub-contract manufacture for the following reasons:

- They had restricted access to funding so could not lease factory space and machinery
- They did not want to expand their low headcount
- Their internal expertise was in product design and not manufacture
- With a global client base they needed global production and a global distribution network
- Help was needed with the industrialisation of their products
- Working capital requirements were reduced by having Goudsmit UK hold stock

This client has seen their business expand greatly in the last 3 years, and Goudsmit UK have been sub-contract manufacturing their product for 5 years.

CASE STUDY 3 - CLIENT C

This client is a large multi-national, making a product used in the building trade. With the launch of their product they made a decision not to manufacture in-house as it was a departure from their normal business area. They had several reasons to use Goudsmit UK as a sub-contract manufacturer:

- Competing in a global market price was everything. They could benchmark Goudsmit UK against several other suppliers
- Given the global use of the product they wanted a high quality manufacturer who would warranty the product
- They wanted to piggyback the distribution onto a pre-existing proven global supply chain
- As is often the case, the company wished to reduce working capital requirements so they needed a partner who could stock globally for them

The partnership is now in its third year and the product is in global distribution.

Manufacturing Capabilities

As previously stated, we like to work within our core capabilities when sub-contract manufacturing products. We also like to produce as many of the components that make up the product ourselves, in-house. Therefore, we tend to work within our core product areas to ensure we supply the best quality product. Details of these core products are available from our other brochures. They are as follows:



MAGNETIC PRODUCTS

Supplying over 100 million magnets annually we can easily integrate any magnet into a sub-contract manufactured product. We manufacture the full range of magnetic materials and have extensive test facilities to approve their performance.



POLYMER ENGINEERING

We manufacture thermoplastic injection mouldings using multi-cavity tools and can work with a range of different polymers from engineering plastics to elastomers. Further to this we also make extruded plastic and PU foam parts.



EXTRUDED PARTS

We manufacture and finish aluminium extrusions from a range of press capacities. Often we will modify the extrusions by machining before they are finished, either by anodising or using a range of other techniques such as powder coating or wet painting. We can also provide printed logos or laser marking on the extrusions.



DIE CASTINGS

We have a wide range of press tonnages and make both high pressure die cast aluminium and zinc components. Post machining is common and the parts will be finished in a range of cosmetic and industrial processes. Surface finish can be modified by bead or sand blasting.



PRESSED PARTS

We can press and form a range of materials in our factory from a deep drawn part to a simple stamping. Often the parts are post machined and tapped and then electroplated or finished with a powder coat or paint.

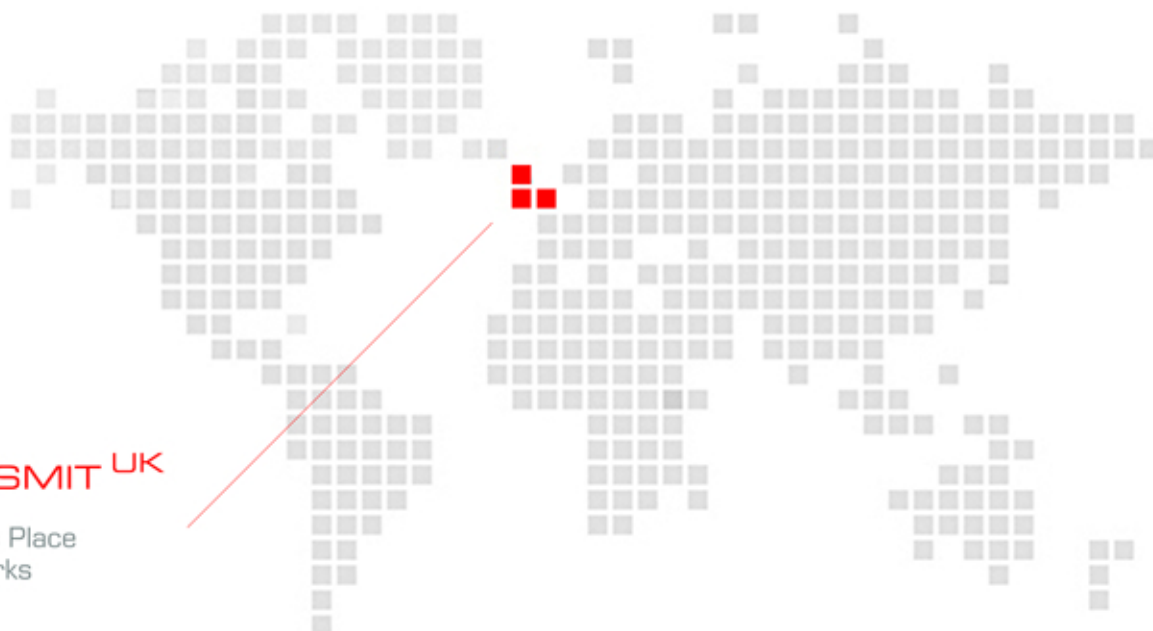


CNC MACHINING

We have multiple CNC milling centres and CNC lathes from which we make millions of components annually. We can work in a number of materials the most common being aluminium, stainless steel, mild steel and brass. On top of machining we also have extensive surface finishing and plating capabilities.

Worldwide Service

- Goudsmit UK is part of the Goudsmit Group of companies. With two production facilities in China, one in the Czech Republic and two in Holland, the company has the reach to supply from Asia to Europe and on into the USA.



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