



The future of parts procurement:

The turnaround towards Online Manufacturing



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Prologue: The current challenges challenges for procurement

Due to **ever more rapidly changing customer needs and market conditions**, **new challenges are continuously arising** in the procurement of individually manufactured components. Uncertainties and crises such as the Corona epidemic or the Ukraine war have made it clear that international supply chains are by no means as stable as expected. In addition, **cost pressure** in times when the **costs of raw materials are rising** and **inflation is growing** is creating a need for change.

Flexibility and agility in procurement are therefore increasingly in demand. The trend toward outsourcing, which is also being fueled by the digital transformation, is increasingly bringing external manufacturing companies onto the scene as suppliers of components. A distinction must be made between conventional contract manufacturers and Online Manufacturers.

Companies are exposed to the multiple burden of

- ✗ **Disrupted global supply chains**
- ✗ **Inflation and rising energy costs**
- ✗ **Material shortages**
- ✗ **Pressure from competition and digitalization**



Conventional contract manufacturing is reaching its limits, and fast, because of its inherently rigid structures. In crisis situations, therefore, **major disadvantages such as supplier dependencies and cut-off supply routes** become apparent, especially in traditional procurement processes. Producers often trust a regular manufacturer with a regional connection. However, if this supplier unexpectedly becomes incapable of acting, the entire production process can come to a standstill. Large companies are usually more flexible and rely on a pool of qualified suppliers, but even in this case, the day-to-day work of buyers can be made more difficult.

In addition, there is a **lack of capacity** or the **production spectrum is too narrow**. Communication also follows traditional patterns in many places. E-mail and telephone are still the most common means of communication when it comes to coordination between customer and supplier. Order placement and encrypted data transmission via upload on a website or via interface with an ERP system are not yet standard.

For these reasons, many manufacturing companies are **changing their strategy** and turning to **alternative procurement and sales markets**. The substitution of raw materials is also being increasingly examined. In addition, those responsible are striving for **more efficient manufacturing processes**. **Online Manufacturing platforms** are becoming increasingly relevant in the wake of these challenges - both for customers and for manufacturers.



Online Manufacturing is a modern form of procurement process whose concept is based on **digitalization, automation and networking**. A broad spectrum of network partners, manufacturing techniques and surface treatments makes high flexibility possible. The networking of all participants in the value chain as well as simple and short processes for the end customer are some of the key advantages of a manufacturing platform.

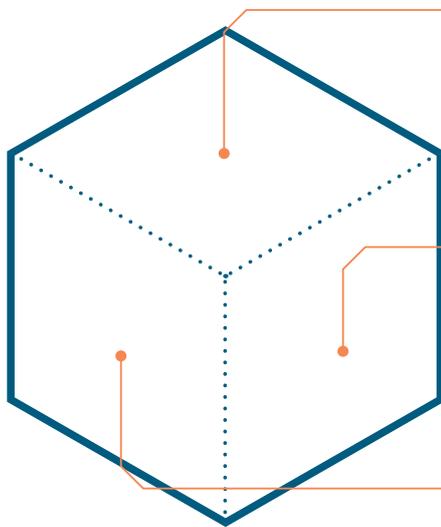
This innovative purchasing strategy for production parts enables companies to, among other things:

- ✓ **secure and flexible procurement in times of crisis**
- ✓ **stable prices**
- ✓ **considerable savings potential**
- ✓ **great efficiency gains**
- ✓ **better ability to plan**

In summary, **the advantages of Online Manufacturing meet current and future needs.**
In procurement, the future therefore belongs to platforms and ecosystems.



Basic principles of Online Manufacturing



Large network

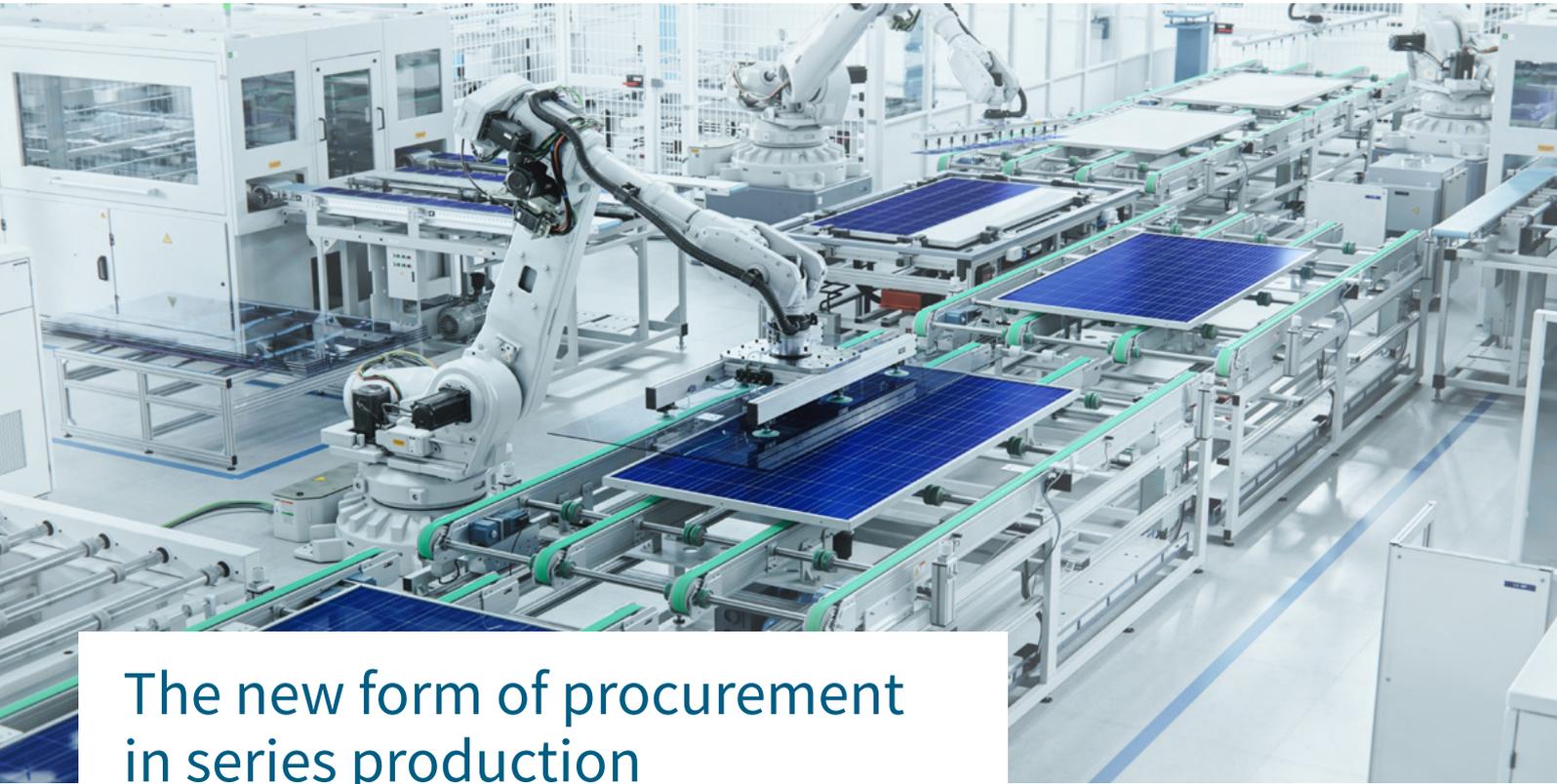
2,000+ manufacturing partners guarantee virtually unlimited capacity and the broadest manufacturing spectrum on the market

Smart Choices

AI-supported selection of the optimal producer in terms of quality, price & delivery time

From one source

FACTUREE is the sole contractor and assumes full responsibility for delivery reliability and quality of parts



The new form of procurement in series production

The concept of Online Manufacturing **combines the strengths of various manufacturing specialists on a B2B platform**. Thus, the customer benefits from a wide range of network partners, manufacturing techniques and surface treatments - all from a single source. The most suitable manufacturer can be found for each requirement based on an AI-supported selection.

This model allows purchasers of serial parts to:



Secure and flexible procurement in times of crisis



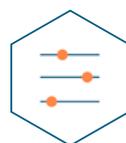
High quality through data-driven QM system



Ecological responsibility and contribution to climate protection



Price stability and price advantages



Simple digital inquiry and order processes



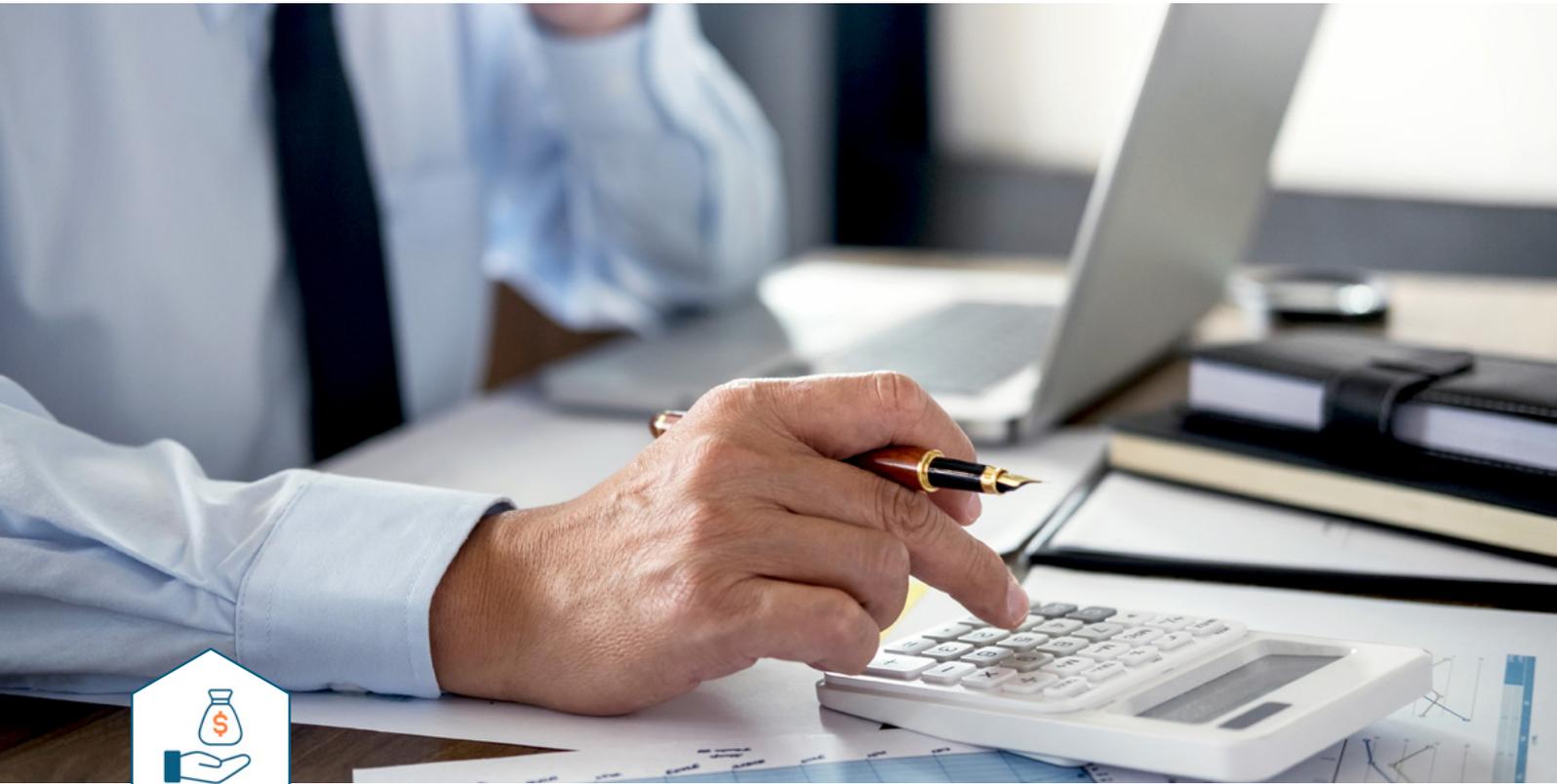
Secure and flexible procurement in times of crisis

The concept of **Online Manufacturing** can **counteract delays in material procurement and delivery difficulties and ensure stable procurement processes**. Since FACTUREE is always informed about the capacities of its manufacturing partners, orders can be distributed or rescheduled according to the respective requirements. A **large selection of materials** can be offered constantly. This results in great flexibility and plannability.

Online Manufacturing thus creates **independence from individual suppliers**. Due to quasi-unlimited production capacities, the Online Manufacturer can react far more flexibly and reliably to current developments than individual manufacturing companies can.

FACTUREE has access to a **huge manufacturing network with over 2,000 partners from almost all areas of manufacturing technology** - such as CNC machining, sheet metal working, 3D printing, extrusion, casting and forging processes as well as component assembly and surface technology. For example, it is possible to procure components produced using completely different manufacturing techniques, such as sheet metal bending, casting and forging, from a single source. **Small and large series production** can be carried out, as well as **prototyping projects**.





Price stability and price advantages

Online Manufacturing also offers significant advantages in terms of price, which plays a particularly important role in series production. A B2B manufacturing platform is able to practically bundle customer inquiries and thus achieve a higher order volume than for a single customer. In addition, the **AI-supported selection and comparison of highly specialized manufacturers** with the appropriate machines and materials in stock, in particular, brings **significant price advantages**. This has a positive effect on quotation prices. At FACTUREE, **price increases are not passed on to customers** - often at the expense of margins - in order to offer them **planning security**. Only in exceptional cases is a price adjustment made to reflect rising material prices. By skilfully selecting manufacturers, FACTUREE is able to balance out the influences in the market. In addition, the Online Manufacturer has a good negotiating position with its partners.

FACTUREE offers an **offer validity of 14 days, which can be maintained even in a tense market situation**. After receipt of the request, the **offer is often made on the same day - but guaranteed within 48 hours**.





High quality through data-driven QM system

The advantages in terms of flexibility and price do not come at the expense of quality - quite the opposite. For the procurement of production parts, **more than 15,000 machines** are constantly available for projects via the **FACTUREE network**. For each project, FACTUREE **uses AI to select the most suitable manufacturer in terms of quality, price and delivery time**. This intelligent selection reduces complaints to a minimum by ensuring that the task is fulfilled by the most suitable supplier. This is a very important aspect, especially for series production.

All manufacturing partners are subject to a **continuous data-driven quality management system certified to ISO 9001**. Logistics partners are also checked for reliability and selected accordingly. For the entire duration of the project, **FACTUREE is the sole contractual and contact partner** and assumes full responsibility for delivery reliability and quality of the parts.





Simple digital inquiry and order processes

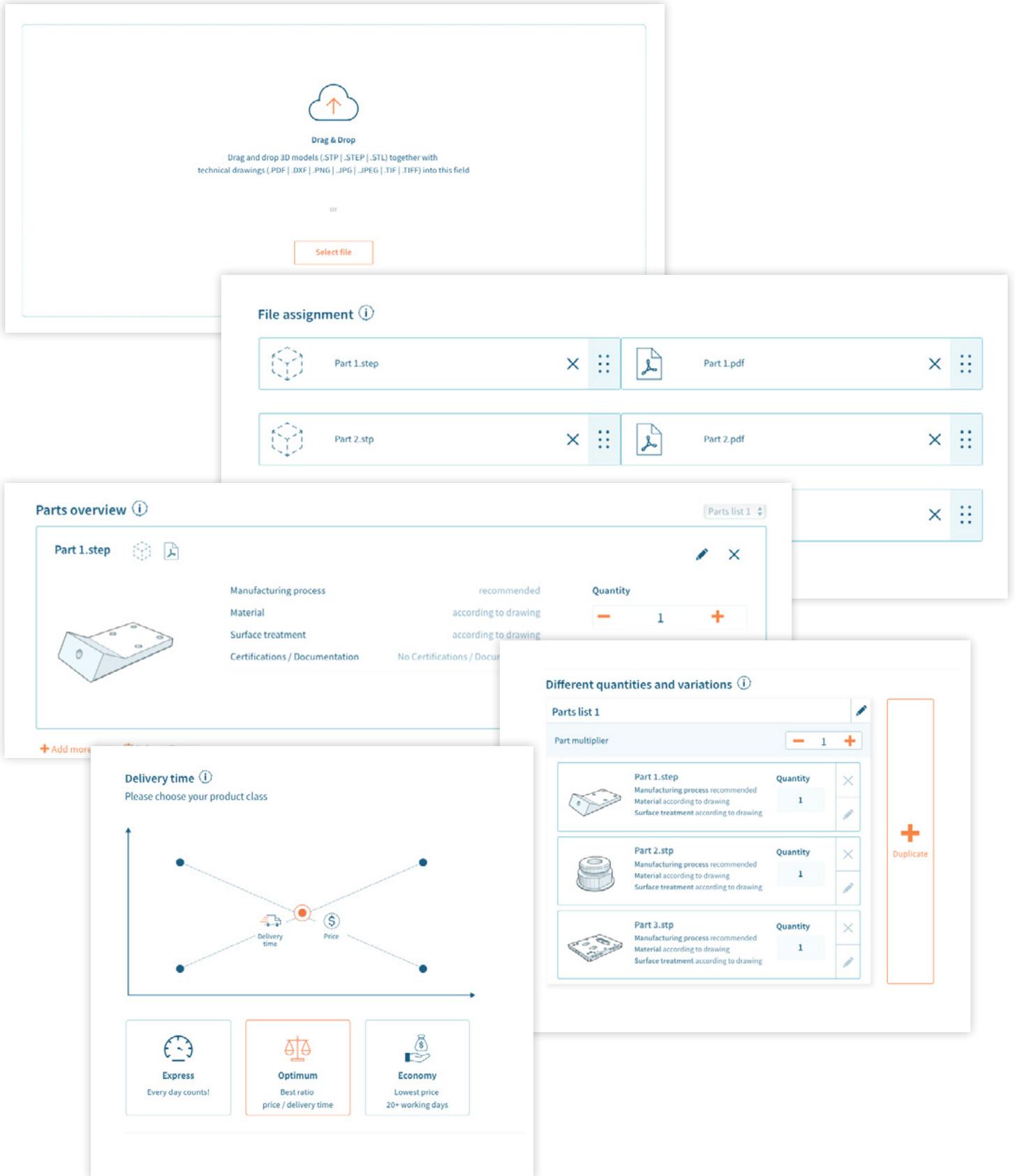
Simplicity is also a clear focus for the procurement of the future. **The inquiry process at FACTUREE is partially automated** and therefore **generates offers quickly**.

With a special **Request-Tool**  inquiries can be completed with just a few clicks. FACTUREE offers a clear advantage over instant pricing providers: the request tool captures all existing information submitted by customers, for example in the form of CAD data and technical drawings in pdf format. **The extremely fast request and readout of drawings by FACTUREE significantly reduces the burden on customers.** This is because in order to obtain a price from competing instant pricing tools, all relevant information such as material, surface quality, tolerances, etc. must be manually transferred to an input mask by the person making the request. This means a very time-consuming process.

The quick receipt of an „immediate“ offer is therefore at the „expense“ of increased effort on the part of the customer. **FACTUREE, on the other hand, considers and optimizes the time actually spent by the user on the request.**



A look at our Request Tool



Drag & Drop
Drag and drop 3D models (.STP | .STEP | .STL) together with technical drawings (.PDF | .DXF | .PNG | .JPG | .JPEG | .TIF | .TIFF) into this field

or

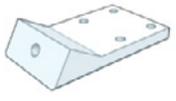
Select file

File assignment ⓘ

	Part 1.step	✕	⋮		Part 1.pdf	✕	⋮
	Part 2.step	✕	⋮		Part 2.pdf	✕	⋮

Parts overview ⓘ

Part 1.step  



Manufacturing process: recommended

Material: according to drawing

Surface treatment: according to drawing

Certifications / Documentation: No Certifications / Docu...

Quantity: - 1 +

Different quantities and variations ⓘ

Parts list 1

Part multiplier: - 1 +

	Part 1.step Manufacturing process recommended Material according to drawing Surface treatment according to drawing	Quantity: 1	✕	⋮
	Part 2.step Manufacturing process recommended Material according to drawing Surface treatment according to drawing	Quantity: 1	✕	⋮
	Part 3.step Manufacturing process recommended Material according to drawing Surface treatment according to drawing	Quantity: 1	✕	⋮

Delivery time ⓘ

Please choose your product class

Delivery time vs Price graph

 Express Every day counts!	 Optimum Best ratio price / delivery time	 Economy Lowest price 20+ working days
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In practice: Parker Hannifin Group focuses on modern Online Manufacturing

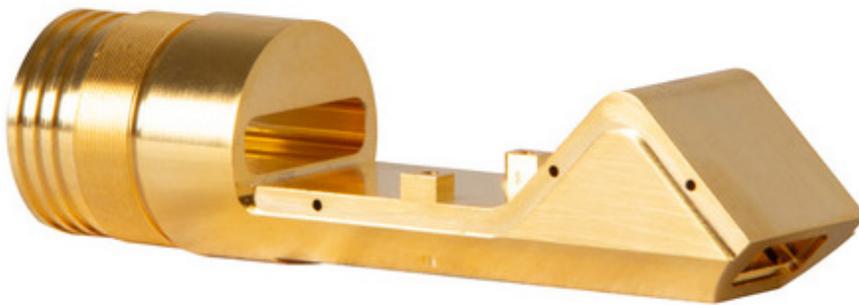
In many companies in industry and production, the procurement of components is subject to very complex processes due to operational structures and special requirements. Material, processing, execution and delivery time are essential and time-consuming as well as cost-intensive factors that must be thoroughly planned and usually tie up many different resources such as personnel and costs.

Parker Hannifin Corporation is a mechanical engineering company founded in 1917 and headquartered in Cleveland, Ohio, USA. The Group is regarded as the world's leading manufacturer of drive and control technology. The group has also been operating in Germany since 1962. Parker Hannifin specializes in hydraulics, pneumatics, electromechanics, filtration, connection technology, refrigeration/air conditioning technology, sealing technology, aerospace and EM shielding.



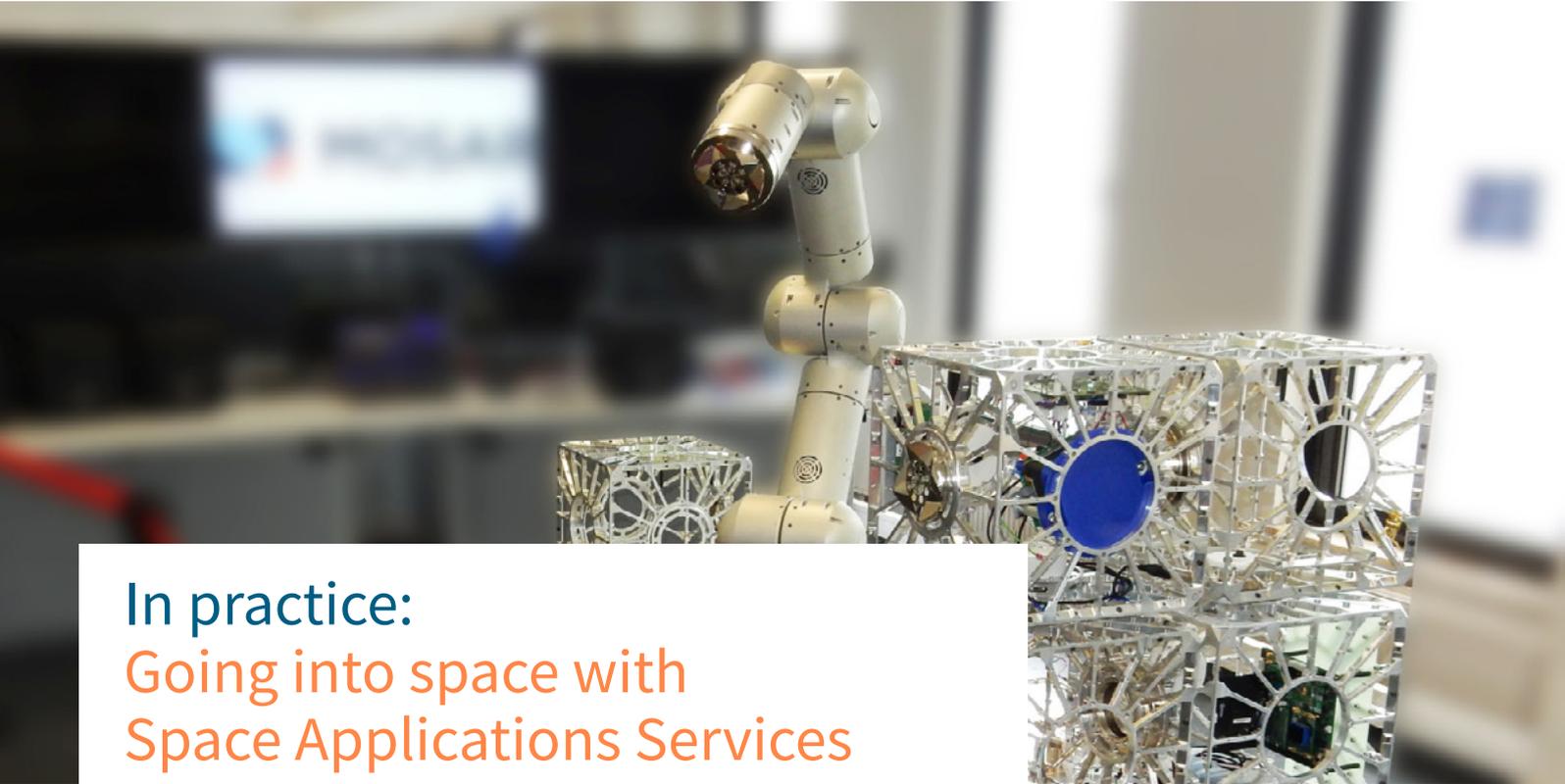
Parker Hannifin is dependent on short procurement times and the precise production of special components. In the past the production of such components was still carried out in a time-consuming and labor-intensive way involving prototyping, but the company made a fundamental change in 2019.

FACTUREE was chosen because the company has an extensive production network. FACTUREE's numerous manufacturing partners always offer free capacity and ensure universal production. The Online Manufacturer was able to deliver the commissioned components before the agreed delivery date, despite the complex manufacturing process with high volumes and tight delivery deadlines. Parker Hannifin benefited from the advantages of rapid order processing, personal customer support and very short delivery times. The mechanical engineering company thus avoided being affected by capacity bottlenecks and disproportionate staff commitment and was able to efficiently drive its own digital transformation.



Parker Hannifin entrusted the Online Manufacturer FACTUREE with the order to produce special components for assembly devices in the engineering sector. The brass (CuZn39Pb3) components to be produced, divided into seven positions of 50 pieces each, were to be manufactured in complex turning and milling operations. The tolerances for the project were extremely tight at ± 0.02 mm and in some cases there were additional fits. The complex manufacturing process required, among other things, special surface treatments. In the first treatment step, the surfaces were undercoated, then nickel-plated in the second. Finally, the surfaces were partially polished and laser engraved.





In practice: Going into space with Space Applications Services

A developer and service provider in the field of space technology also uses the advantages of Online Manufacturing to realize the procurement of complex components. Space Applications Services relies on FACTUREE's B2B platform for this purpose. One order included parts for the construction of prototypes and so-called Space Qualification Models for the aerospace application area. The CNC parts were manufactured with high precision and quickly provided by FACTUREE.

Space Applications Services NV/SA, headquartered in the Brussels region and with a subsidiary Aerospace Applications North America in Houston (USA), specializes in systems and software development for the European Space Agency (ESA), national space agencies and the space industry. The company develops international solutions and technologies for manned and unmanned spacecraft, earth observation, science, exploration and communications in this segment.



Space Applications Services attaches great importance to space applications. To ensure the highest quality and reliability in this highly sensitive area, complex components are required for prototype construction and space qualification models. A change in the procurement of these components became necessary, as the previous supplier no longer met Space Applications Services' requirements in terms of reliable material quality, delivery time and pricing. FACTUREE was selected and has since supplied the high-quality CNC parts.

The procurement process for the components was very simple: engineers from Space Applications Services created drawings and 3D data, which were sent to FACTUREE. The Online Manufacturer then generated a quotation within one to two days. Once the order has been placed and delivered, all parts undergo a quality check at Space Applications Services. FACTUREE quickly implements any rework that may be required.



Space Applications Services has been supplied by FACTUREE with high-quality CNC parts for various applications and projects for several years. In addition to the high quality, Space Applications Services appreciates the fast delivery time as well as the attractive pricing. The professional and uncomplicated communication also leads to quick problem solutions and additionally underlines the reliability.



In practice: Getting going with components with GHOST bikes

In series production, it is becoming increasingly important to exploit the potential for new digital value creation. When procuring series parts, reliability - through long-term availability, consistent high quality and consistent prices - is indispensable.

This is illustrated by the example of a bicycle manufacturer. Since the Corona pandemic, the world has experienced a real bicycle boom. Bicycles with drive systems in particular are booming. Especially e-bikes. However, these are subject to complex construction and require the highest level of precision. For an e-bike line from the bicycle manufacturer GHOST-Bikes, FACTUREE supplied three essential components in series. These serve to attach and stabilize the battery to the bicycle frame. The manufactured components also enable GHOST-Bikes to develop and implement functional technical solutions in the area of prototyping within a short time.

GHOST- Bikes was founded more than 25 years ago in Waldsassen in the Upper Palatinate and has developed into a globally active company with over 150,000 bikes produced annually. The portfolio includes gravel and mountain bikes as well as e-mountain, e-city and e-trekking bikes.

GHOST

According to GHOST-Bikes GmbH, the complexity of products in the industry is increasing all the time, especially due to the fact that the electric bike sector is booming. At the same time, demand is increasing. Therefore, optimized production methods that bring more efficiency and cost advantages with very high quality have always been sought out. With FACTUREE, the company has opted for the path of Online Manufacturing and thus has various milled and turned parts, sheet metal bent parts as well as individual parts realized in series production. This applies, for example, to the E-RIOT line of e-mountain bikes. In addition, prototyping is also supported with the components.



For GHOST bikes, it was a decisive criterion that FACTUREE could offer a wide range of processes - from turning and milling to sheet metal working and forging - from a single source and in series production. The components supplied by FACTUREE for GHOST bikes are, on the one hand, bent parts for the secure attachment of the battery to the bicycle frame. This is, for example, the battery rail, which helps to ensure that nothing rattles while riding and that the battery holds securely in the frame. On the other hand, FACTUREE supplied a forged part that acts as a connector between the bike stand and the bike frame.



GHOST Bikes chose FACTUREE because the Online Manufacturer ensures very short procurement times through the network of manufacturers from which it draws and offers all the necessary manufacturing techniques. All components were produced quickly and in good quality. In addition, the pricing and support were convincing.



The parts procurement process at FACTUREE in detail



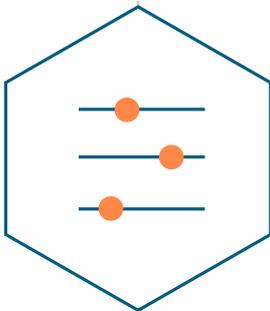
Simple digital quote request

The customer has various options for requesting a quote. On the website www.facturee.de, they can submit their inquiry via a user-friendly **inquiry tool** . They have the option of uploading encrypted 3D models and any technical drawings of the parts to be manufactured. A classic e-mail inquiry is also an option. In addition, FACTUREE's telephone customer service provides support in case of questions. Each customer is assigned a dedicated customer service representative when requesting a quotation.



Quick quotation

Once the request has been submitted to FACTUREE, the offer is prepared within a short time. This is usually transmitted on the same day but is guaranteed within 48 hours. FACTUREE realizes its express offer by means of a high degree of automation, e.g., in the reading and classifying of CAD files. The additional review of the quotation by an engineer guarantees a reliable calculation despite the high speed.



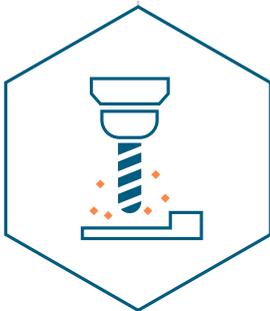
Individual offer by adjusting the delivery time range

The offers are tailored precisely to the needs of the customers. For example, greater leeway in delivery times means that the company has access to a larger selection of manufacturing partners in its own pool, which leads to more favorable competitive prices that are passed on directly to customers. To offer customers reliability, FACTUREE offers are also valid for 14 days. This has been consistently maintained even in times of strongly fluctuating material prices.



Contract awarded to ideal partner

When placing an order with a manufacturing partner, FACTUREE makes use of its extensive production network, which currently includes more than 2,000 manufacturing partners with approx. 15,000 machines, which guarantees free capacities and short delivery times. Digitalized processes enable efficiency and speed in the selection process. Through intelligent AI-supported supplier matching, FACTUREE ensures that the most suitable manufacturer(s) are selected for each project. However, FACTUREE remains the sole contract and contact partner throughout the entire manufacturing process.



Wide range of machining options

At FACTUREE, projects in the field of prototyping (starting from a quantity of 1) can be carried out as well as small and large series production. The range of services includes almost all manufacturing technologies such as CNC machining, sheet metal processing, 3D printing, extrusion, casting and forging processes, as well as component assembly and surface technology. This broadest range of services on the market means that even complex inquiries with different manufacturing technologies and surface treatments can be served and fulfilled by a single contractual partner.



Data-driven quality management

ISO 9001-certified continuous data-driven quality management ensures safety. Quality defects and complaints are consistently avoided from the outset by selecting the right manufacturing company, which ensures the components are consistently high quality. AI-supported selection reduces complaints to a minimum by ensuring that the task is performed by a highly specialized supplier. This is an essential aspect, especially for series production.



Fast delivery throughout Europe

FACTUREE offers consistently short delivery times. Delivery can take as little as 9 working days via express shipping - and not only within Germany. FACTUREE has a continuously growing number of customers in other European countries. The delivery of goods throughout Europe is also 100 percent climate-neutral, as - in cooperation with one of Europe's leading providers in the field of sustainability projects South Pole - all emissions generated during shipping are fully offset.



FACTUREE – The Online Manufacturer

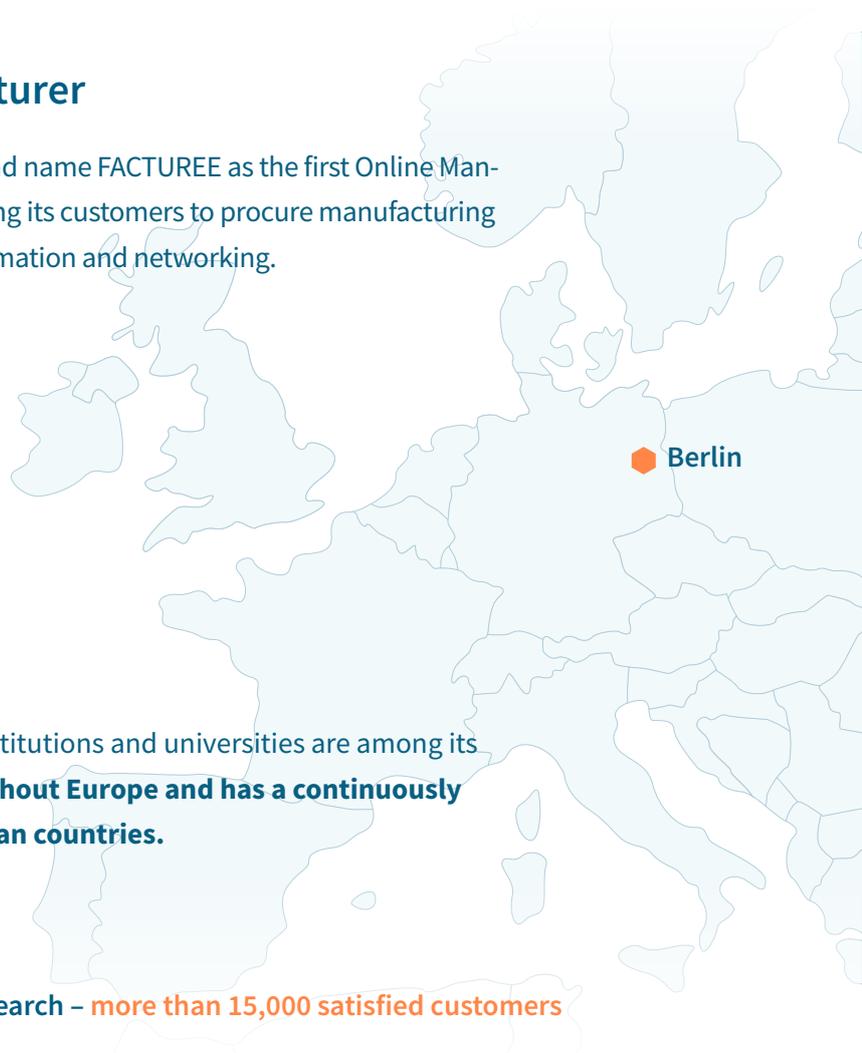
Berlin-based cwmk GmbH operates under the brand name FACTUREE as the first Online Manufacturer. The company pursues the goal of enabling its customers to procure manufacturing parts in a modern way through digitalization, automation and networking.

Customer base from the fields of:

- ✓ Mechanical and plant engineering
- ✓ Medical technology
- ✓ Robotics
- ✓ Automotive
- ✓ Aerospace

Leading industrial companies, SMEs, research institutions and universities are among its satisfied customers. **FACTUREE operates throughout Europe and has a continuously growing number of customers in other European countries.**

From industry to international cutting-edge research – **more than 15,000 satisfied customers**





Conclusion

Online Manufacturing is picking up speed and increasingly proving to be a better alternative to conventional contract manufacturing. It supports sustainable increases in efficiency and serves companies as an important component on the path to Industry 4.0. Conventional contract manufacturing, on the other hand, is on the verge of successive replacement, but this also opens up new opportunities for small manufacturing companies.

FACTUREE provides diverse and highly qualified manufacturing capacities with its network concept as well as the strict selection process of its manufacturing partners. The Online Manufacturer enables manufacturing companies to procure production parts in a contemporary way that eliminates dependence on individual suppliers. The end-to-end digitization and automation of the ordering process via an online network leads to greater efficiency, which in conjunction with high quality represents a decisive competitive advantage.



Would you also like to benefit from contemporary procurement processes?

FACTUREE – The Online Manufacturer



+49 (0)30 629 3939-0



info@facturee.de



www.facturee.de



FACTUREE – The Online Manufacturer
cwmk GmbH
Oudenarder Str. 16
13347 Berlin



