## PILLEN GROUP PAPER

**FULL-SERVICE MANUFACTURING PARTNER** 

# IMPOSSIBLE Let's make it!









**ASSEMBLIES** 

FACTWALL | THE FAMILY BUSINESS | SERVICE | PRODUCTION & SUPPLY;
PRECISION MACHINING, SHEET-METAL WORKING, ALUMINIUM PROFILE MACHINING,
ASSEMBLY & INSTALLATION | SUSTAINABLE SUPPLY CHAIN PARTNER





## **FACTWALL**



## Pillen

SINCE 1956 FAMILY PASSION FOR QUALITY



- MACHINE FACTORY
- SYSTEM SUPPLIER

INNOVATOR MANUFACTURING INDUSTRY | OEM

PRECISION MACHINING | SHEET METAL WORKING | PROFILE MACHINING | ASSEMBLIES

#### **SERVICE**

- DESIGN & VISUALIZATION • (CO- / RF-) ENGINEERING • PRODUCTDEVELOPMENT
  - MEASURING

RECISION ACHINING



ROBOTIZED PRODUCT LOADING HIGH SPEED MILLING





PRECISION MACHINING

INLINE RENISHAW FEEDBACK

VERTICAL

UP TO 5-AXIS SIMULTANEOUSLY

3200mm X 720mm X 600mm

### CNC-TURNING WELDING

ROBOTIZED / COBOTIZED

TURNING/MILLING COMBINATION

AUTOMATIC Ø65 MM

TURNING UP TO Ø500MM

#### ALUMINIUM PROFILE MACHINING

SAWING/MILLING/BENDING/ROLLING/GLUING WELDING / WRAPPING / POWDERCOATING

3- AND 5-AXIS PROFILE MACHINING

UP TO 9000MM LENGTH

#### SHEET METAL ORKING

(NON) FERRO MATERIALS 0.5MM-30MM

24 / ALL-ROUND SHEET **FIBER LASER METAL CUTTING MACHINE** 

COBOTIZED FOLDING, PRESSING, SHEARING, DRILLING



FINISHING - POWDERCOATING

#### OTHER PROCESSING

- CNC 5-AXIS WOOD PROCESSING CENTRE • CNC PROCESSING MACHINING CENTERS FOR PLASTICS & OTHER MATERIALS





WELDING

MIG / MAG-WELDING • TIG-WELDING • LASERWELDING • SPOTWELDING

#### CERTIFICATIONS







### **MANAGEMENT**



MITUTOYO CRYSTA APEX S COORDINATES MEASURING MACHINE 1200 X 3000 X 1000 MM

#### **PED GUIDLINE**

TRACEABILITY | FEM ANALYSIS | STRENGTH TEST | PRESSURE TEST | HARDNESS- AND ROUGHNESS MEASUREMENTS

## FACILITIES O



> 4.000 M<sup>2</sup> **ASSEMBLY FACILITIES** 

MODULES AND COMPLETE **ASSEMBLIES** 

**ELECTRO ASSEMBLIES** 



## SO NICE TO SEE YOU!

Welcome to the Pillen Group, a family business which has been working nationally and internationally as an innovative production and assembly factory for over 65 years.

As a family and a team, we enjoy meeting our business relations in person and investing in long-term partnerships. This ties in with one of our core values: personal contact.

#### **Dutch full-service manufacturing partner**

With multiple production and assembly sites in Lichtenvoorde, near Germany, we develop and produce parts, components and modules while also assembling complete finished products. From individual pieces to large 24/7 series production. Our knowledge of raw materials and materials and our network relationships are vast and offer you many advantages as a customer. In addition to our skilled workers, we also have several 24/7 machining centres, which can produce machined, profiled and sheet metal products, both manned and with the aid of cobots and robots.

#### Our areas of expertise include:

- Technical advice, project and quality management;
- Precision machining;

- (Special) thin sheet metal working;
- Aluminium profile machining;
- Complete (electrical) assembly facilities.

This makes us the point of contact as a full-service production partner. Our passion for high precision allows us to work with complex, challenging tolerances. We achieve all this with a team of over 125 skilled employees. We work for a variety of clients active in (international) market segments such as:

- Analytical equipment;
- Renewable energy;
- Electrical equipment construction;
- Flow & gas meter industry;
- Logistics & distribution systems;
- Mechanical engineering;
- Medical industry;
- Retail/interior design;
- Lighting industry;
- etc

With high-quality machinery, the decades of technical knowledge, the experience of our people and with passion, we never avoid a challenge, however complex.









### IMPOSSIBLE? LET'S MAKE IT POSSIBLE TOGETHER!

#### Original Equipment Manufacturer (OEM) & System Supplier

Our strength lies in the production and manufacturability of products. This also includes an element of service with regard to engineering, product development, prototyping, production and the traceability of materials and the complete assembly. We can therefore act as a system supplier. We offer this service to partially or fully support our customers, as required. Furthermore, we look after the entire project management with respect to production and assembly of components, modules and/ or complete assemblies.

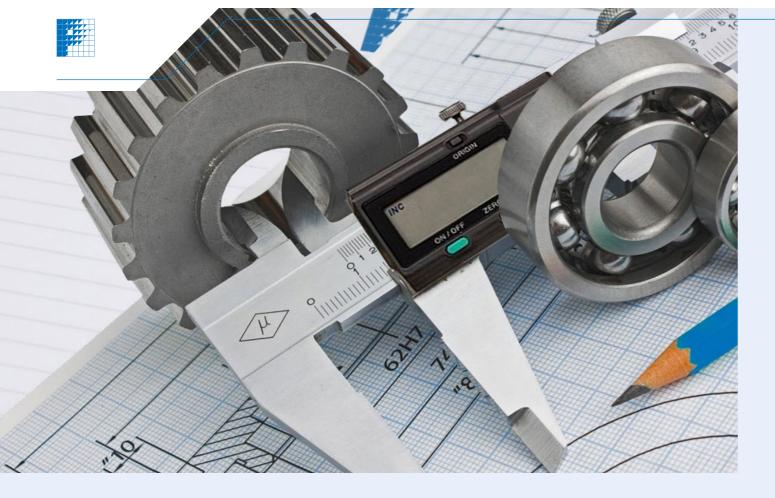
#### Meet the Pillen family & team

My name is Theo Pillen, one of the second generation of family members working in the companies in the Pillen Group. Looking to the future, the younger generation of our family is also involved in the business to ensure that our innovative power, creativity and pure entrepreneurship continue to survive.

Do you have an idea and/or are you looking for a collaborative technical partner? We are here for you.

Kind regards,

Theo Pillen - CEO



### FROM IDEA TO FINAL PRODUCT...

We provide and support complete project and product management. This includes conducting technical research, product design, engineering, co-engineering/re-engineering, elaborating and building prototypes, but also conducting quality measurements during and after production.

Our technical knowledge for machining different materials is very diverse and comes in handy when producing and assembling parts, components, modules. We can also manufacture complete finished products. Being involved in the development of an idea or product as early as possible (early supplier involvement) shortens the time-to-market because the product is immediately efficiently developed into a manufacturable whole. Any customisation can yield a large cost reduction in time, material or cycle time. This always takes account of the requested quality requirements.



## **OUR SERVICE**







#### Your challenges, our service

- To what extent can the product be produced?
- Are the requested product specifications in line with the desired cost price?
- How can we industrialise our prototype?
- What is the appropriate choice of material for us?
- Where can we make savings in cost-price?
- How can you assist us in the design and engineering phase for production?

We are receiving an increasing number of requests from clients to make our observations and provide advice in order to answer these questions and make adjustments where necessary, and to monitor the various stages prior to, during and after production. We think it is important to be seen not only as a supplier, but also as a partner with a high performance level, in line with one of our other core values: being performance-oriented.

#### Measurement techniques and quality management 'Let's measure it!'

We have a wide range of measurement techniques that allows providing supportive measurement of production as well as subcontracting third-party measurement work as a service. We can achieve this thanks to our conditioned measuring room, our modern 3D Mitutyo measuring machines and our AUKOM-certified quality staff. We can also produce measurement reports upon request.

#### Our measurement services:

- Tactile measurements
- Optical measurements
- Leak and pressure tests
- Manual measurements

#### More info? Scan the QR-code





#### Our certifications:

- ISO9001 ISO14001
- Recertification G0304

**LRQ**/

AUKOM











## OUR PRECISION MACHINING

Pillen Group has been the specialist in precision machining since 1956. Various machining operations are performed in-house on our machinery: CNC Milling, CNC Turning. Thanks to our in-house engineering, prototyping, project management, you can come to us from idea to final product in machining supply. We have several 24/7 machining centres at our disposal, which allows us to easily meet your increasing demand for larger series. You can come to us as early as at the conception of the idea.

#### **Series production volumes**

Pillen is primarily geared to producing medium to large series of precision-machined products. We are not afraid of prototyping or producing individual pieces; however, we really come into our own with medium to large repetitive series. The set-up (tooling, software control) is designed in such a way that we can change quickly from one job to another.

#### **Product sizes**

We focus on precision machining in dimensions of  $\leq 500 \times 500 \times 500$  mm. We also perform horizontal and vertical milling of (non-)ferrous metal types of workpieces with a maximum length of 3200mm on our CNC-controlled machining centres. At this length, the focus is more on single pieces to medium-sized series.

#### Our precision department is set up to produce parts, modules and assemblies for:

- the analytical market & medical industry;
- the automotive industry;
- the flow and gas meter industry;
- the high-tech industry;
- machine and equipment construction





## PRECISION MACHINING

#### **Environment and sustainability**

The production facilities are fully conditioned in line with our sustainability vision. This means that we have a completely gas-free site and also generate our own energy consumption to the extent possible. Finally, we place strong emphasis on engagement of our team members and lifelong learning, to ensure craftsmanship continues to develop sustainably.

#### **Diversity in precision-machining parts**

We are increasingly deploying smart technology to produce a wide variety of workpieces more efficiently; in other words, according to the High-mix Low-volume system. Using pallet systems, workholding cubes and clamping methods, we can machine a mix of different parts/products on a single machine tool, under a constant stress, which benefits speed and product accuracy.

#### **Quality control with CNC turning-milling combinations**

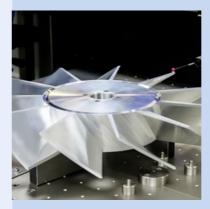
Several CNC turning centres are equipped with an automated bar feeder and driven tools that can produce complex parts up to Ø65mm in one or two operations. Larger components up to Ø500mm are loaded manually or by robot. In addition to our CNC turning centres, we also have several turning-milling combinations fully robotised to ensure quality in one operation while also being able to produce unmanned.

#### Efficient 5-axis CNC milling centres

We have various 3, 4 and 5-axis CNC machining centres, many of which are fully automated and equipped with automatic pallet systems. The machines allow for quickly changing products and tools which enables flexible 24/7 production.

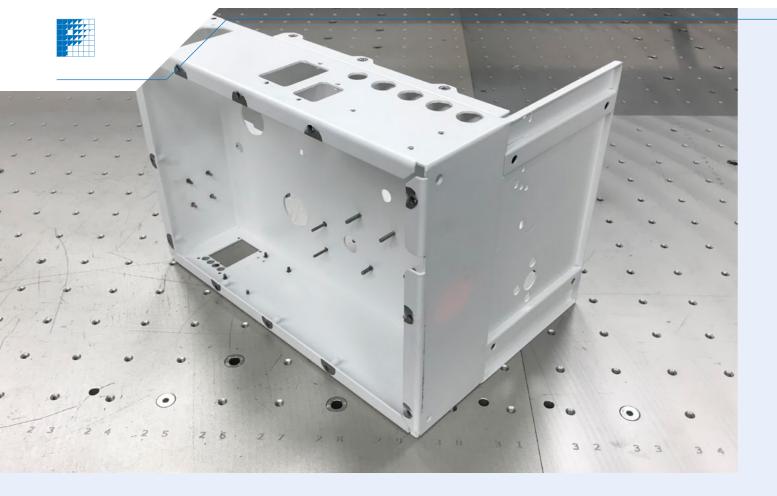
#### Multitasking using turn-mill combinations 24/7

For machining complex and/or laborious products in medium to larger series, we use our so-called 'multitasking machines'. These versatile machines allow us to both turn and mill in a single operation. This improves accuracy and cycle time compared to routing with separate operations via one or more turning or milling machines.









### **OUR SHEET METAL PRODUCTS**

We like challenges and mostly work with thin reflective (aluminium) sheet materials in our sheet metal processing. One of the fastest fibre CNC-controlled laser cutting machines allows us, together with our technical team, to achieve a low cost per part/product combined with very high quality and precise tolerances for our national and international clients.

#### Medium-sized series and assembly facilities

In our sheet metal work, the focus is also on producing components, modules and/or assemblies in medium-sized repetitive series. In particular, we are a specialist in machining special lightweight (reflective and absorbent) thin sheet materials.

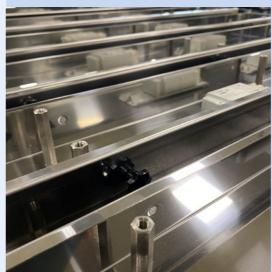
Target markets where we supply thin plate machined products and modules:

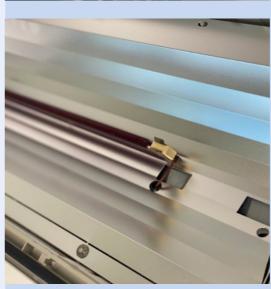
- Renewable energy;
- Machine and equipment construction;
- Medical industry;
- Retail/interior design;
- Lighting industry.

For these clients, we produce, among other things, lighting fixtures, parts for interior elements, covering materials such as (electrical) casings, housings and devices for (medical) analysis equipment, etc.

## SHEET METAL WORKING







#### Multi-purpose fibre laser cutting machine for sheet materials

Our fully automatic fibre laser cutting machine creates the required sheet metal parts at very high speed and precision. Sheet materials with a maximum size of 3000x1500mm can be machined on the fibre laser cutting machine.

#### Powerful in machining delicate sheet materials

Our production facilities are primarily geared to thin sheet. The 24/7 fibre laser cutting machine is used for the creation of contours and, combined with a large line of CNC-controlled press brakes, this production line enables us to process medium to large series of delicate sheet materials quickly and efficiently at the highest level. With our decades of experience in the lighting industry and interior design and always thinking along with our partners in finished products, we are able to continue to guarantee the requested quality.

#### **Welding facilities and methods**

To join sheet metal parts or sheet material from different types of metal, we use various welding joints and have the necessary welding machines and robotic set-ups. We can also develop customer-specific Welding Method Qualifications.

We use the following welding methods:

- MIG/MAG welding
- TIG welding
- Laser welding
- Spot welding

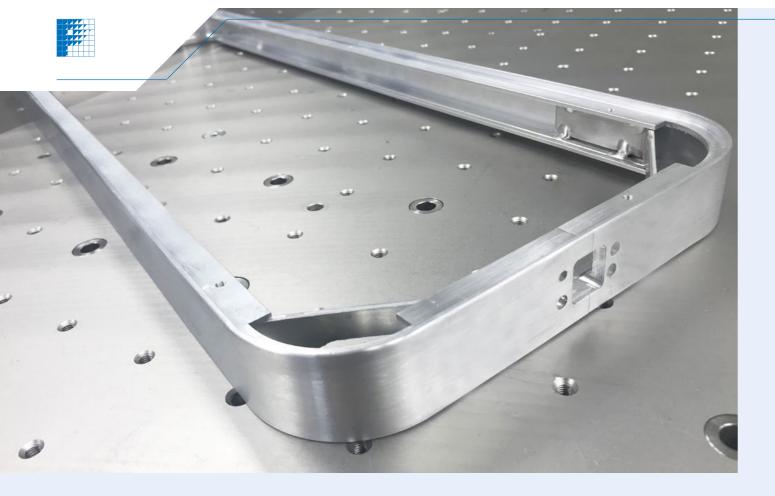
#### **Post-processing**

Post-processing (surface treatment) such as powder coating or galvanisation can be applied to strengthen, protect and, for example, keep the machined sheet material scratch-free.

#### More info? Scan the QR-code







## OUR ALUMINIUM PROFILE MACHINING OPERATIONS

Our technical heart beats faster when machining aluminium extrusion profiles. In the Supply Chain, we are the perfect link in the machining of aluminium extrusion parts coming directly from the extruders. Our profile machining facilities can handle anything from simple cutting operations to more complex 5-axis profile milling operations.

#### Storage and handling facilities of aluminium extrusions

We have storage and handling capacities where our clients can store the supplied aluminium extrusion profiles. The advantage thereof is that the aluminium stock can be used for any immediate production demand, saving time, transport and handling costs.

We will gladly share our knowledge of engineering aluminium structures, aluminium processing and the end application in terms of stability and weight with our clients to achieve the perfect aluminium machined profile, optionally combined with the complete composition of the end result.

We perform the following profiling operations:

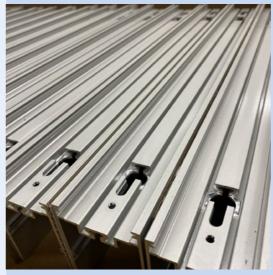
- CNC cutting
- 3 & 5-axis CNC milling up to lengths of 9 metres extrusion
- bending-rolling
- joining: gluing, welding

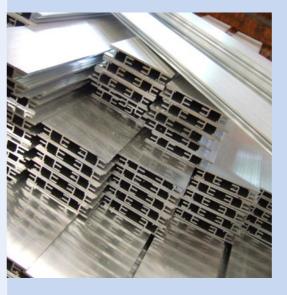




## ALUMINIUM PROFILE MACHINING







We process our aluminium profiles for the:

- Interior design;
- Linear industry (logistics & distribution systems);
- Medical industry;
- Lighting industry;
- etc.

#### Machining profile lengths of up to 9000 mm

Our 3 and 5-axis machining centres are capable of machining aluminium profiles in lengths of up to 9000 mm. The profiles can be milled, drilled and/or tapped in one operation.

### Creating round/organic shapes in aluminium (blank and anodised) profiles

We do not shy away from realising curves/organic shapes in an aluminium extrusion profile. In some cases, this will require a trial run to determine together whether the desired bending can actually be achieved in the profile.

By bending/rolling the profile, the corresponding curve is created as an operation. To do this, we use a roller method that requires little or no post-processing.

#### **Seamless joining of aluminium profiles**

A corner joint in an aluminium extrusion profile can be created by welding or gluing. Finally, we can also arrange for the desired finishing operations (such as powder coating) for the profiles.

#### The connection to our sheet metal work

The machined aluminium profile is internally connected to our sheet metal work. This allows integral sheet and profile components to be produced at our premises. This saves in time and organisation and therefore reduces cost prices in the chain.



## OUR ASSEMBLY FACILITIES

In addition to our 16,000 m2 production floor, we have more than enough space (4,000 m2) to perform assembly/ installation work of almost any size. We can also perform the assembly and installation of products, devices and machines using materials supplied by third parties. However, we do, of course, prefer to process and subsequently assemble the components ourselves or in combination with the above.





## ASSEMBLY & INSTALLATION







#### Module construction with electrical components

We perform (electrical) assembly and sub-assembly work for components processed by machining, profile and/or sheet metal working. These sub-assemblies, or modules, can optionally be fully tested, after which only final assembly will need to take place. In consultation with our clients, we determine how the modules will be delivered elsewhere for further processing in order to create a final product.

#### **Complex assemblies**

We are increasingly acting as a complete assembly partner and put together various final assemblies. We offer the possibility of assembling complex assemblies. We ensure that the parts and components supplied by third parties and the parts machined by us will result in the complete final assembly.

Depending on customer-specific requirements, we will assemble and disassemble the product assemblies as well as testing these assemblies during and after the assembly process.

#### **Supply chain management**

As a system supplier, we not only assemble and test modules and/or complete final assemblies, we take care of the complete logistics with Just in Time deliveries if required.









## SUSTAINABLE SUPPLY CHAIN PARTNER

As a full-service manufacturing partner for our business relations in various market segments such as: analytical devices, mechanical engineering, electrical device construction, sustainable energy, flow and gas meter industry, logistics & distribution systems, medical industry and lighting industry, we are aware of our ecological/environmental/local footprint. In doing so, we are also sorting to meet the future SDGs.

#### Together, we take responsibility

Everyone can see that our climate is changing rapidly. As a manufacturing company, we are conscious that we can and must make a difference to stop further negative climate change.

### Sustainable procurement policy and largely energy-neutral!

We also try to take stock of the extent to which our partners are working on sustainability in the inventory and decisions. We are also investing heavily in a sustainable (virtually) energy-neutral production environment. Specifically, we are investing and building solar power capacity of nearly 800Mw of electrical power. We are therefore making our buildings and machinery more sustainable. And together with and for our customers we choose sustainable raw materials to be incorporated and processed.

All this is aimed at reducing emissions and contributing to a circular production environment in which our machined parts, components, modules and assemblies contribute to a sustainable future for the next generations.

#### Sustainable use and comfortable working

Besides improving the sustainability of our buildings, production and logistics processes for our products, we also feel that it's extremely important that our employees continue to develop to stay relevant, inside and outside the labour process. We also attach great importance to ergonomic and comfortable workplaces in our companies.

### In addition to ISO 9001, we are also ISO 14001 certified

In addition to our ISO9001 certification, we are also ISO14001 certified. This standard specifies the requirements of an environmental management system that we can use to continuously improve our environmental performance.

#### Onze core values



#### **PURE**

No-nonsense, clear communication, sustainable society



#### **PASSION**

Involvement, entrepeneurship, growth, honesty



#### **PERFORMANCE**

Innovation capacity, ambition, technical know-how, more than 100% commitment



#### **PERSONA**

Family business, interest, partnership, together

# WE HAVE BEEN MAKING COMPONENTS AND ASSEMBLIES FOR MORE THAN 65 YEARS









#### Let's talk

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More about us?





