

## Commercial brochure

DESIGN & PRODUCTION OF SPECIAL MACHINERY AND MUCH MORE!







Since 1943



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# COMPANY PRESENTATION



# COMPANY PRESENTATION



The purpose of this information sheet is to present our company, as well as the various **resources** (human, material and organisational) **at our disposal and that can be put into action to best meet your requirements.** 

Thomas Constructions Mécaniques – TCM has been based in the heart of the Vosges mountains **for over 80 years.** This longevity demonstrates the breadth of our expertise, whether in general mechanics, automation, new technology, research, innovation or sustainable development.

## COMPANY PRESENTATION OUR SERVICES

- Our services are categorised into **four** fields of activity:
- Special machinery (production lines or workstations, handling equipment, packaging and packing facilities, test or control stations, etc.), the integration of auxiliary equipment (robots, vibrations, 4.0 technology, etc.) and industrial automation
- On-site industrial maintenance at customers' premises, production sites and industrial facilities (including metal work, welding, etc.); machining and mechanical welding of replacement or wear parts
- Assurance of safety compliance for existing industrial facilities, whether physical protection equipment (electromagnetic lock doors, guards, etc.) or immaterial protection equipment (light curtains, scanners, cameras, etc.)
- Technical upgrading of existing industrial facilities (retrofit), including technological and process upgrading, as well as complete process changes for existing equipment

## COMPANY PRESENTATION OUR MAIN BUSINESS SECTORS AND FIELDS OF EXPERTISE

### Main business sectors

#### Food industry

- > Paper and cardboard industry
- > Wood processing
- Fextile work
- > Metallurgy, Steel industry
- Automotive industry
- Non-destructive testing
- Miscellaneous

#### Our fields of expertise

- > Machining of metal and plastic parts
- > Pneumatics and hydraulics
- Metal work
- Prototyping
- > Electricity and electronics
- Automation and IT
- Robotics and cobotics
- > Integration
- > 3D modelling
- > Structural calculations

## COMPANY PRESENTATION OUR VALUES AND COMMITMENTS

#### Design

By adopting an approach which combines realism with modernity, our design office focuses on developing **solutions based on production engineering** in full compliance with **your** quality, production, and budgetary requirements.

Our teams of engineers and technicians conduct all the necessary design and engineering studies for your projects.

#### Identification of your constraints

Analysis of your needs.

Drafting of specifications.

A single, highly qualified project manager as your key contact throughout every stage of your project.

#### <u>A turnkey service</u>

With our global approach, multidisciplinary teams and extensive expertise of manufacturing industries, we provide robust, reliable and durable turnkey solutions.

#### <u>A multidisciplinary methodology</u>

At each stage of research and development throughout your project, we **hold strategic planning meetings** between the design office and the manufacturing workshops, so that we can fully capitalise on our internal theoretical and practical skills, as well as having co-engineering discussions with your teams.

## COMPANY PRESENTATION OUR VALUES AND COMMITMENTS

#### Theoretical approach

Each study is subject to an exhaustive analysis using computer-aided design and drafting (CADD).

#### Practical validation

Solutions requiring pre-validation phases are tested in our workshops. We don't need to call on intermediaries or subcontractors, we have the required expertise in the trades and the value chain needed to install and monitor your equipment.

#### Personalised support

#### Commissioning

Planning and coordination of the assembly and commissioning phases on site in close collaboration with your production and maintenance teams.

#### Skills transfer

- > Qualified employees who are fully accustomed to working on site with customers, whether independently or with teams working in other trades.
- > Teams with all the necessary qualifications and training to install high-quality facilities in strict compliance with safety regulations.
- Throughout the commissioning phase, we will train your operators to use the equipment. We also train your maintenance teams in equipment troubleshooting.

## COMPANY PRESENTATION COMPANY CHARACTERISTICS

- Company name :
- Head office :
- Legal form :
- Manager :
- SIRET no.:
- Capital :
- Trade and companies register :
- APE code :
- Total number of employees :

Thomas Constructions Mécaniques – TCM SAS
5 rue Jean Moulin – F - 88120 Vagney
SAS
Pro Consult SARL, President, Madame Françoise Goosse, Manager
306 650 565 00014
€174,498
er : Trade and companies register : Epinal
2562B

#### 22 employees

## COMPANY PRESENTATION TURNOVER

2019	2020	2021	2022
€1,095,379	€593,791	€1,199,373	€1,460,534

Turnover in k€



Turnover in k€

# PROCESSES AND MEANS OF IMPLEMENTATION



Thomas Constructions Mécaniques – TCM represents a team of 22 competent and committed people at your service :



#### Machining of metal and plastic parts

Comprehensive and modern machine fleet: numerical control machining centre, numerically-controlled lathes and milling machines.

 $\rightarrow$  We oversee the quality processes and manufacturing deadlines for the metal and plastic components of the equipment we design.

With this know-how and the immediate availability of our machining equipment, we offer a proactive and flexible service which is invaluable for our customers.









#### Metal work

Our metal work unit is equipped with all the equipment required to carry out the majority of operations related to the production and shaping of metal objects: mortising machine, press, drilling machines, rolling machines, semi-automatic welding stations and TIG/Plasma/Oxycutting workstations.

Our vast range of metal work equipment and the adaptability of the workshop's covered areas are ideal for performing almost every type of shaping.





#### Electricity/Automation/Electronics

**From the design phase of your project**, we take care of integrating all the electrical and electronic components :

- > electrical studies
- PLC studies and programming
- > production of electrical diagrams, wiring and installation logbooks
- wiring of power cabinets, control cabinets (automation), pneumatic cabinets and frames
- > installation of cable trays
- > on-site connection
- > final inspection, power up and validation

As part of our maintenance and repair services, we also perform **technical upgrades** and the **modernisation of existing electrical equipment.** 







#### Machine assembly

Our **experienced teams of fitters and welders** also provide support with the maintenance and improvement of your infrastructure and working conditions :

- > replacement and/or modification of walkways
- installation and/or modification of ventilation ducts
- > manufacture and installation of floors and access doors on production lines
- welding of reinforcements on to machine frames
- replacement of bearings, cylinders, rollers, motor gear units and conveyor systems
- replacement of bands, guides, chains and belts
- > adjustment and upgrading of conveyor systems
- > modification of fabric drive systems, presses, cylinders and rollers
- > modification of pneumatic and hydraulic control systems
- > installation of conveyor lines

#### Design and engineering office

Our teams of engineers and technicians conduct all the necessary design and engineering studies for your projects.

Based on your needs analysis or specifications, our teams produce the mechanical and electrical working drawings, other manufacturing documents, automation software, etc.

- I Divalto ERP
- 8 SolidWorks licences (6 SolidWorks licences, 1 SolidWorks Professional licence, 1 SolidWorks Simulation licence)
- I Siemens license TIA Portal
- I drawing software package for electrical and pneumatic diagrams







#### Operations performed on customers' sites with mobile equipment

We are equipped with a **fleet of vehicles** (cars, utility vehicles, vans, trucks) in order to provide services **throughout the whole of France**. Each vehicle is equipped with all the tools needed to perform mechanical, welding/metal work, electrical, automation, assembly and maintenance services on the customer's site.

#### Supplier partner network

THOMAS CONSTRUCTIONS MECANIQUES - TCM also represents a network of highly-qualified, competent and efficient partners throughout France. These partnerships enable us to guarantee short response times in the case of mechanical and electrical repair services or in an emergency.

#### Part supplies available for the provision of services

Our warehouses hold extensive stock of materials and components.

We have several internal warehouses exclusively to meet our needs; the first specialises in electrical and electronic components, the second in all the standard mechanical elements specific to our fields of activity.

In addition to this, we keep supplies of all our raw materials. We maintain a permanent stock of various profiles, sheets, flats and rounds, etc., whether made from structural steel, special steel, stainless steel or various types of plastic materials.

## PROCESSES AND MEANS OF IMPLEMENTATION ORGANISATIONAL RESOURCES

We provide our customers with a production macro-schedule in the form of a Gantt chart, when we submit our business proposal. We also use these charts for internal planning to ensure we uphold our commitments with regard to the deadlines set by our customers.

#### Example of Order Macro-Schedule





# PROCESSES AND MEANS OF IMPLEMENTATION SAFETY AND ENVIRONMENTAL MEASURES

Our teams work in accordance with general safety and environmental regulations as well as with our customers' specific requirements.

To achieve this, our technicians working on site, periodically and in line with the legislation in force, complete specific training courses and/or refresher courses, such as :





# TECHNICAL REFERENCES





#### METTON MILLING MACHINE FOR THE FOOD INDUSTRY

Metton, a skimmed milk curd, is mainly used to make Cancoillotte, a cheese made from cow's milk.

This state-of-the-art Metton milling machine, with its central, fully automatic control system, complies with the strictest European regulations on hygiene, safety and environmental protection.

It can be easily dismantled to facilitate cleaning, and with a capacity of I,000kg/hour, it can grind a wide range of Metton blocks of up to 65kg.

The milling machine can be configured to the required grain size. Packaging of the finished product is adapting according to the desired weight upon exiting the conveyor belt.

#### PAPER PRESS UNIT

5.5 metres in length, this unit is used to position press rolls which can be height-adjusted in order to set the required paper thickness.

Made entirely of stainless steel, the system is designed to insert and remove the felt in one continuous piece with sets of spacers.





#### HIGH CAPACITY AUTOMATIC CONVEYOR SYSTEM FOR HEAVY LOADS

With the constraints of an extremely short production downtime and the need for operational production to start urgently, this unit was developed, designed, manufactured and commissioned in record time.

This fully automatic conveyor system is controlled by a central PLC. It is a high-capacity conveyor which transports pallets of over one ton to the end of the packaging line. It is composed of chain conveyors, roller conveyors and a bidirectional transfer station. The system is designed to withstand extreme operating conditions (high ambient temperature, very dusty environment, high ambient humidity).

Developed according to a production philosophy in line with our customer's strategic productivity and profitability targets, this conveyor system is a unit that can be integrated into an existing and complex manufacturing line, optimising productivity and the overall efficiency of the manufacturing facility at lower cost.







#### CONTINUOUS HEIGHT CONTROL WORKSTATION WITH 4.0 DIGITAL MONITORING AND REPORTING VIA ONLINE PLATFORM

Continuous height and flatness control station for slabs leaving the forming press, equipped with monitoring software and digital reporting capability via an online data processing and analysis platform.

Composed of a set of laser sensors and a data acquisition controller, the station uses laser scanning to continuously measure and record the height of products leaving the forming press and throughout production.

The workstation is fully mobile and can be moved from one production site to another.

Data is processed locally in real time on a remote laptop computer.

The data processing software, developed specifically for this use, can determine the slab configuration, their height and degree of flatness.



#### **Special machinery projects**

With our extensive expertise, we can complete all types of custom-made projects, from conveyor lines to punching workstations, presses and even entire animal feed distribution lines (vertical insect farms), and much more ...













Machining and metal work projects

With our metal work and machining workshops, we can meet all your production needs.









#### <u>Multi-year maintenance, repair and upkeep of</u> <u>Valorys facilities</u>

Our know-how is recognised all over France, leading to work on large-scale infrastructure under multi-year preventive and corrective maintenance contracts, as in the case of the waste sorting centre for which we perform the following services :

- Manufacture, supply and installation of various mechanical components
- Manufacture, supply and installation of wear plates
- > Overhaul of electric motors













## Motorised conveyor system for boxes with integral lids for the Caen-Normandy University Hospital Centre

The Caen-Normandy University Hospital Centre required us to design and produce a transfer, supply and removal system for plastic boxes used to package drugs for the University Hospital store and central pharmacy :

- Supply and removal of boxes to the order picking and transfer preparation work areas
- > Supply and removal of boxes to the automated preparation area
- > Automatic flow management to different areas





# THEY TRUST US



# CONTACT



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