PLIENO SPEKTRAS

Tailored solutions for food processing & handling.



About Us

We are an independent design, engineering, and manufacturing company specializing in open food processing technologies.

We are committed to delivering high-quality, reliable equipment that improves food processing efficiency. Our products are designed with precision to meet the specific needs of our clients, ensuring long-term durability and performance.

ANNO: 1993

Location: Klaipėda, Lithuania

Facilities: 4,000 m² of modern, in-house production space

Staff: 70 specialists in stainless steel and aluminum processing

Annual Turnover 2025 : € 6 mio

Scope: Worldwide delivery and installation

Proven Results and Experience

Satisfied Clients	Projects Completed	Years of Experience
580+	**2300+**	**30+**

Sectors We Serve

Our open food processing technology is used across various sectors including:

- **Seafood industry**,
- **Vegetables/fruits industry**,
- **Pet food industry**,
- **Meat & poultry industry,**
- **Bakery industry,**
- **Milk & cheese industry,**

and is adaptable for:

- **beverage**,
- **and other industries using conveyor technology.**



Processing Equipment

- Weighing and dosing systems;
- Mixing systems (for bulk, powders, cut vegetables, meat pieces – all tailor-made);
- Peeling and cutting systems for root vegetable,
- Disc-cutters;
- Crushing machines;
- Special fish processing machines;
- Vacuum systems;
- Bleeding systems;
- Sortation systems;
- Packing systems;
- Automated grading systems etc.



Conveying Equipment

Conveyors & Conveyor Lines

Belt, screw, modular belt, homogeneous belt, chain, roller, mesh belt, wire belt – from open food handling to packed goods and pallets.

Conveyor-Based Machines

Accumulation buffers with dynamic feeding, coolers, disinfection and washing/drying tunnels, sorting machines, multi-conveyor workstations.

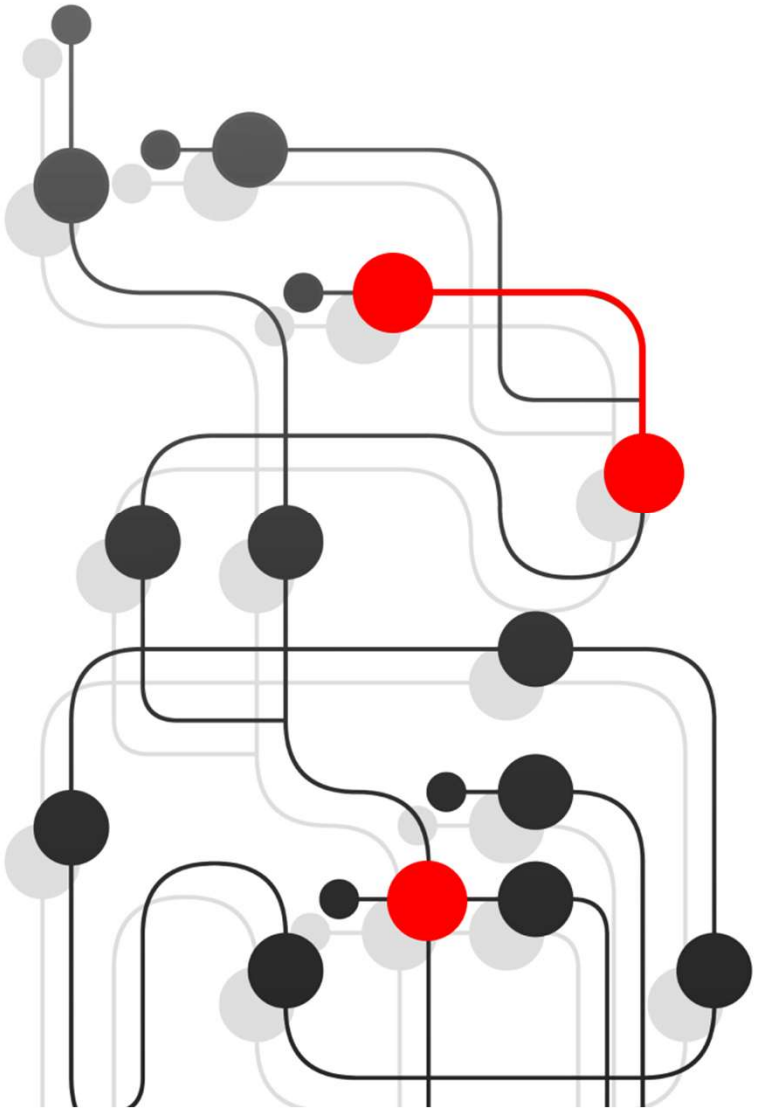


Filling Gaps in the Chain

Our passion is to fill the gaps in the production equipment's chain. Teaching machines from different manufacturers to speak a common language and operate in a unified system.

The baking oven then understands what the conveyor carrying the product to be defrosted is "telling" it, the packaging machine "hears" what the labelling machine is whispering to it, and how happy the palletizer is at the end.

Because **Plieno Spektras** has taken care of everything that was missed. Different manufacturers, different protocols, different logic — **we bridge them all into one unified, high-performance production system**. **No bottlenecks. No unplanned downtime. No product loss.** Just a precisely integrated chain where every machine knows its role and executes it flawlessly. **We engineer the missing links**. Let the equipment manufacturers focus on building exceptional machines. **Plieno Spektras ensures they all speak the same language — and perform as one.**



Seafood Processing Equipment on Board

Fish distribution lines on board a fishing vessel:

- Vacuum pumps systems for fish,
- Dewatering and storage tanks;
- Fish sorting machines,
- Rotary drum fish scaler’s
- General conveyors to and from the freezing machines and to the storage rooms,
- Other conveyors and elevators.

By incorporating third-party machines into the lines at the customer's request, such as skinning, filleting, checkweighers, slicing and others, we integrate them all into a seamless, perfectly functioning system.



Automation Projects

At PLIENO SPEKTRAS, we specialize in providing complete automation solutions, from the initial design phase to implementation and continuous monitoring. Our team ensures that every process runs smoothly, efficiently, and accurately:

- Programming and Control;
- Monitoring and Data Collection;
- User Interfaces and Smart Integration;
- Tailored Solutions for Every Industry.

Whether it's a complex, multi-step process or a simple, single-task automation, we ensure that all elements work in harmony to increase efficiency, reduce human error, and lower operational costs.



Science-driven innovation

Developed with Prof. Torbjørn Trondsen, engineered and manufactured by UAB Plieno Spektras in Lithuania, Coolnova cabinets bring together Norwegian research and Lithuanian precision engineering. Coolnova is a science-based thawing technology designed to preserve product quality and maximize yield.





Natural water mist technology thaws products quickly and evenly — preserving original texture, taste, smell and nutritional value. No drip loss. No quality compromise.

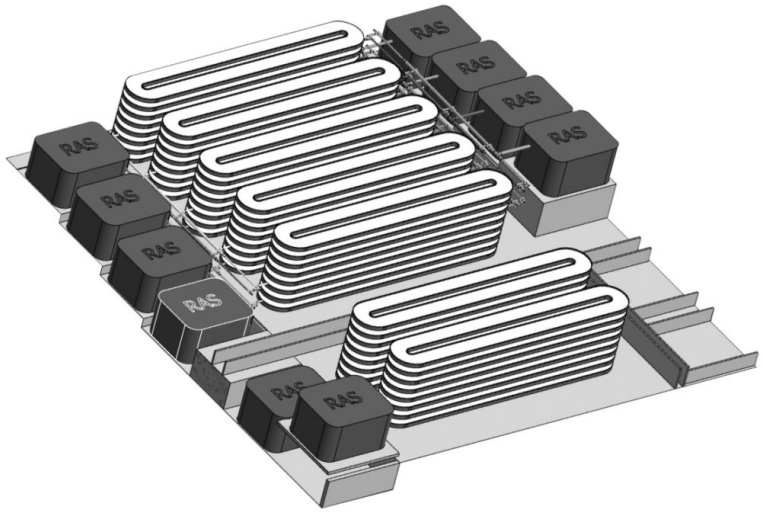
Coolnova Mini — up to 360 kg per day. For retail, kitchens and hotels.
Coolnova Combi — up to 1,000 kg per cycle. For wholesale and industrial production.

Energy consumption from 0.12 kWh/kg.

Intelligent Fish Farming solutions

In cooperation with Prof. Torbjørn Trondsen, PLIENO SPEKTRAS provides engineering, manufacturing, and integration of advanced Intelligent Fish Farming solutions based on innovative Raceway and SIFT farming technologies. Combining aquaculture expertise with industrial engineering, we deliver sustainable, scalable, and highly efficient systems for modern land-based fish farming.





These systems combine high fish welfare standards, efficient space utilization, and optimized water management to maximize productivity and sustainability. Modular design, automation, and real-time process control enable flexible and scalable aquaculture operations.

Engineering & Automation

High-performance solutions that drive efficiency and reliability.



3D Modeling

Using Autodesk Inventor to create adaptable, precision-driven designs.



Automation

Integrating sensors, switches, and touch panels for seamless control and improved workflow.



Optimization

Streamlining processes and programming controllers to enhance operational performance.

Industrial Prototypes

Some of the prototypes we have developed, driven by the needs of our customers:

- an automatic secondary packaging machine that puts product boxes on packaging trays;
- an automatic machine for placing pouches on a sterilization cassette (250 pcs/1 min);
- automatic machine for placing pouches on a sterilization tray;
- automatic machine for removing the product pouches from the sterilization tray into the drying system with pad reloading, and others.



ONSHORE & ONBOARD

Manufacturing Capabilities

Comprehensive solutions for every stage of production.

Welding

Surface Treatment

Assembly

Installation

Engineering & Design

Cutting

Punching

Bending

Rolling

Machining



Manufacturing Capabilities

From precision machining to assembly.

CNC Laser Cutting
Material: Stainless Steel
Precision: Smooth, accurate edges
Capacity: Up to 10mm thickness
Precision laser cutting for intricate and clean finishes.

CNC Punching
Material: Stainless Steel
Capacity: Up to 3mm thickness
Hole punching and perforation for complex patterns.

CNC Sheet Bending
Press Options: 150-ton and 100-ton presses
Capacity: Up to 3000mm width
Accurate, large-scale bending for consistent results.

CNC Plate Rolling
Rollers: 4
Material: Stainless Steel
Capacity: Up to 4mm thickness, 2000mm width
Uniform rolling for smooth, precise curves.

TIG/MIG Welding
TIG: Best for thinner materials like stainless steel
MIG: Suitable for thicker materials and large-scale jobs
Materials: Stainless steel, aluminum, mild steel, and alloys
Strong, clean, and durable welds for any application.

Glass Blasting
Room Dimensions: 6m x 6m x 3.5m
Technology: Clemco system
Professional surface finishing for large components.

NC Turning and Milling
Turning: Cylindrical parts like shafts and bushings
Milling: Grooves, slots, and intricate patterns
Precision: Tight tolerances for critical applications
High-precision machining for complex components.

NC Plate Rolling
Rollers: 3
Capacity: Ø90mm x 1250mm
Specialized rolling for smaller applications.

NC Tube Bending
Capacity: Up to Ø42mm
Reliable bends for structural and industrial tubing.

Assembly and Installation
Services: Full integration and on-site installation
Quality: Precision checks ensure proper fit and finish
End-to-end support, from assembly through final installation.

Workshop and Team
Facility Size: 4000 m²
Team: ~70 skilled professionals
Efficient production with fast turnaround times.

Engineering Design
Capabilities: Custom solutions, 3D modeling, prototyping
Planning and execution from concept to production.



Darius Edvardas Anužis

Head of Marketing & Business Development

EMAIL: darius@plienas.lt
MOBILE: +370 646 06 447

MANUFACTURER
Plieno Spektras, UAB

ADDRESS
Dubysos g. 37, Klaipėda

WEBSITE
www.plienospektras.lt

PLIENO SPEKTRAS

Tailored solutions for food processing & handling.