Machine building 1/2

We design and build machinery and industrial automation systems for the plastics processing industry and other manufacturing sectors.

For two decades, drawing on engineering expertise and hundreds of completed implementations, we have been creating machines tailored to the individual needs of our clients.

We specialize in building machinery and technological production lines for the plastics processing industry, as well as delivering solutions for the automotive, aerospace, and manufacturing sectors. Our equipment is developed using advanced design technologies and high-quality components, ensuring reliability and long service life.

Our projects cover the entire process — from concept development, design, and construction to commissioning and automation system integration. We deliver task-specific machines, control cabinets, and robotic and automation systems. Our team of experienced engineers guarantees precision, quality, and top-level support.

● Control cabinets

availability: to be agreed

Design and construction of control systems

Design, assembly, and programming of integrated industrial automation systems that ensure stable, safe, and efficient production line operation. From simple control architectures to fully automated systems with visualization and data acquisition.	Design of PLC and HMI control systems
	Programming of SCADA systems and process visualization
	Integration with MES / ERP supervisory systems
	Design and construction of control cabinets
	Implementation of safety systems (SIL, PL)
	Diagnostics and optimization of existing systems
	Acquisition and analysis of process data

Control and Visualization

Simple operation of workstations, enhancing user comfort and increasing production efficiency	Manual – performed by the operator
	Automatic – via PLC controllers and regulators
Solutions from leading manufacturers	Siemens, Allen Bradley, Schneider Electric, Omron, B&R, Astraada, and HMI and SCADA systems

Data acquisition and analysis – Industry 4.0

Control and data acquisition systems integrate intelligent machines and production processes	Collected and archived in real time
	Ongoing analysis of equipment operation, elimination of process errors, and prevention of failures
	Data archiving, creation of historical analyses
	Monitoring production progress and planning development actions based on actual efficiency indicators

Safety

Projects executed in compliance with the Machinery Directive and applicable Polish and European Standards
All systems meet strict requirements for workplace safety, operator protection, and reliable equipment operation.

Scope of Implementation

Design and assembly of control cabinets	Automation and robotization of processes
PLC programming	Machine safety systems
HMI and SCADA systems	Modernization and integration of existing production lines
Control, visualization, and data acquisition	

● Robotics

availability: to be agreed

Industrial workstation robotics

Execution of projects from individual workstations to complete production lines	Increased efficiency, precision, and safety of production processes
	Handling repetitive and demanding tasks
	Improved work ergonomics and consistent quality

Execution of production line construction

Project execution for industries	Automotive
	Aerospace
	Metalworking
	Household appliances and plastics processing

Scope of Implementation

Project execution for industries: automotive, aerospace, metalworking, household appliances, and plastics processing	Construction and integration of robotic production lines
	Palletizing and depalletizing applications
	Welding and assembly applications
	Modernization and automation of existing workstations
	Design of control, safety, and visualization systems

Technologies and Partners

Implementation of solutions based on robots from leading manufacturers	ABB	Universal Robots
	KUKA	Epson
	FANUC	Mitsubishi
	Kawasaki	

Machine building 2/2

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● Automation

availability: to be agreed

Custom solutions

Analysis of process and technology requirements	
Optimization of material flow and cycle times	
Design of machines with non-standard functionality	
Integration with existing ERP/MES systems	

Scope of Implementation

Assembly lines	Inline quality control
Packaging machines	Collaborative robots (cobots)
Transport and storage	Systems integration

● Maszyny zadaniowe

availability: to be agreed

Scope of machinery

Analysis of process and technological requirements	
Optimization of material flow and cycle times	
Design of machines with non-standard functionality	
Integration with existing ERP/MES systems	

Scope of Implementation

Perforators	Calibration tables
Cutting and chamfering devices	Caterpillar and belt haul-off units
Orbital cutters	Cooling tanks
Discharge chutes	Calendering devices (calenders)
Printing: two-color rotary pad printing	Complete construction of production lines
Construction of a plastics processing machine	Saws, guillotines, orbital cutters

Control technologies

PLC control and HMI panels	
Integration capability with industrial robots	
Integration capability with data acquisition systems using automatic scanners	

Complete production lines

Execution of complete plastics processing lines	
Delivery of manipulators	
Execution of DEKRA or BV audits	

Target industries

Construction	Furniture
Automotive	Household appliances and others

Tool manufacturing

We specialize in the design and production of tools for the plastics processing industry

Based on 30 years of experience, hundreds of completed projects, and implemented systems, we deliver solutions that meet the highest requirements in profile extrusion.

Each project is executed comprehensively — from concept and technical documentation, through the manufacture of precision components, to final assembly and commissioning. Our goal is to provide clients with the highest quality products, reduce start-up time, minimize waste, and ensure process stability and repeatability.

We produce injection molds, extrusion lines, heads, and calibrators for extruding shaped, chambered, window, furniture, construction, and decorative profiles, gutter systems, pipes, and foamed profiles. We utilize modern technologies and design software.

Injection molds for plastics

Availability: 10 days

Offered types and technologies

Production of plastic injection molds with simple and complex designs	Hot-runner
	Cold-runner
	Mould injection
	Other types according to client requirements
	Production of molds based on in-house designs, provided documentation, or physical parts

Tooling and CAD/CAM design

	Tooling department equipped with modern machines and an experienced workforce
	Design carried out using reputable software

Serial production of industrial components

Mass production of components for the industry	Construction
	Automotive
	Furniture
	Household appliances and other sectors

Extrusion lines

availability: to be agreed

Offered types and technologies

Design and construction of complete extrusion lines and extrusion components	Perforators	Cooling tanks
	Cutting devices	Discharge chutes
	Calibration tables	Calendering and printing devices
	Haul-off units	Custom solutions according to client requirements

Tooling department and CAD/CAM design

	Machines equipped with PLC control and programmable HMI panels
	Supplied manipulators, applications with industrial robots, and data acquisition systems with automatic scanners
	DEKRA or BV audits carried out upon request

Serial production of industrial parts

Mass production of components for the industry	Construction
	Automotive
	Furniture
	Household appliance components and others

Production of heads and calibrators for extrusion lines

availability: to be agreed

Offered types and technologies

Production of heads and calibrators for plastics extrusion, as well as tools for profile extrusion and other components	Window profiles	Cooling tanks
	Construction strips	Discharge gutters
	Cable trays	Calendering and printing devices
	Custom solutions according to client requirements	

Tooling department and CAD/CAM design

	Tools manufactured based on in-house designs, provided documentation, or physical parts
	Design process carried out using reputable CAD/CAM software
	Production supported by a modern tooling department and a skilled workforce

Serial production of industrial components

Mass production of components for the industry	Construction
	Automotive
	Furniture
	Household appliance components and others

Services

Precision milling, turning, and cutting of components for industry, prototypes, and medium production series

Solgam Sp. z o.o. offers comprehensive machining services, including CNC milling, conventional milling, turning, and wire EDM cutting.

We handle both individual components and medium production series, performing machining based on a model or provided documentation, with the option of part design.

We work with mild steel, stainless steel, tool steel, aluminum, brass, nickel, titanium, sintered carbide, and graphite.

Thanks to modern milling centers, universal lathes, and electrical discharge machines, we produce components with complex shapes, high precision, and consistent process repeatability.

● CNC Milling

availability: to be agreed

Working area / Dimensions

X-1200 mm	Z-600 mm
Y-600 mm	Table load capacity: 1800 kg

Materials

Mild steel	Tool steel
Stainless steel	Aluminum

Component type / Applications

Individual components and medium series	Machine parts with complex shapes
Prototypes	

● Conventional Milling

availability: to be agreed

Working area / Dimensions

X-1000 mm	Milling with dividing head possible
Y-500 mm	
Z-500 mm	

Materials

Mild steel	Brass
Stainless steel	Aluminum
Nickel	Titanium

Component type / Applications

Individual components and medium series	Machine and tool components

● Conventional Turning

availability: to be agreed

Working area / Dimensions

Maximum turning length 3000 mm	Turning of long large-sized parts possible
Maximum turning diameter 920 mm	

Materials

Mild steel	Brass
Stainless steel	Aluminum
Nickel	Titanium

Component type / Applications

Machine parts	Cylindrical and large-sized components
Medium production series	

● Wire EDM Cutting

availability: to be agreed

Working area / Dimensions

X-600 mm	Z-350 mm
Y-400 mm	Cutting angle +/-30°

Materials

Steel	Sintered carbide
Graphite	Aluminum

Component type / Applications

Tools	Mold components
Heads and parts requiring very high precision	