

# Company Profile



## Activity

**LUMEL.S.A.** is the leader among Polish enterprises manufacturing electrical measuring and control instruments. For 55 years, we deliver our measuring instruments to more than 15 000 industrial companies in various fields of applications: power, chemical, metallurgical, processing, food, consumer goods, mining and automotive industries and also for domestic appliances.

Beside the production of measuring and control instruments, we are specialising in pressure diecasting process and precise machining of aluminium and zinc alloy pressure castings, manufacturing of precise plastics moulded pieces, execution of precise engineering metal parts, design and execution of moulds and tools.

More than 50% of Lumel's production is destined for export to 45 countries in the world.

### OUR MOTTO

To fulfil customer's requirements. We guarantee to all customers the highest quality of goods and services, advantageous delivery terms, competitive prices and a good operation flexibility.

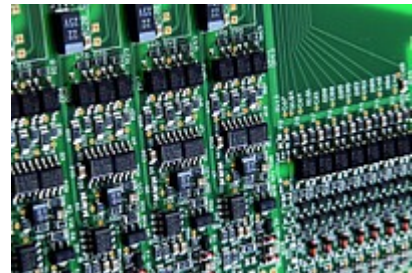
### QUALITY

Since 1995, we are working according the ISO 9001 Quality Management system and internal quality system procedures. The implemented complex method to ensure the quality causes that we are a credible partner for companies for which the quality and reliability are the fundamental question.

Taking care of the continuous raising of standards we have implemented in 2003 the ISO 14001 environmental Management System.

### OUR EMPLOYEES

Experienced staff, specialised engineers and professionally trained workers help us to fulfil all customers requirements. We pay a particular attention to the internal culture in the company where the primary meaning is given to the competence to join the work in team with the continuous development of individual capacities.



# History

## The most important dates in the LUMEL's history:

- **7 November 1953** - Zielonogórskie Zakłady Wytwórcze Mierników Elektrycznych were founded on the strength of the Ministry of the Machine-Building Industry decision.
- **1 January 1954** - the first moving-iron meter was produced.
- **18 July 1958** - the Company's name was changed into Lubuskie Zakłady Aparatów Elektrycznych - LUMEL.
- **may 1962** - the millionth analogue panel meter was produced.
- **march 1964** - the Company depended on the newly created Union of the Automation and Measuring Instruments "MERA" and the Company's activity was enlarged by the production of industrial and laboratory electrical measuring instruments for electrical quantities.
- **1 April 1967** - the Experimental Plant of Measuring and Control Apparatus was created. 5 years later, it was transformed into The R & D Centre of Electrical Metrology.
- **1969/1970** - years of the highest development of the Company
- **November 1995** - LUMEL received the ISO 9001 Quality Certificate.
- **December 1997** - the Company was converted into a joint-stock state company - LUMEL S.A.
- **May 1999** - LUMEL S.A. received the prestigious Polish promotion trademark "TERAZ POLSKA" for the digital meters with bargraphs series.
- **April 2003** - LUMEL received the ISO 14001 Environment Certificate.





# SMT assembly

## **LUMEL S.A. - experience and competence**

For over 53 years, LUMEL S.A. is well-known on the European market for the production of highest quality measuring instruments and precise aluminium alloy pressure castings. Growing from year to year, the production of our devices and received numerous order for assembly of electronic subassemblies, determine us to invest in up-to-date and high-duty line for SMD assembling of electronic elements.

Apart from the production of electrical measuring instruments, LUMEL S.A. offers following sub-contracting services and industrial co-operation derived from technological possibilities and available production capacity.

## **COMPLEX OFFER OF ASSEMBLY SERVICES**

In the scope of SMT assembly, our strong point is the possibility to offer for our customers a full range of services supported by high qualifications of our employees.

### **We offer:**

one-sided and double-sided assembling of SMD elements in the technology of reflow soldering, in accordance with European Directive for RoHS, assembly of thread elements by flow soldering, complementary assembly of thread elements and mechanical parts, mixed assembly, optical inspection of assembled PCB, assembly can be carried out on the base of own or committed elements.

Taking advantage of the acquired experience in design and testing of our apparatus

### **we also offer:**

design of PCB, completion of elements to assembly, ensuring PCB and templates for coating with soldering paste or glue in compliance with the transmitted documentation, testing of assembled systems acc. to the customer's instructions, testing in the climatic chamber, testing of vibration resistance.

### **Our machine park**

The assembly line is composed of:

automatic silkscreen printer - JUKI K1760,

placement machine - JUKI KE-2060,

reflow oven - ERSO HOTFLOW 2/14,

magazine loader and line unloader - JOT,

conveyors and in-line workstation - JOT,

soldering aggregate of KIERSTEN company,

optical control stand,

stand for thread assembly with Weller soldering stations

All stands and devices are equipped with the protection against static electricity in compliance with EN 61340 5-1 and 5-2 standards.

## **Warranty of the highest quality of production and services**

All design and production processes, and customer's services are running in LUMEL in accordance to ISO 9001:2000 and ISO 14001 Quality Systems. The assembly process is carried out according to the IPC-A-610D standard.

We have obtained the first certificate in 1995, and the certification of our company is made till now by the very exacting Dutch company KEMA.

In the scope of the commercial service we offer:

the appointment of a responsible person for each order, which will be responsible for the realization of the whole order, short time-limit of delivery, attractive prices, realization of both large orders and smaller series.



# Pressure castings

We execute castings according customers' orders and deliver them in the shape ready for assembly. Over 50 years of experience, ISO 9001 and ISO 14001 quality procedures, precise measuring instruments and high qualified team guarantee the best quality and short terms of delivery.

## Execution according customers' needs.

Our offer includes a full service of our customers from consultations and advice in the scope of the part design, through the design and the execution of tools, to the delivery of parts ready for assembly.

## Our offer includes:

consultations in the scope of design of parts, designs of moulds and appropriate tools, executions of tools, precise pressure diecasting, accurate mechanical working of castings, surface treatment, warrnishing and powdering processes, assembly of mechanical and electronic components on the casting, packing and delivery acc. customers needs.



## Plastics parts

We offer complex services, from the design of moulds and tools, through the production, machining and assembling, to the delivery of ready products.

We can execute any large-series of parts using entrusted tools or ordered with us. We currently specialise in the production of plastics moulded pieces for electronic and automotive industries and also for household equipment.

We have a many years experience in the scope of plastics processing and precision engineering parts and we possess an appropriate stock of machine tools.

Our experience and the highest quality of products are confirmed by many millions parts executed yearly for control and measuring instruments produced by LUMEL.

### Design of moulds and other tools.

We lead the design process of moulds and other tools using the CAD/CAM software on the base of transmitted designs, models or virtual models.

We offer the execution of:

- plastics moulds,
- blanking and press-forming dies.

We execute moulds and tools in our own tool workshops equipped with CNC machines enabling to reach a high precision of machining.

### Production of plastics parts.

In the scope of production and machining of plastics parts we offer:

- execution of parts in all shapes,
- ultrasonic welding,
- contact bonding, gluing,
- silk-screen printing,
- varnish processing,
- anti-electrostatic protection,
- milling of wastes.

We are currently producing ca 700 different parts. We are using following plastics: ABS, PA, PC, PE, PMMA, POM, PPE, PPS, PS, PVC, SAN, SB, TPU, in 30 grades and colours.

### Varnish process.

We realise the varnish process applying two methods:

- solvent varnish (wet process), polyester and epoxide varnish powder process.

We can also realise marking processes by means of silk-screen or tampon (dabber) printing methods.

Pre-or final assembling.

We offer the possibility to assemble elements like: standardised elements, clamps, terminals, electronic packages produced by threading method or SMT assembling.



## Mechanical working

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### Machining

In the scope of machining we offer:

precise machining of parts on vertical drill and screwing CNC machines, equipped with CNC dividing table, machining space X/Y/Z = 600/300/300 mm precise machining of parts on CNC chucking lathes, machining space X/Z=250/300 mm, execution of parts on CNC turret and sequence lathes, machining of bars up to 30 mm of max. diameter, execution of parts on longitudinal bar automatics, up to 10 mm of max. diameter, machining on conventional lathes, milling and grinding machines.

We execute parts from following materials: aluminium alloys, brass, free-machining steel, stainless steel. We can additionally offer following chemical surface treatments: anodizing, zinc coating, nickel plating, chromate coating, phosphatizing.

### Sheet metal forming

In the scope of sheet-metal forming we offer following services: press stamping of electrical equipment parts on Bihler automatic machines in a wide range of worked materials from 0.2 up to 1 mm, die shearing of large-series flat elements on a turret press, maximal dimensions of sheets:

1000 x 2500 mm, sheet of 0.5 up to 3 mm thickness, high precision die shearing of smooth flat elements on a Feintool press, from strips of 0.5 up to 2 mm thickness, follow-on-die pressing of elements with complex shapes, width range of worked materials from 0.2 up to 1.5 mm, bending, drawing.

We can execute parts from following materials: steel, brass, aluminium, copper, permalloy in the shape of sheets, strips or bands.

