ELECTR



LED LIGHTING SOLUTIONS

ELECTRIC CARS CHARGING STATIONS

ELECTRICAL AND ELECTRONIC EQUIPMENT

PLASTIC INJECTION MOULDING

DESIGN

ELECTRONIC, PLASTIC, METALLIC PRODUCTS AND SUBASAMBLIES SUBCONTRACTING

ELECTRICITY PRODUCTION AND SUPPLY

ELECTR

CONTENTS

Capitolul I	Short history
Capitolul II	Object of activity
Capitolul III	Technologies
Capitolul IV	Organizational structure
Capitolul V	Stock and shareholder information
Capitolul VI	Turnover structure
Capitolul VII	Financial situation
Capitolul VIII	External Market
Capitolul IX	Management System Quality - Environment; Licenses



Electromagnetica SA is a joint stock company, with legal personality and unlimited life, duly established and operating under the memorandum of association and under the Law no. 31/1991, republished in 2004, and amended by the Law no. 441/2006, GEO no. 82/2007 and GEO no. 52/2008, as well as in compliance with the Law on capital markets no. 297/2004 and the Law on issuers no. 24/2017.

MISSION, VISION, VALUES

The MISSION of ELECTROMAGNETICA top management and employees is to offer high-performance solutions, based on new technologies, to fully satisfy customers and to reasonably respond to expectations, by searching and opening new paths in technology and business.

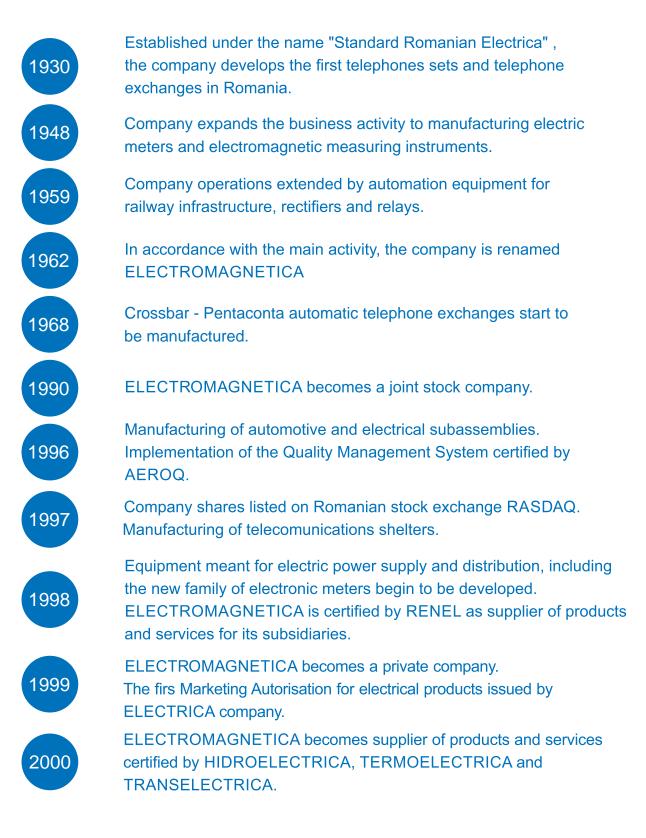
Our VISION for accomplishing the undertaken mission is to develop products resulting from our own research-design activity. Through its strategy, ELECTROMAGNETICA aims to expand to complementary fields, with high growth potential, ensuring the superior capitalisation of research-development resources and its technological base. The company also intends to maintain a high degree of production flexibility, the total or partial outsourcing of mechanical processes at competitive costs, profit reinvestment, financing mainly from its own sources, balanced diversification of activity and risk balancing.

The VALUES that define and permanently shape the company's identity and organisational structure are:

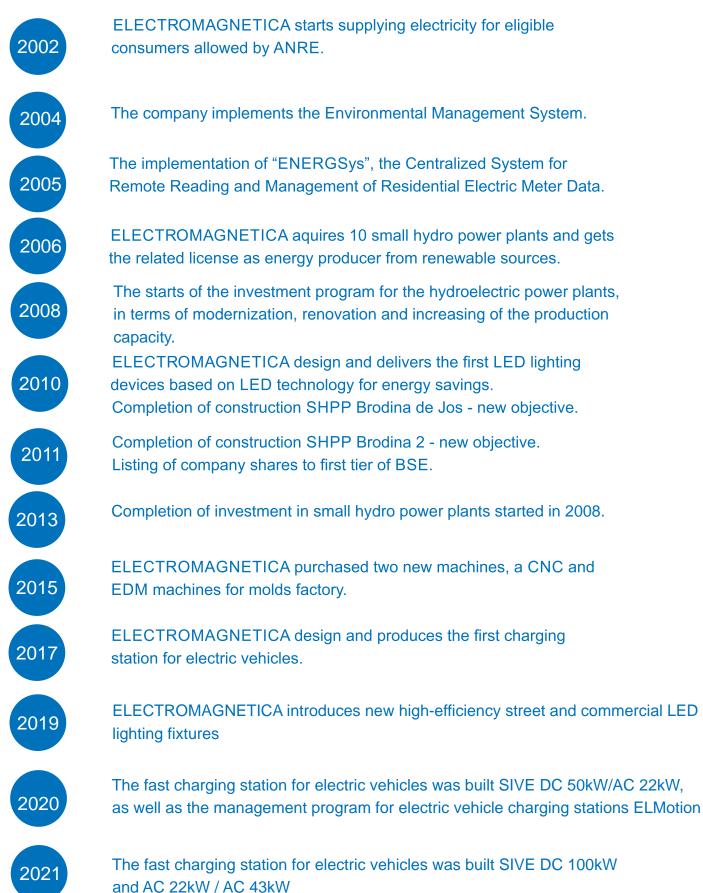
- Creativity: we are innovative and insist on always applying the latest technologies and most suitable solutions;
- Business ethics: represents the foundation of our business relationships, characterised by honesty, integrity, communication and mutual trust;
- Collaboration: we have a proactive attitude towards the customers' needs, offering them quality products and services that add value through long-term direct and indirect benefits;
- Responsibility: we act responsibly to protect the environment, the safety, health and personal development of employees, to create a competitive business environment, of integrity, the social and cultural development of the community;
- Self-confidence: we believe that teamwork, along with capitalising our own experience and resources, gives us the necessary strength for the fulfilment of our mission and the sustainable development of the company;
- Adaptability: we are constantly adapting to the requirements of the market, searching and discovering new opportunities, but being constantly focused on the customers' needs and expectations.

ELECTR MAGNETICA

Chapter I SHORT HISTORY



ELECTR



ELECTR®MAGNETICA

Chapter II

OBJECT OF ACTIVITY

LED LIGHTING SOLUTIONS

We proposed that through **Innovation**, **Investment** and **Creativity** to open new directions in the field of LED illumination.

Residential / environmental / office lighting





Industrial lighting



GAMMA	ARGO	AVIO
Lighting shopping mall	Lighting shopping mall	Lighting shop windows, shelves, shopping centers

Projectors





Emergency indicators



ELECTR MAGNETICA

CHARGING STATIONS FOR ELECTRICAL VEHICLE

ELMotion charging stations are designed and produced by ELECTROMAGNETICA and oer professional charging for the public and business domains. They are reliable, shock and vandalism resistant with a modular and robust design.

ELMotion is a trademark at OSIM

Electric vehicle charging station ELMotion Power 22/ AC 22kW

ELMotion Power 22 (EAVE22C) is a power supply for electric vehicles and offers professional charging in the public domain.

The equipment is mounted on the ground and connects to the three-phase power grid (3P + N) ensuring a maximum load power of 22.1kW / h at 32A for a single vehicle.

The limitation of the load current offered can be adjusted in the range 6 ... 80A. The connection to the vehicle is made in 2 ways: - Schuko outlet

- cable with type 2 plug.

The access control for the loading is done with a hold button. Bilingual registration. OPTIONS

Control the ventilation / air conditioning of the room at the request of the vehicle Warm-up equipment to increase operating range The housing can be customized according to the request

TECHNICAL SPECIFICATIONS

TN-S (L1, L2, L3, N, PE)16A, 230Vac, 1P, 3.2kW 32A, 400Vac, 3P, 22.1kW 380 ... 415Vac, 50 / 60Hz, 32A Network connection Grounding system Load power red symbol indicates error yellow symbol indicates ready equipment green symbol indicates ongoing upload Communications Ethernet mode Modbus RTU data exchange and commands Modbus RTU / RS 495 Data exchange and orders By car Using the charging cable according to SR EN 61851 1110 x 353 x 190 mm Size Weight 40kg

PROTECTION over voltage the short circuit to the touch

MODES OF LOADING mod1 - 230Vac, 16A unlimited - Schuko type F socket with protective cap mod2 - 230Vac, 16A limitable - Schuko type F socket with protective cap mod3 - 3x [380... 415] Vca, 32A - cable with plug type 2 (case C)





9

CHARGING STATIONS FOR ELECTRICAL VEHICLE

Quick charge station for electric vehicles SIVE DC 50kW/ AC 22kW

SIVE DC 50 KW / AC 22 KW is a power supply for electric vehicles and offers professional charging in the public domain. The equipment is mounted on the ground and connected to the three-phase current network (3P + N) ensuring a maximum charging power of 50kW / h at 32A for a single vehicle. The offered load current limitation can be adjusted in the range of 6... 80A. The connection to the vehicle is made in 2 ways:

- 1. AC input Line voltage 400 Vac ± 10% Frequency (Hz) 45-55 Three-phase network type (L1; L2; L3 + N + PE) TNS earthing system Power factor (Module 4)> 0.98 THD current distortion value <5% Surge protection Tetrapolar protector Residual current protection device DDR 30 mA Panic button type Press / rotate release
- 2. DC output Output voltage 250-500 V Maximum current 125 A at 400 V Maximum power 50 kW IT grounding system



ELECTR MAGNETICA



- 3. AC output Maximum power 22 kW
- 4. Charging possibility of charging two vehicles at the same time, one in direct current and the other in alternating current.
 DC charging mode Mode 4 (IEC 61851)
 AC charging mode Mode 3 (IEC 61851)
 Measuring the amount of energy Certified MID type
- 5. Cables and connectors AC outlet Type 2 (IEC 62196-2) Locking system with protection CCS Combined CCS Cable 2 (IEC 62196-3) Locking system with protection CHAdeMO cable CHAdeMO certificate Locking system with protection
- 6. User Login Off Local RFID The remote OCPP
- 7. Local HMI Administration The remote OCPP Signaling for status indication RGB color indicator
- Man-machine interface English, Romanian, Spanish, German, Other languages on request 7 inch display, touch type User interface Multiple upload sessions
- Internal Communications PLC, CAN, RS 485 Exterior 10/100 base, T-Ethernet 3G wireless with OCPP server



ELMotion management software for electric vehicle charging stations

The advantages of the ELMOTION solution

The concept of E-Mobility (electric mobility or electro mobility) refers to the transition from the traditional design of vehicles using fossil fuels and oils, to models with electric and even electronic drives. In this category are included all road vehicles that operate exclusively with an electric motor, but also those that have a combination of electric motor with one with low combustion, the hybrid or those that work on hydrogen.

The main purpose of implementing the E-Mobility concept is to produce and use environmentally friendly and more efficient vehicles.

Our stations are compatible with any electric vehicle in Europe with AC charging

They are reliable, efficient and durable. With a modular and robust design, they are shock and vandal resistant, flame retardant and do not fade. OCPP compatible - protocol that can be communicated with the stations and can be integrated into any computer platform ELMotion is a registered trademark of OSIM They are made in Romania Warranty: 2 years

CHECK THE STATION WITH THE PHONE SMARTPHONE EV users application

INTUITIVE INTERFACE Select the appropriate station from the mobile application. Each station contains information on the types of sockets installed, so you can always see if your vehicle is supported and how fast the load is. NAVIGATION TO STATION You can find a suitable station from the list of stations ordered by distance from the current position or you can view the stations directly on the map.

STATION CONTROL Do you want to know what maximum output power the station has or other technical parameters? You can find them in detail in the station through the mobile application.

MANAGEMENT application for station owners

The management application is the software package installed on a server (called Central System within the OCPP) that ensures process from the data retrieval from the stations to the automatic payments.

This will have several components:

Communication component with charging stations;

The station management module for charging station operators (CPO); Interface for EV users;

This centralized platform aims to allow EV users access to all charging stations managed through the platform, with the possibility of paying at each transaction or on a monthly invoice.

The access to the platform for the operators of the charging stations will be made through the web application, the EV users having the possibility to use both the web application and the mobile phone application.

The management application should be seen as a tool that can be used:

for the charging stations produced by Electromagnetica for charging stations manufactured by other manufacturers and complying with OCPP v1.6



ELECTRICAL AND ELECTRONIC EQUIPMENT

APLICATION OF SINGLE-PHASE METERS

OUTDOOR



Individual consumers

INDOOR



Grouped consumers 2...24 consumers

CERTIFICATION



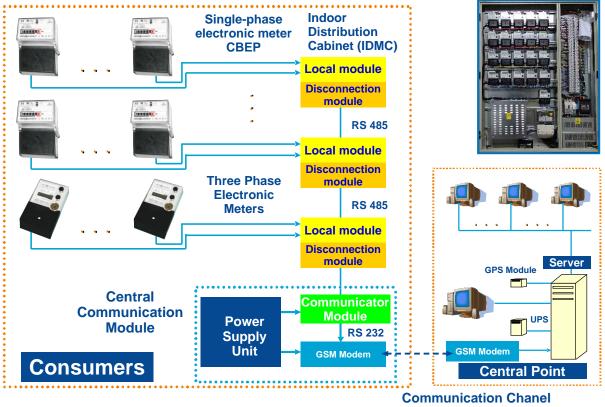
6 (D)
ter .
-
40.00
40um Distor



ELECTR

INTELLIGENT METTER READING MANAGEMENT SYSTEM FOR ELECTRICITY NETWORKS

ENERGSys



GSM, GPRS, Radio, Network IP

ELECTR MAGNETICA

EQUIPMENT FOR RAILWAY INFRASTRUCTURE

Relay signaling, centralization, blocking



Services

- Installation, commissioning, technical support and service for their products
- Design, construction, repair and upgrade electricity grids stations and electric transformer voltages of 0.4 - 20 kV
- Supply electricity to eligible customers
- **Trading electricity from renewable hydroelectric and thermoelectric**
- **Collection**, processing, and transmission of electricity consumption records
- Provision of energy services
 - Technical advice to reduce energy consumption
 - Efficient use of energy and achieving measurement systems and telemanagement



PLASTIC INJECTION MOULDING

EXPERIENCE

OVER 50 YEARS IN PLASTICS MOULDING

OFFER

- Products / parts by plastic injection moulding
- Pad printing for plastic products / parts
- Plastic parts assembly
- Working in three shifts Packing
- Optimization and repair of plastic injection tools



			MAC	HINE	ION MACHINES CHARACIERIS LICS	VCIERIS	S	
Machine No	Machine Designation	Injection Capacity (g)	Injection Pressure (bar)	Clamping Force (tone)	Platan Size Hor x vert(mm)	Distance Between bars Hor x vert(mm)	Mold hight min / max (mm)	Central ring diameter (mm)
~	ENGEL ES200/40	88	2400	40	430x460	305×305	150 / 480	100
2	ENGEL ES80/25	35	2200	25	380x432.5	260x260	150/330	100
က	ENGEL ES80/25	35	2200	25	380x432.5	260x260	150/330	100
4	ENGEL ES80/25	35	2200	25	380x432.5	260x260	150/330	100
2J	ENGEL vertical ES80V/25V	35	2200	25	380x432.5	260x260	150/330	100
9	ENGEL vertical ES200V/40V	88	2400	40	430x460	305×305	150/480	100
7	ENGEL ES700/150	450	1910	145	750x850	510×510	150/460	160
ω	ENGEL ES650/125	225	2040	120	740x520	No bars	250 / 600	125
ത	ENGEL ES330/70	110	2400	20	660x400	No bars	200 / 450	125
10	ENGEL ES500/120	250	2040	120	730x420	No bars	250 / 500	125
5	FEROMATIK K275-S	723	2150	275	970x970	630x630	350 / 1200	160
12	ENGEL ES330/110	150	2400	110	730x420	No bars	250 / 750	125
13	ENGEL ES330/90	110	2400	06	730x420	No bars	250 / 750	125
14	ENGEL ES330/90	110	2400	06	730x420	No bars	250 / 750	125
15	ENGEL ES330/90	110	2400	06	730x420	No bars	250 / 750	125
16	ENGEL ES330/110	150	2400	110	730x420	No bars	250 / 750	125
17	ENGEL DUO 4550/800	2480	2300	800	1550x1520	1170×1000	700 / 1300	250
18	BATTENFELD	450	2500	200	840x902	570×570	250 / 600	160
19	ENGEL ES1350/275	735	1840	275	1050x650/900	No bars	350 / 850	160
20	ENGEL CL 2550 / 500 sl	1550	1640	500	1200x1350	840x840	250 / 750	200
21	ENGEL CL 2550 / 350	1550	1640	350	1090x1185	735×735	250 / 660	160
22	ENGEL ES7050/1000 DUO+robo	4156	2090	1000	2000x1830	1400×1150	600 / 1200	250
23	BATTENFELD HM500/5100S	2741	1690	500	1590x1470	1000x800	450 / 1150	200
24	ENGEL Victory 260	735	1840	260	1050x650/900	No bars	350 / 850	160

IN IEPTION MACHINES CHARACTERISC



ELECTR MAGNETICA

DESIGN

ELECTROMAGNETICA has a design center complex, integrating into its structure various fields, such as: design of electrical and electronic products, printed circuit boards (PCBs), tools and dies, mechanical structures and metal structures, networks, stations and electric transformation.

CAPABILITY

- Design of complex products based on a diverse range of technologies used in the manufacturing process;
- Approach to the process specific to the design and development of products based working procedures in accordance with the quality management system;
- Qualified staff: over 50 engineers, technologists and techicians;
- High degree of specialization and experience in the field of technical staff.





SUBCONTRACTING PRODUCTS AND SUBASSEMBLIES ELECTRONIC, PLASTIC AND METAL

Technological features of the company, due to investments made in recent years areas such as automatic planting of electronic components, injection masses plastics, mechanical processing, automatic processing of sheets, allows approach a diversified portfolio as both products and especially, subassemblies such as:

- Printed circuits boards
- Highlights plastics
- Sheet metal parts

Manufacturing technologies include complex operations, parts and products being executed under both semi automatic as well. ELECTROMAGNETICA presents of great flexibility in organization production flows, focused on assembling electronic parts, plastic and metal.

PRODUCT MANAGEMENT

ELECTROMAGNETICA provides in collaboration with its partners:

- assistance from the design stage to mass production products or assemblies
- prototyping realization
- optimizing costs and manufacturing flows

ELECTR®MAGNETICA

ELECTRICITY PRODUCTION FROM RENEWABLE SOURCES

- Production of electricity provided from renewable energy sources -RES
- Portfolio 10 small hydropower plants SHPP (Power <10MW)</p>
- SHPP LocationsL Suceava river basin
- It was implemented a comprehensive modernization program, refurbishment and extension of production capacity small hydropower plants



ELECTR MAGNETICA

ELECTRICITY SUPPLY FOR ELIGIBLE CONSUMERS

- Collection, processing, and transmission of electricity consumption records;
- Provision of energy services
 - Technical advice to reduce energy consumption
 - Efficient use of energy and achieving measurement systems and telemanagement





Chapter III

TEHNOLOGIES

1. Line for automatic planting electronic components

SMT Technology

SAMSUNG

2. Execution and maintenance tools department

- 5 axis machining center
- 3+2 axis machining center
- 3 axis machining center

FIDIA DIGIT 218

FIDIA K199

MAZAK VTC 820/20 MAZAK VTC Nexus 510C-II

machining processing by EDM

- with solid electrode
- with electrode by wire

ROBOFORM 30 and ONA NX3 ROBOFIL 290 and ONA AF60

grinding machines, traced and drilling in coordinated

CNC milling center	AZK HWT D-442 and HURCO VMX 10HSi	i
spotting presses machine	REIS	
mass of measured in 3D	DEA	k

3. Metalworking at cold

automatic sheet metal processing line

- center being machined sheet metal
- sheet metal bending machine

TRUMATIC 200R TRUMABEND V85S, L2500mm

- line processing by punching, stamping, deep drawing
 - automatic press

SCHALL 40 tF



- lathes
- universal milling machines, horizontal, vertical

shapings

- drilling machines
- universal grinding machines, centerless plan

4. Assembly line by welding

pressure welding plant in points, with microprocessor welding

TECNA 4622 N

5. Plastic injection molding machines

horizontal machines	ENGEL, BATTENFELD
	and FEROMATIK
vertical machines	ENGEL

6. Transports

electroforklifts, motoforklifts

cars

- electric hoists
- self-propelled aerial platform

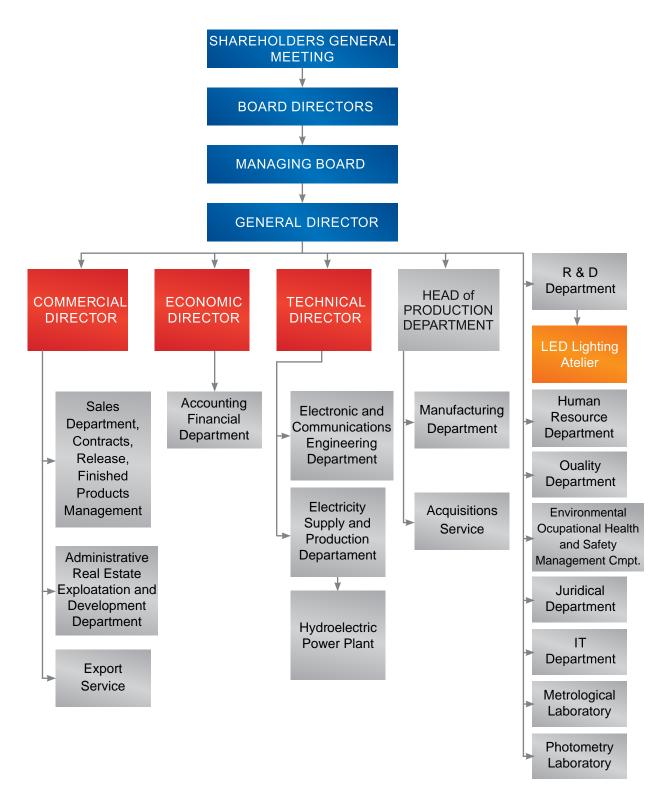
7. Laboratory

- metrological laboratory
 - metrological verification of electricity meters
- photometric laboratory, thermal analysis and EMC



Chapter IV

ORGANIZATIONAL STRUCTURE



Chapter V

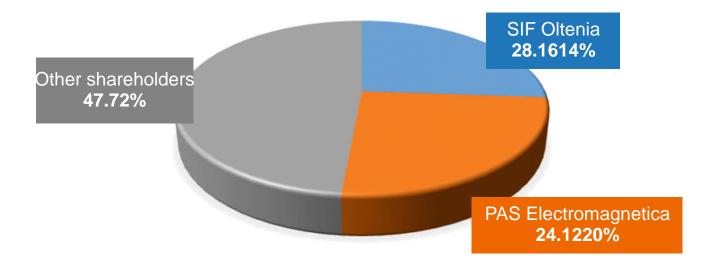
STOCK AND SHAREHOLDER INFORMATION

ELECTROMAGNETICA SHARES AND SHARE CAPITAL

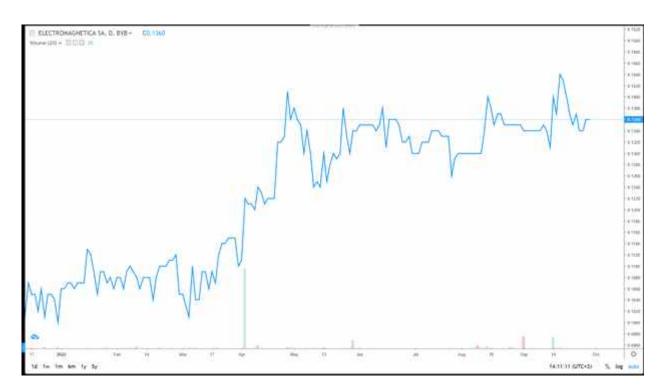
Share capital:	67.603.870,40 lei
Number of shares issued:	676.038.704
Nominal value:	0,1000 lei
Common, registered, dematerial	ised shares
ISIN Code	ROELMAACNOR2
LEI Code	254900MYW7D8IGEFRG38
Securities market:	Bucharest Stock Exchange
BVB stock symbol:	ELMA
Category:	Premium
ELMA shares are part of the composition of the following indices:	BETPlus, BET-XT, BET-XT-TR, BET-BK
Bloomberg ID:	BBG000CMQBR5
Reuters symbol:	ROELMA.BX



OWNERSHIP STRUCTURE (September 30st, 2022)



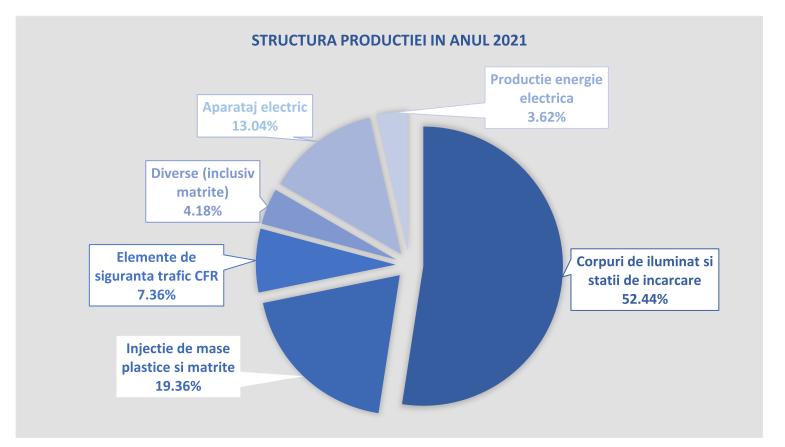
EVOLUTION OF ELMA SHARES IN 2022





Capitolul VI

SHARE OF MAJOR GROUPS IN TURNOVER FOR 2021





Chapter VII

FINANCIAL STATUS

[Euro]

		2019	2020	2021
1.	Tangible assets	60.731.443	59.905.756	68.031.302
2.	Current assets	24.503.233	22.979.254	21.960.096
2.1	Inventories	3.224.599	2.752.428	3.662.276
2.2	Trade receivables	16.735.880	16.097.270	17.707.090
2.3	Cash and cash equivalents	4.542.754	4.129.556	568.843
3.	Current liabilities	9.443.659	9.021.084	10.998.366
4.	Non-current liabilities	4.043.762	3.946.461	5.224.281
5.	Equity attributable to company shareholders	70.220.216	68.842.970	72.619.581
6.	Revenue	58.511.017	62.510.706	71.756.237
7.	Turnover	53.984.897	58.537.497	68.863.987
8.	Profit before tax	1.049.735	451.925	- 3.399.275
9.	Net profit	945.943	480.515	- 3.256.496

ELECTR®MAGNETICA

Chapter VIII

FOREIGN MARKET



Germany	Greece
France	Bulgaria
Italy	Turkey
Netherlands	Ukraine
Austria	E.A.U.
Switzerland	Morocco
United Kingdom	



Chapter IX

LICENSE AND CERTIFICATION

CERTIFICATION OF QUALITY MANAGEMENT SYSTEM AND ENVIRONMENT

AEROQ - ISO 9001 : 2015

"Design, development, manufacturing, marketing and service" of telecommunication terminals and equipment, automotive subassemblies and relays, automation elements and equipment; power supply units, equipment intended for electric power distribution and measurement, metal structures and containers, injection moulds and plastic deformation tools; LED luminaires.

"Instalation, commissioning, technical assistance and service for own products ".

"Electric energy production and supply".

AEROQ – ISO 14001 : 2015 AEROQ – OHSAS 18001 : 2008 INTERTEK– IATF 16949 : 2016

«Design, development, production and service» for products electrical and electronic parts plastic parts, including tool design and production of plastic for automotive industry.

ELECTR MAGNETICA

www.electromagnetica.ro







ELECTRIC POWER SUPPLY LICENSE

AUTORITATEA NAȚIONALĂ DE REGLEMENTARE ÎN DOMENIUL ENERGIEI
Nr. 1293 din 12.07.2013
Nr. 1233. an
 Contraction and the second seco
Se acordă, în conformitate cu prevederile Legii energiei electrice și a gazelor naturale nr. 123/2012,
LICENȚA
pentru furnizarea de energie electrică
SOCIETĂȚII COMERCIALE ELECTROMAGNETICA S.A.
cu sediul social înBucurești, Sector 5, Calea Rahovei,
Nr. 266-268
reprezentate de SCHEUŞAN EUGEN, director general
pe baza cererii înregistrate de ANRE cu numărul29024
din .10.06.2013și a documentației prezentate.
Prezenta licență este valabilă conform condițiilor asociate.
PREŞEDINTE,
NICULAE HAVRILET
Data eliterare 12.07.2013

LICENSE FOR ELECTRIC POWER PRODUCTION

			Nr. 769 din 22.01.2007
ANRE			
	AUTORITATEA	NAȚIONALĂ de REGLEMENTA	RE în domeniul ENERGIEI
Se acor	dă, în conformite	ate cu prevederile Legii ene	rgiei electrice nr. 318/2003,
		LICENTA	4
pentru	producerea de energie e	lectrică	
		Societății Comerciale ELECTROMAGI	
		ti, sector 5, str. Calea Rahovei, nr. 266-	268
	tate de Eugen Scheu		
		e de ANRE cu numărul	
i a docu	mentației prezen	itate.	
Prezenta	licență este vala	bilă conform condițiilor asc	ociate.
	1000	22.01.2007	PREŞEDINTE,
Seria: L	Nr. 1939	Data eliberării: 22.01.2007	6/

ELECTR

266 - 268 Calea Rahovei, Bucharest - ROMANIA Tel.: 0040 21 404 21 46; Fax: 0040 21 404 21 48 http://www.electromagnetica.ro