STEEL FABRICATED PARTS BUSINESS UNIT



overview

ABOUT ELECTROALFA

STEEL FABRICATED PARTS BUSINESS UNIT

TECHNOLOGIES

RANGE OF PRODUCTS

OUR CLIENTS

COMPETITIVE ADVANTAGES

ABOUT ELECTROALFA

Electroalfa is a Romanian group of companies specialized in the design and manufacturing of electrical equipment, the design and manufacturing of steel fabricated parts and EPC contracting for various industrial fields.

We have a background of over 25 years and started as a greenfield private investment.

PRODUCTS & SERVICES

range

ELECTRICAL EQUIPMENT FOR LOW AND MEDIUM VOLTAGE

COMPLEX ELECTRICAL INSTALLATIONS TURNKEY PROJECTS

SPECIALIZED ENGINEERING SERVICES

STEEL FABRICATED PARTS

RENEWABLE ENERGY GENERATION PROJECTS

ELECTROALFA

today

- 25 years of experience of in the field
- a strong brand based on the expertise, qualifications and enthusiasm of more than 400 specialists
- research and development facility
- three modern factories in Botosani
- design office in the Republic of Moldova
- a 3.5 MW photovoltaic park
- sales offices in all regions of Romania
- a turnor over in excess of 30 milion euro in 2015

INTEGRATED MANAGEMENT SYSTEM

for quality, environment, health & safety

We use advance ERP and MRP solutions, PPAP process on customer request, implemented and keep up to date an integrated quality-enviroment-health & safety management system, are BV Mode II certified for the production of marine equipment and our factories were audited while approved on PD CIG 023 for the production of enclosures for electrical equipment.





Quality Management Systems Certification SR EN ISO 9001:2008



Environmental Management Systems Certification SR EN ISO 14001:2005



STEEL FABRICATED PARTS BUSINESS UNIT

STEEL FABRICATED PARTS BUSINESS UNIT

The steel fabricated parts design and manufacturing activities appeared as a distinct workshop in the early beginings of Electroalfa to serve the growing need of enclosures for electrical equipment.

overview

Year after year, by massive investments in specialized machines and by enlarging the team with specialized people, this activity developed and finally turned into a Profit Center/Business Unit.

Nowdays, the SPF BU is a distinct company of the group, providing high quality enclosures for Electroalfa's switchboards as well as various subcontracted products for third party customers. During the last 2 years we made investments of 4.9 million Euro in new machines, specialized software and extended the manufacturing area with two new production halls.

Our main capabilities for steel sheet processing are: Shearing, Laser Cutting and Punching, Deep Drawing, Bending, Rolling, Various types of Welding, Semi-Automated Burrs Removal, Polyurethane Gasketing, Electrochemical Plating, Powder Painting.

STEEL FABRICATED PARTS BUSINESS UNIT: RANGE OF PRODUCTS

Standardized steel boxes and cabinets for electrical equipment

Alfa System Dismountable Cabinets Can be delivered as flatpack solution Assembled from front and back frame 1 Removable back wall and side covers 3,6 Door fitted with sliding handle and polyurethane gasket 5 Protection degree up to IP55 acc. IEC60529 58 standardized sizes available





Steel Boxes for Electrical Equipment

Made of galvanized steel sheet 1-2 mm Standard color: RAL 7035 (powder paint) Door fitted with locks and polyurethane gasket Door opening angle: 120° Protection degree up to IP66 IEC60529

Various subcontracted products

Drawer Cabinet

Steel furniture

Centralized locking system

Smooth powder paint

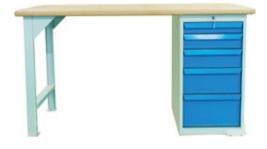


Workbench with Compartments

These durable workbenches are ruggedly built to stand up to the harshest working environments.

Customizable drawer compartments: maximum organization of tools, components and instrumentation.

The result is superior durability, configurability, mobility and quality.



Control Enclosure for Machine Tool

Galvanized steel

Powder painted in different colors (inside/outside)

IP66



Custom Chassis (Switchboard)

Personalized cutouts on the doors

Dedicated fixing accessories inside based on the make and type of circuit breakers

Complete with busbar holders

Powder painted



Control Console

Steel furniture

Centralized locking system

Smooth powder paint



Steel Enclosure for Electrical Applications

Mild steel

Tight tolerances on bending

Welding

Powder painting

Gasketing

IP66



STEEL FABRICATED PARTS BUSINESS UNIT: TECHNOLOGIES

STEEL CUTTING

Cutting machine for steel in coils up to 5T FGH 420 guillotine

Plasma cutting machine for thicker steel and profiles

CNC machine for cutting sheets format SHEAR GENIUS SGe6

Prima Power



LASER & PUNCHING

LT COMBO FIBER, 3000 W

Laser Cutting Machine for Sheets and Tubes

Materials

Structured steel: 20 mm Stainless steel: 8-10 mm Aluminium: 10 mm Bronze/Brass: 6 mm

Dimensions

Working area: 3,000 x 1,500 mm Maximum weight of the piece: 200 kg Maximum thickness of sheet processed: Structured steel – 20 mm; Stainless steel – 8-10 mm; Aluminium – 10 mm; Bronze/Brass – 6 mm Maximum pipe cross section: Round shape – 225 mm; Square shape – 160x160 mm; Rectangular shape – 200x100 mm Minimum pipe cross section: Round shape – 16 mm; Square shape – 16x16 mm; Rectangular shape – 16x16 mm Maximum pipe length: 6,000 mm (200 kg) Laser power: 3000W, Fiber



Trumpf Trumatic 200R

Materials

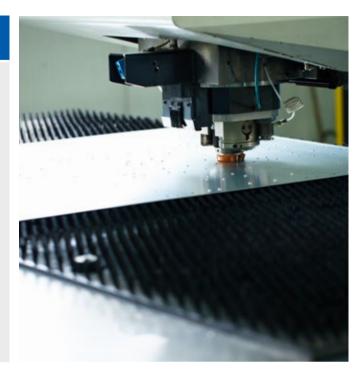
Steel sheet Polycarbonate Stainless steel Brass

Dimensions

Maximum sheet size: 2,070x1,280 mm 9 Technologies and Processes Maximum weight of the piece: 150 kg Maximum thickness of sheet processed: 6.4 mm

Precision

The smallest distance: 0.001 mm The smallest angle: 0.001 Precision: +/-0.1 mm Repeatability: +/- 0.03 mm



Trumpf Trumatic 2000R

Materials

Steel sheet Polycarbonate Stainless steel Brass

Dimensions

Maximum sheet size: 1,275x1,280 mm Maximum weight of the piece: 150 kg Maximum thickness of sheet processed: 6.4 mm

Precision

The smallest distance: 0.001 mm The smallest angle: 0.001 Precision: +/-0.1 mm Repeatability: +/- 0.03 mm



Prima Power Shear Genius SGe6

Materials

Aluminium: 5 mm Structured steel: 4 mm/8 mm for punching Stainless steel: 3 mm

Dimensions

Working area (without repositioning): 3,000x1,500 mm (punching) Maximum weight of the piece: 200 kg

Euromac ZX1250/30 & Euromac ZX Index Multitool

Materials Thickness range: 0.5-10 mm

Dimensions

Working area (without repositioning): 2,000x1,250 mm (punching) Maximum weight of the piece: 200 kg

Trumpf Trumatic 6000

Combined Laser & Punching Machine

Materials

Structural steel: 8 mm Stainless steel: 6 mm (laser) Aluminium: 4 mm (laser)

Dimensions Working area: 2,500 x 1,250 mm Maximum weight of the piece: 200 kg Laser power: 2700W, CO2

Precision

The smallest distance: 0.001 mm The smallest angle: 0.001 Precision: +/-0.1 mm Repeatability: +/- 0.03 mm







BENDING

Prima Power Bending Center Fast Bend Fbe4

Maximum bending pressure: 313 kN Maximum force to support the sheet: 509 kN Maximum height of bending: 200 mm Maximum bending inside: 55 mm Minimum width between bendings: 140 mm Maximum length of the piece for bending: 2,250 mm Max. opening (max. distance between pressed&bending blade): 200 mm Max./Min. thickness of material: 2.5/0.5 mm

Gasparini PBS45/1600, PBS45/2100, PBS85/3000

Maximum pressure: 850 kN Adjustable stroke: 200 mm Maximum length of the piece for bending: 3,100 mm Maximum distance between tables: 390 mm Width between uprights: 2,600 mm Max./Min. thickness of material: 5*/0.8 mm

*Currently only tools up to 3 mm are available in our factory.

Bending Press Power Bend Pro 135-30

Maximum pressure: 1,324 kN Adjustable stroke: 410 mm Maximum length of the piece for bending: 410 mm Maximum distance between tables: 2,600 mm Max./Min. thickness of material: 3/0.8 mm

Bending Press Trumpf Turmabend V85S

Maximum pressure: 850 kN Adjustable stroke: 215 mm Maximum length of the piece for bending: 2,550 mm Maximum distance between tables: 385 mm Max./Min. thickness of material: 3/0.8 mm







Maximum bending pressure: 313 kN Maximum force to support the sheet: 509 kN Maximum height of bending: 350 mm Maximum bending inside: 55 mm Minimum dimensions for pieces for bending: 200x400 mm2 Maximum dimensions for sheet formats: 1,500x2,160 mm2 Max. opening (max. distance between pressed&bending blade): 350 mm Max./Min. thickness of material: 2/0.8 mm



Bending Machine for Tubes and Profiles

Maximum tube O.D. capacity: from 6 to 52*2mm Medium bending radius: 1D Ovalisation: < 1% Thickness reduction: < 20% No clamping marks

DRILLING

Drilling and threading machines for up to 102 mm diameters: driller G13, driller GVM 6A, threader type MFIV 16, pneumatic threader type ROSCAMAT







BURRS REMOVAL

De-burring machine, G11 3RRB, GECAM



GASKETING

CNC polyurethane gasket pouring machine with 2 operating tables which allows the fabrication of enclosures with protection degrees up to IP66, RAMPF



WELLDING

Active (MAG), Trans Puls Synergic 2700, Merkle M 285k,

Eurofil 300, Filcard 203

Protective gas welding

Magic Wavw 2200, Merkle PU 250k, Mos 2000T

Inert gas welding (Argon) with fusible electron (MIG), tungsten electrod

NKLP 36/46, PCP 28 Telwin, Telwin Spoter 6000

Pressure welding

TECNA (manufacturer)

Point welding, cooper table, soldering plier

QIROX QRC 350 (manufacturer CARL CLOOS)

Welding robot





STAMPING

1 Hydraulic Press

500 tones Stroke: 1,000 mm Motor: 45 kw

9 Excentric Presses

Working force: 20÷63 (force-tones)

2 Hydraulic Presses

For tube deformations

ELECTROCHEMICAL ZINC PLATING

Automated line capable of providing various electrochemical plating: Zn, Ni, Ag (currently prepared and used for Zn plating only) Bath material: Polypropylene Bath internal size: 2,500x600x1,100 mm Maximum weight of an individual part: 70 kg Minimal size of parts to be plated: ϕ 5 mm or 5x5 mm (square)



POWDER PAINTING

Automated powder painting line, running on a nano-ceramic pretreatment process Cyclotron automated powder painting cabin (fast color shift system), Nordson Materials: normal steel, stainless steel, cooper, aluminum Maximum size of parts to be painted: 2,500x1,500x800 mm Maximum weight of parts: 100 kg Thickness of paint layer: 60-120 µ Polymerization oven: tunnel type 180-200 °C



OUR CLIENTS

We commit ourselfs to be a constant presence on the export market by investing continuously in advanced technologies and keep improving our products.

DOMESTIC AND INTERNATIONAL

clients

Electroalfa's domestic clients are operating in the energy market, industry and infrastructure, residential and civil buildings.

Our international clients are active in various industries like electrical equipment, automotive, shipyards, green energy, furniture, medical, building interiors.



Fxxx INDUSTRIAL REFRIGERATION * * ACOUSTICS GEAR

«xxx» stands for customers under NDA

COMPETITIVE ADVANTAGES

Extensive experience in the design and fabrication of sheet metal parts and assemblies

TRUMATIC 20

- Full control over production and sales ERP & MRP solutions (ORACLE based)
- High Standards of Quality Assurance Certifications (ISO certifications)
- Premium Portfolios of suppliers and customers
- Speed And versatility in meeting customer demand/requirements
- Competitive price/quality ratio East European labor rates mixed with advance technological capabilities

 Advance design and testing capabilities inhouse R&D Laboratory

TRUMPF

- Partnerships with reputables Technical Universities
- Experience in participation in domestic and international competitive bids





Headquarters:

4 Calea Nationala, 710001, Botosani, Romania P (40-372) 030 947 F (40-371) 607 156 E: office@electroalfa.ro

www.electroalfa.ro