





### The execution of investments with PV systems means only benefits:

- Easy and quick installation proven and precisely manufactured solutions
- Cost optimization production for individual orders according to the needs of the investment
- Wide application the variety of construction models gives the opportunity to carry out investments in any terrain
- High quality and safety best steel from ArcelorMittal steel in Magnelis® coating guarantees long-term use
- Individual approach every investment is most important to us. Our own
  machine park and an experienced team of specialists provide you with the
  certainty of a personalized offer adjusted to your expectations and needs
- Environmental protection the highest quality of Magnelis®-coated steel is 100% recyclable and can also be reprocessed multiple times

#### A wide range of steel structures:

- Driven into the ground
- Fixed to concrete ballast blocks
- Tilt angle range: 15°, 20°, 25°, 30°, 35°
- Configurations of the number of vertical and horizontal panels on one table:  $4\times3$ ,  $4\times4$ ,  $4\times5$ ,  $4\times6$ ,  $4\times7$ ,  $4\times8$ ,  $4\times9$
- Single-support and two-support structures
- Individual projects up to non-standard module sizes







## RANGE OF SERVICES

#### Bending of steel profiles:

- 4 mm thick and up to 13 m long using 300 ton press brakes and a bending line length of 6,500 mm each.
- 6 mm thick on an HD hydraulic press with a pressure of 350 tons and a bending line length of 6,100 mm.

**Laser cutting of sheets up to 25 mm** thick and maximum dimensions 3000×1500 mm. Workpieces: structural steel up to 25 mm (oxygen), stainless steel up to 20 mm (nitrogen) and aluminium: up to 12 mm (nitrogen).

Laser cutting of pipes and profiles up to 8 mm thick and surrounding wheel diameter 15-250 mm. Possibility of processing tubes and profiles, as well as flat bars – shape cutting of edges, burning holes.

**Perforation and roller profiling of cold-bent profiles of CZS** type of elements up to a thickness of 3 mm and a length of up to 15 m.

**Perforating and punching /detailing** of materials in the structural steel circle from 0.6 to 4 mm and stainless steel from 0.6 to 3 mm.

# NATURE-FRIENDLY TECHNOLOGIES

For the sake of the environment and for future generations, we develop and invest in modern technologies, eco-friendly products and innovative solutions. Our commitment to clean energy production from renewable sources is our direction for improving the quality of life in a clean, friendly environment, minimizing the impact on the environment.

Using many years of experience, knowledge and the latest technologies, our experts have designed support structures for the construction of photovoltaic farms that meet the highest quality.



ISO 9001, ISO 14001 Quality and Environment Management



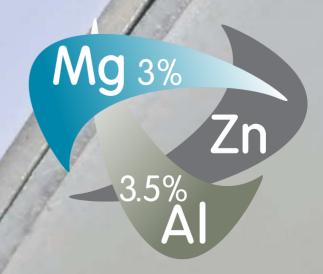
## DURABLE COATING FOR SOLAR STRUCTURES.

Our structures for photovoltaic farms are manufactured from the best steel with metallic Magnelis® coating – the very best in terms of anti-corrosion protection.

#### **Basic advantages:**

- Corrosion resistance: three times higher than that of zinc-coated steel\*
- Self-healing properties ensuring effective edge protection
- Cost-effectiveness in comparison to batch-galvanised steel
- \* Data based on exposure test results





### **IN NUMBERS**

We are a company with extensive experience, well-established market position and ever-growing trust of millions of customers worldwide.





## 30 years on the market



50000 tonnes of ready-made profiles per year



## 6000 football fields

The profiles produced so far could be used to build a farm the size of 6,000 football fields.



# SUPPORT STRUCTURES FOR PHOTOVOLTAIC FARMS



#### FWD1 bifacial

Structure: Two-support, driven into the ground

Panel quantity configurations: 4×5, 4×6

Tilt angle: 25°

Module size: 2256 x 1133 Module type: bifacial

Layout of modules: 3x3, 3x4, 3x5, 4x3, 4x4, 4x5

Orientation: Horizontal

Number of modules: 20, 24 pcs

Structure: S320GD steel + ZM 310/430 MAGNELIS

Wind zone: by GPS location Snow zone: by GPS location





#### FWD1

Structure: Two-support, driven into the ground

Panel quantity configurations:  $4\times3$ ,  $4\times4$ ,  $4\times5$ ,  $4\times6$ ,  $4\times7$ ,  $4\times8$ ,  $4\times9$ 

Tilt angle: 15° – 35° Module size: any

Module type: monofacial

Layout of modules: 3x3, 3x4, 3x5, 4x3, 4x4, 4x5

Orientation: Horizontal

Number of modules: 12 – 36 pcs

Structure: S320GD steel + ZM 310/430 MAGNELIS

Wind zone: by GPS location Snow zone: by GPS location

#### FWD2 bifacial



Structure: Two-support, driven into the ground

Panel quantity configurations: 2×4, 2×5, 2×7, 2×8, 2×9,

2×10

Tilt angle: 20°-30°
Module size: any
Module type: bifacial
Orientation: vertical

Number of modules: od 8 do 20szt

Structure: S320GD steel + ZM 310/430 MAGNELIS

Wind zone: by GPS location Snow zone: by GPS location



#### FWD2

Structure: Two-support, driven into the ground

Panel quantity configurations: 2x4, 2x3, 2x4, 2x5, 2x6, 2x7,

2×8, 2×9, 2×10, 2×11, 2×12, 2×13, 2×14

Tilt angle: 15° – 35° Module size: any

Module type: monofacial Orientation: vertical

Number of modules: 8 – 28 pcs

Structure: S320GD steel + ZM 310/430 MAGNELIS

Wind zone: by GPS location Snow zone: by GPS location

#### **FWD2.3**



Layout: Vertical

Structure: Two-support, driven into the ground

Panel quantity configurations:  $3\times5$ ,  $3\times6$ ,  $3\times7$ ,  $3\times8$ ,  $3\times9$ ,

3×10, 3×11, 3×12 Module size: any

Module type: monofacial Wind zone: by GPS location Snow zone: by GPS location

Tilt angle: 15° – 35°

Number of modules: 15 - 36 pcs

Structure: S320GD steel + ZM 310/430 MAGNELIS



#### FBD1

Construction: double-support fixed to concrete ballast blocks Panel quantity configurations: 4×3, 4×4, 4×5, 4×6, 4×7, 4×8, 4×9

Tilt angle: 15° - 35° Module size: any

Module type: monofacial Orientation: Horizontal

Number of modules: 12 - 36 pcs

Structure: S320GD steel + ZM 310/430 MAGNELIS

Wind zone: by GPS location Snow zone: by GPS location





#### FBD2

Construction: double-support fixed to concrete ballast blocks Panel quantity configurations: 2x4, 2x3, 2x4, 2x5, 2x6, 2x7, 2x8,

2×9, 2×10, 2×11, 2×12 Tilt angle: 15° – 35°

Module size: any

Module type: monofacial Orientation: vertical

Number of modules: 8 – 28 pcs

Structure: S320GD steel + ZM 310/430 MAGNELIS

Wind zone: by GPS location Snow zone: by GPS location



# SUPPORT STRUCTURES FOR HOME PHOTOVOLTAIC SYSTEMS



#### FWD1 HDM

Layout: Horizontal

Structure: Two-support, driven into the ground Module size: 2008-2205 x 996-1054 x 35

Module type: monofacial

Layout of modules: 3x3, 3x4, 3x5, 4x3, 4x4, 4x5

Wind zone: 1 Snow zone: 1,2,3

Location: Up to 300 AMSL

Tilt angle: 25°



#### FWD2 HDM

Layout: Vertical

Structure: Two-support, driven into the ground Module size: 2008-2205 x 996-1054 x 35

Module type: monofacial

Layout of modules: 2x4, 2x5, 2x6, 2x7

Wind zone: 1 Snow zone: 1,2,3

Location: Up to 300 AMSL

Tilt angle: 25°

#### FWD1 HMM



Layout: Horizontal

Structure: Two-support, driven into the ground

Module size: 1640-1776 x 990-1054 x 35

Module type: monofacial

Layout of modules: 3x3, 3x4, 3x5, 4x3, 4x4, 4x5

Wind zone: 1 Snow zone: 1,2,3

Location: Up to 300 AMSL

Tilt angle: 30°



#### FWD2 HMM

Layout: Vertical

Structure: Two-support, driven into the ground Module size: 1640-1776 x 990-1054 x 35

Module type: monofacial

Layout of modules: 2x4, 2x5, 2x6, 2x7

Wind zone: 1 Snow zone: 1,2,3

Location: Up to 300 AMSL

Tilt angle: 30°



#### **FWD1 HBM**

Layout: Horizontal

Structure: Two-support, driven into the ground Module size:  $2250-2300 \times 1130-1140 \times 35$ 

Module type: bifacial, monofacial Layout of modules: 3x2, 3x1

Wind zone: 1

Snow zone: 1,2,3

Location: Up to 300 AMSL

Tilt angle: 25°

#### FWD2 HBM



Layout: Vertical

Structure: Two-support, driven into the ground Module size: 1720-2300 x 1095-1140 x 30/35/40

Module type: monofacial

Layout of modules: 2x4, 2x5, 2x6, 2x7

Wind zone: 1 Snow zone: 1,2,3

Location: Up to 300 AMSL

Kat nachylenia: 25°

#### Trapezoidal steel bridge

Height (mm): 100

Dimensions (mm): 250, 340, 420

Orientation: Vertical Module size: any

Material: S320GD steel + ZM310 Magnelis



#### Roof profile

Installation method: Perpendicular to the long

side of the module

Dimensions (mm): 2250, 5435

Orientation: any Module size: any

Material: S320GD steel + ZM310 Magnelis





#### **Carports**

The market-unique support structure for Carport PV modules is designed to make it as user-friendly as possible.

Entering and leaving even small plots, driveways and parking lots, or unpacking the car after shopping or removing young children from the car will not be problematic any longer. The spacing between the pillars makes opening the doors or the trunk lid comfortable and unobstructed, without the risk of damaging them. Aesthetic appearance, a variety of functionalities and positive impact on the environment only.







