

PRESENTATION SHEET

Low-visibility barrier MZP "Putanka"

An effective volumetric obstacle for perimeter protection



The barrier deployed on the ground: the structure blends into the vegetation with no additional camouflage.

MZP "Putanka" is a volumetric wire entanglement barrier made of thin high-tensile steel wire, designed for the rapid creation of hard-to-cross defensive lines. Because of the small wire diameter the structure is practically invisible on the ground — hence the name.

Flex Met LLC is a Ukrainian manufacturer with its own semi-automated production, certified raw materials and quality control at every stage. Equipment and materials are exclusively of Ukrainian origin.

100 m²

covered by a single kit

Deployed dimensions 10 × 10 m, height 1.2–1.4 m. Kit weight — 25 kg.



Forest areas and approaches to a facility



Open ground, forest edges, slopes



Dense vegetation and hard-to-reach areas

2100–2300

N/mm² — wire tensile strength

10–15 min

deployment by a small crew

25 kg

kit weight, package 1.2 × 0.6 × 0.25 m

400+

units per month — production capacity

Purpose and operating principle

Structurally the product is a system of interconnected garlands of wire rings which, once installed, form a volumetric obstacle. In the standard configuration the barrier is assembled as a rectangular block; if required it can be stretched lengthwise with a corresponding change in height and width.

The installation layout is chosen according to the terrain, vegetation and configuration of the protected area. Installation requires no special equipment.

The entangling effect

When someone tries to cross it, the loops tighten and entangle the intruder's legs, depriving them of mobility: a person caught in the barrier can practically not get free without help. The obstacle acts as both a physical and a psychological barrier and buys time for the security service to respond.



Close-up of the weave: wire of 0.5–0.9 mm diameter in four rows of rings.

Kit contents — 104 and 40

104

rings of the working web — the complete MZP-104 system

40 + 40

connecting rings and metal stakes for installation

Product advantages



Low visibility

Blends into grass, soil and vegetation from the very first stage of camouflage — by day and by night.



Compactness

25 kg and a 1.2 × 0.6 × 0.25 m package for 100 m² of working web when deployed.



Long service life

Five-year storage warranty, three years of continuous service; the service life is measured in years.



Deployment speed

10–15 minutes by a small crew, with no special installation equipment.



Durability in the field

Resistant to corrosion (preservative coating), temperature swings, weather conditions and mechanical loads.



Cost efficiency

Impedes unauthorised entry without the major expense of permanent fencing.

Fields of application

- ☐ Protection of strategic facilities, military bases, industrial zones and the state border.
- ☐ Temporary or permanent restriction of access to designated zones.
- ☐ Channelling movement along controlled routes.
- ☐ Creation of defensive lines and barriers.
- ☐ Field conditions, perimeter protection of depots and restricted-access sites.



Blocking approaches and movement routes in open terrain.

Technical specifications

MZP-104 · 10 × 10 × 1.2–1.4 m · wire 0.5–0.9 mm

Kit weight	25 kg	Number of reverse bends	min. 9
Area covered (when deployed)	100 m ²	Number of twists	min. 20
Length × width	10,000 × 10,000 mm	Rings of the working web	104 pcs (MZP-104)
Height	1,200–1,400 mm	Connecting and fastening elements	40 connecting rings + 40 metal stakes
Wire diameter	0.5–0.9 mm	Plastic packaging ties	170–190 pcs
Wire by row of rings	1st (bottom) 0.9 · 2nd 0.8 · 3rd 0.6 · 4th (top) 0.5 mm	Package size (L×W×H)	1.2 × 0.6 × 0.25 m
Limit deviation	0.02 mm	Installation time	10–15 min
Material	carbon steel	Warranty storage period	5 years
Carbon content (C)	min. 0.45 %	Continuous service	3 years
Tensile strength	2,100–2,300 N/mm ²	Standards	DSTU EN 10264-2:2022 and/or GOST 9389-75 and/or GOST 7372-79

TU U 25.9-37679894-001:2025

DK 021:2015 (CPV) — 44310000-6 "Wire products"

DSTU EN 10264-2:2022

Why customers choose our products

- Semi-automated production**
Reduces the human factor and ensures stable geometry, precise elements and repeatable quality from batch to batch.
- Certified raw materials**
Quality certified wire with supporting documents for every batch.
- Complete kit**
Rings and stakes are included — the customer receives a kit ready for installation.
- Sealed packaging**
The product is protected during transport and long-term storage.
- In-house production**
From 400 units per month, with quality control at every stage of manufacture.
- Flexible terms of cooperation**
For government and commercial customers, including within tender procedures.

Documents and delivery support

- A **certificate of quality (conformity)** for every batch.
- **Installation instructions** for every batch.
- Every unit is **marked** and allows the manufacturer to be identified.
- Warranty: five years of storage, three years of continuous service.
- Installation tools: the **Woodpecker BWG12** pneumatic c-ring tool and galvanised **FLEXMET C-Ring** staples — perimeter setup time is cut several times over.



We are ready to provide certificates, technical specifications and product samples for review, and to work out volumes and delivery schedules for your specific order. Equipment and materials are exclusively of Ukrainian origin.

Company **Flex Met LLC**
Address 65078, Odesa, Heroiv Krut St., bld. 13
Phone **+380 66 078 14 65**
Website **flexmet.com.ua**