

THE TECHNOLOGY OF CUT OUT-PULLED SECTIONS FOR PLASTER WORKS

A. Technology

The technology designed and patented by “Arkada-Engineering” Ltd. enables to produce a new type of metal sections for plaster and stucco works. The production is based on a new technology of perforation making.

The technology allows to receive a number of conclusive advantages at final output:

The economy of metal leads to decrease in the cost price of products (from 40 % and more – angles, from 20 % and more – beacon sections),

Steel sections	Width of a tape of a standard steel section, mm	Width of a tape of a prosechno-rastjazhnogo profile, mm	Economy, %
Angle 20	39 (42)	22	43.6 (47.6)
Angle 25	46 (49)	27.5	40.2 (43.8)
Angle 31	58 (61)	27.5	52.6 (54.9)
Beacon section 6	28	21.17	24
Beacon section 10	40	32	20

- **High efficiency, more than in 10 times exceeding productivity at manufacturing apertured products with application of stamps, and more than in 3 times at use of a rotational method.**
- **The improved technical and operational characteristics of finished articles.**
 - High speed of installation (in connection with the geometrical features of a design — special cutting-outs, steel sections reliably also are quickly fastened to a solution)
 - Simplicity and convenience at performance of works.
- **Advanced system of products packing, providing full safety of products at a long transportation.**

By designing the technology of cut out-pulled sections the following problems were solved:

- Optimization of specific consumption of materials of manufacturing of cut out-pulled products (the production of sections from smaller width of preparation with preliminary executed cutting-outs at the expense of its extension with preservation of geometrical parameters of products);
- Firmness optimization of a cut out and stretching tool at the expense of selection of a material of the tool;
- Quality maintenance cut out-pulled products and sufficient durability in comparison with the similar products which punching in the form of round apertures receive a method of cold stamping;
- Optimization of labor input of manufacturing of products at the expense of reception of cells of products directly as a part of the automatic transfer line, in comparison with the similar products which punching in the form of round apertures receive a method of cold stamping on stamping

complexes, and also at the expense of reception from multiline preparations of several finished articles.

- Maintenance of stability of process of roll-forming.

To solve the objective we have design the method of cutting-out at an angle by the special tool of the disk form with a considerable quantity of cutting edges.

The special configuration of a cutting edge of the tool which provided reception of the demanded size of a cell has been designed.

At researches optimization of the tool for reception of the necessary sizes of cells and crosspieces between cells has been spent.

Tool manufacturing carried out according to requirements of the developed technological process.

At technology working off performance of process of profiling without thinning of metal and surface deformation that has allowed to stabilize roll-forming process has been provided.

In a camp besides roll-forming extension of cells and cutting of multiline preparations on unary products has been executed.

Adjustment tool simultaneously leave:

- 6 details (sections beacon mesh);
- 1 or 5 details depending on automatic transfer line type (corners mesh).

B. Products

Angle mesh for plaster works

Technical information:

	Y20	Y25
Width of a shelf (mm), A	20,0	25,0
Length (mm)	3000	

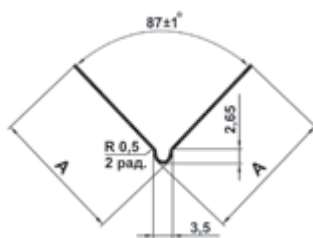
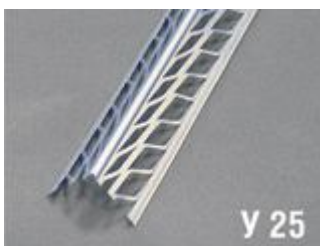
The galvanized steel angle mesh is used for internal stamping works and serves for furnish, reinforcing, protection of external corners, gypsum cardboard partitions and facings from mechanical damages and from the subsequent strewing of a finishing layer.

The product is analogue of an angle punched, but by manufacture the new technology of reception of apertures is applied.

The available complete set of the equipment provides manufacture of an angle mesh with a shelf of 20 mm and 25 mm from the galvanized steel (release of aluminium products is possible also).

Material for manufacture of steel sections:

Steel galvanized in accordance with GOST R 52246—2004, GOST 14918—80



Beacon mesh sections for stucco works

Technical characteristics:

	M6	M10
Width of a product, B (mm)	20,0	24,0
Height of a product, H (mm)	6,0	10,0
Length (mm)	3 000	

Appointment:

The beacon mesh galvanized section is used as basic directing at plastering for surface alignment. Is applied ideally exactly to cover with plaster all surface of a wall, it sets a thickness of alignment of a surface.

The available complete set of the equipment provides beacon sections manufacture 20 mm galvanized with shelves and 24 mm, height of an edge 6 mm and 10 mm accordingly.

Material for manufacture of steel sections:

Steel galvanized in accordance with GOST R 52246—2004, GOST 14918—80

Beacon section complete set M6, M10:

