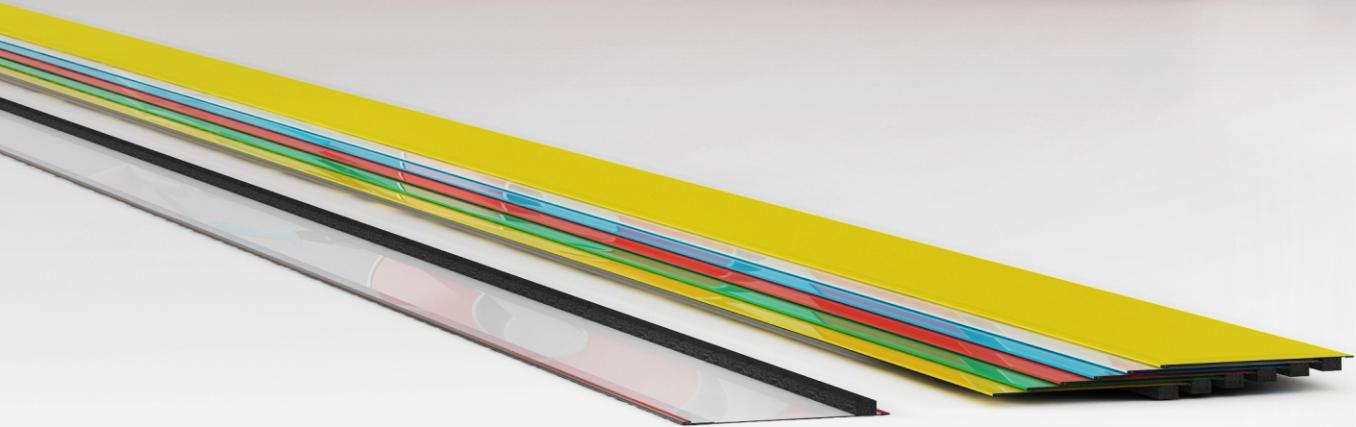


„3D-PROFILE“
„3D-EDGE-PROFILE“

**3D
SYSTEM**





3D System® company was created in 2001 and is the only company on Polish market that produces aluminum profiles for channel letter named “3D-Profiles” and “3D-Edge Profile”, used in visual advertising. Channel letters, made by sign makers with a use of profiles from 3D System® company, are illuminated from inside of letters, most commonly with energy-efficient LED systems. Channel letters, made with a use of profiles from 3D System® company, are placed on buildings, halls, or other buildings of public use, making impressive illuminated advertisements, which increase recognition and prestige of companies.

System of building channel signs, proposed by 3D System® company, is the fastest, and at the same time- cheapest method of constructing single letters, signs, or other spatial objects. This system features high professionalism, which is backed by long-term experience and constant increase of quality of offered products.

Adhesives developed by 3D System® company with a cooperation of chemists from laboratories of German company Evonik®, and Polish company Heko, are inseparable component of building channel letters, and are used to bond “3D-Profiles” to letter's face. Production of adhesives on special demand is aimed at increasing durability of spatial forms built with a use of system proposed by 3D System® company.

3D System® company, trying to meet sign makers' expectations, releases for client use special software- „Bending Points Indicator”, which generates bending point of “3D-Profiles”. Software simplifies and replaces classic measures with a use of measuring tape. BPI is another step in developing system of building signs. Makes the construction of channel letters much faster, and more friendly for user.

„Bending Points Indicator” software is a new path of developing system chosen by 3D System® company, which is aimed at simplifying building of signs with a use of “3D-Profiles”. New version of BPI 1.2 software allows for applying bending points on ordered “3D-Profiles”, by automatic communication with the printing station.

3D System® company designed and created automatic letter bender for channel letters (including our own control software) as an alternative for machines imported from China. „3D Letter Bender” was showed for a first time at Rema Days 2018 exhibition in Warsaw.

„3D- PROFILE”



„3D-Profiles” are manufactured from aluminium band of 0,5mm thickness, painted in RAL colours of 40% matt and 60% gloss structure. All profiles are protected with a thin film, which protects lacquered surface from scratching during production process.

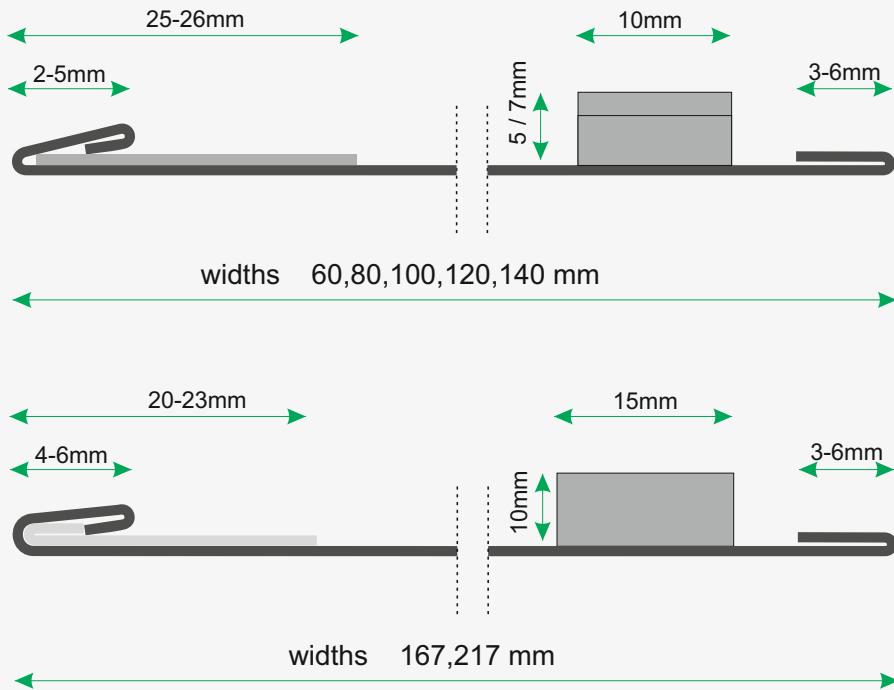
Standard widths of profiles: 60, 80, 100, 120, 140, 167, 217 mm. „3D-Profile” is used in production of channel letters with, or without illumination. Allows for construction of letters from 25cm up to 200cm height. “3D-Profile” is a main bearing element of a built letter. Profile has a pasted acrylic stripe, which allows for bonding profile with letter face.

Waterproof sponge is used in “3D-Profiles”, and it protects letters from dust and insects getting inside, and light coming out of letters. “3D-Profile” together with PMMA creates a solid block, which is assembled with letter back with a use of screws. Construction from PMMA, profile and PVC creates a finished product in form of advertising channel letter.

„3D-Profiles” are characterized with a high quality materials used in production. Durable elements of profile guarantee long-term operation of spatial signs made with a use of it. Estimated liveness of forms constructed with a use of “3D-profiles” is about 10 years. Warranty given by 3D System® company for “3D-Profiles” is for period of 5 years.



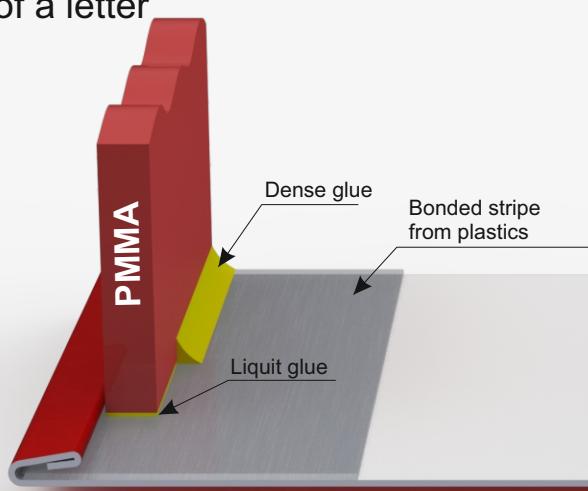
Cross-section of „3D-Profile”



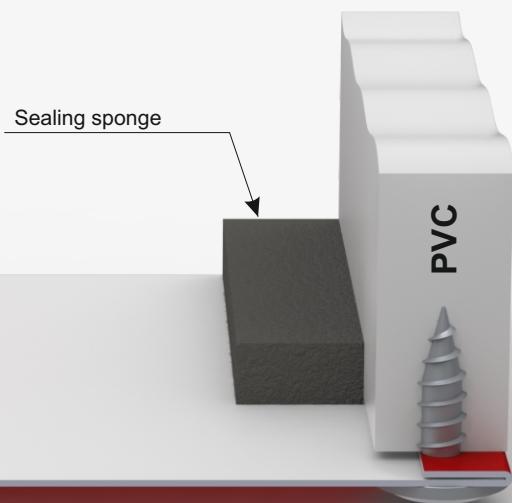
“3D-Profiles” in 167mm and 217mm width mark out with an acrylic stripe placed and folded into the front edge, which strengthens bonded connection between letter's face and profile in a built spatial form.

Example of construction of a letter with a use of „3D-Profile”

Front of a letter



Back of a letter



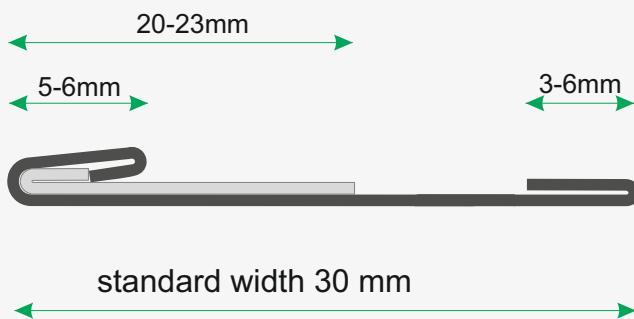
3D System® company manufactures „3D-Profiles” in any width according to client's project. Production's minimum is settled individually with a sales person. Profiles produced on demand cannot be returned.

„3D-EDGE PROFILE”



„3D-Edge Profile” is produced from aluminum band of 0,5mm thickness, coated in RAL system colors, of a 40%/60% structure (40% matt, 60% gloss). Width of profile- 30mm. „3D-Edge Profile” is used in production of spatial forms from 25cm to 200cm height. „3D-Edge Profile” is only an intermediary- not a construction-bearing part of built letter. Edge profile is used to connect fronts of built sign with its casing, which is most often made of aluminum. Casing is the main bearing part of created spatial sign. „3D-Edge Profile” is bonded to front of letter only with a use of structural Monolith glue.

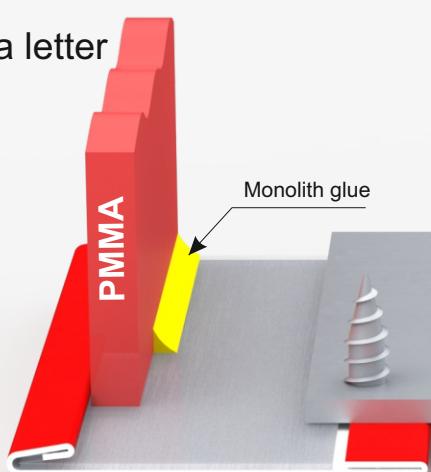
Cross-section of „3D-Edge Profile”



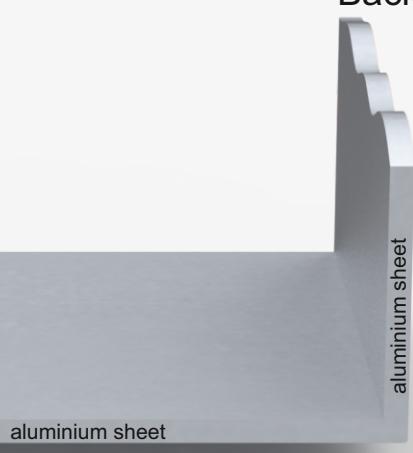
Main advantage of „3D-Edge Profile” that marks it out is an acrylic stripe placed and folded into the front edge, which strengthens bonded connection between letter's face and profile in a built letter.

Example of construction of a letter with a use of „3D-Edge Profile”

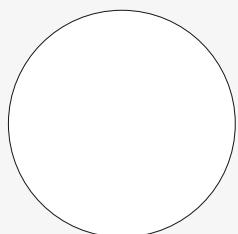
Front of a letter



Back of a letter

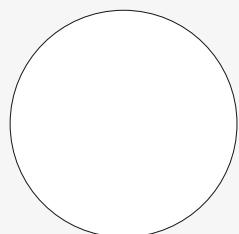


Basic colors of „3D-PROFILE”

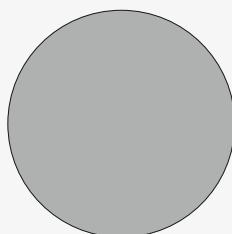


RAL 9016 MATT

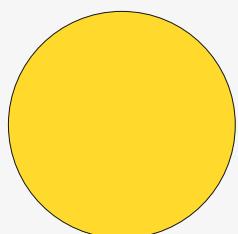
Profile for painting



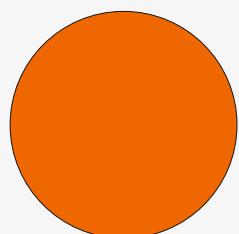
RAL 9016 GLOSS



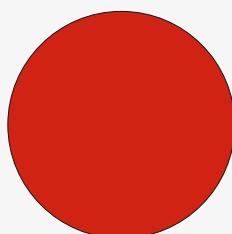
RAL 9006



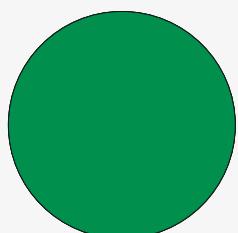
RAL 1023



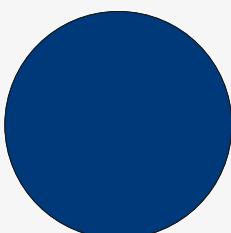
RAL 2004



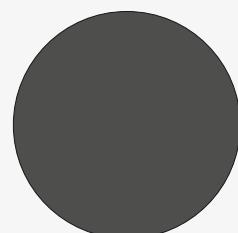
RAL 3020



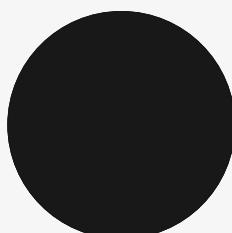
RAL 6029



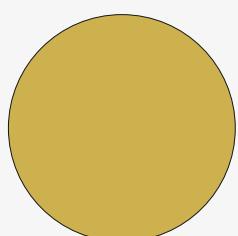
RAL 5002



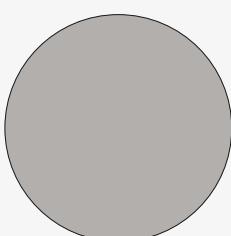
RAL 7024
grafit



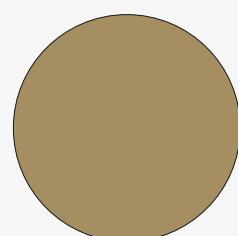
RAL 9005



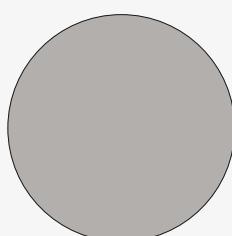
Gold



Silver



Gold



Silver

Mirror

Brushed

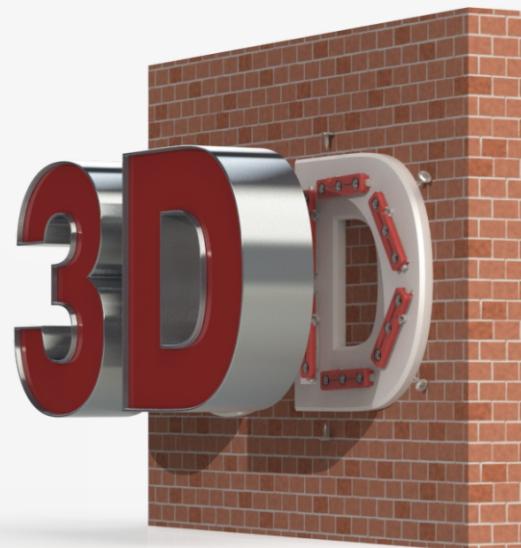
„3D-Profiles“ are available in presented colors. Ordering profiles in any given color from RAL pallet is conditioned by production's minimum, which amounts from 2000m to 5000m, depending on a width of profile. Lead time for profile in custom color is between 3 to 6 weeks. Price of profile in custom color remains in accordance with an offer placed in the price list of 3D System® company.

Example of construction of a letter with a use „3D-PROFILE”

Creation of front-illuminated letter requires usage of the following:

- PMMA or rigid polycarbonate (PC) for letter's front (polycarbonate, due to its endurance parameters, is advised for fronts of big letters);
- Foamed 10mm PVC for letter's back

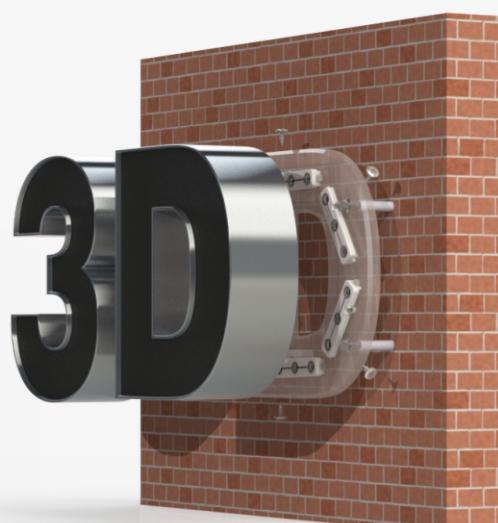
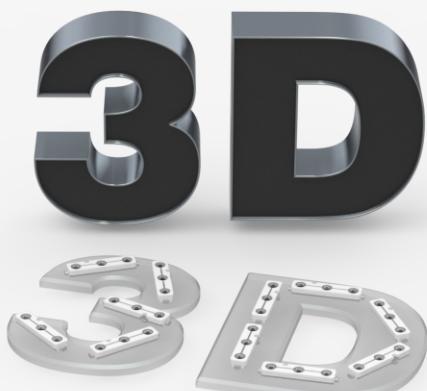
NOTE: Extruded PMMA should not be used for letter's front because of low material resistance and frequent cracks during installation works.



Creation of back-illuminated letter, especially in case of signs in black color, requires usage of the following:

- Non-transparent material for letter's front, e.g. PMMA, rigid polycarbonate (PC), Dibond, or similar material
- Transparent 10mm rigid polycarbonate for letter's back

Letter, in this case, should be remoted from the base on which it is mounted, so the light can easily emerge and create a glow around the form, making black logo visible.



One-component glues for small letters up to 80 cm.



PMMA no.1 liquid glue is an one-component, transparent glue with a strong unpleasant scent. It is designed to pre-bonding “3D-Profiles” with front of letters. It precedes the process of bonding with a dense glue. Glue penetrates gaps, but it does not fill them. It is used to build letters not higher than 80cm.

Glue is packed in 0,25L and 0,5L metal cans. One can of 0,25L allows to apply 100-150m of joint. Glue is applied with a special transparent 50ml bottle. Syringe needle should be attached on a bottle before application. Glue should be applied in small quantity, in order to prevent leakage. It is advised to do sample bonding using transparent PMMA in order to get better experience. Such test will help to determine method of applying and quantity of applied glue. Initial bonding of glue starts in 30 minutes after applying glue. After this time dense glue can be applied.

This glue should not be used with “3D-Edge Profiles”. Glue should be stored in cool spaces (cannot be frozen). Optimal temperature of bonding- 20°C.



PLEX 9021-0 dense glue is an one-component, transparent glue with strong scent. It is designed to bond “3D-Profiles” with front of letters. It is used after liquid glue. Glue fills out gaps, but it does not penetrate them. It is used to build letters not higher than 80cm. Glue is packed in 1,2kg bottles. One 1,2kg bottle allows to apply 150-200m of joint. Glue is applied with a special transparent 250ml bottle with a tube. Glue should be applied few times in a form of thin layers applied in 30 minutes periods. Initial bonding of glue, after which letters can be removed from the assembly table, starts in 2 hours after applying glue. This glue should not be used with “3D-Edge Profiles”.

Two-component glues for big letters up to 200 cm.



MetalPlex glue is a structural, two-component glue based on methacrylate, non-transparent in blue-navy color. It is used to bond acrylics with metals. Works great with materials like "Dibond". Replaces many classic connections, e.g. rivets, screws, etc. Joint has very high strength- ca. 70kg/cm². Surface does not need to be specially prepared before bonding.

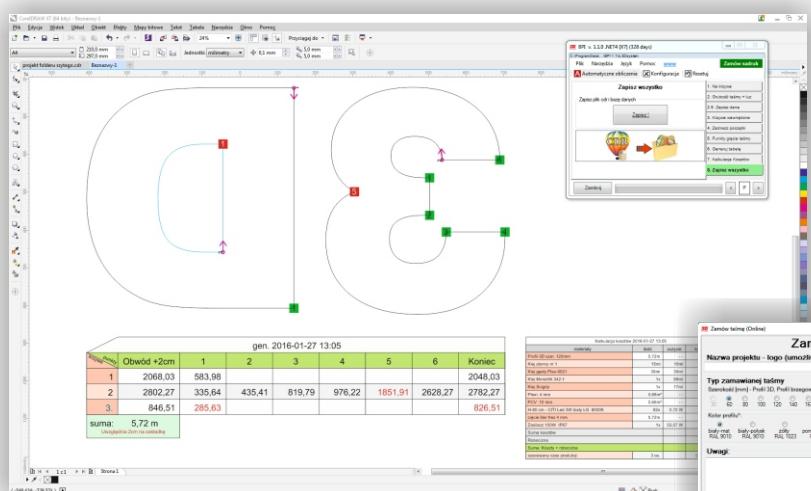
It is used for building letters and spatial signs up to 200cm height. Glue is packed in 380ml cartridges (capacity of two components together). Tube of glue allows to apply 25m of a joint. MetalPlex is applied with a use of special manual dosing gun- type H-285, and a mixing nozzle. Time of bonding is ca. 20 minutes. Time of usage of glue after mixing is ca. 8-12 minutes. Temperature of usage- 21°C.



SCIGRIP 42C glue is a first transparent structural glue, two-component based on methacrylate. Glue bonds "3D-Profiles" with front of letters. SCIGRIP 42C glue is used to build letters and spatial signs up to 200cm height. Glue is packed in 230ml cartridges (capacity of two components together). One package of glue allows to apply 18m of a joint during single usage. SCIGRIP 42C is applied with a use of special manual dosing gun- MIXPAC C 10:1, and is applied using mixing nozzle similarly as with Monolith 342-1 glue. Time of bonding is ca. 20 minutes. Time of usage of glue after mixing is ca. 7-10 minutes. Optimal temperature of usage is ca. 21°C.

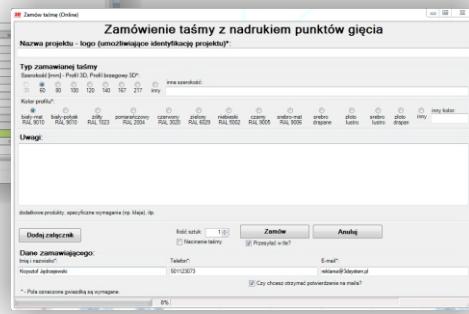
Bending Points Idicator.

BPI software window



Corel Draw window with BPI calculations

„Print order online” window



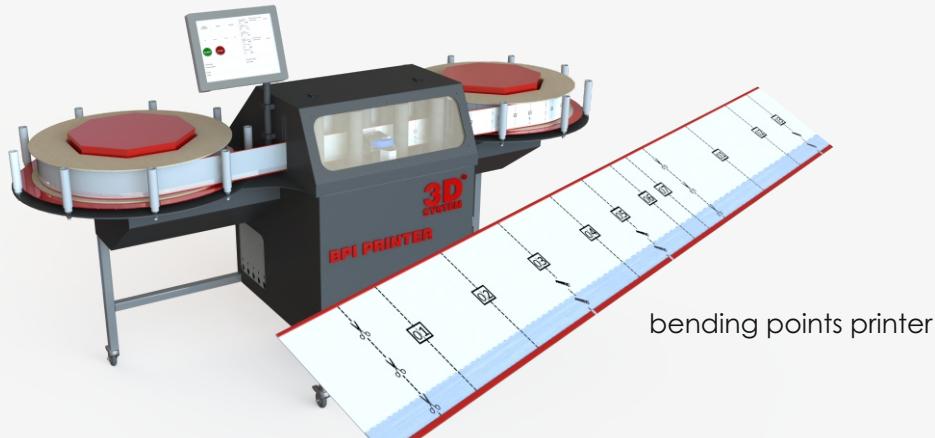
“Bending Points Indicator” – „BPI” is an authorial expansion, prepared by 3D System® company, for CorelDraw software. “BPI” allows to generate bending points and placing them on “3D-Profiles” with a use of measure. Proposed method replaces traditional manual measure with measuring tape. Usage of software, proposed by 3D System® company, substantially shortens time of building letters, and eliminates mistakes in measuring forms done by unexperienced persons. 3D System® company hereby submits sign makers relatively cheap tool supporting building spatial forms.

Main advantage of “Bending points Indicator” is a cost calculator option, which instantly creates price estimate of a project. Functions of cost calculator allow to calculate usage of given materials, with an indication of quantity and prices of materials, LED modules, power supplies, glue, etc. Cost calculator is a solution dedicated to people organizing and managing production.

Module, allowing to place orders online for printing of bending points free of charge on “3D-Profiles” within realized order, is a novelty in “BPI”. Marking the band shortens time of production of spatial form, and totally eliminates mistakes in measures.

Software is available for different versions of CorelDraw and Windows software. Details about installation requirements can be found on www.3dsystem.pl website.

“Bending Points Indicator” application has a test version with a license allowing to use it free of charge for 30 days.



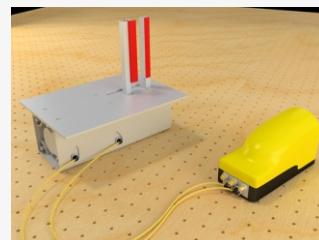
Machines and accessories for building channel letters.

Automatic channel letter bender for „3D-Profiles”



Materials and tools necessary for building letters:

- Pneumatic press for bending “3D-Profiles” (min. feed 2 bars);
- Measuring tape to measure bending points;
- Wooden pegs Ø 6mm;
- Wooden wedges;
- Assembly table 250x125x2cm with
drilled Ø 6,2mm holes (not through)



Assembly table is made of deciduous waterproof plywood of given format: 250x125x2cm. Ø 6,1-6,2mm holes are drilled each 2,5cm up to $\frac{3}{4}$ thickness. Above mentioned elements are available in 3D System® company.

Shears for cutting metal sheets, set of metal files, clamps, utility knife, marker and marker remover should be bought on your own.

Client can do materials by himself. Please contact 3D System® service, who will give You appropriate hints.

MANUFACTURER OF PROFILES AND MACHINES FOR CHANNEL LETTERS



3D SYSTEM
Paluch 24 str., 02-147 Warsaw, Poland
Tel. +48 22 652 60 11 /12
www.3dsystem.pl