













PROCESS IDENTIFICATION AND INDUSTRIAL LABELLING



INDUSTRIAL FLOOR MARKING AND FLOOR PAINTING



LEAN MANAGEMENT



MARKING AND IDENTIFYING HAZARDOUS AREAS



HEALTH AND SAFETY MARKING

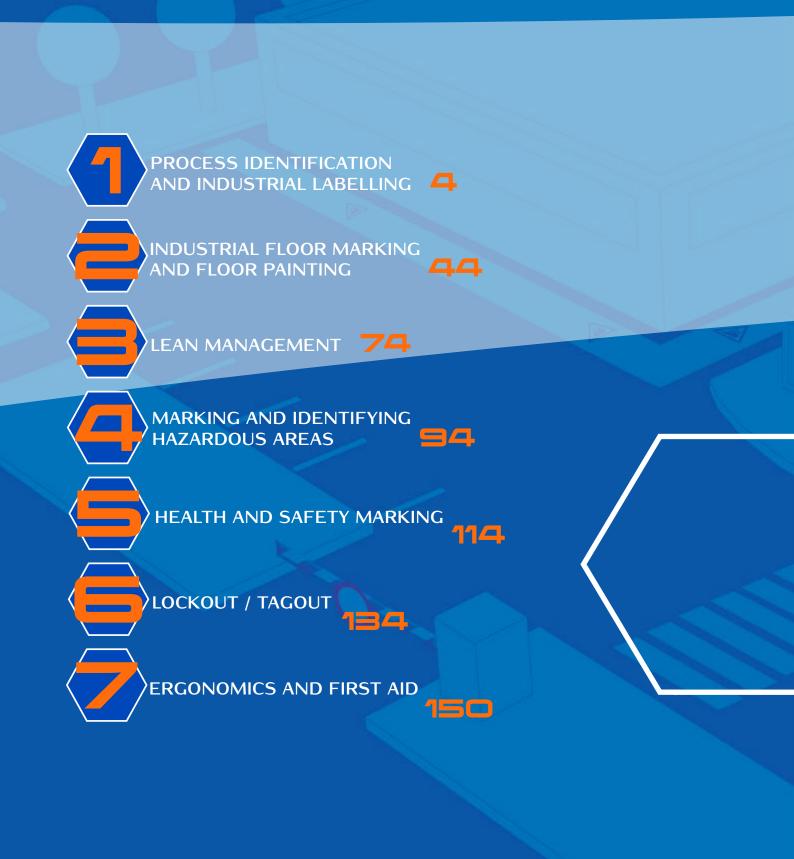




LOCKOUT / TAGOUT



ERGONOMICS AND FIRST AID





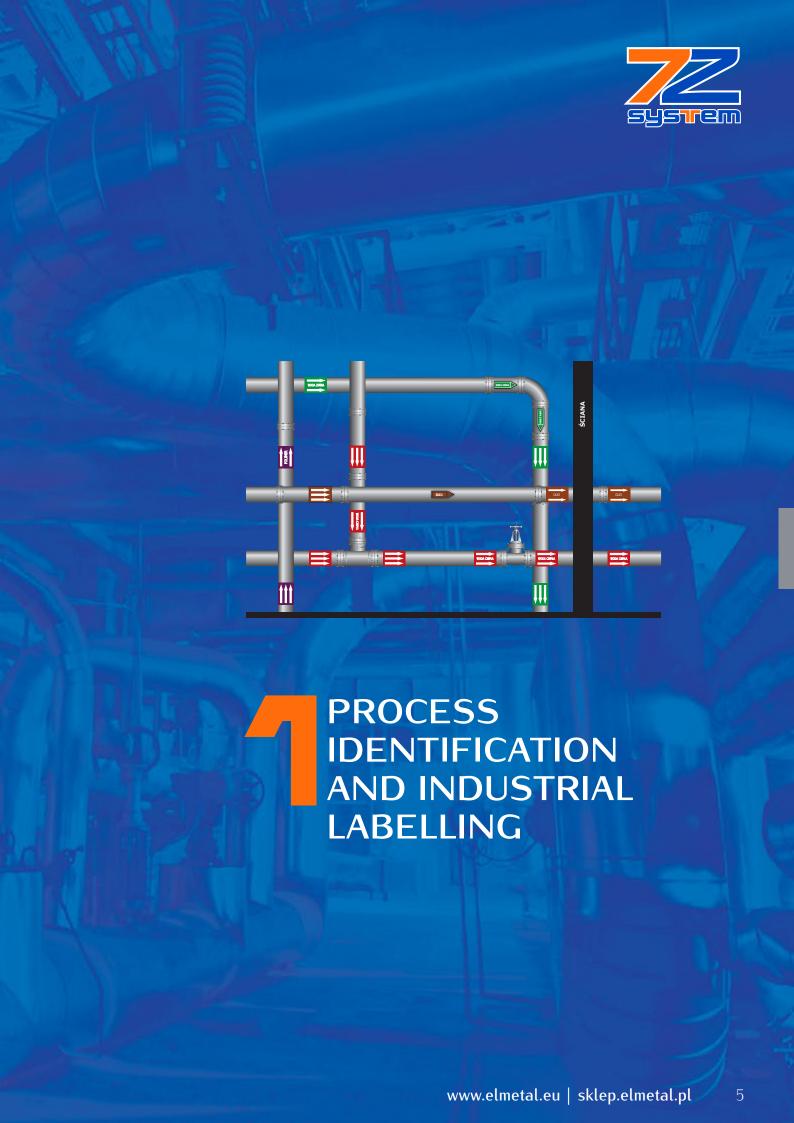
SYSTEM FOR THE VISUALISATION AND ORGANISATION OF PROCESSES CREATED BY ELMETAL

What will the client gain from the implementation of 7Z?

- Increased safety: hazardous areas are identified and marked
- Increased work efficiency: communication routes, production pathways and storage areas are identified and marked
- Reduction of material loss: resources are clearly labelled



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IDENTIFICATION PLATES



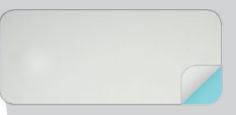


ANODIZED ALUMINIUM GLOSS / MAT





ENGRAVING LAMINATE



SELF-ADHESIVE ENGRAVING LAMINATE



ANODIZED ALUMINIUM NATURAL



BRASS



ALUCER (CERAMIC COATED AND PRINTED ALUMINIUM)



STAINLESS STEEL (LACQUERED)



STAINLESS STEEL (NATURAL)



STAINLESS STEEL ETCHED

IDENTIFICATION PLATES











Our **identification plates** are produced in four materials to match the chemical and thermal environment they have to withstand:

- plastic laminates
- aluminium
- stainless steel
- brass

All are weather and UV resistant. The identification plates are manufactured using the latest production methods, laser engraved, mechanical engraved, UV printing and painting. Our experience over many years have enabled us to supply the highest quality of identification plates in many materials to meet all our customer needs, economically and quick.

NR	MATERIAL	TYPE	THICKNESS (mm)	PRODUCT TECHNOLOGY	TEMPERATURE RESISTANCE
1		engraving laminate (various colors)	1,6 (s)	laser engraving	-30°C / +85°C
2		engraving laminate (various colors)	3,2	laser engraving	-30°C / +85°C
3	laminate	engraving laminate (various colors)	0,6 - 0,8	laser engraving	-30°C / +85°C
4		self-adhesive engraving laminate (various colors)	0,15	laser engraving	-30°C / +85°C
5		anodized (various colors)	0,5 - 2,0	laser engraving	-40°C / +450°C
6	aluminium	anodized (natural)	0,5 - 3,0	mechanical engraving+painting	-30°C / +150°C
7	atummuntum	chromated and ceramic coated ALUCER	1,2 (s)	UV printing	-30°C / +150°C
8		type 304 (natural)	0,8 (s)	laser engraving	-40°C / +450°C
9		type 304 (natural)	0,8	mechanical engraving+painting	-30°C / +150°C
10		type 316L (natural)	0,8 - 3,0	laser engraving	-40°C / +450°C
11	stainless steel	type 316L (natural)	0,8 - 3,0	mechanical engraving+painting	-30°C / +150°C
12	Sicci	type 304/316 (natural)	0,8 - 3,0	etching+powder painting	-30°C / +150°C
13		type 316L (powder coated)	0,8 - 3,0	UV printing	-30°C / +150°C
14		type 316L (lacquered)	0,8 - 3,0	UV printing	-30°C / +150°C
15	brass	natural	0,6 - 2,0	mechanical engraving	-40°C / +450°C
16	brass	natural	0,6 - 2,0	mechanical engraving+painting	-30°C / +150°C
17	brass	natural	0,6 - 2,0	UV printing	-30°C / +150°C

s - standard thickness









ALUCER PLATES

Alucer is a special technology developed by Elmetal, which enables printing on aluminium. It is an excellent alternative to plastic and stainless steel plates. The limited temperature resistance of plastic plates and the inability of placing colour on stainless steel plates make Alucer plates a versatile option.

Our many years of experience and the use of the newest technologies guarantee the highest level of quality.



Advantages of the Alucer plates

- a cost-effective solution when compared to other plate types
- ability to use full colour printing
- resistance to high temperatures (up to +150°C)
- 5-year resistance to UV radiation
- resistance to the most commonly used cleaning agents (ethyl alcohol, oils, acetone, low concentrated acids and bases)
- the plates can be cleaned with high-pressure liquids

Production technology

- coating of aluminium sheets with a paint layer
- printing
- thermosetting
- finishing of the plate, after-machining (e.g. rounding of the edges), making mounting holes







PROWADNICA KANAŁOWA GÓRA / DÓŁ



ETCHED DATA PLATES

Etched nameplates made from stainless steel or brass. The thickness of the etched material ranges from 0.8 mm to 3 mm.

Etched nameplates - how are they made?

The photochemical etching process creates grooves in the metal surface of the nameplate in the form of the required graphics, letters or numbers. Etching makes it possible to create shapes in the metal with a depth of up to 0.4 mm. The etched pattern can be coated with thermosetting paint, which is resistant to aggressive environmental factors and the passage of time. The finished etched nameplates feature very distinctive grooves, which are incredibly durable and aesthetically pleasing.

The photochemical etching process makes it possible to obtain complex and detailed elements of excellent quality, which are much more time-consuming or even impossible to achieve by means of laser engraving or milling.

Intended use of etched nameplates:

- rating plates
- machine and equipment information plates
- nameplates for control panels
- advertising nameplates



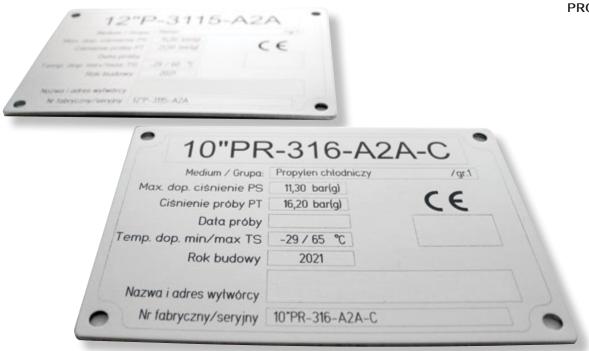












FIBRE LASER MARKING

Laser marking is a very precise and high-grade method of applying industrial markings. This marking method is excellent for rating plates, identification nameplates and various types of information plates for machines and equipment.

The high precision of the laser marking machine allows to obtain legible details of complicated graphics with small dimensions and miniature font formats.

Laser fibre marking used by Elmetal "blackens" the material without disturbing its surface. The highest quality results are achieved on aluminium and anodised aluminium (natural and coloured). These materials quarantee the best contrast, durability and repeatable quality.

Laser marking is permanent and resistant to abrasion, heat and acids.



Materials recommended for laser marking:

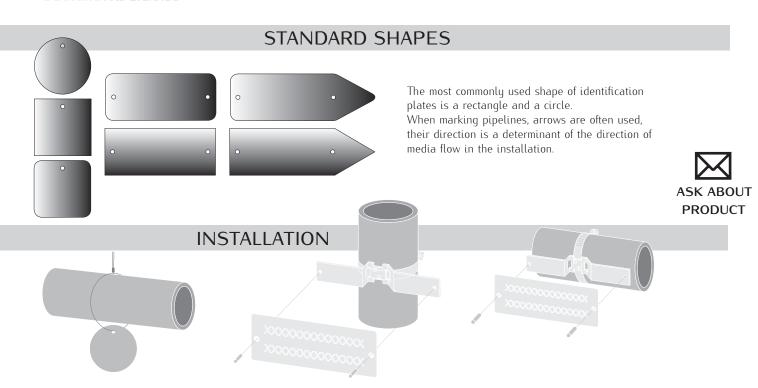
- stainless steel (oxidised, crude, anodised, coated, brushed)
- precious metals (gold, silver, bronze)
- nickel, titanium, chrome
- polycarbonate
- polypropylene
- PVC
- silicone
- coated wood
- coated paper

DATA PLATES









MATCH YOUR NEEDS



COMPOSED DATA PLATES





Composed identification plates comprise a profile with a slide-in insert on which a number, description or other information is printed. Additionally, pictograms, arrows, warning signs and medium-identifying colours can be placed in the profile.

The profiles can be mounted on the pipework using a mounting bracket and a clamping ring. The profile can be also stuck directly onto the surface of the pipework, equipment or riveted to the insulation.



MATCH YOUR NEEDS



Inserts with colour codes

Arrows, codes and symbols

Inserts with pics

Inserts with text











OTHER



















LOGO















Composed plates				
Material Max lenght [m] Height [mm]				
PVC	1	20, 40, 80, 160		
Aluminium	1	10, 20, 40, 80, 160		

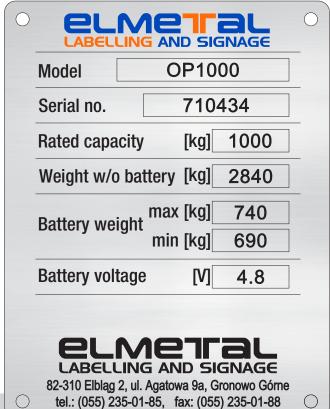
MATERIALS:

PVC

ALUMINIUM







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HOLES FOR RIVETS



MOST COMMONLY USED MATERIALS

stainless steel

REVERSE PRINTING

ALUCER

engraving laminate / adhesive PVC foil

ROUNDED EDGES

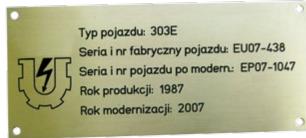
ANY SHAPES

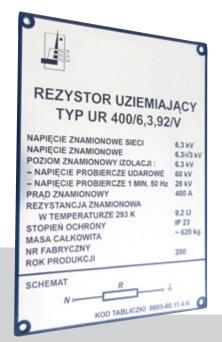
SELF-ADHESIVE

BOTTOM











Nameplates can be engraved by laser or mechanically (with an engraving cutter) and printed. We engrave on PVC laminates, aluminium, stainless steel and other materials, to order.

The size of the plate, its design (e.g. rounded corners), the layout of the text, and the holes needed for mounting can be tailored to customer specifications.





SEE ALSO
Identification plates
pp.6-13

KONTAKT DO SERWISU: TH. 58 680 22 00 LIMAIL: SERWISH-POLITIKNIK, PL POLITIKANIK EPO. 18 7 0 0 0. MISELWIGO 35, 80 297 EMBRO WWW.POLITEKNIK, PL





DRABINA









MACHINE AND EQUIPMENT INFORMATION LABELS

Legible labelling of individual parts of machines and equipment is a factor of great importance, which above all else guarantees occupational safety. It also makes servicing the equipment and its operation much easier.

All machines must be labelled, and the marking should be visible, legible and durable. In addition to standard rating plates, the most common form of equipment labelling are warning and information signs.

Elmetal offers complete labelling systems for machinery and equipment — data plates, manufacturer marking, information and warning signs. All our products are made only using high-quality materials, which quarantee long-term legibility and aesthetic appearance.

In addition to standard industrial designs, we manufacture bespoke labelling.

MATERIALS PCV PHOTOLUMI-DIBOND STEEL SHEET **FOIL MAGNETIC** galvanized (aluminium SELF-ADHESIVE hard **NESCENT** FOIL composite sheet) foamed transparent **PVC & FOIL** transparent coloured two-sided reverse print adhesive reflective **ALUCER** reverse printing

MACHINE AND EQUIPMENT LABELING













Information hangers made of galvanised sheet metal, Dibond or PVC are an excellent solution for temporary labelling of ladders, scaffolding and handrails, as well as shelves and product racks.



REVERSE LABELS

Reverse labels and stickers are printed on transparent film - under the material, but over the adhesive layer. This makes them more resistant to damage and discolouration, enables them to retain their gloss for longer and facilitates their cleaning.



MAGNETIC LABELS

Magnetic labels are ideal for labelling which is often replaced or temporary. Once removed, they leave no marks and can be reused. Magnetic labels can be used on metal elements of machine housing, metal cabinets and racks as well as magnetic dry-wipe boards.

Magnetic film (standard thickness 0.7 mm) can be used to print any symbols and graphics in full colour. Labels can be twisted and bent without losing much of the magnetic field energy (the pulling force of standard labels is 0.039 kg/cm2). They can be easily cut with scissors or a knife.

SEE ALSO

Identification plates pp.6-13

OHS signs & boards p.120







Labels and stickers designed and produced by Elmetal, which are used in inspections, calibration and maintenance processes, facilitate efficient management of device inspections dates.

- design suited to company requirements;
- manufactured in line with applicable industrial standards;
- resistant to oils, chemicals, adverse weather conditions, temperature and UV radiation;
- the strong adhesive used adheres to practically any surface;
- once removed, they leave no marks







MANOMETER GAUGES

We offer a solution that does not require replacement or disassembly of the manometer.

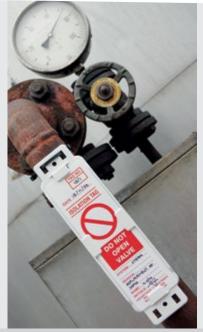
- self-adhesive labels made of high-quality foils.
- available in: yellow, green, red (other colors available on request)
- available diameters: from 50 mm to 160 mm



MACHINE AND EQUIPMENT LABELING









SCAFFTAG SYSTEM

The Brady visual tagging solutions (Scafftag) ensure a permanent data trail of inspections and work carried out, as well as information about the usage and if safe or prohibited at the point of use.

Scafftag help:

- Communicate the latest equipment inspection and test status clearly at the point of use
- Record an audit trail of recent equipment maintenance, tests and inspections
- Uniquely identify equipment
- Comply with Health and Safety legislation
- Reduce accidents in the work place.





Forkilitag, No ID. Section Frazz WYCONSWER IN STORM LINE FRAZZ MYCONSWER IN STORM LINE F

FORKLIFFTAG®



LADDERTAG®



MULTITAG®

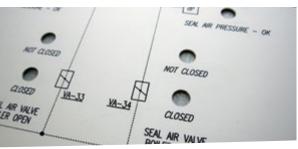




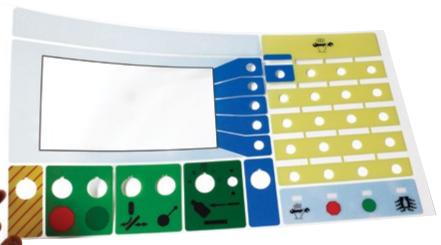






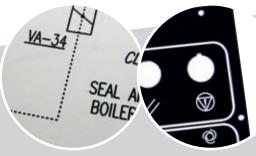






MATCH YOUR NEEDS





MECHANICAL / LASER HOLES FOR BUTTONS, ENGRAVING SCREWS, RIVETS



PAINTING



ROUNDED EDGES



ANY SHAPES

MOST COMMONLY USED MATERIALS

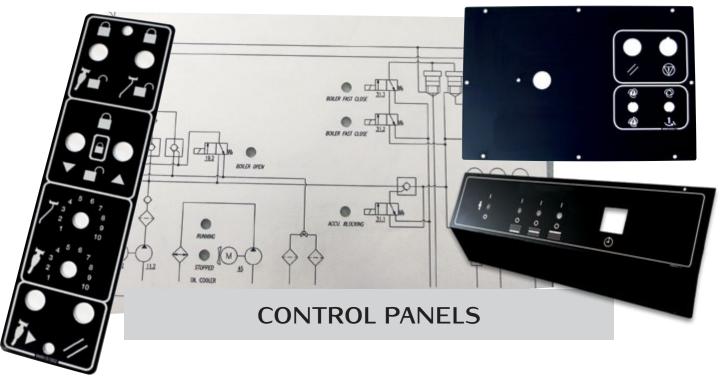
Anodized aluminium gloss / mat

Engraving laminate

Stainless steel

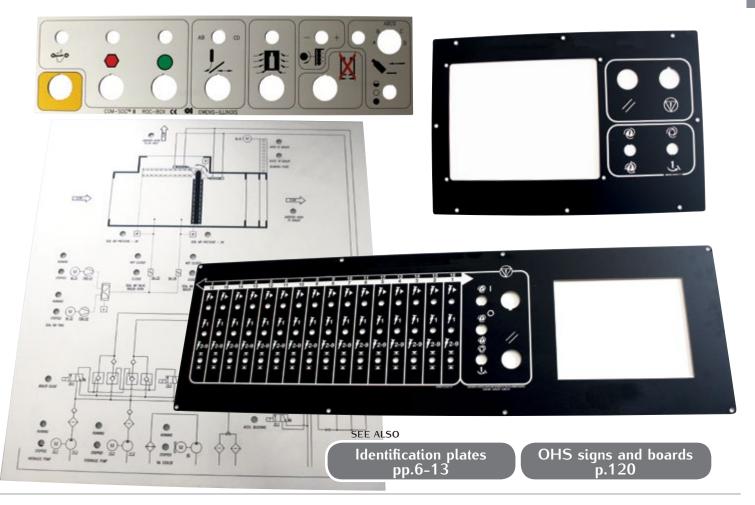
CONTROL PANELS





The company produces plates for panels, consoles, control panels, and dashboards. They are made of engraving laminate, anodised aluminium or stainless steel. The material is resistant to weather conditions, UV light, lubricants, solvents and coolants. The surface and markings are easy to clean.

Materials in black-white or white-black guarantee the best legibility of the labelling. We also make new copies (duplicates) of damaged or illegible control panels.















TANK LABELING

Tank identification labels can be ensured by means of PVC signs with information which is either printed or stuck in the form of labels. Signs can carry all types of text, pictograms, company logos, photographs, pictures, etc. There are practically no limits as to the size of the sign, the size and type of the lettering or the amount of information shown on the sign.

The signs can be made in strict accordance with the customer's design. Once the size of the tank, its contents and location are specified, we will propose the best possible design, size and the method of mounting of the sign.



MATERIALS

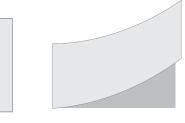








INSTALLATION



After providing the dimensions of the tank, its contents and places of its installation, we will propose the appropriate design, size and assembly method.









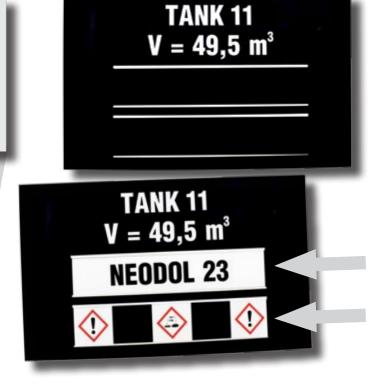
NITRIC ACID TANK "A" V-100m³

Tank labels options

- Full colour printing
- Any shape
- Pics
- Graphics
- Logotypes
- Rail mounting system
- Individual design project
- Materials: PVC, DIBOND, steel sheet, self-adhesive PVC



Recommended text sizes							
Text size [mm]	17	25	40	80	160	200	400
Reading distance [m]	5	8	15	24	40	60	120



Slide-in profiles kit

The boards with slide-in and profile system are perfect for mounting on the post (posts) next to the tanks. Made of steel sheet or composite aluminium sheet (DIBOND).

The system of profiles and slides allows independent configuration of markings for multiple use.













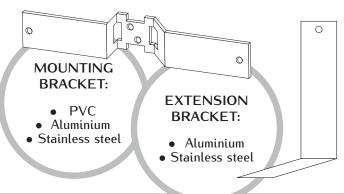






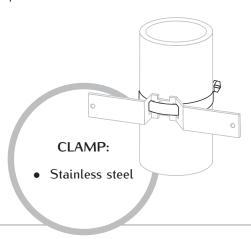
Mounting bracket / extension bracket

Mounting bracket enables plates to be affixed on pipelines, also with small diameters, and on equipment components. Its versatile shape makes it possible for the bracket to be mounted on a vertical or horizontal pipeline. Extension bracket guarantees that the marking is legible and aesthetically pleasing, and also enables plates to be affixed in places hidden from view or ones difficult to access.



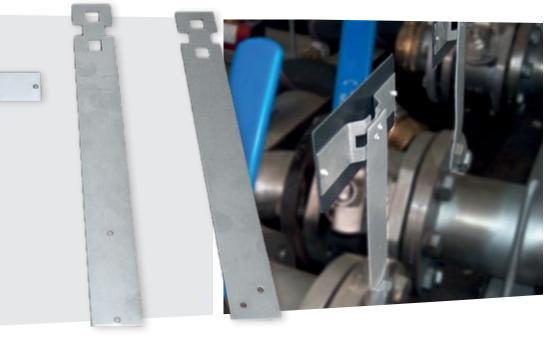
Clamps

Clamps enable the mounting brackets to be affixed to pipelines or equipment components. The brackets are available as finished products with specific dimensions or as a set for individual assembly to specific dimensions.



FIXING ELEMENTS

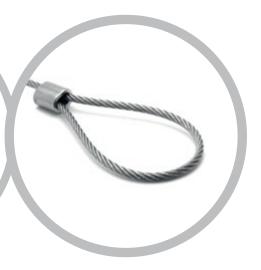






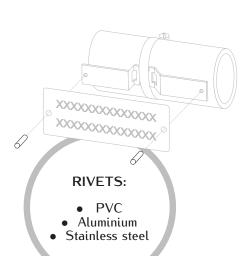






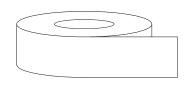
Rivets

We offer rivets made of plastic, aluminum and stainless steel.



Foam adhesive mounting tape

Double-sides ddhesive tape enables plates to be affixed to a flat surface. Depending on type, the tape is resistant to temperatures between - 40°C and +200°C. It is resistant to moisture, low concentrated acids and bases, as well as oils and fats.



Wire rope loops / Cable ties

Stainless wire rope loops and polyster cable ties (black and white) for assembly elements.







DIMENSION OF THE BRACKET ACCORDING TO THE SIZE OF THE PLATE



S102HJN20AA101 Zawór trójdrogowy ster. pneum – pomiar miejscowy



MOUNTING	G BRACKET	IDENTIFICA	ATION PLATE	COMPOSED IDEN	TIFICATION PLATE
Width (mm)	Height (mm)	Width (mm)	height (mm)	Width (mm)	Height (mm)
70	3 ()	74	3 ()	72	3 ()
88		92	-	90	
96		100		98	
106		110	-	108	
116	18	120	22	118	20
124		128	-	126	
142		146		144	
160		164		162	
178		182		180	
70		74		-	
88		92		-	
96		100		-	
106		110		-	
116	24	120	40	-	_
124		128		-	
142		146		-	
160		164		-	
178		182		-	
70		74		72	
88		92		90	
96		100		98	
106		110		108	
116	30	120	50	118	40
124		128		126	
142		146		144	
160		164		162	
178		182		180	
70		74		72	
88		92		90	
96		100		98	
106		110		108	
116		120		118	00
124	50	128	60	126	80
142		146		144	
160		164		162	
178		182		180	
196		200		198	

FIXING ELEMENTS





CLAMPS				
Range (mm)	TYPE W4	TYPE W5		
12-20	+	+		
12-22	+	+		
16-25	+	+		
16-27	+	+		
20-32	+	+		
25-40	+	+		
30-45	+	+		
32-50	+	+		
40-60	+	+		
50-70	+	+		
60-80	+	+		
70-90	+	+		
80-100	+	+		
90-110	+	+		
100-120	+	+		
110-130	+	+		
120-140	+	+		
130-150	+	+		
140-160	+	+		
150-170		+		
160-210		+		
210-260		+		
260-320		+		



RIVETS			
Dimension (mm)	Material		
3 x 5,5	PVC		
3,1 x 6,4	PVC		
3,1 x 7,5	PVC		
3 x 5	Aluminium		
3 x 6	Aluminium		
3,2 x 6	Aluminium		
3,2 x 8	Aluminium		
4 x 8	Aluminium		
3 x 6	Stainless steel		
3 x 8	Stainless steel		
3,2 x 6	Stainless steel		
3,2 x 8	Stainless steel		
3,2 x 10	Stainless steel		



FOAM ADHESIVE MOUNTING TAPE WIDTH (mm)					
19 25 39 50					
60	80	90	100		

	CLAMPS TYPE DESCRIPTION					
Туре	Material	No. and steel grade acc. to DIN 17440-85	Grade of the equivalent acc. to PN-71/H-6020	Steel grade acc. to international standards		
W4	All from acid-resistant steel	1.4301 X5CrNi 1810	OH 18N9	AFNORZ6CN18.09; AIS1304; B.5.304S15: SS2332; SUS 304		
W5	All from acid-resistant and non-magnetic steel	1.4401 X5CrNiMo 17122	OH17N12M2T	AFNORZ6CND17.11; AISI316; B.S.316S16 SS 2347; SUS 316		





CONDENSATE

CONDENSATE









PIPE MARKING ID TAPES

CRYSTALISED MATERIAL: One-sided silicon coated paper, 137 g / m2, ensures trouble-free film transfer from the backing paper to the target substrate

ADHESIVE: Polyacrylate based on water, permanent

SCOPE of use: outdoor — labeling, descriptions in the medium and long term. Application indoor: durability in principle is not limited.

TECHNICAL DATA:

Thickness: (without protective paper and adhesive): 75 microns

Weight: 115 g / m2

Shelf life: (DIN 30 646) adhered to steel does not show measurable shrinkage in the transverse direction; towards longitudinal <0.4mm Water resistance: adhered to aluminum after 48 hours / 23°C does not show any shapes.

show any change.

Temperature resistance: glued to aluminum -40° C to $+80^{\circ}$ C does not show any change.

Bonding strength: (FINAT - Test Method I, after 24 hours, stainless steel): at least 16 N / 25 mm

Tear resistance (DIN 53 455): Longitudinal: min. 19MPa; Transverse: min. 19MPa Tensile strength (DIN 53 455) longitudinal: min. 130%; Transverse: min. 150%

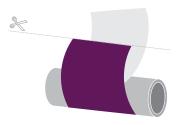
Shelf life at vertical exposure in the context of Central European climate (with proper sticking by specialist):

White and black: 4 years; Colorless and color: 3 years; Metallic colors: 3 years.

Recommended sticking temperature: $> 10^{\circ}\text{C}$

Storage life: 2 years - in original packaging, at 20 $^{\circ}\text{C}$ and 50% relative humidity.

INSTALLATION



The surfaces to which the material will be applied should be thoroughly clean, dry and completely free of dust, grease and any other residue. Freshly painted surfaces should be allowed to dry for at least three weeks or at least thoroughly cured. Cut off the appropriate length of tape, including an additional 3 cm for overlaps. Stick the tape by pressing it down with a soft object (cloth).

PIPE MARKING ID TAPES





A quick and simple way to provide piping marking is the use of **self-adhesive pipe marking tape** which is made of premium-quality film. Tape is available on rolls with the length of 25 m and with the following standard widths: 40, 80, 100, and 160 mm.

STANDARD COLORS		RAL CODE	ELMETAL CODE
White		RAL 9003	010
Yellow		RAL 1023	021
Red		RAL 3000	031
Orange		RAL 2008	035
Purple		similar to RAL 4008	040
Green		RAL 6037	062
Blue		RAL 5015	052
Black		RAL 9005	070
Grey		RAL 7005	071
Silver		RAL 9006	090
Brown		RAL 8003	801

other to order







The colour of the tape informs about the type of agent flowing through the pipe. These colours are regulated by commonly applicable standards and in-house regulations.



Coloured tape (CT)					
Colour		Roll wid	dth (mm)		
Cotour	40	80	100	160	
White	CT040-010	CT080-010	CT100-010	CT160-010	
Yellow	CT040-021	CT080-021	CT100-021	CT160-021	
Red	CT040-031	CT080-031	CT100-031	CT160-031	
Orange	CT040-035	CT080-035	CT100-035	CT160-035	
Purple	CT040-040	CT080-040	CT100-040	CT160-040	
Green	CT040-062	CT080-062	CT100-062	CT160-062	
Blue	CT040-052	CT080-052	CT100-052	CT160-052	
Black	CT040-070	CT080-070	CT100-070	CT160-070	
Silver	CT040-090	CT080-090	CT100-090	CT160-090	
Brown	CT040-801	CT080-801	CT100-801	CT160-801	

Multi-coloured tape (IMO)							
Colour		Roll width (mm)					
Cotour	Colour code	40	160				
White	010						
Yellow	021	Method of creating an identification no.					
Red	031	1. Select tape width 2. Select colour codes 3. The identification no. shall be as follows: IMO [roll width]-[colour 1 code]/[colour 2 code]/					
Orange	035						
Purple	040						
Green	062	- [colour 3 code]					
Blue	052	Example: IMO tape: width 80 mm colours: green / yellow / green IMO 080-062/021/062					
Black	070						
Silver	090						
Brown	801	1110 000-002/021/002					

Coloured tapes with arrows identify both the type of the agent flowing through the pipeline (colour code) and the direction of its flow (arrow).

In addition to identifying the agent and direction of its flow these tapes carry a more detailed description of the given agent. The text is printed according to customer specifications.



(Coloured t	ape with a	rrows (AT)	
Colour		Roll wid	dth (mm)	
Cotour	40	80	100	160
White	AT040-010	AT080-010	AT100-010	AT160-010
Yellow	AT040-021	AT080-021	AT100-021	AT160-021
Red	AT040-031	AT080-031	AT100-031	AT160-031
Orange	AT040-035	AT080-035	AT100-035	AT160-035
Purple	AT040-040	AT080-040	AT100-040	AT160-040
Green	AT040-062	AT080-062	AT100-062	AT160-062
Blue	AT040-052	AT080-052	AT100-052	AT160-052
Black	AT040-070	AT080-070	AT100-070	AT160-070
Silver	AT040-090	AT080-090	AT100-090	AT160-090
Brown	AT040-801	AT080-801	AT100-801	AT160-801
Ti	ransparent	tape with	arrows (A	Τ)
	•		,	,

Transparent tape with arrows (AT)					
Roll width (mm)					
Colour	40	80	100	160	
Transparent	AT040-000	AT080-000	AT100-000	AT160-000	



Coloured tape with arrows and text (TT)				
Colour		Roll wid	lth (mm)	
Cotour	40	80	100	160
White	TT040-010	TT080-010	TT100-010	TT160-010
Yellow	TT040-021	TT080-021	TT100-021	TT160-021
Red	TT040-031	TT080-031	TT100-031	TT160-031
Orange	TT040-035	TT080-035	TT100-035	TT160-035
Purple	TT040-040	TT080-040	TT100-040	TT160-040
Green	TT040-062	TT080-062	TT100-062	TT160-062
Blue	TT040-052	TT080-052	TT100-052	TT160-052
Black	TT040-070	TT080-070	TT100-070	TT160-070
Silver	TT040-090	TT080-090	TT100-090	TT160-090
Brown	TT040-801	TT080-801	TT100-801	TT160-801

PIPE MARKING ID TAPES



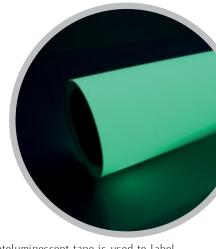


Manufactured to the design submitted by the customer. This type of tape combines several items of information: colour code, direction flow, description of the medium and warning pictogram.

	Multi-functional tape (MT)						
Colour		Roll width (mm)					
	Colour code	40	80	160			
White	010	Method of creating an identification no.					
Yellow	021	1. Select tape width 2. Select tape colour 3. Add text 4. Select GHS pictogram 5. The identification no. shall be as follows:					
Red	031						
Orange	035						
Purple	040	MT [roll width]-[colour code]/[any text]/[pictogram code] Example: Multi function tage MT:					
Green	062						
Blue	052						
Black	070	 Multi-function tape MT: width 100 mm, yellow colour GH02 pictogram MT 100-021/TEKST/GH02 					
Silver	090						
Brown	801	_ WIT 100 021/1ERS1/GH02					

GHS pictograms				
GHS01				
GHS02				
GHS03				
GHS04				
GHS05				
GHS06				
GHS07	(!)			
GHS08				
GHS09	\$			

CUS nictograms



Photoluminescent tape is used to label areas of critical importance in premises with poor lighting, in those which are periodically completely dark and along evacuation routes.

Photoluminescent tape (WTP)				
Colour	Roll wid	dth (mm)		
Cotour	50	100		
Yellow– –black	WTP050-021	WTP100-021		
White- -red	WTP050-031	WTP100-031		

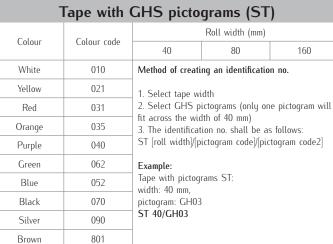
Tapes with GHS pictograms are used for additional marking of pipes through which a chemicals agent flows. These tapes can be used separately or together with arrow (AT) or text and arrow (TT) tapes.

Reflective tape is designed to mark areas which require attention in poor lighting conditions. The special structure of the tape reflects the light falling on it.

Warning tapes are used to mark all elements which can pose a hazard to personnel, e.g. protruding pipes or installation components.









Reflective tape (WTR)					
Colour	Roll width (mm)				
Cotour	50	100			
Yellow- -black	WTR050-021	WTR100-021			
White- -red	WTR050-031	WTR100-031			

Warning tape (WT)					
Colour		Roll wid	Roll width (mm)		
Cotour	40 80 100				
Yellow- -black	WT040-021	WT080-021	WT100-021	WT160-021	
White- -red	WT040-031	WT080-031	WT100-031	WT160-031	







GHS Pictograms

GHS01

GHS02

GHS03

GHS04

GHS05

GHS06

GHS07

GHS08

GHS09







HOT WATER

WATER

WASTEWATER

DEMI WATER

DYE

ULTRAFILTRATE

ANOLYTE

ELUATES

RESIN
PIGMENT PASTE

SODIUM HYDROXIDE

HYDROCHLORIC ACID

IRON CHLORIDE

SULPHURIC ACID

COAL SOLUTION

LIME SOLUTION

POLYELECTROLYTE SOLUTIONS

SLIME PHOSPHORS

PHOSPHORS

SLIME

WATER CLEANED

TEXT

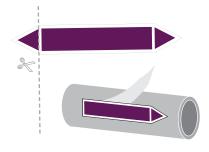
Arrows with text					
Width a Height b (mm)					
(mm)	20	40	60		
110	EA11020xx	EA11040xx	EA11060xx		
230	EA23020xx	EA23040xx	EA23060xx		
400	EA40020xx	EA40040xx	EA40060xx		



Arrows with text and pictograms					
Width a	Height b (mm)				
(mm)	20	40	60		
110	EA11020xxY	EA11040xxY	EA11060xxY		
230	EA23020xxY	EA23040xxY	EA23060xxY		
400	EA40020xxY	EA40040xxY	EA40060xxY		

xx - colour code Y - GHS pics code

INSTALLATION



Warning! The surfaces to which the material will be applied should be thoroughly clean, dry and completely free of dust, grease and any other residue. Freshly painted surfaces should be allowed to dry for at least three weeks or at least thoroughly cured. Possibilities of using selected varnishes or paints with self-adhesive foil should be checked before final sealing of the foil. Before applying the label, check if there are any chemical reactions between the film and the substrate.

PIPE LABELING













Direction arrows



Labels with text

Self-adhesive labels are a perfect complement or replacement for pipeline marking tapes. Most often used as direction arrows.

Made of high quality, temperature-resistant foils in the range from -40° C to + 120 $^{\circ}$ C, moisture, slightly concentrated acids and bases, oils and fats.

STANDARD	COLORS	RAL CODE	ELMETAL CODE
White		RAL 9003	010
Yellow		RAL 1023	021
Red		RAL 3000	031
Orange		RAL 2008	035
Purple		similar to RAL 4008	040
Green		RAL 6037	062
Blue		RAL 5015	052
Black		RAL 9005	070
Grey		RAL 7005	071
Silver		RAL 9006	090
Brown		RAL 8003	801
			other to order



Where should labels and tapes be placed on pipelines?

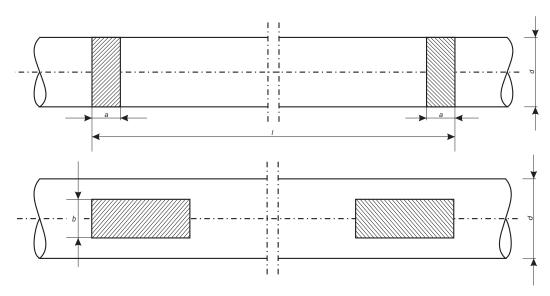
Typically, pipeline labelling should be found at four key locations:

- Every 60-500 cm (depending on the size of the pipeline) along straight pipeline routes.
- At each change of direction point (on b oth sides).
- On both sides of each entry/exit point of the system into/from the floor or wall.
- Next to all flanges and valves.

How to place labels and tapes on pipelines to ensure their maximum visibility?

Labels or tapes for pipeline labelling should always be placed in the line of vision of an employee, service technician or rescue services.

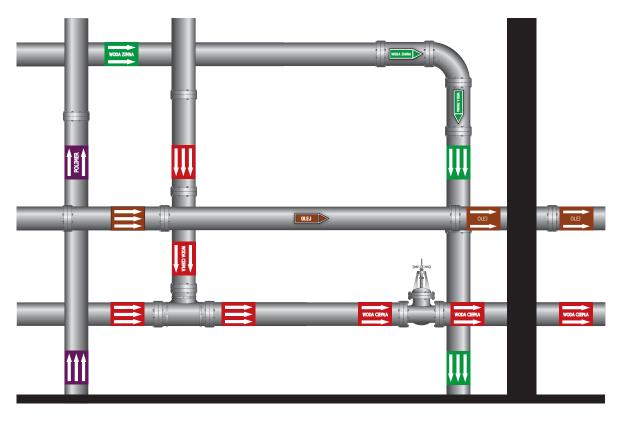
- The label/tape should be visible from any point of possible approach to the pipeline.
- The label/tape should be visible at any point of entry into the wall, floor or ceiling.
- If the pipeline is located below the line of sight, the label/tape should be placed above the centreline (horizontal axis) of the pipeline.
- If the pipeline is located above the natural line of sight, the label should be placed below the horizontal axis of the pipeline.



Recommended dimensions of tape and labels				
Pipeline diameter (d) [mm]	Tape width (a) [mm]	Label height (b) [mm]	Gap between marking (l max) [mm]	
below 80	40	20	2000	
from 80 to 160	80	40	3000	
from 160 to 315 (300)	100	80	4000	
above 315 (300)	160	120	6000	

PIPE MARKING - RECOMMENDATIONS





The table below shows the most frequently used labelling guidelines (based on ASME / ANSI standards and the Polish non-binding standard PN-70/N-01270).

Identification colours		
COLOUR	Colour of the text (arrows), background and framing (arrow labels)	Description
White	OTHER ↑	Other defined
Yellow	GASES ↑	Gases – also liquefied gases. Most frequently flammable gases
Red	HALON ↑ HOT WATER	Water and other substances used in fire protection systems (ANSI). Sometimes hot water
Orange	TOXIC ↑	Caustic, toxic or corrosive fluids. Toxic substances
Purple	ACIDS AND BASES ↑	Acids and bases
Green	WATER∱	Any water not used in the fire protection system
Blue	AIR ∱	Any compressed vapours or gases which do not fit into other categories
Black	OTHER LIQUIDS ↑	Any liquids that do not fit into other categories
Grey	ASH ↑	Other, e.g. ash
Silver	VAPOUR ↑	Vapour
Brown	OILS AND FLAMMABLE LIQUIDS ☆	Oils. Also liquids, which may burn but are not flammable

If you need detailed assistance in planning and designing pipeline labelling, please contact our technical advisers.









PIPE MARKING ACCORDING TO THE ISO 20560 STANDARD



ISO 20560 is a new global standard ensuring uniformity in the marking of piping systems and tanks. This is the very first global standard which outlines a unified marking safety system for pipes and storage tanks. The uniformity of graphical symbols, coherent colour coding solutions and identical methods of information distribution are to ensure better recognition and quicker comprehension to enable an immediate identification of potential danger.

Until recently, there existed various national and international standards for the marking of piping systems and tanks; however, there was no single, coherent system. This is set to change with the implementation of the new ISO 20560 standard. Specialists delegated by as many as nine countries were actively involved in the development of this new standard. This working group was responsible for developing the new guidelines of ISO 20560-1 – the part relating to piping systems and ISO 20560-2 – the part focusing on tanks.

The reasoning behind the new ISO 20560 standard is the standardisation of the system and procedures for the marking of tanks and pipelines in a consistent and understandable manner regardless of the type of facility where the new guidelines are applied. This will ensure that the identification of hazards inside any factory compliant with ISO 20560 will be consistent and understandable to both permanent employees, external service providers and emergency services.

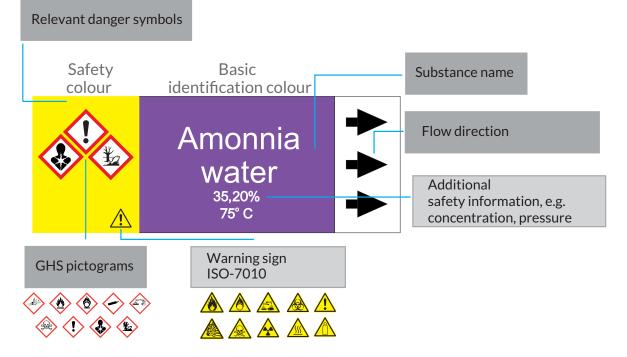
Would your company like to implement the ISO 20560 standard? Our expertise and experience in the marking of piping systems and tanks will help you make this a reality. Contact us if you would like more information on the new ISO 20560 standard or if you wish to receive a quote for the marking of pipes and tanks.

ISO 20560 MARKING STANDARD









Elements of the safety information system for pipelines - ISO 20560.1

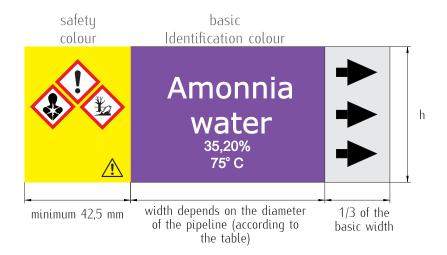
The amount of information contained in a pipeline marking system is dependent on various factors such as the type of facility, its complexity, the availability of safe work instructions as well as the competencies and skills of those working on each section of the installation. Each enterprise is required to select the necessary information to be displayed on the pipelines on the basis of its own operating instructions and the hazards resulting from work organisation and risk assessment procedures.

The information contained in the safety marking system must include:

- colour coding to identify the contents of the pipeline,
- the name of the medium,
- arrows indicating the direction of flow,
- where necessary, warning signs and GHS symbols either on their own or together.







Basic requirements of ISO 20560-1:2020 marking standard

The following requirements should be taken into account when selecting the correct size and layout of the various components of the safety information system for pipelines:

- the minimum width of the basic identification colour or, when used alone, the safety colour for pipes with an outside diameter not exceeding 150 mm shall be 85 mm.
- for pipelines with an outside diameter exceeding 150 mm but not exceeding 500 mm, the minimum width of the basic colour or, when used alone, the safety colour shall be 120 mm.
- for pipelines with an outside diameter exceeding 500 mm, the minimum width of the basic colour or, when used alone, the safety colour shall be 200 mm.
- for pipes with an outside diameter exceeding 500 mm, the minimum colour surface area in mm² for the basic colour area or, when used alone, the safety colour area shall be 50 times the outside diameter of the pipeline. For pipelines with a diameter exceeding 500 mm, the minimum colour surface area shall be no smaller than 25,000 mm².
- when a safety colour is added, the minimum width of the safety colour should be 50% of the width of the basic colour area.
- a maximum of two lines of text should be used for displaying the content name of the substance in the pipeline.
- the minimum font height should be 7 mm.
- the minimum arrow point height should be 10 mm.
- the minimum height of warning signs and GHS pictograms should be 20 mm.
- to increase visibility, the marking system on the pipelines should have sufficient contrast with the surface on which it is mounted.
- when a pipe is seen from two sides, the safety information marking should appear on both sides of the pipe.

Safety colour and basic identification colours

	Content of a pipe	Text colour	Basic identification colour
Safety colour	Hazardous substances	Black	Yellow
Basic identification colour	Gases in either gaseous or liquefied condition	Black	Grey
tachiatan cotoal	Liquids and fixed materials (powder, granulates)	White	Black
	Acids	Black	Orange
	Alkalis (leaches)	White	Violet
	Firefighting medium	White	Red
	Water	White	Green
	Air	White	Blue



Marking sizes depending on the diameter of the pipeline

Outer diameter of the pipeline – d	Minimum width of the basic color
d ≤ 150 mm	85 mm
$150~\text{mm} \leq d \leq ~500~\text{mm}$	120 mm
500 mm ≤ d	200 mm

text height ≥ 7mm

 $l = \frac{d \times 50}{h}$

The height of the labels depends on the diameter of the pipeline

 $h=50\ x$ pipeline diameter / min. basic identification color width

For example:

 $h=50\times 90/85=52.9~mm$ – for a pipeline with a diameter of 90 mm $h=50\times 170/120=70.8~mm$ – for a pipeline with a diameter of 170 mm

DIAMETER OF THE PIPELINE SAMPLE TAPES $d \leq 150 \ mm$ Basic identification colour **Ammonia BINOMMA** 85 mm 85 mm $150~\text{mm} < d \leq 500~\text{mm}$ Caustic Basic identification colour soda **epos** Caustic 120 mm 60 mm 120 mm d > 500 mmSulphuric acid basic identification colour

Sulphuric bise

200 mm





- Unstable explosives
- Explosives, divisions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6
- Self-reactive substances and mixtures, types A, B

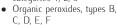
COKE

OVEN

Organic peroxides, types A, B



- Flammable gases, category 1
- Flammable aerosols, categories 1, 2
- Flammable liquids, categories 1. 2. 3
- Flammable solids, categories
- Self-reactive substances and mixtures, types B, C, D, E, F
- Pyrophoric liquids, category 1
- Pyrophoric solids, category 1 Self-heating substances and
- mixtures, categories 1, 2 Substances and mixtures, which in contact with water,
- emit flammable gases, categories 1, 2, 3



SAMPLE GHS TANK BOARDS

TANK 11

 $V = 49,5 \text{ m}^3$

NEODOL 23



GHS-03

- Oxidizing gases, category 1
- Oxidizing liquids, categories 1 2 3
- Oxidizing solids, categories 1, 2, 3



GHS-04

Refrigerated liquefied gases

· Compressed gases

Liquefied gases

Dissolved gases



• Corrosive to metals, category 1

GHS-05

- Explosives, divisions 1.5, 1.6 Flammable gases, category 2
- Organic peroxides, type G
- Skin corrosion, categories 1A, 1B, 1C
- Serious eye damage, category 1

GHS LABEL ELEMENTS



PENTAN

DANGER!

Extremely flammable gas. Contains gas under pressur. May explode if heated. Gas may reduce oxygen in confined spaces.



- Keep away from heat/spark/open flames/hot surfaces. No smoking. Protect from sunlight. Store in a well-ventilated place. Leaking gas fire: Do not extinguish, unless leak can bestopped safely. Eliminate all ignition sources if
- safe to do so. Eye contact: For liquified gas, flush eyes with
- lukewarm water. Seek immediate attention. Skin contact: Liquified gases may cause cryogenic burns. Treat burned or frostbitten skin by flushing or immersing the affected area(s) in lukewarm water. Do not rub affected area.
- Inhalation: If respiratory systems develop, move victim away from source of exposure and into fresh air. Seek medical attention.

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1 Product Identifier

Name or number used for a hazardous product on a label or in the SDS.

2 Signal Words

"Danger" or "Warning" are used to emphasize hazards and indicate the relative level of severity of the hazard assigned to a GHS hazard class and category.

3 Hazard Statements

Standard phrases assigned to a hazard class and category that describe the nature of the hazard.

4 Precautionary Statements

Measures to minimize or prevent adverse effects.

5 GHS Pictograms

Standardized set of symbols which convey health, physical, and environmental hazard information.

6 Supplier Identification

Company name, address, and phone number should be listed on the label.

SAMPLE GHS ADHESIVE LABELS

COKE

OVEN









GHS LABFLING





Acute toxicity (oral, dermal, inhalation), categories 1, 2, 3



- Acute toxicity (oral, dermal, inhalation), categoru 4
- Skin irritation, categories 2, 3
- Eye irritation, category 2A Skin sensitization, category 1
- Specific target organ toxicity following single exposure, category 3
- Respiratory tract irritation Narcotic effects



categories 1A, 1B, 2

Reproductive toxicity,

categories 1A, 1B, 2

categories 1, 2

categories 1, 2

1A, 1B, 2

Carcinogenicity, categories

Specific target organ toxicity

Specific target organ toxicity

following repeated exposure,

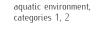
Aspiration hazard, categories

following single exposure,



- Respiratory sensitization, • Acute hazards to the aquatic environment, category 1 category 1 Germ cell mutagenicity,
 - Chronic hazards to the aquatic environment, categories 1, 2







GHS pictograms can be printed on self-adhesive foil, magnetic foil and PVC. We also use other materials - dibond (aluminum composite sheet), steel sheet or PVC coated with a photoluminescent layer (signs glowing in the dark).

GHS pictograms can also be used as elements of health and safety boards and other visual management systems.

GHS

Global Harmonised The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) is an internationally agreed-upon standard managed by the United Nations that was set up to replace the assortment of hazardous material classification and labelling schemes previously used around the world. Core elements of the GHS include standardized hazard testing criteria, universal warning pictograms, and harmonized safety data sheets which provide users of dangerous goods with a host of information.

SEE ALSO

Health and safety pics

p.122







SEE ALSO

Pipe marking tapes

p.28

GHS IDENTIFICATION PLATES









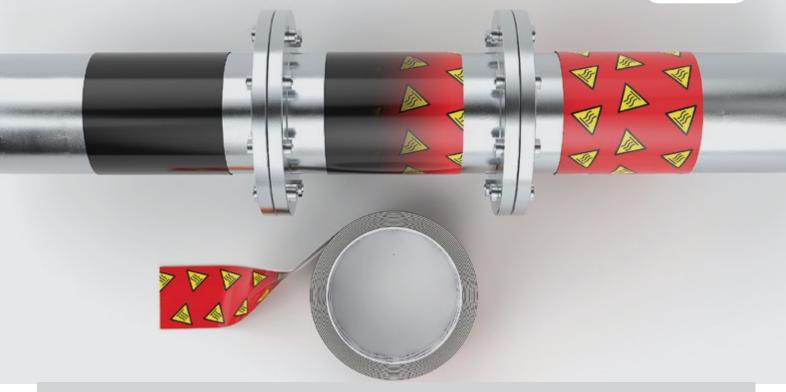


SEE ALSO Identification plates

p.6







HEAT DETECTION TAPE

The **Heat Detection Tape** is a self-adhesive warning tape with a unique feature of hot surfaces detection. It is designed to sensor and to provide visual recognition of surfaces where the temperature exceeds safe level for people and there is a high probability of thermal burns.

When the applied surface exceeds the temperature of approximately 60°C the T-TO tape changes color from black to vibrant red and exposes the hot surface warning symbols. As soon as the temperature drops, the symbols disappear and the tape returns to its original color.

Product destined for surfaces with a periodical temperature change. In case of a constant exposure to the maximum temperature, the actual service lifetime may be shorter than declared.

The T-TO **Heat Detection Tape** has a wide field of application and it increases the level of safety of industrial installations, engine rooms, offshore platforms or any other places at risk of heat burns as a result of a skin contact with a hot surface.

TECHNICAL SPECIFICATION

Operating temperature	-40°C to + 120°C
Application temperature	-10°C to + 35°C
Shelf lifetime	Undifined storage lifetime
Service lifetime	6 months - 2 years (depending on the frequency of exposure)
Solvent resistance	Resistant to solvents and mild chemicals
Fungus resistance	Resistant to fungi







HEAT DETECTION TAPE T-TO

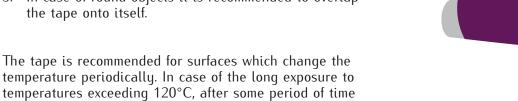
CODE	DIMENSION	THICKNESS
T-TO/50	50 mm x 5 m	0,4 mm
T-TO/75	75 mm x 5 m	0,4 mm
T-TO/100	100 mm x 5 m	0,4 mm

INSTALLATION

- Clean and dry the surface.
- 2. Remove any loose coatings or rust, if necessary.
- 3. Remove the backing from the tape.
- 4. Adhere the tape to the surface and press rmly.

the tape would permanently change the color to red.

5. In case of round objects it is recommended to overlap the tape onto itself.



	INDUSTRIAL FLOOR PAINTING	48-51
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INDUSTRIAL FLOOR MARKING AND PAINTING















FLOOR LINES PAINTING

STENCILS

FLOOR MARKING TAPES

str. 48

str. 54

str. 58

The painting of lines delineating traffic areas is best suited for open spaces and in areas of particularly heavy vehicle traffic, e.g. forklift traffic.

Floor and road marking stencils are used for permanent marking in areas where it is not possible or acceptable to use self-adhesive symbols.

Floor marking tapes (for the designation of traffic routes) are a simple and quick solution for the creation of safety zones for vehicle and pedestrian traffic, and the separation of stored goods.

INDUSTRIAL FLOOR MARKING & PAINTING















FLOOR MARKING SELF-ADHESIVE SIGNS **Floor marking** is crucial to the creation of a visual workplace, as it makes it easier for employees and all visitors to a warehouse, factory or institution to understand that space.

Elmetal offers comprehensive floor marking services for production plants, warehouses and offices.

Our product portfolio includes an extensive range of stencils, paints, applicators and tapes for independent application.

- Floor marking primarily includes:
- Designation of traffic routes for forklifts and other vehicle traffic
- Pedestrian crossings
- Standard and special parking spaces (for instance, for disabled persons)
- Numbering of parking spaces
- Warning signs around ramps and posts
- Areas excluded from traffic, e.g. fire routes
- Selef-adhesive floor marking signs and labels
- Road surface markings (arrows, stripes and other symbols)
- Storage areas

str. 56

Floor marking signs and symbols made using self-adhesive film. The symbols are laminated with an abrasion-resistant film.













For industrial floor marking we exclusively use professional and tested road marking paints designed for horizontal painting of roads, yards, parking lots, streets and other road and passageway surfaces with a bituminous or concrete wearing surface.

These paints have excellent technical parameters, and are characterised by very good adhesion and visibility in all conditions, both during the day and at night. They are guickdrying and can be applied in many different ways. In view of their intended use, they have excellent wear resistance.



Road marking machine



Elmetal's product range includes marking for production plants and warehouses. We provide the comprehensive organisation of any facility. We implement functional labelling of transport routes and designate parking spaces in garages and parking lots.

The scope of our work includes both painting and the removal of road surface marking.







INDUSTRIAL FLOOR PAINTING



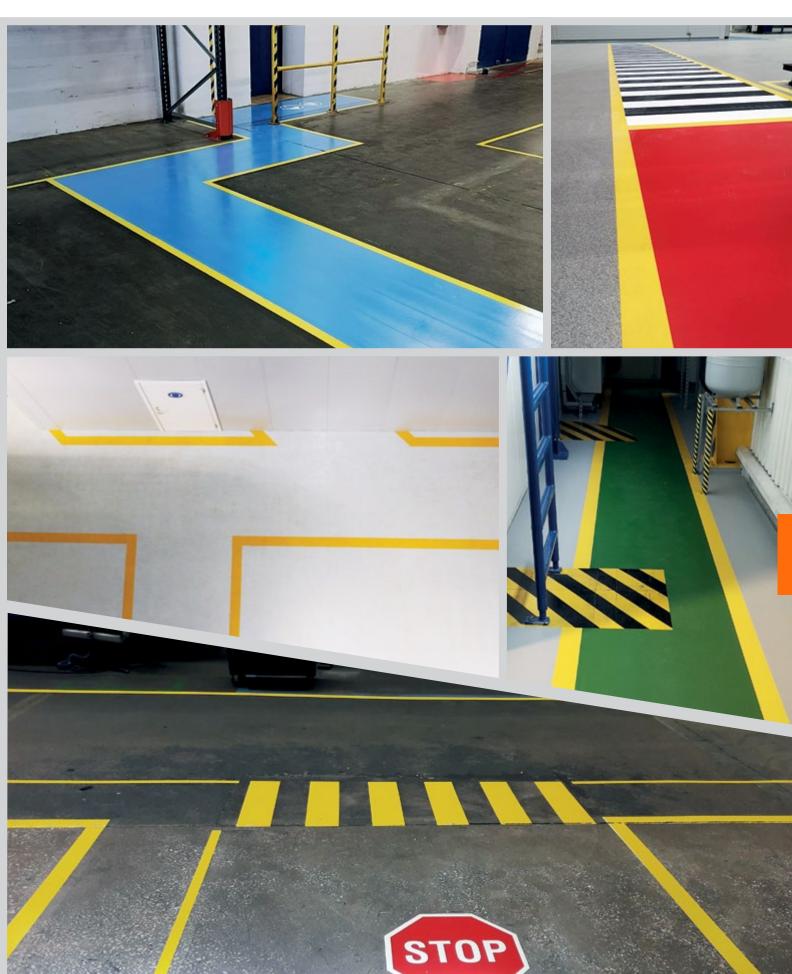






INDUSTRIAL FLOOR PAINTING



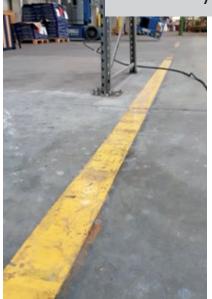








THE REMOVAL OF LINES AND FLOOR MARKINGS





The removal of lines and floor markings is especially necessary after the reorganisation of traffic on circulation routes or after the expansion and modernisation of a production area. Sometimes, old floor markings are simply worn and illegible and therefore require repainting.

Old markings are often removed to make way for new parking spaces, new workstations, or simply to increase productivity in the workplace.



Elmetal removes all types of floor markings – lines, stripes, pedestrian crossings, arrows and other 5S shapes. The paint removal method is individually chosen to suit the particular type of surface.

In the case of concrete surfaces, we often choose a dust-free method that does not use any chemical agents. As a result, the work can be carried out without generating harmful vapours and dust that could damage machinery and endanger the health of the team. This method also does not require disruptive downtime.

Removal of floor markings on concrete:

- Dust-free (the abraded layer is transferred directly into bags)
- Solvent-free
- Removal using an electrically driven machine
- Dry removal
- Thin-layer removal (does not cause deep irregularities in the surface)

In the case of resin flooring, the recommended solution is repainting the existing markings.

EASYLINE EDGE PAINTS







Easyline Edge Applicator

Ideal for marking factory floors, stores and warehouses, car parks, playgrounds and other hard flat surfaces.

- Revolutionary line marking paint applicator-produces 3 line widths; 50mm, 75mm, 100mm
- Adjustable rear wheels allow line marking close to walls and racks
- Paint applicator is quick to assemble and simple to use

 no additional equipment or knowledge required

For internal and external use

Easyline hand applicator

Hand-held applicator used for freehand marking and stencilling. This system gives the user added comfort and ease of use.



Easyline Line Marking Paint Aerosol

Capacity of 750 ml (aerosol)

- Dries in 10 minutes, easy to apply, no mess, no wastage
- complies with your legal obligations under European Directive 92/58/EEC
- Health and Safety focused-non toxic, non harmful and irritant free formula
- Ideal for stencilling/free hand marking



Order paints and applicators www.sklep.elmetal.pl



The EasyLine floor marking system consists of an applicator (hand-held or automatic) and paint aerosol. The hand-hel applicator is used to mark smaller surfaces and individual shapes using, for example, a stencil, while an automatic applicator is used to paint lines.



EASYLINE EDGE PAINT (750 ml)				
Colour	Colour			
White	RAL 9016	general marking		
Yellow	RAL 1023	hazard / caution		
Red	RAL 3020	danger / prohibition		
Blue	RAL 5017	mandatory / protection		
Green	RAL 6024	information / direction		
Orange	RAL 2009	chemical storage		
Black	RAL 9017	delete existing line		
Grey	RAL 7045	delete existing line		
Fluorescent yellow		other		



Stencils which are used for horizontal application of paint enable the marking of the flooring inside production halls, warehouses as well as on parking lots and roads.

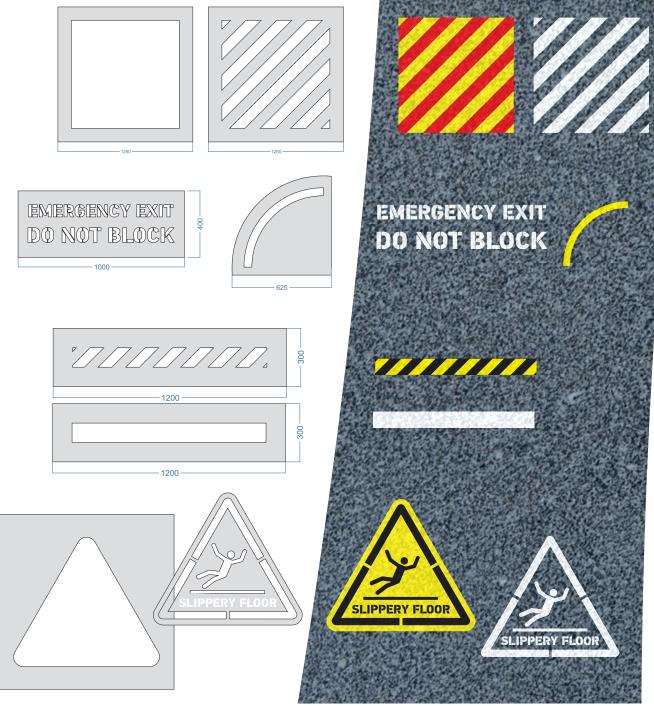
As the products are made from high-quality materials, they are durable and easy to clean, and the stencils can be reused on numerous occasions.

We also prepare practical cases for storing and moving stencils.



MARKING STENCILS





Stencil types:

- alphanumeric characters
- words
- codes
- lines and strips
- door swing area
- other to order















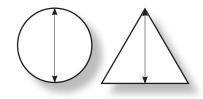




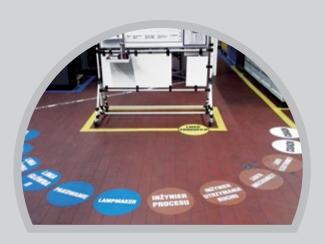
sign layer

self-adhesive layer

release liner

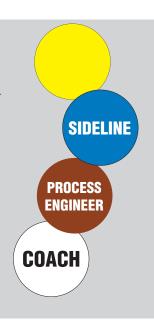


As standard, the signs come in a circular shape with a diameter of 300 mm (prohibition and mandatory signs) or a triangle which is 300 mm high (warning signs).



FLOOR MARKINGS AS VISUAL CONTROL ELEMENT

Floor signs designed and produced by Elmetal are a crucial and primary element of visual management in a company. They are perfectly compatible with the concept of Lean Management of manufacturing processes.



FLOOR MARKIN SIGNS







MOST OFTEN USED



















SEE ALSO

List of standard pictograms

p.122

Photoluminescent signs

p.132

Floor marking signs made from high-quality self-adhesive film with excellent adhesion (30 N/25 mm) and increased resistance to water, fats, oils, as well as low concentrated acids and bases.

The film is resistant to temperatures between -40°C and $+80^{\circ}\text{C}$. The signs are additionally protected with hard-wearing film which minimises wear. The signs are resistant to sunlight.

Each signs can also be prepared with an additional photoluminescent layer, ensuring their visibility in the dark or low light.

As standard, the signs come in a circular shape with a diameter of 300 mm (prohibition and mandatory signs) or a triangle which is 300 mm high (warning signs).

WE PREPARE SIGNS OF INDIVIDUAL DESIGN AND SIZE

TPM-AM











DIVERTED TRAFFIC!











VINYL TAPES

Adhesive vinyl tapes - Eexcellent for the marking of surfaces in warehouse and production halls. Used primarily for the designation of traffic routes, warehouses, storage areas, etc. The tape has very good adhesion properties and great resistance to wear. Easy to keep clean. Vinyl tape features no backing paper. Supplied in a standard version or laminated for additional protection from wear.

Available in rolls with a length of 33 m, width of 50 mm or 100 mm, and thickness of 0.17 mm. Available colours: black, yellow, yellow-black, blue, red, white, white-red and green.

The installation is guaranteed to be quick, clean and simple.

Hazard tape yellow-black WT 1648

Tape for temporary marking of communication routes, storage areas or dangerous places (caution area). It can also be used as a fencing tape. Resistant to abrasion, corrosion and moisture. After disassembly, it does not leave any marks on the surface.

Tape width: 48 mm Length: 16 m

Thickness: 0.135 mm

VINYL TAPES	COLOURS	width	roll lenght	thickness	Material	temperature resistance	
White							
Yellow							
Red							
Green		50 mm,	22	0 17	PVC;	from -10°C	
Blue		100 mm	100 mm	33 m	0, 17 mm	rubber based glue	to +80°C
Black							
White-red							
Yellow-black							



Warning! Before assembly, the surface should be thoroughly cleaned.



Order vinyl tapes www.sklep.elmetal.pl

FLOOR MARKING TAPES













If you find that painting aisle striping is too expensive and involves too much downtime, the DuraStripe program is the perfect solution for your facility floors. DuraStripe floor tape can be used in any workplace looking to increase productivity.

DuraStripe floor marking tapes and shapes are easy to install and will last a long time, even in industrial facilities with lots of activity and traffic. That means instead of worrying about the state of your floors, you can focus on the rest of your business.

DuraStripe, with its quick and easy "peel-and-stick" application, its numerous, vivid, long lasting colors, and its simple, no-residue removal, is the ideal tool for an effective 5S, SixSigma or Visual Factory programs.

DURASTRIPE SELF-ADHESIVE FLOOR MARKING TAPES						
Туре	Material	Glue	Hardness	Thickness	Width [cm]	Colours
LEAN	PCV	Acrylic	95º Sh A	0,76 mm	5 / 7,5 / 10 / 15 / 30,5 / 61 / 86,5	white
SUPREME V	PCV	Rubber based	95º Sh A	0,91 mm	5 / 7,5 / 10 / 15 / 30,5 / 61 / 86,5	white
X-TREME	PCV	Rubber based	98º Sh A	0,76 mm	5 / 7,5 /10	white
COLD STORAGE	PCV	Acrylic	95º Sh A	0,85 mm	5 / 10	white
OUTDOOR	PCV	Acrylic	95º Sh A	0,85 mm	5 / 10	white







MEAN LEAN

SUPREME V

X-TREME

Mean Lean DuraStripe is our most economical and lowest profile marking product. It has a durable, smooth surface layer that cleans easily and resists damage from pivoting tow-motor wheels. Because of its low profile, Mean Lean does not have a beveled edge.

DuraStripe Supreme V combines the conforming adhesive from original DuraStripe with the low impact profile of DS Lean. This makes it the Supreme choice for a variety of challenging floor conditions. In addition, Supreme V offers the benefit of having tapered edges to eliminate most potential tripping & impact hazards.

This new heavy-duty DuraStripe is made for critical environments and area where pivoting with forklifts / tow motors can occur. DuraStripe X-Treme has a special coated surface that facilitates easy cleaning.The X-Treme as with the DSV, comes with bevel edges to limit damages from dragging of pulling of pallets.

MEAN LEAN	J
new building / smooth floors	superior
porous floors	not recommended
old, oily, dirty or epoxy floors	not recommended
uneven or tiles	not recommended
available in 5S shapes	yes
available / custom colours	7 / no
standard widths [cm]	5 / 7,5 / 10
beveled edge	no
roll lenght [m]	30, 60, 120
nominal thickness [mm]	0,56

SUPREME V	<i>'</i>
new building / smooth floors	superior
porous floors	excellent
old, oily, dirty or epoxy floors	excellent
uneven or tiles	excellent
available in 5S shapes	yes
available / custom colours	7 / no
standard widths [cm]	5-86,5
beveled edge	yes
roll lenght [m]	30, 60, 120
nominal thickness [mm]	0,91

X-TREME	
new building / smooth floors	superior
porous floors	excellent
old, oily, dirty or epoxy floors	excellent
uneven or tiles	excellent
available in 5S shapes	yes
available / custom colours	11 / yes
standard widths [cm]	5 / 7,5 / 10
beveled edge	yes
roll lenght [m]	30, 60, 120
nominal thickness [mm]	0,76



Order tapes sklep.elmetal.pl

DURASTRIPE TAPES





Note: As with any print and tape installation, it is crucial that the floor be prepared properly, and is as clean and dry as possible. Remove all old tape adhesive and/or chipped paint completely from the floor surface.

COLD STORAGE

Durastripe Cold Storage Floor Marking Tape combines a durable, impact resistant striping surface with an aggressive, low temperature adhesive to deliver a safety striping material that conquers the cold. Its low friction surface is engineered to resist damage caused by skidding and pivoting forklift wheels - two common causes of aisle marking destruction. Beveled edges assist dragged or pushed pallets in sliding over the stripe to resist chipping, slicing and tearing, even in cold environments.

COLD STOR	AGE
epoxy floors / smooth floors	superior
cold	excellent
old, oily, dirty or epoxy floors	excellent
uneven or porous	not recommended
available in 5S shapes	no
available / custom colours	7 / no
standard widths [cm]	5 /10
beveled edge	no
roll lenght [m]	30
nominal thickness [mm]	0,85

OUTDOOR

Ergomat DuraStripe Outdoor Marking Tape is designed for outdoor spaces, has a strong adhesive, is easy to apply, maintain and remove.

Available in two widths (5 cm and 10 cm).

new building / smooth floors superior excellent porous floors excellent excellent

OUTDOOR

old, oily, dirty or epoxy floors uneven or tiles available in 5S shapes no 7 / no available / custom colours 5 /10 standard widths [cm] beveled edge no 30 roll lenght [m] 0.85 nominal thickness [mm]

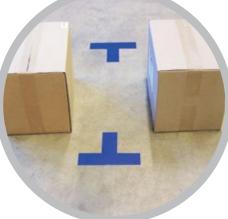
INSTALLATION

- Remove a few centimeters of the protective backing from one end of the DuraStripe.
- Place the adhesive backing on the floor where desired and press firmly.
- Using a roller or pressing down on the Durastripe with one hand, continue to peel the protective backing from the DuraStripe with the other hand.
- To end a line, simple cut the DuraStripe with scissors or a utility knife.
- To create mitered corners, allow two pieces of DuraStripe to overlap, with the bottom piece adhered to the floor, and the top piece overlapping with the protective backing in tact.
- Complete the miter by cutting both layers together from the inside corner to the outside corner.
- To increase DuraStripe products bond to the floor, you may drive something heavy, such as a forklift, over the entire line.
- Repeat steps 1-7 as needed to complete your installation.











PUX

Durastripe pux - are perfect for places of increased traffic of forklift trucks in factories and industrial halls. The "Pux" format enables easy exchange of markings in the event of their damage after passing heavier vehicles.

"T" SHAPES

Durastripe T's are useful in conjunction with Durastripe Corners and other shapes. They act as a T-junction when making multisquare patterns and other advanced layouts.

STRIPS

Adhesive Strips can assist with organizational, 5S, and safety efforts. Use them to outline work cells, mark the locations of equipment, and more.







FOOT PRINTS

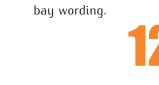
Foot Print shapes are great for showing direction, way finding and for improving general awareness of pedestrian routes.

PEDESTRIAN

Durastripe Pedestrian – perfect for areas where you need to place floor marking to clearly designate and direct the flow of foot traffic.

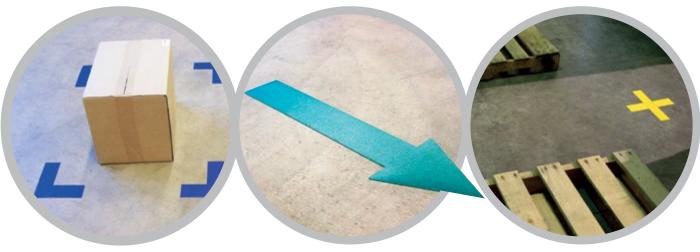
LETTERS & NUMBERS

Adhesive Floor Letters & Numbers are a great alternative to painting the floor to denote location references and bay wording.



DURASTRIPE SHAPES





CORNERS

Adhesive corners - ideal for delimiting the areas of cards, racks, work tables, and for other storage areas.

ARROWS

Durastripe arrows are the ultimate way to direct traffic and make your facility look and function like it should. These arrows are great for any 5S program and last for years handling light traffic.

"+" SHAPE

Adhesive X shapes are a great addition to the Durastripe floor marker range, providing a multi bay or line separator for walkway lines storage bays and marshaling lanes.



Order floor marking shapes www.sklep.elmetal.pl



INSTALLATION

As with any print and tape installation, it is crucial that the floor be prepared properly, and is as clean and dry as possible. Remove all old tape adhesive and/ or chipped paint completely from the floor surface.

Floor surfaces containing cracks or holes can reduce the lifespan of DuraStripe products. In areas such as high traffic zones, where pallets, skids or other objects have the tendency to scrape or drag on the ground, we recommend using the DuraPux or to score a solid line every foot.

DuraStripe Shapes are perfect supporting tools for any 5S, Six Sigma, or Visual Workplace programs.

DuraStripe Shapes are the perfect way to connect traditional DuraStripe floor lines, or to add specific organizational or caution symbols to your workplace floors. With the same adhesive backing, and made from the same material as our regular DuraStripe floor tape, these shapes will give a custom look to your warehouse or factory.

They are easy to install and easy to reconfigure, making them ideal devices to support the evolving efficiencies on a production floor.







DURASTRIPE MARKING













PRODUCT AND MATERIAL STORAGE

Many facilities utilize floor marking in product and material storage areas to communicate to employees where they can find what they need. These markings can be temporary for holding areas where products in various stages of production are kept or permanent for long-term storage areas that house finished products or raw materials.

Considered a key component of the 5S process in lean manufacturing, this application of floor marking yields gains in efficiency and safety by reducing worker confusion.



TOOLS AND EQUIPMENT

Placing outlines around equipment and tools is another common application of floor marking.

An example of this is placing white tape around the base of portable tools or machinery to indicate its proper location. This eliminates the time employees would waste searching for needed resources. Outlining machinery also enhances safety because the line can indicate the reach of the machine's components and the space it needs to operate.



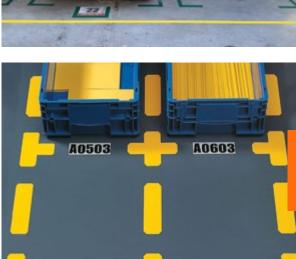
STORAGE AREA MARKING





















Self-adhesive floor marking window perfect for identification of storage areas, forklifts or logistic boxes. The yellow color of the window frames ensures excellent visibility of the marking.

The document is placed under a window that sticks to the substrate thanks to a self-adhesive tape applied under a transparent PVC material (typically 0.5 mm thick). The width of the border frame and the self-adhesive layer is 5 cm.

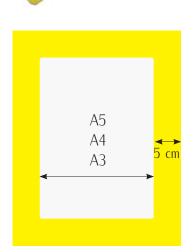
To facilitate access to the document, when it is necessary to replace it frequently or update, you can use the three-sided glued window.

For more information, contact our advisers.

INSTALLATION



Warning! The surfaces to which the material will be applied should be thoroughly clean, dry and completely free of dust, grease and any other residue. Freshly painted surfaces should be allowed to dry for at least three weeks or at least thoroughly cured.



We accept orders for individual designs and custom sizes of windows

ASPHALT STICKERS







ASPHALT STICKERS

The use of innovative film makes stickers for marking asphalt, pavement and unit paving easy to apply and remove, without the need to use heat. The stickers do not change their shape as they are made of polyurethane film, which contains aluminium. Asphalt stickers are made from self-adhesive film intended for road and pavement marking – the film effectively replaces the painting of short and medium-term markings depending on its place of use.

The stickers can be applied on surfaces such as asphalt, cement, unworked stone, paving stones and similar. The asphalt film is easy to remove and resistant to abrasion and other factors resulting from regular use.

The specially developed adhesive applied on the film can be used on very difficult, porous surfaces, both indoors and outdoors.

STICKER USE

- outdoor and indoor floor marking in production areas and warehouses
- information and warning marking near entrances, stairs, factory paved footpaths or car parks
- temporary signage of hazardous areas
- directional and health and safety marking in circulation routes
- pedestrian crossings

ADVANTAGES

- superb visual effect
- easy application and removal
- perfect for rough, uneven surfaces with limited adhesion
- high abrasion resistance
- high adhesion and durability
- PVC-free
- excellent slip resistance R12 certificate







AISLES RACKS AND DOCKING LOCATION MARKING

- marking of paths, aisles and circulation routes (traffic signs, boards, barriers)
- marking of racks, pallet storage positions, bins and containers
- labelling of locations
- OHS marking (hydrants, fire extinguishers)
- marking with special signs
- installation of bumper rails, barriers and safety mirrors
- interactive safety gates

FLOOR MARKING

- marking of pedestrian circulation routes and forklift traffic routes
- painting of transport routes
- marking of staging areas
- marking with special signs (arrows, warning and information signs, other pictograms)
- marking of loading ramps and docks
- marking of workstations
- painting of parking spaces and lines







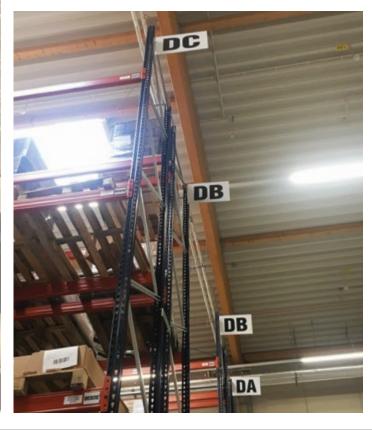












WAREHOUSE MARKING

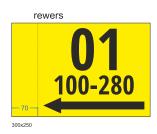


EXAMPLES OF RACK MARKINGS

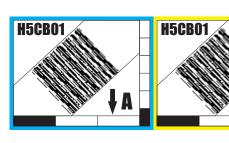


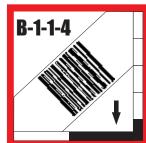


∱B



































MATERIALS









LEAN BUARDS	
SHADOW BOARDS 5S	78-79
MOBILE 5S STATIONS	80-81
5S CABINETS AND TOOL BOARDS	
MOBILE FIRST AID STATION	83
5S SHADOW FOAMS	84-85
PERFORATED BOARDS	86-87
ALUMINIUM CONSTRUCTION PROFILES	
ROAD SIGNS / ROAD BOARDS	92
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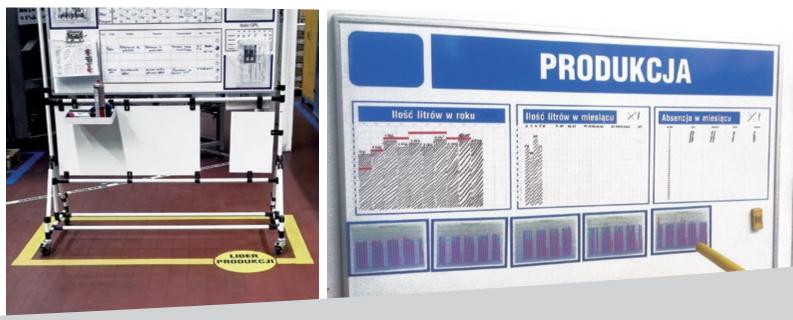






We will design and make LEAN boards in accordance with your standards and requirements.





LEAN BOARDS

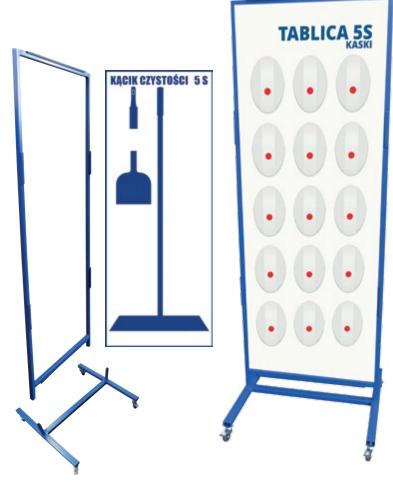
The boards and signs manufactured by Elmetal form part of the plant visualisation system and are a tool of the Lean Management system. They are made exclusively from high-quality materials. The variety of the materials on offer enables a suitable selection of the product to the objective it is to fulfil.

As required by the Lean Management system, Elmetal can manufacture any boards to visually inform the employees of any instructions from the management.





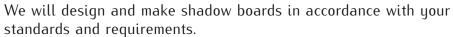






- made of aluminum profiles or steel modules
- easy to assemble (modular)
- washable
- durable
- very effective in organizing a workplace







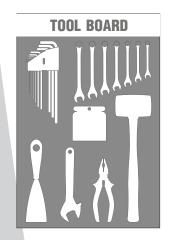
5S BOARDS AND STATIONS







5S BOARDS AND STATIONS





Shadow boards are an excellent solution to maintain tools, accessories and workplace control within a production plant. If any item is missing from the board, the shadow visible on the board immediately notifies us of this fact.

By using assorted colours, we can assign specific boards to designated areas inside the plant.

Each shadow board is created as an individual project – we carefully select suitable materials and technology to perfectly match client expectations.











MOBILE 5S STATIONS

Mobile 5S stations are an exceptionally innovative LEAN tool. The four-wall mobile structure (on wheels) is constructed from aluminium profiles and shadow boards. This mobile service station, which you can move around with ease, is perfect for when you want to have all your tools at hand.

The mobile 5S stations can be effortlessly moved between workstations, production lines or even from one shop floor to another. The four shadow boards make it possible to set up, for example, a cleaning station, a service repair station, a tool board with tools and a station for drawing up reports and drafting documents.

Lightweight and robust frame made from aluminium profiles

The tough yet lightweight structure built from aluminium profiles provides the boards with a longer lifespan. The structure is lighter, so it is easier to transport.

MOBILE 5S STATIONS









We will fit the boards with the accessories you need

All the brackets, hooks, pockets and shelves used in the stations will be selected to meet your requirements.

We design and print elements in 3D

We design and, using a 3D printer, manufacture tool holders and equipment for 5S stations. Each tool is scanned beforehand. Metal objects can be additionally supported by magnets installed in the brackets.









5S CABINETS AND TOOL BOARDS

Shadow tool boards and cabinets serve to organise and store tools or items of personal protective equipment.

We design and print brackets tailored to the specific tools as well as to the method and location of their use.







MOBILE 5S STATIONS



■ PUNKT PIERWSZEJ POMOCY



MOBILE 5S FIRST AID STATION

Mobile first aid station on a 5S board provided with a stand. The wheeled 5S board is an ideal first aid solution in locations without a fixed, dedicated area, such as next to a wall. This board is perfectly visible and can be easily moved.

Each mobile first aid station is created as an individual project — with first aid equipment tailored to the specific requirements of the company or institution. First aid items can be attached to the board permanently (for example, wall-mounted first aid kits or eye wash stations) or hung on brackets (first aid kit in a case, Automated External Defibrillators). The board can be printed with first aid equipment shadows.

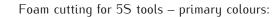
Mobile 5S first aid station – design:

- aluminium profiles or welded steel structure, powder coated
- casters with a brake
- 5S board on DIBOND composite panel (alu+PE+alu)
- fastening elements adjusted to specific board equipment
- bespoke colours (recommended: green or orange)









- black and red
- black and blue

Cut-out shadow foam inserts for tools allow you to:

- quickly find the tools you need,
- replace your tools quicker,
- immediately see what is missing,
- prevent the tools from moving when opening or closing the drawer,
- protect the tools from damage,
- organise your work system,
- implement 5S and Lean principles,
- save time and money.

5S SHADOW FOAM





5S SHADOW FOAM - TOOLBOX FOAM INSERTS

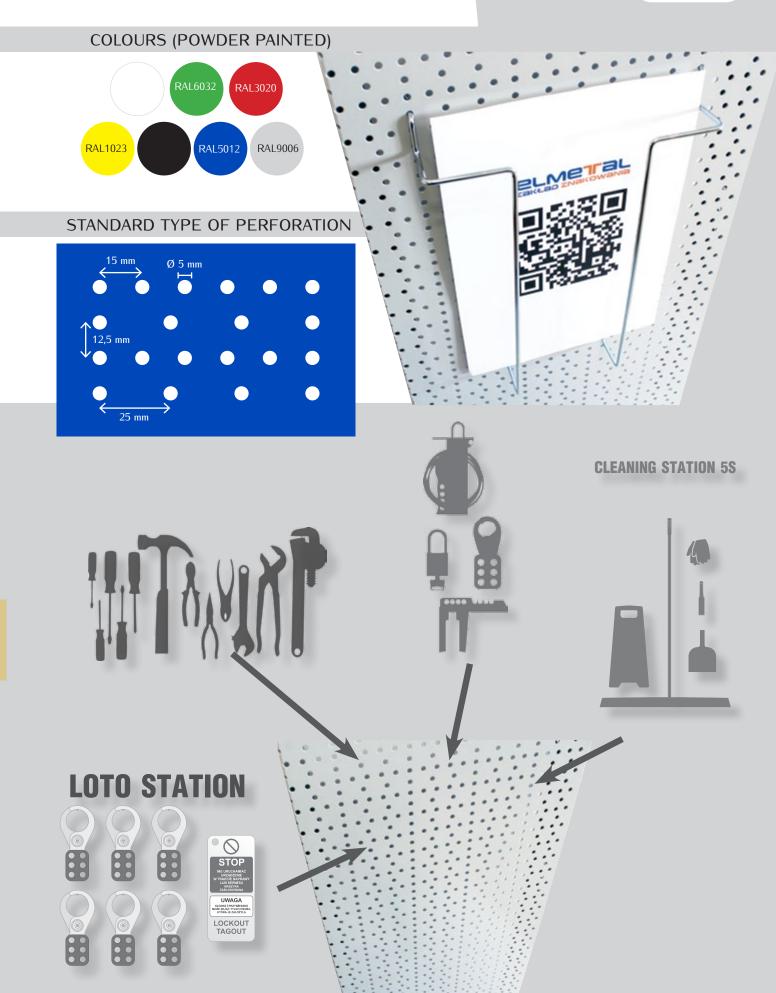
Shadow foam for tools offers an exceptionally effective method for the visual organisation of tools. As 5S tool holder – foam inserts for tool drawers or toolboxes prevent tools from becoming lost or misplaced when opening a drawer or moving a toolbox.

The cutting of tool shapes in dual colour contrasting foam will allow to immediately notice that tools or items are missing or indicate where to replace them. An appropriate design will minimise the problem of searching for the tool, saving you time.

You will no longer need to waste time looking for your tools. We will design your shadow foam inserts according to your needs. We will prepare shadow inserts and cut them to shape of the specific toolbox or drawer. On opening the toolbox, you will be able to immediately reach for the tool or replace it where it belongs.



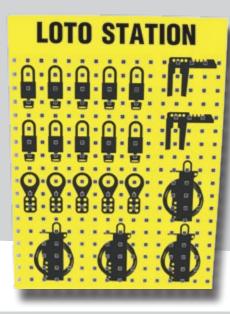




PERFORATED BOARDS







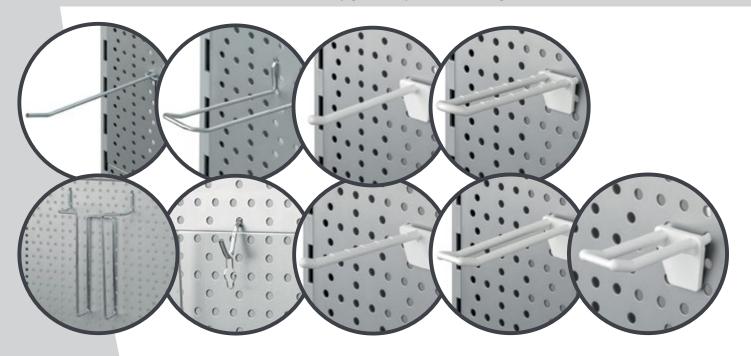
PERFORATED BOARDS

Perforated boards are made of 1.5 or 2 mm galvanized sheets which are powder coated. They allow for the placement of tools, production equipment or LOTO system components in an organised and preplanned way. These type of boards are also ideal as 5S cleaning stations.

Perforated boards can be adapted so that they can be mounted on a table top or mounted in standing structures with or without wheels. You can attach lock boxes and or tool boxes which are also part of our offer to these boards. Perforated boards can be additionally equipped with dryerase boards, pockets and holders for documents or tags.

Self-adhesive labels used as shadows on these perforated boards can be of any colour. As preferred we can stick the shadows to the boards before shipping or prepare a set of do-it-yourself self-adhesive label set.

MOUNTING ELEMENTS











ALUMINIUM CONSTRUCTION PROFILES

T-slot aluminium profiles are versatile products for building various types of structures. Lightweight and corrosion-resistant aluminium is used for constructing LEAN boards, tool racks, 5S shadow boards, display cases, workbenches and desks.

The limited weight and durability of the profiles, as well as their ease of assembly, make aluminium a perfect alternative to steel, which requires welding. All aluminium profile systems are faultlessly designed, ensuring a precise fit and maximum structural rigidity.

Elmetal profiles are made of 6063 aluminium alloy. Their natural anodised finish makes them scratch and corrosion-resistant.







Using lightweight and corrosion-resistant aluminium profiles, we can build for you:

- LEAN boards
- tool racks
- 5S shadow boards
- cabinets
- workbenches and desks

- information and advertising stands
- machine screens and panels
- glazed protection screens
- small shelters and bus stops









ASSEMBLY TABLE



The composite panel can be printed with tools shadows, for example.

MDF board:

- covered with galvanised metal sheet
- coated with rubber (SBR, NBR, EPDM, NR-L)
 - uncoated
 - varnished

Polyurethane warning and safety profiles

- conical round
- rectangular rounded

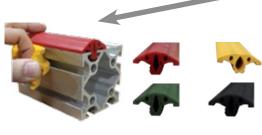


Customisable foam inserts for drawers

- black and red
- black and blue

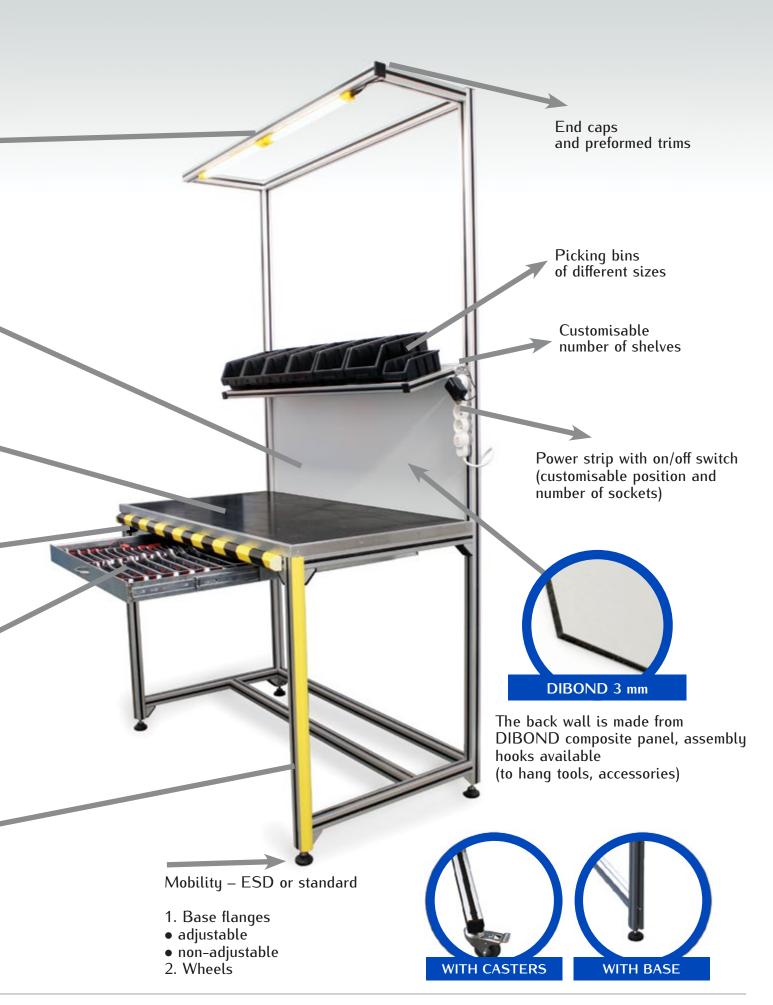


Polyurethane buffers, bump rails in four colours



ALUMINIUM CONSTRUCTION PROFILES













Elmetal supplies traffic signs, boards containing road signs and information boards resembling traffic signs.

Traffic signs may be coated with reflective or prism film.

The width of standard signs is 60 cm.



DIRECTION SIGNS & WELCOMING BOARDS













1 2 3

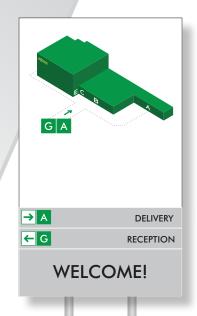
DIRECTION SIGNS AND WELCOMING BOARDS





Direction signs and welcoming boards are made using materials with durability suited to the conditions in which these signs will be utilised. Solvent printing on a substrate made of galvanised sheet metal, composite sheet (DIBOND) or plastic (PVC) is the most commonly employed solution.

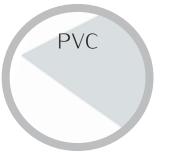
A welcoming board may show a map of a facility, the number and name of a building or room, or the number of a platform or bus stop. It may also function as a signpost, and indicate directions and location of facilities.



MATERIALS









	HAZARDOUS AREA WARNINGS	.51R. 90-97
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MARKING AND IDENTIFYING
HAZARDOUS AREAS





HAZARDOUS AREA WARNINGS







The most common causes of accidents at work resulting in personal injury are collisions with a stationary object (31%) or hitting a moving object (21%). These figures clearly underline the importance of the correct labelling and securing of hazardous locations.

Compliance with the proper guidelines for the labelling of hazardous locations is one of the most vital aspects of any plant's work organisation.

The marking of hazardous areas and places particularly exposed to the possibility of accidents is intended to provide workers with visual information in order to minimise the risk to their health and life.

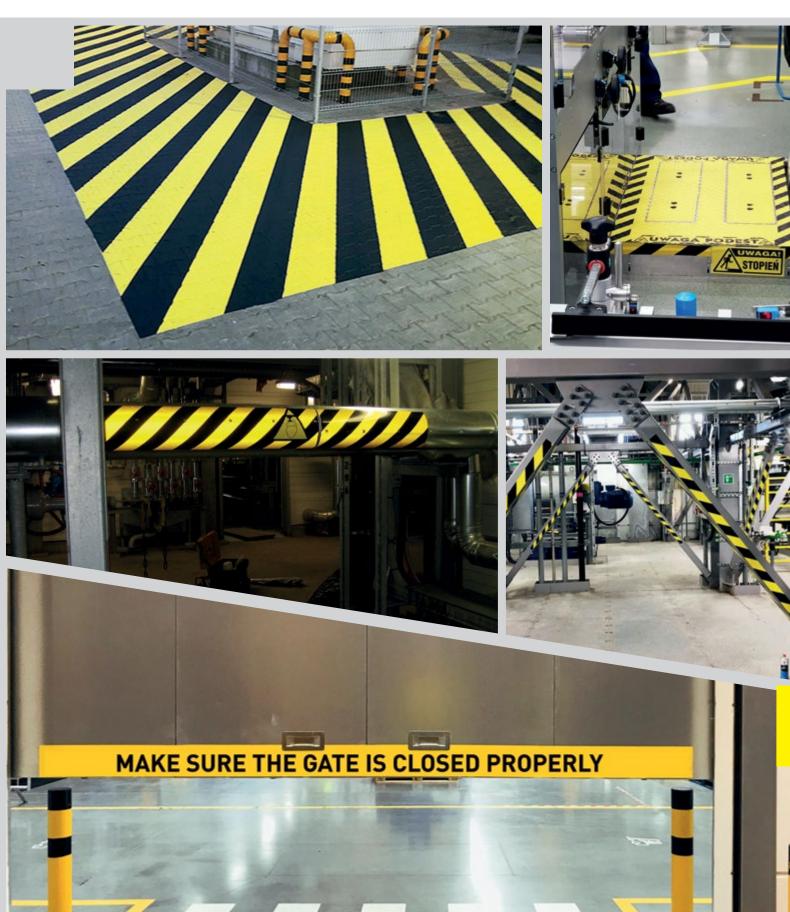
In hazardous locations, it is recommended to:

- suitably label hazardous zones
- designate hazardous locations with barrier and reflective tape
- install gates, posts and guard rails
- install warning and safety profiles
- install convex safety mirrors
- use LED safety sign projectors
- use interactive systems with warning signs and safety gates



HAZARDOUS AREA WARNINGS











Industrial safety barriers are most often used in production plants or warehouses to separate pedestrian traffic zones from vehicular transport traffic areas. They can also cordon off and protect areas with equipment or machinery which is prone to damage.

They are designed to designate circulation routes, ensuring the safety of people, equipment, production materials, products and vehicles present in production processes and warehouses. Industrial barriers include various types of posts, bumper rails, stop bollards and safety barriers mounted on fixed elements such as stairs and walls.



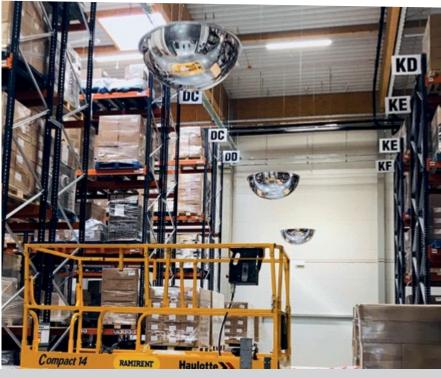




CONVEX SAFETY MIRRORS





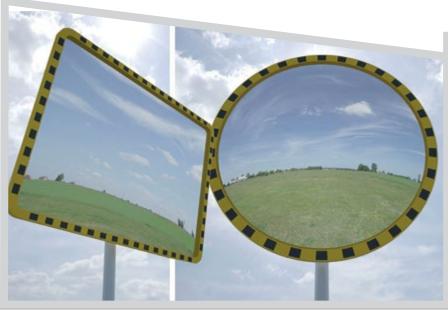


CONVEX SAFETY MIRRORS

Convex safety mirrors have a wide range of applications in factory car parks, production areas and warehouses. They can also be used in parking lots, in particular, in places with limited visibility. Also, the industrial sector employs these safety mirrors to increase visibility in industrial facilities. They improve the level of safety at intersections of circulation routes and are also extremely useful when installed at unloading ramps, providing assistance to drivers. When installed over intersections between high storage racks, they increase the visibility level for forklift drivers.

Yellow and black framed warehouse safety mirrors. Acrylic, round and rectangular mirrors for use at intersections of circulation routes inside production areas and in warehouses. Mirrors of this type minimise hazards linked to reduced visibility by eliminating blind spots.

Hemispherical safety mirrors safety mirrors are invaluable in warehouses and production areas. They facilitate collision-free movement of pedestrians, transport vehicles and forklifts.











Interactive gates with LED safety signs. Superior products and solutions for preventing or eliminating many safety and ergonomic problems. These solutions help lower worker's compensation, sick leave, and personal injuries while increasing moral, well being, and productivity.

- Revolutionary self-closing Smart Gate, available with kinetic safety add-ons and LED signs.
- Wireless sensors that pair with our LED Signs. Protects against dangerous collisions between pedestrians and vehicles.

Save Thousands of \$ - Eliminate costly power drops and improve safety. Wireless Transmission - Our proprietary wireless hinge with kinetic switch (Patent Pending) transmits a micro-burst energy packet which activates the LED safety warning sign. Extended Range - Wireless RF signal transmits up to 1000 feet (300 M) for deployment flexibility.

Plug & Play – Smart Gate and sign are paired at the factory for installation ease.

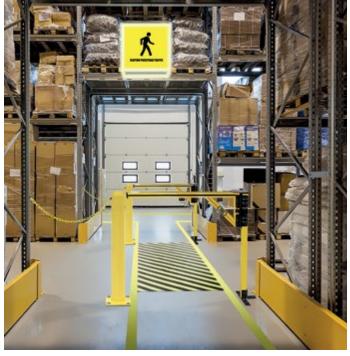
Expandable – Additional gates, kinetic components and other interactive sensing devices can be packaged to address any conventional or unique in-plant safety concerns.

INTERACTIVE LED SAFETY SIGNS















SAFETY LED PROJECTORS

The high quality LED projectors are a smart and innovative solution in modern safety and logistics. This solution can protect human lives as well as direct smooth traffic flow in the logistics warehouses.



- Long life span 30 000 h.
- Indelible identification
- Economical and efficient

LED MARKING ACCORDING TO YOUR REQUIREMENTS

The projected image is easy to see, doesn't come off, will not wear out, it can be also turned ON and OFF. You can also change and shift the projected symbols. Such marking is highly visible and attract attention. You can project any indicator, navigation symbols and pictograms eg. In shopping centers, airports, railway stations, public or industrial areas, warehouses and factory floors. The projected image is easy to see, doesn't come off, will not wear out, it can be also turned ON and OFF. You can also change and shift the projected symbols. Such marking is highly visible and attract attention. You can project any indicator, navigation symbols and pictograms eg. In shopping centers, airports, railway stations, public or industrial areas, warehouses and factory floors.



SAFETY LED PROJECTORS













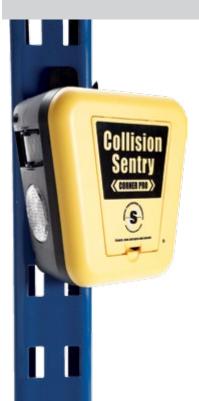






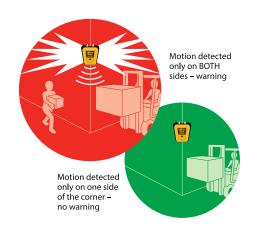


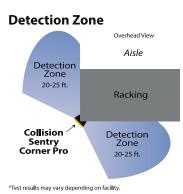




Blind corner intersections are a prime spot for accidents in any industrial setting – accidents that can result in damage to equipment, the facility and most importantly to people.

Collision Sentry Corner Pro works to prevent accidents at blind corners by sending both an audio and visual alert to warn of approaching traffic. Collision Sentry Corner Pro helps create a safer working environment in areas where forklift traffic and pedestrian traffic intersect.















ANTI-SLIP TAPES

We offer self-adhesive tapes and formats with antisliding surface. Antisliding layer is obtained by putting on the material surface the composition of fine minerals flooded with binding substance. It guarantees great wear resistance, durability and effective anti-sliding protection. Tapes from the bottom have extremely effective and durable adhesive layer. Besides the anti-sliding functions, the tapes can also be used for marking the storerooms, manufacture rooms and others. The advantage of tapes offered by us is quick and simple montage. Assembling does not require special tools or skills. Supplied as tapes in rolls or as formats cut to size at a specific dimensions.



WARNING TAPE

Tape is covered with a layer of minerals hardened by glue, dyed in yellow-black lines. Perfect fo use on all kinds of surface of routes used for pedestrian traffic and vehicular traffic (e.g. fork-lift truck). Effective also for marking surfaces in workshops, manufacture rooms and storehouses.

Width: 5 or 10 cm Roll lenght: 33 m



DEFORMABLE TAPE

Tape with aluminium ground, covered with a layer of coarse minerals hardened by glue, which gives abrasion resistance and antisliding surface. For use on irregular or stamped surfaces (e.g. corrugated plate). Accomodate to the shape of the surface. Perfect for use on surfaces that intensively get dirty.

Width: 5 or 10 cm Roll lenght: 33 m



EXTRA-STRONG TAPE

Extra strong anti-slip tape is covered with a layer of minerals hardened by glue which gives abrasion resistance and antisliding surface. Resistant for influence of heavy vehicular traffic. Tapes do not absorb dirt, mud, oils or sand. Effective for use in heavy industry and construction.

Width: 5 or 10 cm Roll lenght: 33 m



TRANSPARENT TAPE

Transparent tape is covered with a layer of colourless minerals hardened by glue. Perfect for use on all kinds of surface of routes used for pedestrian traffic and vehicular traffic (e.g. forklift truck). Effective also for marking surfaces in workshops, manufacture rooms and storehouses.

Width: 5 or 10 cm Roll lenght: 33 m



PHOTOLUMINES-CENT TAPE

Photoluminescent antislip tape with addition of photoluminescent pigment, which makes the tapes visible in darkness. Perfect for use on all kinds of surface of routes used for pedestrian traffic and vehicular traffic (e.g. forklift truck). Effective also for marking surfaces in workshops, manufacture rooms and storehouses.

Width: 5 or 10 cm Roll lenght: 33 m





SAFE STEP high performance antislip coatings provide a durable anti-slip surface for use in many applications without the need for regular re-application, and their unique profile gives our coatings a guaranteed level of slip resistance.





SAFE STEP 50

For application in large areas of low pedestrian traffic e.g. factory floors, garages and storage areas. Pack: 5l



SAFE STEP 100

For application in areas of heavy pedestrian traffic e.g. ramps, steps and work platforms.

Pack: 5l



SAFE STEP 200

For application in areas of heavy vehicular traffic e.g. fork - lift truck ramps and loading bays.

Pack: 5l



SAFE STEP 500

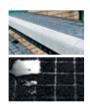
For application in solvent sensitive areas e.g. breweries, food processing facilities, hospitals and confined areas

Pack: 5l



ANTI-SLIP SPRAY

Transparent antislip spray, quick and easy to apply to metal, timber, fibreglass, marble and many other substrates.



SAFE STEP **MATRIX**

Designed to provide an immediate antislip solution for slippery surfaces such as wet or greasy floors, work platforms, open mesh catwalks, gantries, walkways and steps.



Anti-slip floor painting is the application of industrial paint which is then coated with quartz sand. Such anti-slip paint provides excellent protection on floors and stairs in production areas and warehouses. It can also be used on platforms and industrial staircases. The non-slip paint dries quickly and gives a durable, even, rough and anti-slip finish.

The anti-slip coating of paint and quartz sand prevents slippage anywhere there is moisture, water and other substances that can make a surface slippery. The colour of the paint can also be used to designate an area or type of the protected surface or mark out circulation routes.





Our panels and anti-slip stair profiles are specially designed to ensure safety on slippery surfaces, such as wet and greasy floors or industrial staircases.

- on a lightweight aluminium substrate or sturdy stainless steel
- easy to install using standard screws or mounting anchors
- resistant to impact and corrosion
- suitable for indoor and outdoor use
- available in many colours: grey, yellow, black, yellow-black depending on the solution used
- can be installed on any type of surface (concrete, metal, wood, stone, plastic, deck grating)

Anti-slip steel stairs are coated with Safe Step coating, and the edges are marked with warning tape.



Anti-slip warning stair profile: aluminium+ anti-slip tape



Anti-slip warning stair profile: aluminium+ warning tape+ anti-slip coating



Anti-slip black stair profile: stainless steel+coarse-grained antislip tape





SAFETY TAPES AND CHAINS



Barricade tape is brightly colored tape is used to warn or catch the attention of passersby of an area or situation containing a possible hazard. Tapes are made of one side printed foil.

Available lenghts: 100 m, 250 m, 500 m

Roll width: 8 cm

Colours:

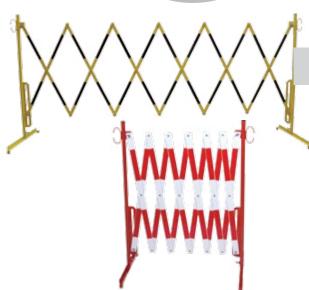




Barrier chains are used to designate hazardous areas. Made of alternately connected single links, each link can be opened and reconnected. The chain should be assembled using specially designed hooks.

Lenght: 1 m

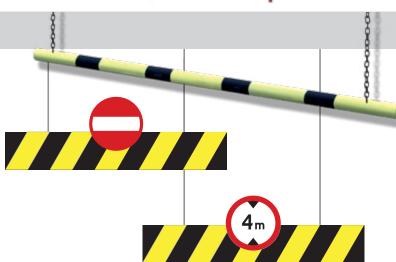
Colours:



EXPANDING BARRIERS

Expanding barriers are an ideal solution for temporary closures of pedestrian and vehicle areas. Expanding barriers are available in white-red and yellow-black colour combinations. The opening system of the barriers is progressive, which makes it possible to use barriers of various lengths. When folded, the barriers take up very little space.

Expanding barriers can also come with casters, equipped with a brake which locks the barrier in one position.



HEIGHT BARRIERS

Height barriers make it possible to reduce the risk of damage caused as a result of not lowering the forklift truck masts. They are useful in any areas where height limitation is necessary because of the height of suspended elements, such as fire safety installations or air-conditioning and ventilation ducts. Depending on the type of protected gateway or area, you can choose between suspended or stand-alone height limiters. The first type is a simple and cost-effective solution, which allows drivers to verify if the height of their vehicles is adequate for the pre-determined height limit.

PROTECTION BARRIERS AND PROFILES









PROTECTION EDGE PROFILES

Warning and protective bumper guards are made of flexible polyurethane foam and are sufficiently resilient to absorb even the hardest knocks and blows. Their black and yellow marking also acts as a hazard warning of sharp edges, protruding ledges and obstacles. Profiles can be used both indoors and outdoors on factory transportation routes, machines, vehicles, walls and passageways.

Adhesive: modified acrylic adhesive resistant to light and

ageing on all types except B **Bonding strength:** 21 N/25 mm

Temperature resistance: between -40 °C and +100 °C

Fire test: DIN 4102 B2, UL 94 HB/10 mm Standard lengths: 1 m, 5 m, up to 50 lm (boxed)



STANDARD TYPES TYPE A TYPE B TYPE C TYPE D TYPE E/H TYPE F TYPE G TYPE A TYPE B TYPE C TYPE D TYPE E/H TYPE F TYPE G TYPE A TYPE B TYPE C TYPE D TYPE E/H TYPE F TYPE G

Elmetal also manufactures bespoke profiles:

- white-red, black, white
- photoluminescent or reflective
- FLEX warning profiles which can be mounted on corners (45° to 160°)
- profiles on a stainless steel base, which allows the profile to be mounted in places where they cannot be glued









Falling from a great height constitutes a genuine risk for many categories of employees. The AXES GATE prevents such situations because it provides robust fall protection, by constantly building on its extensive experience in diverse sectors.

The AXES GATE was developed as fall protection for ladders with safety cages and work platforms. The gate prevents you from stepping or falling directly out of an opening. The gate shuts automatically and is manufactured entirely from plastic.

SINGLE GATE

safety gates can easily withstand an impact of 100 kg.

- very easy to install.
- once installed, you never will need to maintain.
- self-closing system.

DOUBLE GATE





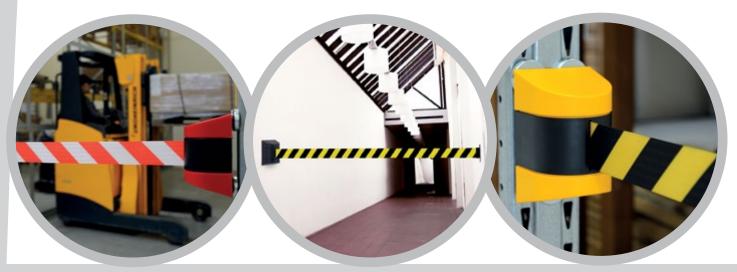
CONES



Tensacone consists of a traffic cone with a topper, which is provided with 3.65 m of expandable warning tape. Industrial product for outdoor use. The topper fits most traffic cones, and can be additionally affixed with screws. Using several traffic cone toppers, it is possible to easily designate workstations and any hazardous areas.

PROTECTION BARRIERS





WALL MOUNTED BARRIERS

Tensabarrier® **Wall Units** are ideal for areas requiring periodic access restriction without taking up floor space. As part of the Tensabarrier product line, the world's original retractable webbing barrier system, our wall units use the same retracting mechanism as the floor standing Tensabarrier posts.

Tensator's webbing cassettes have a braking system that slow retracts allowing the webbing to fall to the floor upon release and then slowly and safely retract back into the post, eliminating the risk of an accident.

- Available in a range of colours & finishes
- 50 mm width webbing available from 2.3m up to 9.0m
- 150 mm width webbing available in 2.0m
- A range of mounting options ensures the best solution for you (surface mount, removable, rack mounting, magnetic mount, recessmount, clamp or glass mount)

TAPE END OPTIONS



STANDARD



PANIC BREAK



MAGNETIC



WIRE CLIP

MOUNTING OPTIONS



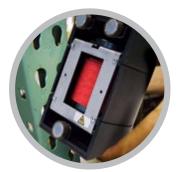
RACK MOUNT



REMOVABLE



CLAMP



MAGNETIC MOUNT



GLASS MOUNT



STANDARD







Tensabarrier® Advance

- 50mm width webbing available in 2.3m and 3.65m options
- 150mm width webbing available in 2.0m
- The 150mm wide webbing im proves visibility of the barrier by three times that of the standard 50mm webbing
- Wide webbing is also a highly effective, lowcost method of communicating messages to your customers & employees
- Post available in a range of colours & finishes
- Accommodates a full range of sign holders

The Tensabarrier® is the world's original retractable barrier developed to optimise space and effectively organise people flow.



SIGN HOLDERS A3 / A4



Tensabarrier® Outdoor

Outdoor post is of rugged construction, which can be filled with either sand or water for added stability.

- Super light when empty for easy transportation
- 3.65m of retractable webbing
- Plastic post available in 5 colours (Red, Yellow, White, Black, Blue)

Tensabarrier® Heavy Duty

- The bases feature easy to carry handles & are stackable for easy storage
- Available with screw or bayonet fixings
- Available in a range of colours
- Single or dual line versions
- 50mm width webbing available in 2.3m and 3.65m options
- 150mm width webbing available in 2.0m



DOUBLE TAPES





PROTECTION BARRIERS







A-FRAME SIGNS

The principal task of A-frame safety signs is to warn about the danger of slipping or tripping on a slippery surface. A-frame safety signs can also be used to convey other types of important information.

Elmetal's A-frame safety signs come in standard yellow or red colour and are made from high-quality plastic.

Other A-frame signs, which are made from painted galvanised metal sheet, are suitable even for the harshest of environments which often occur in industrial plants. Colour and text can be specified by the customer.











HOT POINTS	116-11/
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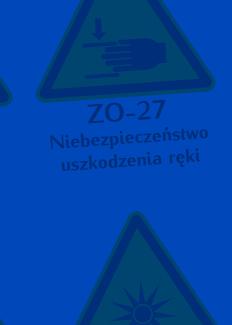
ZO-3° Uwaga Pojemnik

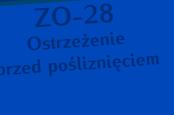


ZZ-Zak pale



ZZ Vieupov





































FROM DESIGN TO IMPLEMENTATION





HOT POINTS - special visual workplace - is our idea for your company. Simple, clear, legible and aesthetically pleasing, Elmetal provides marking solutions for your company premises.

These can include:

- medical points,
- fire safety points,
- entrances to production halls,
- entrances to warehouse and workshops,
- entrances to canteens,
- entrances to offices,
- emergency exits,
- entrances to manufacturing premises,
- passageways between halls,
- hazardous areas,
- access points for extinguishers and hydrants.

For us, there are no limits. Request the visit of an Elmetal Advisor – let's create interesting and functional concepts together.

Hot Points allow no mistakes – an area labelled in this way will be perfectly recognisable and visible to all employees, with full compliance with OHS standards.



More information www.elmetal.pl

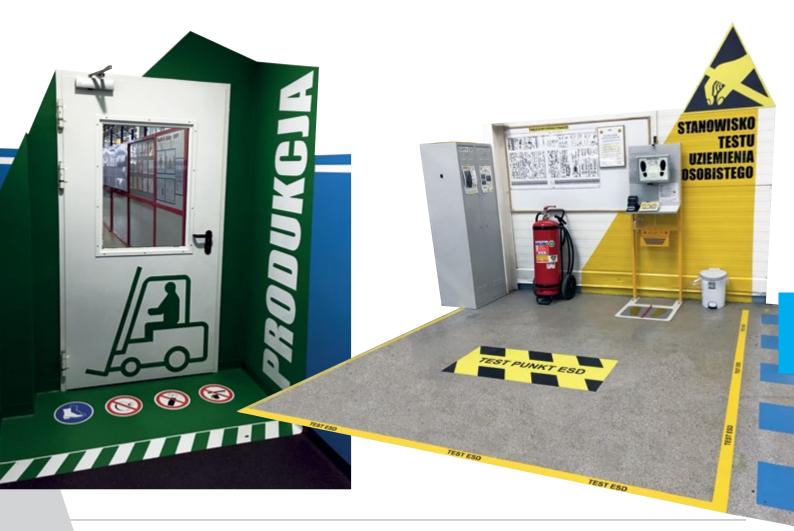




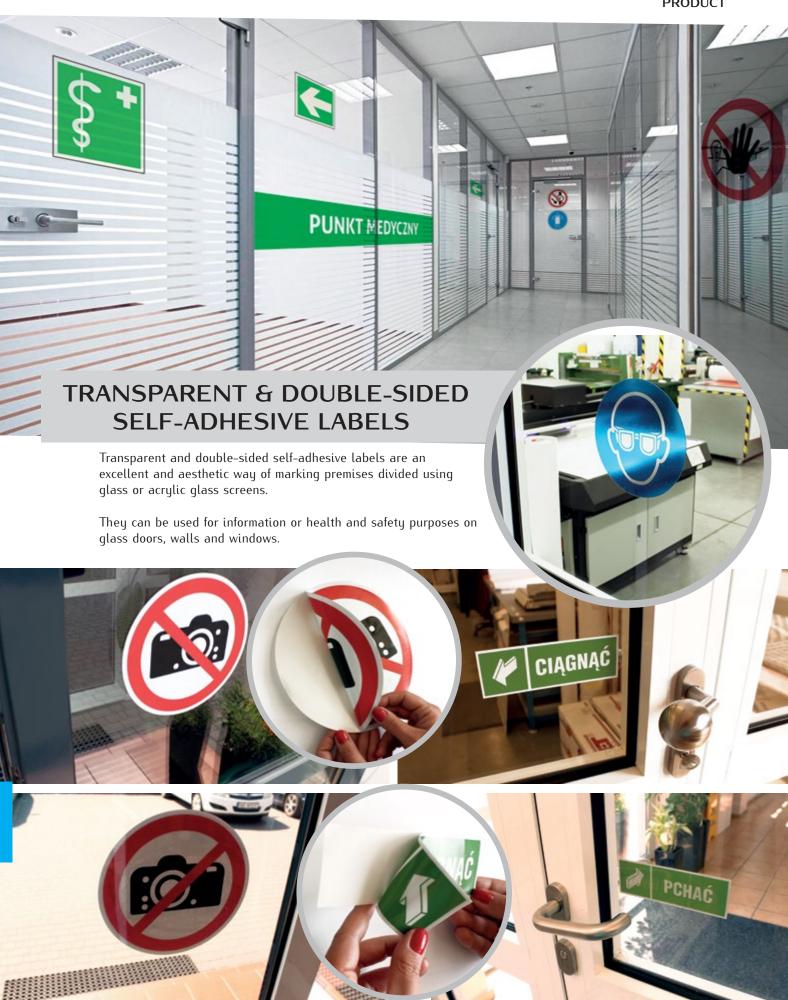




HOT POINTS







LABELS & STICKERS





Marking stencils or self-adhesive stickers with symbols and pictograms can be used as part of Visual Factory and Visual Workplace systems. They are ideal for areas where it is not possible to apply labelling on hard materials: PVC, sheet metal or DIBOND.

The design will be tailored to OHS requirements as well as the needs and specificity of your company.



































PRZYKŁADOWE OZNAKOWANIA











WEGES UNDER WHEELS

Health and safety labelling is an important part of any company's safety system. Correctly placed signs and information boards ensure, above all, employee safety. The use of pictograms and safety signs is regulated by Polish law – OHS boards must be visible in any workplace and are required by OHS regulations.

Based on occupational health and safety guidelines, Elmetal offers safety signs and safety boards, OHS instructions, evacuation signs, fire safety signs and a wide choice of safety and health labelling.

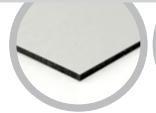
In addition to standard dimensions, we can provide any format of designs on request.

We also manufacture comprehensive signage systems with OHS instructions, specifications relating to traffic safety inside the plant, etc. as required by the customer.



TANKER STATIC GROUNDING







120



STEEL SHEET galvanized



transparentreverse print

adhesive



FOIL SELF-ADHESIVE

- transparent
- transparentcoloured
- two-sided
- reflective
- reverse printing





HEALTH & SAFETY SIGNS AND BOARDS







OHS BOARDS SAMPLES



GHS signs

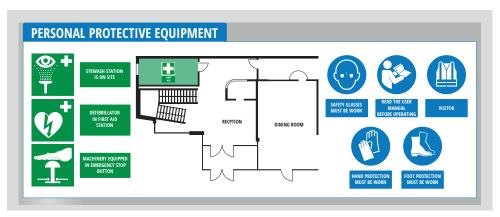






pp.40-41









ZO-01 Flammable materials



ZO-02 Explosion material



ZO-03 Toxic material



ZO-04 Corrosive substance



ZO-05 Radioactive material or ionizing radiation



ZO-06 Overhead load



ZO-07 Fork lift trucks and other industrial vehicles



ZO-08 Electricity



ZO-09 General warning sign



ZO-10 Laser beam



ZO-11 Oxidizing substance



ZO-12 Non-ionizing radiation



ZO-13 Magnetic field



ZO-14 Floor level obstacle



ZO-15 Drop (fall)



ZO-16 Biological hazard



ZO-17 Low temperature / freezing conditions



ZO-18 Irritant



ZO-19 Lower pressure gas cylinder



ZO-20 Battery charging



ZO-21 Explosion risk



ZO-22 Cutter



ZO-23 Crushing



ZO-24 Tipping



ZO-25 Starts automatically





ZO-26 Hot surface



ZO-27 Crushing of hands



ZO-28 Slipery surface



ZO-29 Guard dog



ZO-30 Overhead obstacles



ZO-31 Pressurized cylinder



ZO-32 Optical radiation



ZO-33 Sharp element



ZO-34 Counterrotating rollers



ZZ-01 No smoking



ZZ-02 No open flame



ZZ-03 No thoroughfare



ZZ-04
Do not extinguish with water



ZZ-05 Not drinking water



ZZ-06 No acess for unauthorised persons



ZZ-07
No access for forklift trucks & other industrial vehicles



ZZ-08
Do not touch!



ZZ-09 Do not touch, high voltage



ZZ-10
Do not alter the state of the switch



ZZ-11
No access for people with active implanted cardiac devices



ZZ-12 Do not obstruct



ZZ-13
Do not use this lift for people



ZZ-14 No dogs



ZZ-15 No access for persons with metallic implants







ZZ-16 Do not spray with water



ZZ-17 No activated mobile phones



ZZ-18 Maximum speed Variable number



ZZ-19 General prohibition sign



ZZ-20 No metallic articles or watches



ZZ-21 No heavy load



ZZ-22 No reaching in



ZZ-23 No eating or drinking



ZZ-24 Do not walk or stand here



ZZ-25 Do not use this incomplete scaffold



ZZ-26 No pushing



ZZ-27 No sitting



ZZ-28 Do not use lift in the event of fire



ZZ-29 No stepping on surface



ZZ-30 Don't use this device in a bathtub, shower or waterfilled reservoir



ZZ-31 Do not wear gloves



ZZ-32 No photography



ZZ-33 Do not tie knots in rope



ZZ-34 Do not use for face grinding



ZZ-35 Do not use for wet grinding



ZZ-36 Do not use with hand-held grinding machine



ZZ-37 No climbing



ZZ-38 Hot works prohibited





ZN-01 Wear eye protection



ZN-02 Wear head protection



ZN-03 Wear ear protection



ZN-04 Wear respiratory protection



ZN-05 Wear safety footwear



ZN-06 Wear protective gloves



ZN-07 Wear protective clothing



ZN-08 Wear face shield



ZN-09 Wear safety harness



ZN-10 Use this walkway



ZN-11 General mandatory sign



ZN-12 Use footbridge



ZN-13 Disconnect mains plug from electrical outlet



ZN-14
Disconnect before carrying out maintenance or repair



ZN-15 Wear head and eye protection



ZN-16 Use self-contained breathing appliance



ZN-17 Wear a mask



ZN-18 Wear a hairnet



ZN-19 Refer to instruction manual/booklet



ZN-20 Connect an earth terminal to the ground



ZN-21 Opaque eye protection must be worn



ZN-22 Wash your hands



ZN-23 Use handrail



ZN-24 Wear high visibility clothing



ZN-25 Use barrier cream







ZN-26 Infants must be protected with opaque eye protection



ZN-27 Wear a welding mask



ZN-28 Wear safety belts



ZN-29 Use protective apron



ZE-01 First aid



ZE-02 Stretcher



ZE-03 Safety shower



ZE-04 Eyewash station



ZE-05 Emergency telephone



ZE-06 This way



ZE-07 Medical point



ZE-08 Escape route



ZE-09 Emergency exit



ZE-10 Emergency exit left



ZE-11 Emergency exit right



ZE-12 Emergency exit down



ZE-13 Emergency exit up



ZE-14 Emergency exit left down



ZE-15 Emergency exit right down



ZE-16 Emergency exit left up



ZE-17 Emergency exit right up



ZE-18 Exit



ZE-19 Exit



ZE-20 Exit door open left





ZE-21 Exit door open right



ZE-22 Evacuation assembly point



ZE-23 This way



ZE-24 Exit



ZE-25 Emergency exit left



ZE-26 Emergency exit right



ZE-27 Brek to obtain access



ZP-01 Fire hose reel



ZP-02 Fire ladder



ZP-03 Fire extinguisher



ZP-04 Fire telephone



ZP-05
This way to fire fighting equipment



ZP-06 Fire fighting equipment



ZP-07 Manual fire detector



ZP-08 This way to fire fighting equipment



ZP-09 Fire extinguisher



ZP-10 Przycisk alarmowy przeciwpożarowy



ZP-11 Fire extinguisher



ZP-12 Fire alarm call point



ZP-13 Fire hose reel



ZP-14 Fire emergency telephone



ZP-15 Collection of firefighting equipment



ZP-16 This way to fire fighting equipment



ZP-17
This way to fire fighting equipment



ZP-18
Fire station
Variable number







DOUBLE SIDED SAFETY SIGNS



Double sided exit, fire safety and other occupational health & safety signs are an excellent solution for improving signage visibility. These two-sided signs are designed to be used in areas where signs mounted flat on the wall are insufficient.

Double sided signs are made of 2 mm thick PVC, bent to create two sides. The wall-mounting strips on both sides of the sign are provided with holes for affixing the sign, for example, using wall plugs.

Signs may feature any type of standard fire safety and exit pictograms, as well as warning, mandatory and prohibitory signs and other individual designs.

Double sided signs come in standard sizes:

- each side 20 x 20 cm x 3 cm wall-mounting strip
- each side $35 \times 35 \text{ cm } \times 5 \text{ cm wall-mounting strip}$
- each side 45 x 45 cm x 5 cm wall-mounting strip

Types of signs:

- white background + sign
- photoluminescent background + sign

3D OCCUPATIONAL HEALTH & SAFETY SIGNS





3D OCCUPATIONAL HEALTH & SAFETY SIGNS





3D occupational health & safety signs — exit, fire safety, information, mandatory and prohibitory signs, as well as individually designed signs, provide a perfect solution to increase the visibility of signage in large and open spaces. The three-sided signs with a reinforced design are particularly recommended for use in yards or parking areas. They are recommended for areas where signage mounted flat on the walls is insufficient or where solid signage resistant to changing conditions is required.

3D signs are made from galvanised metal sheet or stainless steel. The wall-mounted signs are printed on robust composite material (DIBOND 3 mm – aluminium+PVC+aluminium).

3D signs may feature any type of standard fire safety and exit pictograms, as well as warning, mandatory and prohibitory signs and other individual designs.

Elmetal carries out bespoke orders for individually selected sizes and designs.

Standard sizes of 3D signs:

- each side 35×35 cm
- each side 35×50 cm
- each side 50×50 cm

Standard dimensions of the mounting post opening:

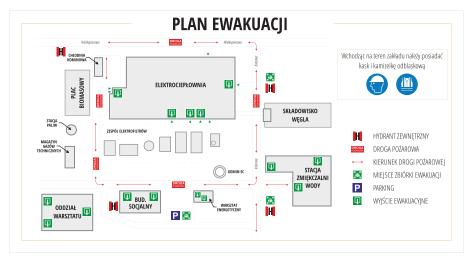
post DN 48 mm

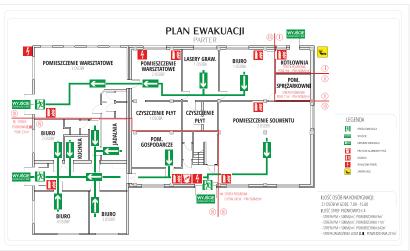


EVACUATION I









If your company does not have **evacuation plans**, we would be happy to assist you by designing them, based on the specificity of your enterprise. We use floor plans of company premises to designate the evacuation routes, as well as mark the position of fire protection and fire-fighting equipment, including extinguishers. The plans we create can also include OHS and fire safety instructions, lists of emergency telephone numbers and information on rescue services.

We know from experience that a legible aesthetic graphic representation of an evacuation plan is remembered by employees much quicker, which provides for greater safety within the company premises. The form we use to create these evacuation plans guarantees full legibility.

Depending on client needs and specifications, we can supply evacuation plans printed on various materials, namely: PVC, DIBOND, framed or behind glass.

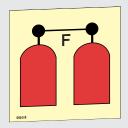


















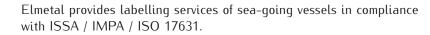








IMO SIGNS



- photoluminescent, transparent or on a white substrate
- materials: PVC film, rigid PVC, Dura-Plate (increased resistance to seagoing conditions, fire-proof), aluminium coated with a photoluminescent layer
- in addition to international labels for sea-going vessels, there are also standard evacuation, fire safety, warning and information signs available
- we also prepare individual labelling designs







APPLICATION:

The photoluminescent signs are successfully used in floor marking: along evacuation routes, pathways, in floor pictograms, and next to any areas which pose a tripping hazard or where there is a risk of a fall, i.e. thresholds and steps. Photoluminescent floor marking also increases the aesthetics of the plant.

FORMATS:

The size and shape of the markings in all available standard sizes. Special individual orders up to 1x1,5 m.

MATERIALS:

- Self-adhesive foil
- Hard PVC
- Foamed PVC
- Transparent PVC
- DIBOND
- Self-adhesive tape

AFTER GLOW PERFORMANCE: BRIGHTNESS (mcd/m2)

after	after
10 min	60 min
260	35



More information about photoluminescent tapes www.elmetal.eu

PHOTOLUMINESCENT SIGNS



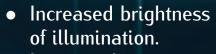
INSTALLATION:

- self-adhesive acrylic foam
- screws
- glow-in-the-dark profiles

Minimum afterglow time: 1800 minutes







- It meets the requirements of the ISO 15370:2010.
- High physical and mechanical durability.



LOCKOUT / TAGOUT	136-139
LOTO TAGS	140-141
LOTO BOARDS	142-143
LOTO CABINETS	144-145
LOTO BOXES	146-149

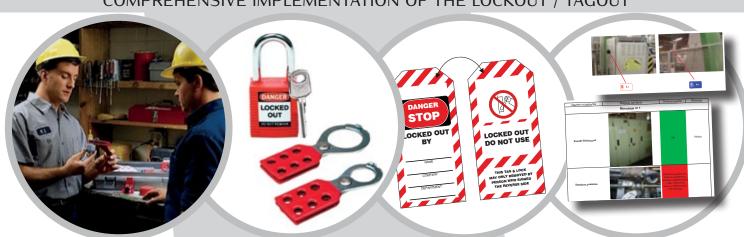








COMPREHENSIVE IMPLEMENTATION OF THE LOCKOUT / TAGOUT

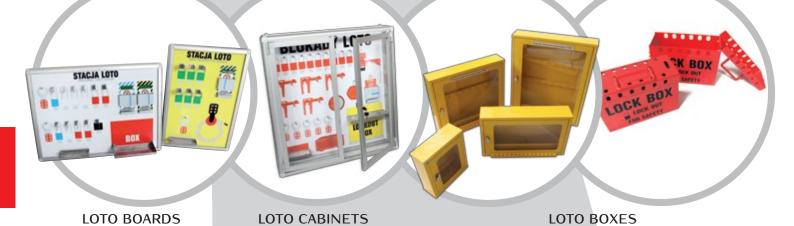


AUDIT, IMPLEMENTING AND TRAINING

PADLOCKS & LOCKOUTS

TAGS

INSTRUCTIONS & PROCEDURES



LOCKOUT / TAGOUT







Elmetal specialises in the comprehensive implementation of the LOCKOUT / TAGOUT system. We conduct audits and training workshops, develop procedures and guidance, as well as supply and install signage and lockout devices. We manufacture lockout tags, cabinets and boards according to the specifications and designs of our clients.

The LOCKOUT/TAGOUT system is a planned safety procedure which prevents accidental activation of devices whilst maintenance work or repairs are being carried out.



The process of turning off the energy supply of machinery and equipment and prevention of its accidental and undesirable reconnection. This is possible thanks to the use of lockout devices suitable for this purpose.

A lockout device must be manufactured from strong materials to prevent it from becoming damaged and removed.

There also must be the potential to secure the lockout device with a padlock.

TAGOUT

Tagout is a tag which is affixed to a machine alongside the lockout device. It informs about the reason for the lockout device, the person who installed it and the means of contacting that person. The tag should be made from a durable material to prevent it from being damaged or removed. It should be affixed to the lockout device in a way which will prevent its accidental removal — typically it is placed on the padlock's shackle which locks the lockout device (LOCKOUT).











AUDIT, DOCUMENTATION AND TRAINING

The preparation and documentation of the general LOTO procedure, describing in detail the objectives and scope of the equipment locking program, is the first stage of the implementation of the LOTO system.

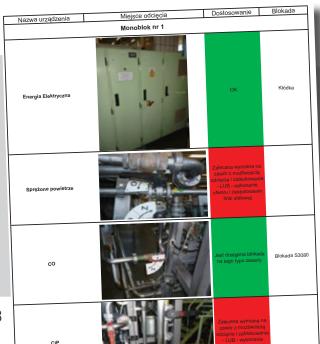
The documentation is created based on an audit of all existing and potential hazardous power sources.

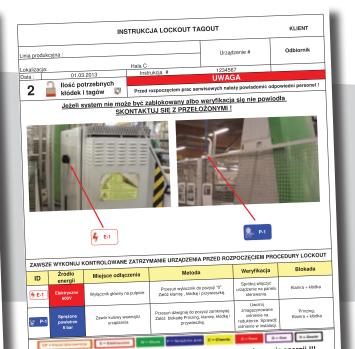
We offer LOTO employee training and training on safe practices in the workplace.

INSTRUCTIONS & PROCEDURES

The preparation of detailed procedures and instructions concerning lockout devices is another obligatory stage of the LOTO system's introduction.

- Procedures act as check lists, making it easier for employees to avoid mistakes and reducing the risk of accidents and injuries.
- Procedures improve the application and removal of lockout devices, which in turn reduces downtime and increases productivity.
- Documented procedures for the inspection of energy sources of individual machines are required by OHS regulations.





LOCKOUT / TAGOUT







PADLOCKS & LOCKOUTS

MECHANICAL RISK LOCKOUT

UNIVERSAL VALVE LOCKOUT

We provide comprehensive padlocks - nonconductive or brass, valve lockouts, universal lockouts and electrical risk lockouts.



ELECTRICAL RISK LOCKOUT

NYLON ENCASED PADLOCKS

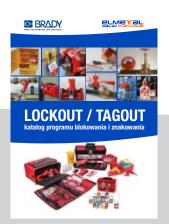


BRASS PADLOCKS

NYLON PADLOCKS



HASPS AND OTHERS

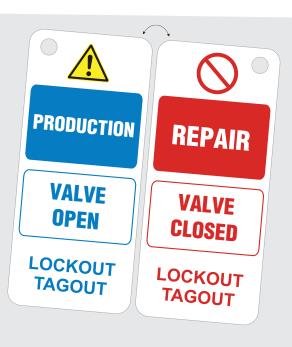




Download LOTO catalog www.elmetal.pl









MATERIALS:

- PVC 0,5-1 mm
- stainless steel
- magnetic foil

TAGS

Tags are one of the key elements of an efficient Lockout / Tagout system. Their durable design allows multiple reuse.

Tags have two main purposes:

- Informative purpose tag placed with a lock provides the personal and contact details (e.g. telephone number) of the person who has locked out the particular source of energy. Thanks to it, one may easily identify individuals working on a lock-out equipment and if required, gain access to it.
- Warning purpose is another important feature. The reverse of a tag contains
 the prohibition to operate particular piece of equipment and informs that the
 lock may be only removed by the individual who applied it, thus eliminating the
 involvement of unauthorized individuals.

The tags on our offer are manufactured by our company, making it possible to supply a custom-made design. Tags may include the logo of the company, additional information boxes or the picture of the employee authorized to operate the tag.

SUGGESTED TAG COLORS

MECHANICAL RISK

ELECTRICAL RISK

ENERGY SOURCE

EXTERNAL COMPANY

LONG-TERM



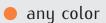






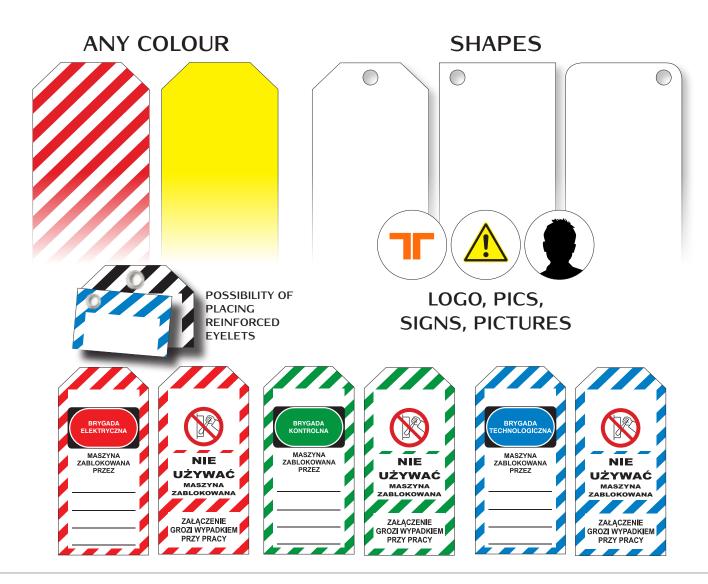
LOCKOUT / TAGOUT

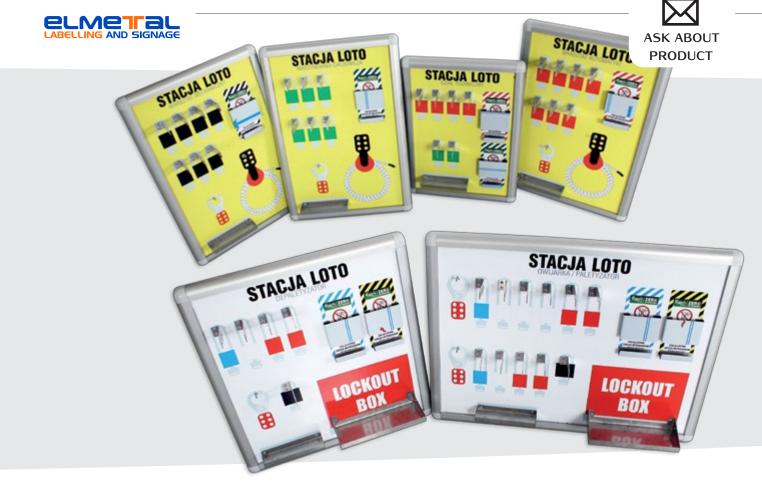




- individual design
- two-sided printing







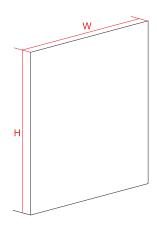
LOTO Boards

Our shadow boards are an excellent solution when organising the LOTO system within a company.

- Ability to freely organise the shadows of lockout devices, safety locks, tags (hangers) and other tools
- Wide range of accessories
- Practically unlimited choice of equipment shadows and board dimensions
- Washable, easy to clean surface
- Simple installation we will install the exact mounting elements you require
- Any background colour (yellow and white as standard) and shadow colour

Standard dimensions			
Height H	Width W		
(mm)	(mm)		
400 mm	250 mm		
250 mm	400 mm		
800 mm	600 mm		
600 mm	800 mm		
1000 mm	700 mm		
700 mm	1000 mm		

Other to order

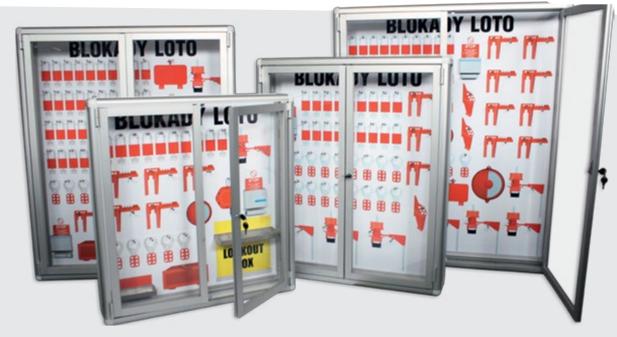












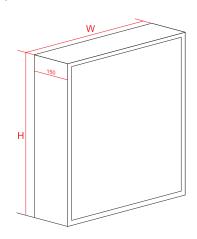
LOTO Cabinets

LOTO cabinets are ideal for areas that require lockout / protection of tools, padlocks and lockout devices.

- Durable, yet lightweight polycarbonate
- The doors can be locked with a key or bolt
- Ability to freely organise the shadows of lockout devices, safety locks, tags (hangers) and other tools
- Wide range of accessories
- Practically unlimited choice of accessories and board dimensions
- Washable, easy to clean surface
- Simple installation we will install the exact mounting elements you require
- Any background colour (yellow and white as standard) and shadow colour
- Prevents excessive accumulation of dust.

Standard dimensions			
Height H (mm)	Width W (mm)	Depth	
400 mm	250 mm	150 mm	
800 mm	600 mm	150 mm	
1000 mm	700 mm	150 mm	

Other to order Minimum depth: 10 cm











Padlock cabinets & boxes

Standard dimensions		
Dimension (mm)	Number of padlocks	
260x200x100 mm	5 padlocks	
260x300x100 mm	10 padlocks	
510x300x100 mm	10 padlocks	
510x420x100 mm	15 - 20 padlocks	
510x540x100 mm	25 - 30 padlocks	
510x750x100 mm	35 - 40 padlocks	
510x900x100 mm	50 padlocks	
600x900x100 mm	60 padlocks	
690x900x100 mm	70 padlocks	

Other to order

width x height x depth

MATERIALS:

- galvanized steel sheet1 mm
 - welded parts
- hooks fi 4 mm galvanized threaded

510

GLASS:

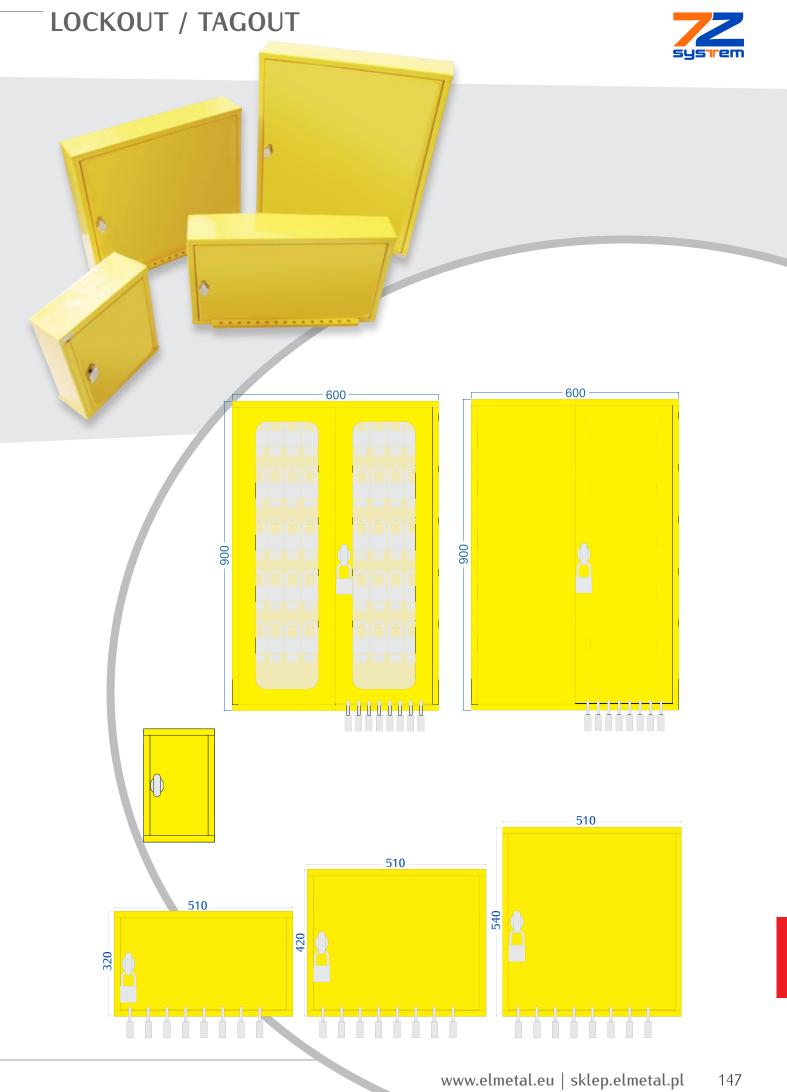
- solid polycarbonate transparent - 3 mm
 - rivet

510

COLOUR:

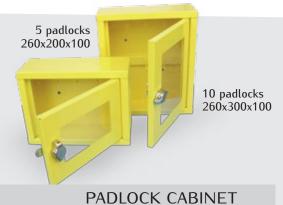
- powder painting
- yellow, red, green
 - RAL colors

510











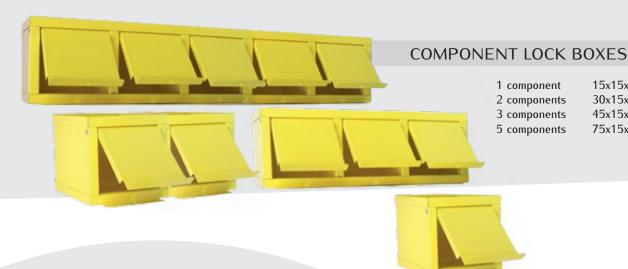
LOCK BOX

15x15x15 cm

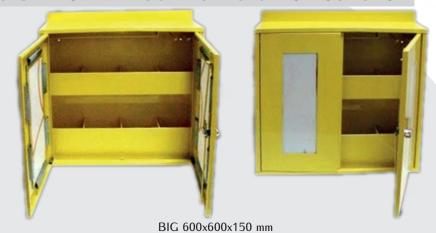
 $30x15x15\ cm$

45x15x15 cm

75x15x15 cm



CABINETS WITH ROOM FOR LOTO INSTRUCTIONS





MATERIALS:

- galvanized steel sheet 1 mm
- welded parts

COLOUR:

- yellow, red, green
- powder painting
 - RAL colors

LOCKOUT / TAGOUT

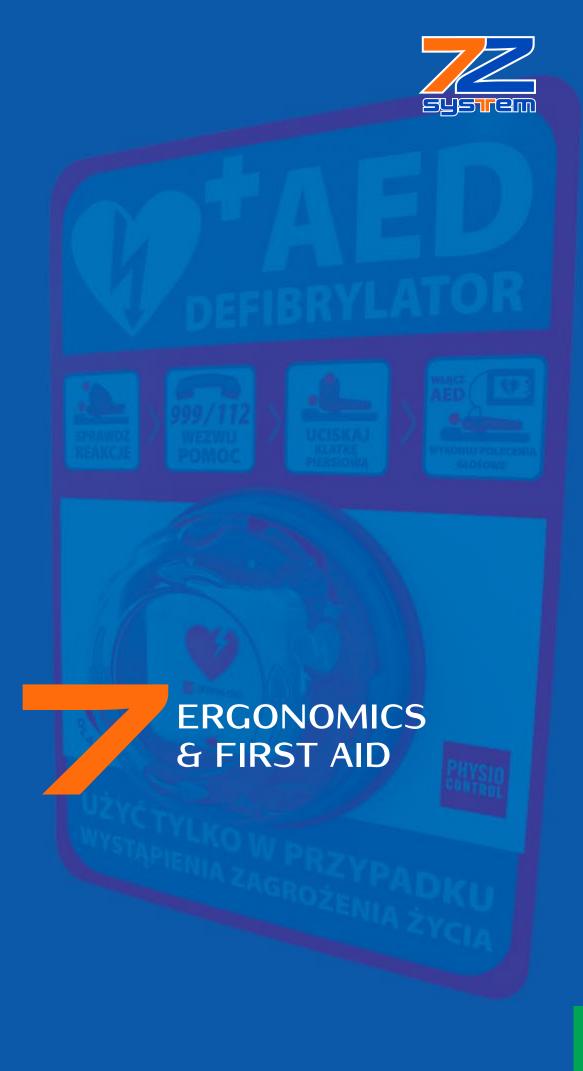


	<mark>ndard dimensions</mark>	
Dimension (mm)		Number of padlocks
510x300x 100 mm		10 padlocks
510x420x 100 mm	0000000	15 - 20 padlocks
510x540x 100 mm		25 - 30 padlocks
510x750x 100 mm	50 padlocks 60 padlocks 70 padlocks	35 - 40 padlocks
510x900x 100 mm		50 padlocks
600x900x 100 mm		60 padlocks
690x900x 100 mm		70 padlocks
260x200x 100 mm		5 padlocks
270x305x 105 mm		10 padlocks

Star	ndard dimensions	
Dimension		
LOCKBOX 260x190x 130 mm	LOCK BOX	BOX
COMPONENT BOX 150x150x 150 mm		1 component
COMPONENT BOX 300x150x 150 mm		2 compo- nents
COMPONENT BOX 450x150x 150 mm		3 compo- nents
COMPONENT BOX 750x150x 150 mm		5 compo- nents
Cabinet with room for LOTO instructions small 450x350x150 mm		
Cabinet with room for LOTO instructions big 600x600x150 mm		

width x height x depth other to order

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ERGONOMIC MATTING

Workstation **ergonomic mats** by Ergomat feature special properties which improve comfort at work and reduce fatigue, while anti-slip mats increase working safety.

They are ideal for food processing plants, workshops, assembly lines in factories and many facilities where compliance with ergonomic standards is required.



Polyurethane matting

Polyurethane mats are a suitable solution in areas with a low footfall, or ones which are dry, damp, or greasy. They also have antistatic properties.

Polyurethane mats react better to contact with alkaline environment (pH > 7).



Nitrile rubber matting

Mats made of nitrile rubber have better resistance to high temperature, abrasion and anti-slip properties, which may be necessary in some industrial conditions. The sealed surface of the mat does not accumulate bacteria and is perfect in areas of particular risk, such as those often found in medical or food processing facilities.

Nitrile mats are more resistant to contact with acids (pH < 7).



Order mats sklep.elmetal.pl

ERGONOMIC MATS & CHAIRS









MAGNETIC MATS

Guarantees thorough cleaning of footwear when leaving workshop premises. The mat is equipped with very strong neodymium NdFeB magnets which catch ferromagnetic impurities from shoe soles (metal shavings, sawdust, metal dust).

Magnetic doormat with magnetic strength of 87 N!



ERGONOMIC CHAIRS

Nowadays, many of us spend long hours sitting down, both in offices and when operating machinery.

The sitting position places an excessive load the on the spine. To reduce defects in posture, ergonomic chairs that provide support for the lower back and facilitate the correct position of the spine should be used.

With a suitably adjusted Ergomat chair, the user can sit in a balanced position.











FIRST AID PRODUCTS



FIRST AID STATIONS AND KITS



PLASTERS & PLASTER DISPENSERS

Elmetal offers first aid materials from Cederroth, a manufacturer of innovative products and solutions, which enable first aid to be provided by people without specialist knowledge.

The products are simple in design and supplied with detailed instructions. They can be used by anyone and in any situation.



Order
first aid products
sklep.elmetal.pl



EYE WASH



BURN GELS, SPRAYS, BANDAGES AND OTHERS

FIRST AID PRODUCTS





DEFIBRILLATORS

A case of cardiac arrest can happen to anyone and everywhere. If no help is provided, the chance of survival decreases dramatically with every minute.

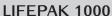
That is why public access to automated external defibrillators (AEDs) is so important. To save lives, however, they must be efficient, easy to use and effective.

Automated and semi-automated devices by Physio Control represent the latest generation of external defibrillators.

They are intuitive, uncomplicated and do not require medical knowledge.









LIFEPAK CR2





CEDERROTH FIRST AID STATION

A First Aid Station (REF 490920) that can treat even more types of injuries and can easily be adapted to meet different healthcare needs. We hope that with your complete First Aid equipment at your workplace, even more people will learn how to save lives and be brave enough to help out if accidents do happen.

The world's smallest emergency department. Cederroth First Aid has solutions that allow everyone to give First Aid, even if they have not had any training. With our innovative range of First Aid Stations, every workplace has their own small emergency department based on their individual needs, so that they are fully prepared for an accident.

Cederroth stations are easy to understand and are designed to make it easy and quick to find the right product. Many of our products can be used for many different needs, making First Aid clear and simple. Clear instructions and easy to restock; red labels show when a product has run out along with its reference number.



4-IN-1 **BLOODSTOPPER** X2

The Cederroth 4-in-1 Bloodstopper is a sterile universal dressing with four different functions:

- Pressure pad for heavy bleeding 1.
- Protective dressing for superficial wounds 2.
- 3. Burn dressing with special wound-protecting surface
- 4. Temporary support dressing

Content:

- 1 pad (14 x 23 cm)
- 2 disposable elastic bandages (10 cm x 3 m)

4-IN-1 MINI BLOODSTOPPER X 3



Sterile universal dressing with four functions, especially suitable for fingers and toes. Contains one elastic bandage (6 cm \times 3 m), with a sewn-in dressing (8 x 12 cm). Clear instructions on the inside of the pack.

Content:

- 1 pad (8 x 12 cm)
- 1 elastic bandage (6 cm x 3 m)

Cederroth Burn Gel provides rapid cooling and effective pain relief for burns. The cold reduces the, pain and swelling and prevents the injury from penetrating the skin deeper. Cederroth Burn Gel Spray and Dressing cool as effectively as water and thus speed up the healing process. Content:

10×10 cm dressing, 2-pack, water-based (>96% water) gel without Tee Tree Oil. Shelf life 5 year



BURN GEL DRESSING 10×10 CM

The Cederroth Protection Kit is an aid in mouth-to-mouth resuscitation. It limits contact between the first-aider and the casualty. Cederroth's breathing mask is fitted with a one-way-valve. Clear instructions are printed in colour on the plastic cloth.

- 1 Breathing mask with a one-way-valve
- 2 pairs of gloves
- 2 Cederroth Safety Hand Cleansers (70% alcohol)

Content:

PROTECTION KIT

The Salveguick Dispenser maintains high quality and is easy to use. When a plaster is pulled from the dispenser, one of its adhesive surfaces is exposed and it can be applied easily with one hand. The dispenser is refilled quickly and easily with a special key. Transparent lid protects against dust. Clean the wound, make sure it is not infected and change the quick bandage daily.

Content: Salvequick Plaster Dispenser, complete with, 40 Textile Plasters (REF 6444) and 45 Plastic Plasters (REF 6036); 1 Key



FIRST AID STATION

Burn Gel





Salvequick)

Œ

Salvequick

YOU CAN ORDER A SET OF REFILL INSERTS



Spray for rinsing and cleansing out dust and dirt from eyes and wounds. The spray provides a soft flow of water, with a total rinsing time of 5 minutes. The spray works at every angle and in every direction. The spray can be used several times and remains sterile to the very last drop. Contains 150 ml sterile sodium chloride solution, 0.9 % NaCl. Eco-friendly propellant. Fits in the First Aid Station. Shelf life 5 years.

EYE & WOUND CLEANSING SPRAY 150 ML



Salvequick Wound Cleansers is a refill for Cederroth First Aid Station. Salvequick Wound cleanser replaces cotton and wound solution in bottle. Convenient and simple to use. Well protected in their packaging. The cleansing fluid consists of sterile physiological saline solution.

Content: 20 Salvequick Wound Cleansers with 0.9% sodium chloride solution.

WOUND CLEANSER



Special key to release empty refills in dispensers.

KEY TO DISPENSER PLASTERS





Blanket with a heat-reflecting aluminium side that provides effective insulation.

Size 210 x 160 cm.



RESCUE BLANKET



2 PAIRS OF GLOVES (REF 2596)



4-IN-1 MINI BLOODSTOPPER

Sterile universal dressing with four functions, especially suitable for fingers and toes. Contains one elastic bandage (6 cm x 3 m), with a sewn-in dressing (8 x 12 cm). Clear instructions on the inside of the pack.

Content:

- 1 pad (8 x 12 cm)
- 1 elastic bandage (6 cm x 3 m)



ELASTIC BANDAGE



2 PARS OF SCISSORS

- 10 Salvequick Plasters (REF 1880)
- 6 Salvequick Wound Cleansers (REF 1880)
- 4 Salvequick Maxi Covers (REF 658024)





CEDERROTH FIRST AID KIT MEDIUM

Cederroth First Aid Kit Medium (REF 390101) is a First Aid Kit made from a durable rubber-like material with a matte finish to keep dust, moisture and dirt at bay. It keeps the equipment hygienically clean, so it is always ready to be used.

The products are packed in transparent plastic pockets, so you can clearly see all the products, making it easy to find the product you need when every second counts. All products come with clear, self-explanatory instructions. The kit is bright green and yellow, making it easy to see from a distance. The practical handle with an adjustable Velcro strap makes it easy to attach the case or carry it with you.



The Cederroth Breathing Mask is an aid in mouth-to-mouth resuscitation. It limits contact between the first-aider and the casualty. The Breathing Mask consists of a plastic cloth with a one-way-valve. Clear instructions are printed on the cloth.

BREATHING MASK



 $2\ \mbox{wipes}.$ Moist cleansing wipes with 70% alcohol for effective hand cleansing.

CEDERROTH SAFETY HAND CLEANSER



4-IN-1 BLOODSTOPPER

The Cederroth 4-in-1 Bloodstopper is a sterile universal dressing with four different functions:

- 1. Pressure pad for heavy bleeding
- 2. Protective dressing for superficial wounds
- 3. Burn dressing with special wound-protecting surface
- 4. Temporary support dressing

Content:

- 1 pad (14 x 23 cm)
- 2 disposable elastic bandages (10 cm x 3 m)



Cederroth Burn Gel provides rapid cooling and effective pain relief for burns. The cold reduces the, pain and swelling and prevents the injury from penetrating the skin deeper. Cederroth Burn Gel Spray and Dressing cool as effectively as water and thus speed up the healing process.

BURN GEL DRESSING 10×10 CM



FIRST AID DECAL











EYE WASH

The world's smallest eye emergency department. Cederroth's buffered eye wash increases the chance of saving a person's eye.

Eye Wash has a neutralising effect on alkali and acid splashes and works to neutralise the eye's pH value, giving a quicker result than a normal sodium chloride solution. The effect is generally stronger on alkalis than acids.





Eye Wash in 2-pack REF 725200

2 (x 500 ml) sterile isotonic borate buffered sodium chloride solution without preservatives for single use. Shelf life 4.5 years.





Wall Bracket for Eye Wash REF 7200

Robust and practical wall bracket for Cederroth Eye Wash 500 ml (REF 725200). The wall bracket gives the bottle a fixed location so everyone knows where it is. The bottle is held in the wall bracket, and opens automatically when twisted out of the bracket – so flushing can begin immediately. Cederroth Eye Wash can be positioned in several different ways, making it suitable for all workplaces. Comes with a fluorescent instruction sign.









Salvequick Textile Plasters are high-quality flexible plasters. The plasters are allergy tested. They are easy to apply, flexible and convenient to use. Clean the wound, make sure it is not infected and change the quick bandage daily.

- High quality
- Allergy tested
- Convenient and easy to use

CONTENT:

Each refill contains 40 plasters (24 plasters measuring 72×19 mm and 16 plasters measuring 72×25 mm). 6 refills/box.



Salvequick Plastic Plasters are convenient high-quality plasters. The plasters are allergy tested. They are easy to apply, flexible and convenient to use. Clean the wound, make sure it is not infected and change the quick bandage daily.

- High quality
- Allergy tested
- Convenient and easy to use

CONTENT:

Each refill contains 45 plasters (27 plasters measuring 72×19 mm and 18 plasters measuring 72×25 mm). 6 refills/box.

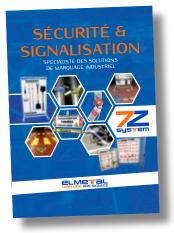




BROWSE OUR ONLINE CATALOGS











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LOTO
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Warehousesmarkingwww.elmetal.pl



Aluminium

profiles

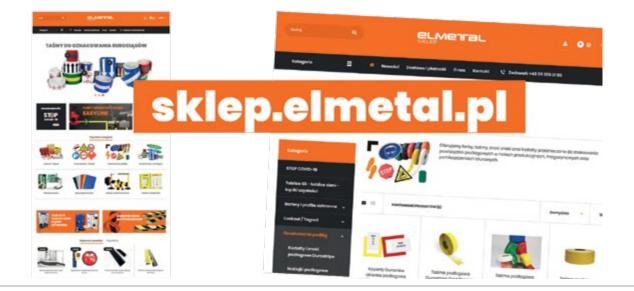
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First aid www.elmetal.pl







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