

### CENTURY OF TRADITION AND ACCLAIMED QUALITY













### **STORY OF SUCCESS**

The roots of our company reach way back into the past. It all began in **1904** when the entrepreneur J. A. Siegel began with the manufacture of wooden folding rules. The nearby forests of the Pohorje area provided a plentiful supply of raw material.

In **1936**, Tovarna meril began the production of spirit levels, an activity which to this day represents the company's leading production line.

After World War II, the enterprise extended its product range to encompass metal and plastic rules.

In **1972**, a new organisation called Slovenijales Tovarna meril Slovenj Gradec was created.

In **1979**, it became an independent manufacturer of metal rules and measuring tools.

In **1996**, the firm transformed to the status of joint-stock company - TOVARNA MERIL KOVINE D.D. and is today successfully continuing its production of the wide product program of high-quality measuring tools.

### A CENTURY OF TRADITION OF TOVARNA MERIL KOVINE







TOVARNA MERIL KOVINE d. d. ranks amongst the largest manufacturers of high-quality spirit levels in Europe. Customers from all over the world are the best proof of our quality. We complement the production of spirit levels with a wide assortment of other measuring tools, especially for the building industry. Adaptability to customer needs, quick response and superior quality are our major advantages; the strength which we will maintain into the future. All our products are the result of our own research and development. We want to satisfy our customers with precise, functional and userfriendly measurement tools.

Our ISO 9001:2008 certification proves that our company controls the entire production and management process in accordance with international standards.

All products in this catalogue are produced per order and minimal order quantities are required. Product on stock you can find in our special Sales catalogue.

### CONTENTS

SPIRIT LEVELS	5
ALU SCREEDING LEVELS AND PROFILES	18
MEASURING SQUARES	24
METAL RULES	30
MEASURING TAPES, WOODEN RULES, TELESCOPIC MEASURING STAFFS	33
LASER PROGRAM	39
OTHER MEASURING TOOLS	44
MARKING ASSORTMENT	49
ADVERTISING ITEMS	51
HAND TOOLS	54
PRODUCT DISPLAYS	58



Production program of TOVARNA MERIL KOVINE includes a wide range of various high-quality measuring tools for professional use. Spirit levels are the leading and primary product line in our production program.

### IMPORTANT ADVANTAGES:

- Long tradition.
- Superior quality.
- Adaptability to customers needs (colours, printing, tool varieties,...).
- In-house development and production of plexiglas vials.
- Use of high-quality ecological input materials.
- Continuous control of production processes using computerised optical measuring devices.
- High measurement precision.

### **MEASURING ACCURACY:**

- Alu-spirit levels: 0.5 mm/m in normal position.
- Model Exacta: 0.3 mm/m in normal position and 0.75 mm/m in inverted position.
- By all spirit levels accuracy in inverted position is under 1 mm/m.

### THE MEANING OF ACCURACY:

Measuring accuracy of 0.5 mm/m in normal position means that a level that is 1 m long allows max. 0.5 mm fault of horizontal line on one or the other side of the level, under the condition, that the bubble in the vial is precisely in the middle of the marking rings. See the picture: 1

Measuring accuracy of 0.75 mm/m in inverted position means that a level that is 1 m long allows max. 0.75 mm fault of horizontal line on one or the other side of the level, under the condition, that the bubble in the vial is precisely in the middle of the marking rings. See picture: 2

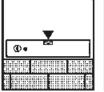


Picture 1



Picture 2

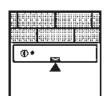
### APPLICATIONS FOR SPIRIT LEVELS:





Horizontal normal position

Vertical normal position



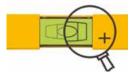
Horizontal

inverted position

Vertical inverted position

### PLEXIGLASS VIALS:

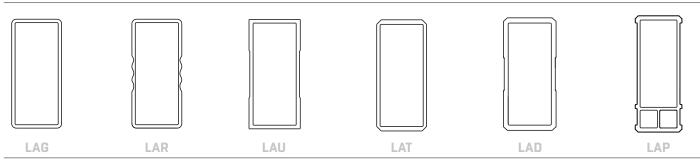
- Made of high-quality plexiglass, shockproof.
- Mechanical treatment of internal radii is computer tested.
- Fluorescent liquid is sealed with ultrasonic welded plugs.
- 30 years guarantee against fluid leaks.
- Applicable in all climatic conditions.
- The colour of liquid is very good resistant to UV-rays.
- Horizontal vial with lens effect enlarges the bubble for easier reading.
- Anti-static vials enable better measuring.





### ALU-SPIRIT LEVELS

### **ALUMINIUM - PROFILE TYPES:**



### LAG: Flat aluminium profile

Dimension 48 × 22 mm, weight 0.56 kg/m. Models: LAGE (silver anodised), LAGB (colour powder coated).

#### LAR: Grooved aluminium profile

Dimension  $48 \times 22$  mm, weight 0.56 kg/m. Models: LARE (silver anodised), LARB (colour powder coated).

#### LAU: Aluminium profile U

Dimension  $48 \times 22$  mm, weight 0.56 kg/m. Model LAUB (colour powder coated).

#### LAT: Flat, heavier aluminium profile

Dimension  $48 \times 22$  mm, weight 0.61 kg/m. Models: LATE (silver anodised), LATB (colour powder coated), LATZ (gold anodised).

#### LAD: Extra strong aluminium profile

Dimension  $48 \times 22$  mm, weight 0.75 kg/m. Model LADZ (gold anodised).

#### LAP: Profile for Exacta level

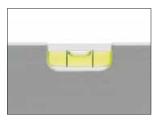
Dimension  $60 \times 24$  mm, weight 0.90 kg/m. Model: LAP (colour powder coated).

### **PROFILE COATINGS:**

SILVER	GOLD	YELLOW POWDER	RED POWDER	RED POWDER	OTHER COLOURS
ANODISING	ANODISING	COATING: RAL 1021	COATING: RAL 2002	COATING: RAL 3000	BY AGREEMENT

Note: When ordering colour powder coated levels, it is necessary to specify the exact colour!

### TYPES OF PLEXIGLASS VIALS:



Horizontal plexiglass vial, stable mechanical fitting. For installation with the following types : LAG, LAR, LAD.

Type: B



Horizontal plexiglass vial, stable mechanical fitting, with a small plastic rim. For installation with the following types: LAG, LAR, LAT, LAP. **Type: M** 



Horizontal plexiglass vial, stable fitting with ultrasonic welding. For installation with the following types: LAG, LAR, LAU. **Type: V** 



Round- vertical plexiglass vial, stable fitting. For the use with the following types: LAG, LAR, LAT, LAP, LAU, LAD, as a vertical vial or a vial with 45° inclination.

### LENGTHS:

20 cm, 30 cm, 40 cm, 50 cm, 60 cm, 70 cm, 80 cm, 100 cm, 120 cm, 150 cm, 180 cm, 200 cm.

### SUPPLEMENTS ON ALU- SPIRIT LEVELS:

#### MAGNETS:



Optional installation into LAT and LAD types beginning from 40 cm length. Levels up to the length of 120 cm have 2 strong magnets and those from 150 cm length 4 strong magnets installed. They ensure safe fastening to the metal groundwork. When ordering, please add letter **M** to the end of the code.

**ALU-SPIRIT LEVELS** 

### **GRADUATION:**



Optional printing of mm-graduating up to the length of 100 cm on LAG, LAR, LAT, LAU, LAD types of alu-spirit levels. When ordering, please add letter **S** to the end of the code.

### HANGER:



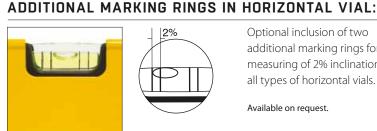
Optional plastic hanger with Euro-hole on end caps on all types of alu-spirit levels. When ordering, please add letter **O** to the end of the code.

Available on request.

### **PRINTING OF COSTUMER LOGO:**

Optional printing in one or more colours for customer logo.

Available on request.



Optional inclusion of two additional marking rings for measuring of 2% inclination in all types of horizontal vials.

Available on request.

### HORIZONTAL VIAL WITH FLUORESCENT BACKGROUND:



Optional inclusion of fluorescent background in all types of horizontal vials. Allows measuring also in places lacking the light.

Available on request.

### **ORDER SURVEY FOR ALU-SPIRIT LEVELS:**

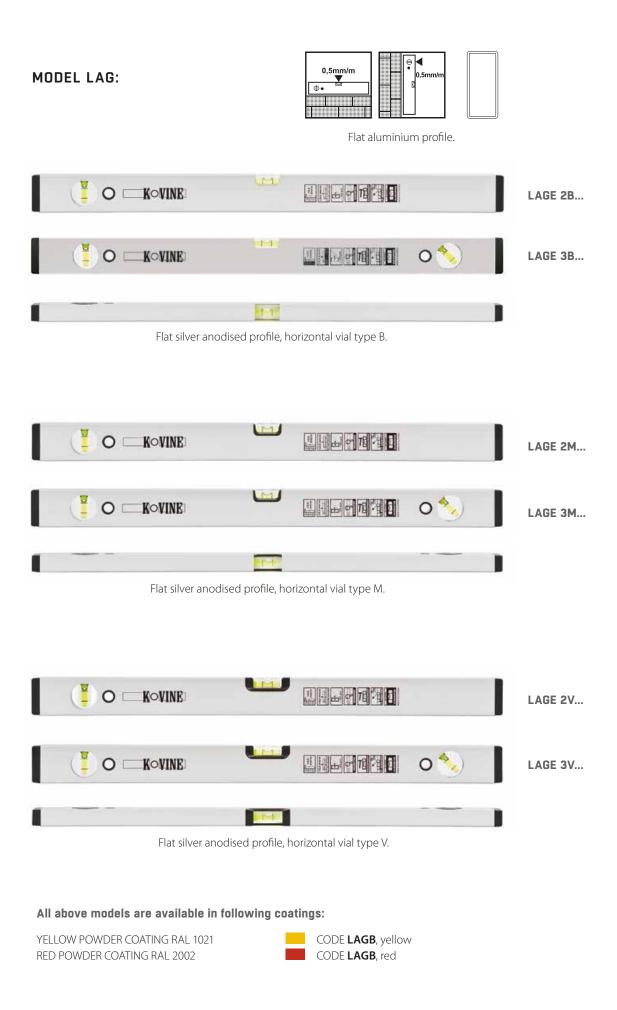
ORDER CODE							
DIGITS 1, 2, 3	DIGIT 4	DIGIT 5	DIGIT 6	DIGITS 7, 8, 9	DIG	ITS 10 or 11 or	12
PROFILE TYPE:	PROFILE COATING OPTIONS:	NUMBER OF VIALS:	TYPE OF HORIZONTAL VIAL:	LENGTH IN cm:	2	SUPPLEMENTS:	
LAG = FLAT	$\mathbf{E} = SILVER ANODISED$ $\mathbf{B} = COLOUR POWDERED$	<b>2</b> = TWO VIALS	B = WITHOUT PLASTIC RIM M =	from 030 cm to 200 cm	M =	S=	0=
LAT = FLAT, STRONGER	<b>Z</b> = GOLD ANODISED	<b>3</b> = THREE VIALS	WITH SMALL PLASTIC RIM V = WITH BIG PLASTIC RIM		MAGNETS	GRADUATION	HANGER
LAG	E, B	2, 3	B, M, V	030120		S	0
LAR	Е, В	2, 3	B, M, V	030120		S	ο
LAU	В	2, 3	v	030120		S	0
LAT	E, B, Z	2, 3	м	030200	м	S	0
LAD	Z	2, 3	В	030200	м	S	0

Illustrative order: Alu-spirit level, grooved profile, colour powder coated, 2 vials, horizontal vial type B, 30 cm, with graduation.

LAR B 2 B 030 S Digit 1-3: profile type Digits 10-12: supplement on alu-spirit levels Digit 4: profile coating Digits 7-9: length in cm Digit 5: number of vials Digit 6: type of horizontal vial

Optional demands: inclusion of two additional marking rings in horizontal vial, inclusion of fluorescent background in horizontal vial, printing of customer logo.





CATALOGUE





	0,5mm/m .5mm/m .5mm/m 0,5mm/m	
MODEL LAU:		
• Kovine		LAU2V
<b>E K</b> ovine		LAU3V
<ul> <li>Aluminium profile U, horizontal vial typ</li> <li>These levels are available in red colour</li> </ul>		
MODEL LAT:		
Kovine:		LATB2
		LATBS
<ul><li>Flat, stronger, red powder coated profil</li><li>Levels fitted with 3 vials are available or</li></ul>		
All above models are available in the	e following coatings:	
SILVER ANODISING YELLOW POWDER COATING RAL 1021 GOLD ANODISING	CODE LATE CODE LATB, yellow CODE LATZ	
MODEL LAD:		
O KOVINE		LADZ
O KOVINE		LADZ
	11	
• Extra strong aluminium profile, gold an	nodised, vial type B. In request with 2 vertical vials.	

• These levels are available in gold anodising execution.



### ALU-SPIRIT LEVEL WITH MAGNETS:

- Models LAT and LAD are available with magnets fitted.
- When ordering, please add the letter **M** to the end of the code.

ATBF     Image: Control					
ATBF     Image: Contract of the information of					
ATBF     Image: Contract of the information of					
ATBF     Image: Contract of the information of					
ATEAMN ATEAMN A for a with a wild sufface for higher measuring precision. 9 where with a wild sufface for higher measuring precision. 9 where with a wild sufface for higher measuring precision. 9 where with a wild sufface for higher measuring precision. 9 where with a wild sufface for higher measuring precision. 9 where with a wild sufface for higher measuring precision. 9 where with a wild sufface for higher measuring precision. 9 where with a wild sufface for higher measuring or wow vertical vials. 9 where with a wild sufface for measuring or wow vertical vials. 9 where with a wild sufface for measuring or wow vertical vials. 9 where with a wild sufface with a wild sufface. LATE2ESOF. 1 where with a wild sufface for wow with milled sufface. LATE2ESOF. 1 where with a wild sufface for wow with milled sufface. LATE2ESOF. 1 where with a wild sufface for wow with milled sufface. LATE2ESOF. 1 where with a wild sufface for wow with milled sufface. LATE2ESOF. 1 where with a wild sufface for wow with milled sufface. LATE2ESOF. 1 where with a wild sufface for wow with milled sufface. LATE2ESOF. 1 where with a wild sufface for wow with milled sufface. LATE2ESOF. 1 where with a wild sufface for wow with milled sufface. LATE2ESOF. 1 where with a wild sufface for wow with milled sufface. 1 where with a wild sufface for wow with milled sufface. 1 where wow wow wow wow wow wow wow wow wow wo	MODEL LAT:				
<ul> <li>With milled measuring surface for higher measuring precision.</li> <li>Possible fitting of all horizontal vial types and one vertical vial, one vertical vial and one vial with 45° inclination or two vertical vials.</li> <li>Powder coatings: yellow RAL 1021 or red RAL 2002.</li> <li>Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.</li> </ul> <b>Instructive order:</b> alu-spirit level, stronger profile, yellow powder coated, with 2 vials, corizontal vial type B, length 50 cm, with milled surface: LATB2B50F. Iote: Please specify colour. <b>ATE4MN Instructive order:</b> alue spirit level, stronger profile, yellow powder coated, with 2 vials, corizontal vial type B, length 50 cm, with milled surface: LATB2B50F. Iote: Please specify colour. <b>ATE4MN Instructive order:</b> alue spirit level, stronger profile, yellow powder coated with 2 vials, corizontal vial type B, length 50 cm, with milled surface: LATB2B50F. Iote: Please specify colour. <b>ATE4MN Instructive order:</b> alue spirit level, stronger profile, yellow powder coated with 2 aluminium legs. Model with 4 vials, 2 horizontal and 2 (type M) vertical vials and with 2 aluminium legs. Stronger, flat, silver anodised profile. For measuring of horizontal line in various installation situations.	LATBF				
<ul> <li>Possible fitting of all horizontal vial types and one vertical vial, one vertical vial and one vial with 45° inclination or two vertical vials.</li> <li>Powder coatings: yellow RAL 1021 or red RAL 2002.</li> <li>Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.</li> </ul> Ilustrative order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type B, length 50 cm, with milled surface: LATB2B50F. Iote: Please specify colour. ATE4MN Model with 4 vials, 2 horizontal and 2 (type M) vertical vials and with 2 aluminium legs. Stronger, flat, silver anodised profile. For measuring of horizontal line in various installation situations.	) o — Kovine				
<ul> <li>Possible fitting of all horizontal vial types and one vertical vial, one vertical vial and one vial with 45° inclination or two vertical vials.</li> <li>Powder coatings: yellow RAL 1021 or red RAL 2002.</li> <li>Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.</li> </ul> Ilustrative order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type B, length 50 cm, with milled surface: LATB2B50F. Iote: Please specify colour. ATE4MN Model with 4 vials, 2 horizontal and 2 (type M) vertical vials and with 2 aluminium legs. Stronger, flat, silver anodised profile. For measuring of horizontal line in various installation situations.					
<ul> <li>Possible fitting of all horizontal vial types and one vertical vial, one vertical vial and one vial with 45° inclination or two vertical vials.</li> <li>Powder coatings: yellow RAL 1021 or red RAL 2002.</li> <li>Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.</li> </ul> Ilustrative order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type B, length 50 cm, with milled surface: LATB2B50F. Iote: Please specify colour. ATE4MN Model with 4 vials, 2 horizontal and 2 (type M) vertical vials and with 2 aluminium legs. Stronger, flat, silver anodised profile. For measuring of horizontal line in various installation situations.					
<ul> <li>one vertical vial and one vial with 45° inclination or two vertical vials.</li> <li>Powder coatings: yellow RAL 1021 or red RAL 2002.</li> <li>Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.</li> </ul> Instrative order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type 8, length 50 cm, with milled surface: LATB2B50F. lote: Please specify colour. ATE4MN Instrative order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type 8, length 50 cm, with milled surface: LATB2B50F. lote: Please specify colour. ATE4MN Instrative order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type 8, length 50 cm, with milled surface: LATB2B50F. lote: Please specify colour. ATE4MN Instructive order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type 8, length 50 cm, with milled surface: LATB2B50F. lote: Please specify colour. ATE4MN Instructive order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type 8, length 50 cm, with milled surface: LATB2B50F. lote: Please specify colour. ATE4MN Instructive order: alu-spirite, yellow powder coated, with 2 aluminium legs. Model with 4 vials, 2 horizontal and 2 (type M) vertical vials and with 2 aluminium legs. Stronger, flat, silver anodised profile. For measuring of horizontal line in various installation situations.	• With milled measuring surfa	ice for higher measuring p	precision.		
<ul> <li>Powder coatings: yellow RAL 1021 or red RAL 2002.</li> <li>Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.</li> </ul> <b>Instrative order:</b> alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type 8, length 50 cm, with milled surface: LATB2B50F. Inter Please specify colour. <b>ATE4MN ATE4MN Instrative order:</b> alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type 8, length 50 cm, with milled surface: LATB2B50F. Inter Please specify colour. <b>ATE4MN Instrative order:</b> alu-spirit level, stronger profile, yellow powder coated, with 2 vials, orizontal vial type 8, length 50 cm, with milled surface: LATB2B50F. Inter Please specify colour. <b>ATE4MN Instrume Instrum</b>					
<ul> <li>Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.</li> <li>Ilustrative order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, torizontal vial type B, length 50 cm, with milled surface: LATB2B50F.</li> <li>Iote: Please specify colour.</li> </ul>			vo vertical vials.		
Iustrative order: alu-spirit level, stronger profile, yellow powder coated, with 2 vials, iorizontal vial type 8, length 50 cm, with milled surface: LATB2B50F.         iote: Please specify colour.    ATE4MN					
Model with 4 vials, 2 horizontal and 2 (type M) vertical vials and with 2 aluminium legs. Stronger, flat, silver anodised profile. For measuring of horizontal line in various installation situations.	Ilustrative order: alu-spirit level, stror	ger profile, yellow powder coat	ed, with 2 vials,		
Model with 4 vials, 2 horizontal and 2 (type M) vertical vials and with 2 aluminium legs. Stronger, flat, silver anodised profile. For measuring of horizontal line in various installation situations.	LATE4MN				
Stronger, flat, silver anodised profile. For measuring of horizontal line in various installation situations.	( O KOVINE			o !)	
Stronger, flat, silver anodised profile. For measuring of horizontal line in various installation situations.	14				
	• Model with 4 vials, 2 horizor	ntal and 2 (type M) vertica	al vials and with 2 alumi	inium legs.	
Length: 100 cm, 120 cm, 150 cm, 180 cm and 200 cm.	• Stronger, flat, silver anodised	d profile. For measuring of	f horizontal line in varic	ous installation situat	ions.
	• Length: 100 cm, 120 cm, 150	cm, 180 cm and 200 cm.			

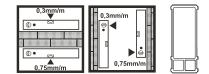


### SPIRIT LEVELS **ALU-SPIRIT LEVELS**

STOCK

### MODEL LAP - EXACTA

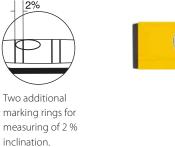
• Measuring accuracy of 0.3 mm/m in normal position and 0.75 mm/m in inverted position. Walls are thicker, strengthened with ribs outside and walls inside, hereby increasing their rigidity and resistance to deformation.

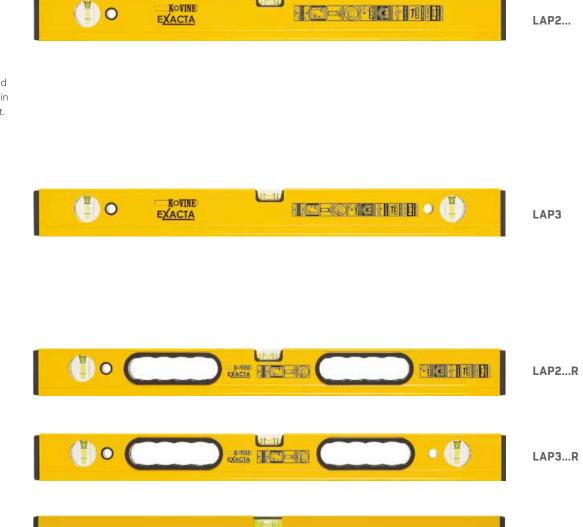


Profile 60 × 24 mm, 0.90 kg/m •



Horizontal vial with fluorescent background allows measuring also in places lacking the light.





#### **ORDER VARIANTS:**

- With one horizontal and one vertical plexiglass vial – order code LAP2.
- With one horizontal and two vertical plexiglass vial – order code LAP3.
- Level can have two milled measuring surfaces (F) up to 120 cm length, for more reliable measuring in all positions.
- Level can have two ergonomic hand-holds (R) in-built, made of high-quality plastics for better handling; from 60 cm length.
- Level can have a plastic hanger with an euro-hole (O) on end caps.
- Level can have extra strong magnets (M). •
- RAL 1021 yellow coating. •
- Lengths : from 40 cm up to 250 cm. •
- Optional printing of customer logos. •

## CATALOGUE



Milled measuring surfaces ( F )



Ergonomic hand-holds (R)

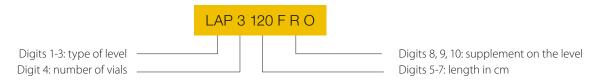


Hanger with a euro-hole (O)



Extra strong earth magnets (M)

Example of order: EXACTA spirit level with 3 vials, 120 cm, milled, with hand - holds and a hanger: order code LAP3 120 FRO



### EXACTA ELECTRONIC SPIRIT LEVEL



- Beside usual measurements, the inclination can be measured with assistance of a digital electronic sensor in the region from 0° to 360°.
- Display selection for the measured values is expressed in °, %, and mm/m.
- Display on LCD monitor in steps of 0.1°, 0.1 % and mm/m.
- Digital display of the necessary vial movement to reach the inclination 0° or 90°.
- Switch on and off of a warning signal for the measured value 0° and 90°, in all modes of display.
- Measured values are saved with the HOLD button.
- The electronic part is calibrated simply and quickly.
- Accuracy 0.1° in the area 0° to +/- 10° and 90° to +/- 10°, in other areas 0.2°.
- Automatic switch off in 6 minutes if inclination modification is not higher than 1.4°.
- Loading: battery 9V standard (alkaline), in delivery scope, duration: 500 working hours.
- Packaging in a strong, transparent, plastic tube.
- Length: 60 cm and 80 cm.

Illustrative Order: EXACTA ELECTRONIC spirit level, length 60 cm: LAP2060E



### **SPIRIT LEVELS OTHER SPIRIT LEVELS**

### **TORPEDO SPIRIT LEVEL**

LTH...





- With 2 plexiglass vials: horizontal and vertical vial, with a milled measuring surface.
- Powder coated in yellow colour RAL 1021 or red colour RAL 2002.
- Measuring accuracy: 0.5 mm/m in normal position.
- Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm

Illustrative order: torpedo spirit level, length 30 cm: LTH030 Note: Please specify the colour.





- Possible to install strong magnets.
- Dimensions 30 cm and 40 cm have 2 magnets built in, while 50 cm, 60 cm and 80 cm incorporate 3 strong magnets and 100 cm 4 magnets.
- When ordering, please add the letter **M** to the end of the code. Example: LTH030M
- Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm

### **TORPEDO SPIRIT LEVEL 25 cm**



LTH025M

• Length: 25 cm



0,5mm/m •

> ◀ 0

> > 0,5m

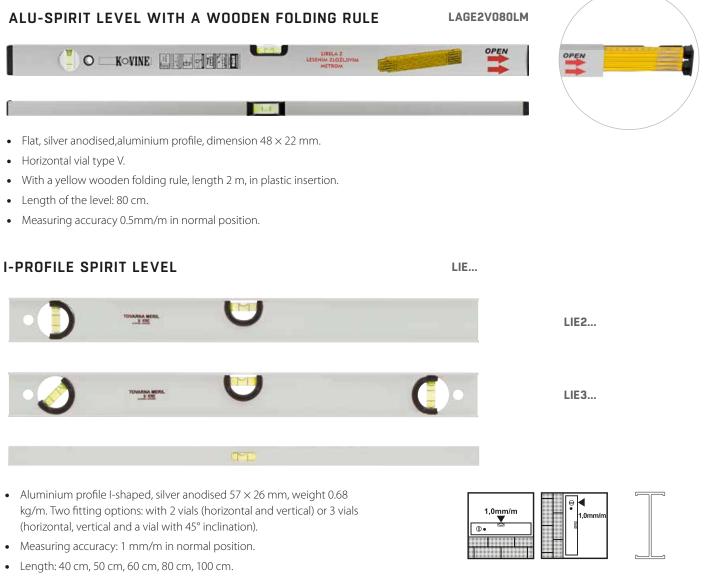
### SPIRIT LEVEL FOR ELECTRICIANS





- Flat, silver anodised, aluminium profile dimension 48 × 22 mm.
- Measuring accuracy 0.5 mm/m in normal position.
- Horizontal vial type V and one vertical vial.
- Template holes for marking and scribing in distance 71 mm according DIN 49075.
- Possible production of distances according to standards for each country.
- Length: 43 cm and 120 cm.

Illustrative order: spirit level for electricians 43 cm: LAGE2V043EL

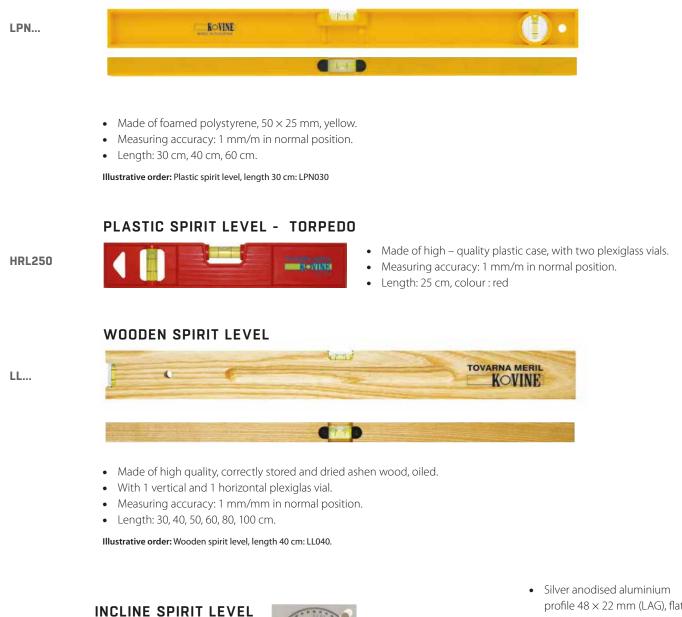


Illustrative order: I-profile spirit level, anodised, 3 vials, length 40 cm: LIE3040





### PLASTIC SPIRIT LEVEL



LNGE...



Illustrative order: Incline spirit level, flat profile, 40 cm: LNGE040

KOVINE

- Silver anodised aluminium profile 48 × 22 mm (LAG), flat with a circular plexiglass disc and a measuring graduation in degrees, percent and ratio.
- Length: 20 cm, 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.



Available with two strong magnets in both types of profiles. When ordering, please add the letter **M** to the end of code.

Illustrative order: Incline spirit level, flat profile, 60 cm, with magnets: LNGE060M

### HOSE LEVEL

### LC...



- Two plexiglass tubes with mmgraduation of 155 mm, with plugs and connections for the fitting of hose of 10 mm dia. or 12 mm dia.
- Application: For levelling on longer distances.
- Code: LC

### **CROSS LEVEL**

LPK



- For measuring of right-angled horizontal lines.
- Adapted for installation with screws.



- On request, a PVC-hose with 10 mm dia. and 10 m or 15 m length.
- Code: LCC10 or LCC15

## BULL'S EYE LEVEL



- For measuring of horizontal surfaces.
- Adapted for installation with screws.

### POST LEVEL

LPP



- 3 plexiglass vials are built in.
- Convenient for building of profiles and columns in vertical position.
- Equipped with a ribbon for fixing on the measuring surface.
- 4 strong magnets are installed for holding on a steel grounding.

LINE LEVEL



- Especially light execution to prevent line sag.
- Plexiglass vial built in.
- Plastic casing with two hangers.
- Belt clip for pocket.
- V-groove for measuring horizontality on round tubes.



## ALUMINIUM SCREEDING LEVELS AND PROFILES

For smoothing and levelling of large areas.

Different types of profiles for different purposes.



**Rectangular profile:** For smoothing of large areas made up of concrete, plaster, screed and filling materials, etc.



**Trapezoid profile:** For smoothing and levelling of slightly dried materials such as plaster, gypsum, etc.



**H-profile:** For shaping and smoothing of freshly applied materials such as plaster, screed, etc.

In rectangular profiles, we can fit one or two plexiglass vials and handles. Stable fixed plexiglass vials provide high measuring precision of 0.5 mm/m in normal position.

Illustrative order: Article number + length in cm

### ALUMINIUM SCREEDING LEVEL WITH 2 VIALS AND HANDLES



- Aluminium profile, box section 100 × 18 mm, wall thickness 1.2 mm, weight 0.86 kg/m, with 1 horizontal and 1 vertical vial and with handles; ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm, 500 cm, 600 cm.
- Illustrative order: ZL2L2R + length in cm.
- Example: ZL2L2R100.

### ALUMINIUM SCREEDING LEVEL WITH 2 VIALS



- Aluminium profile, box section 100 × 18 mm, wall thickness 1.2 mm, weight 0.86 kg/m, with 1 horizontal and 1 vertical vial; ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm, 500 cm, 600 cm.
- Illustrative order: ZL2LBR + length in cm.
- Example: ZL2LBR150.

### ALUMINIUM SCREEDING LEVEL WITH 1 VIAL AND HANDLES



- Aluminium profile, box section 100 × 18 mm, wall thickness 1.2 mm, weight 0.86 kg/m, with 1 horizontal vial and with handles; ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm, 500 cm, 600 cm.
- Illustrative order: ZL1L2R + length in cm.
- Example: ZL1L2R180.

### ALUMINIUM SCREEDING LEVEL WITH 1 VIAL



- Aluminium profile, box section 100 × 18 mm, wall thickness 1.2 mm, weight 0.86 kg/m, with 1 horizontal vial; ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm, 500 cm, 600 cm.
- **Illustrative order:** ZL1LBR + length in cm.
- Example: ZL1LBR200.



### ALUMINIUM SCREEDING LEVEL WITH HANDLES

#### ZLBL2R...



- Aluminium profile, box section 100 × 18 mm, wall thickness 1.2 mm, weight 0.86 kg/m, with handles; ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm, 500 cm, 600 cm.
- **Illustrative order:** ZLBL2R + length in cm.
- Example: ZLBL2R250.

## ZLBLBR...ALUMINIUM SCREEDING LEVEL WITHOUT VIALSZEBLBR...ALUMINIUM SCREEDING LEVEL WITHOUT VIALS - ECONOMIC



- Aluminium profile, box section 100 × 18 mm, wall thickness 1.2 mm, weight 0.86 kg/m, (ZLBLBR) and economic type (ZEBLBR) with wall thickness 1.1 mm and weight 0.78 kg/m, both ends closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm, 500 cm, 600 cm.
- Illustrative order: ZLBLBR + length in cm or ZEBLBR + length in cm.
- Example: ZLBLBR350 or ZEBLBR350.

### ALUMINIUM SCREEDING LEVEL 90 WITH 2 VIALS AND HANDLES

Z902L2R...

- Aluminium profile, box section 90 × 18 mm, wall thickness 1.2 mm, weight 0.79 kg/m with 1 horizontal and 1 vertical vial and with handles; ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm, 500 cm, 600 cm.
- Illustrative order: Z902L2R + length in cm.
- Example: Z902L2R200.

### ALUMINIUM SCREEDING LEVEL 90 WITH 2 VIALS

Z902LBR...

- Aluminium profile, box section 90 × 18 mm, wall thickness 1.2 mm, weight 0.79 kg/m, with 1 horizontal and 1 vertical vial; ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm, 500 cm, 600 cm.
- Illustrative order: Z902LBR + length in cm.
- Example: Z902LBR250.

### ALUMINIUM SCREEDING LEVELS AND PROFILES

### ALUMINIUM SCREEDING LEVEL 80 WITH 1 VIAL



- Aluminium profile, box section 80 × 18 mm, wall thickness 1.2 mm, weight 0.70 kg/m, with 1 horizontal vial; ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm.
- **Illustrative order:** Z801LBR + length in cm.
- Example: Z801LBR400.

### ALUMINIUM SCREEDING LEVEL 80 WITHOUT VIALS



- Aluminium profile, box section 80 × 18 mm, wall thickness 1.2 mm, weight 0.70 kg/m; ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm.
- Illustrative order: Z80BLBR + length in cm.
- Example: Z80BLBR200.

### ALUMINIUM SCREEDING LEVEL 80 WITH STRENGTHENED WALL - LONG LIFE





Horizontal vial with fluorescent background allows measuring also in places lacking the light.

- Aluminium profile, box section 83 × 18 mm, thickness of the measuring and shaping surface: 4 mm, weight 0.83 kg/m, with 1 horizontal vial (Z80T1L); ends are closed with plastic plugs.
- Length: 100 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm.
- Illustrative order: Z80T1L + length in cm.
- Example: Z80T1L150.



### ALUMINIUM SCREEDING LEVELS AND PROFILES

### TRAPEZOID PROFILE

#### ZTE...



- weight 0.69 kg/m; ends are closed with plastic plugs.
- Length: 100 cm, 120 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm.
- Illustrative order: ZTE + length in cm.
- Example: ZTE100.

#### **H-PROFILE**

ZH...

- H-shaped aluminium profile, box section 114 × 28 mm, wall thickness 1.3 mm, weight 0.76 kg/m.
- Length: 100 cm, 120 cm, 150 cm, 180 cm, 200 cm, 250 cm, 300 cm, 350 cm, 400 cm.
- Illustrative order: ZH + length in cm.
- Example: ZH400.



### ALUMINIUM SCREEDING LEVELS AND PROFILES

### **BASIC STAFFS IN PAIR**



- Hollow silver anodised aluminium profile T-form, box section 100 × 43 mm, weight 1.92 kg/m, with 1 horizontal vial; ends are closed with plastic plugs.
- Measuring accuracy: 0.5 mm/m in normal position.
- Length: 125 cm, 150 cm, 200 cm, 250 cm, 300 cm, 350 cm.
- **Illustrative order:** ZPL + length in cm.
- Example: ZPL125.

### LEVELLING STAFF



- Hollow silver anodised aluminium profile, box section 100 × 18 mm, weight 0.86 kg/m, with 1 horizontal vial; ends are closed with plastic plugs.
- Measuring accuracy: 0.5 mm/m in normal position.
- Length : 100 cm, 125 cm, 150 cm, 200 cm, 250 cm, 300 cm.
- Illustrative order: ZRLF + length in cm.
- Example: ZRLF150.

### ADJUSTABLE LEVELLING STAFF



- Hollow silver anodised aluminium profile, box section 100 × 18 mm, weight 0.86 kg/m with 1 horizontal vial; ends are closed with plastic plugs. With two screws for fixing of lengths at the distance of 10 cm.
- Measuring accuracy: 0.5 mm/m in normal position.
- Adjustable length: 60 cm to 90 cm ZRLN090, 100 cm to 170 cm ZRLN170.



> For measuring and transferring of different angles. For builders, carpenters, locksmiths and joiners.

### Advantages of our squares:

- High quality.
- Equipped with precise measuring scales.
- A wide range of lengths and colours.
- Optional printing of customer logo.

### KMI... TRY SQUARE



- Measuring blade made of hardened spring steel,  $40 \times 1.2$  mm, with mm-graduation. The support blade made of black anodised aluminium profile, I-form,  $40 \times 14$  mm.
- Powder coated in yellow (RAL 1021).
- Other colours by agreement.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimensions: 200 × 125 mm, 250 × 135 mm, 300 × 135 mm, 350 × 190 mm, 400 × 190 mm, 500 × 210 mm.
- Illustrative order: try square, length 250 mm: KMI250

### KMN250 ADJUSTABLE TRY QUARE



- Measuring blade made of hardened spring steel, 40 × 1.2 mm.
- The support blade made of black anodised aluminium profile, I-form,  $40 \times 14$  mm.
- For measuring and transferring of all angles. Powder coated in yellow (RAL 1021), other colours by agreement.
- Length of adjustable measuring blade: 250 mm.

### KMS250 TRY SQUARE 45°



- Measuring blade made of hardened spring steel,  $40 \times 1.2$  mm.
- The support blade made of black anodised aluminium profile, I-form, 40 × 14 mm.
- For measuring of angles 45° and 135°.
- Coated in yellow (RAL 1021), other colours by agreement.
- Length of measuring blade: 250 mm.



### TRY SQUARE, STAINLESS STEEL



- Measuring blade made of stainless steel, 40 × 1.0 mm, with etched mm-graduation of long duration.
- The support blade made of silver anodised aluminium profile, I-form,  $40 \times 14$  mm.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimension: 200  $\times$  125 mm, 250  $\times$  135 mm, 300  $\times$  135 mm,
- 400 × 190 mm, 500 × 210 mm.
- Illustrative order: try square, stainless steel, length 250 mm: KMR250.

### КМА...

### ALUMINIUM TRY SQUARE



- Measuring blade made of silver anodised aluminium profile 50 × 4.4 mm, with mm-graduation. The support blade made of black anodised aluminium profile, 15 × 40 mm.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimensions: 300 × 200 mm, 500 × 250 mm.
- Illustrative order: aluminium try square, length 300 mm: KMA300



KTB... CARPENTER'S SQUARE, POWDER COATED

- Made of hardened spring steel,  $35 \times 1.5$  mm, with mm-graduation.
- Powder coated in yellow (RAL 1021). Other colours by agreement.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimensions: 500 × 250 mm, 600 × 280 mm, 700 × 300 mm, 800 × 320 mm, 900 × 340 mm, 1000 × 360 mm.
- Illustrative order: Carpenter's square, yellow, length 600 mm: KTB600

### KTBL ... CARPENTER'S SQUARE, POWDER COATED, WITH MARKING HOLES



- Made of hardened spring steel,  $35 \times 1.5$  mm, with mm-graduation and marking holes at the distance of 5 mm.
- Powder coated in yellow (RAL 1021).
- Other colours by agreement.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimension: 700 × 300 mm, 800 × 320 mm, 900 × 340 mm, 1000 × 360 mm.
- Illustrative order: Carpenter's square, yellow, with marking holes, length 700 mm: KTBL700

KTC...

CARPENTER'S SQUARE, ZINC COATED



- Made of hardened spring steel, 35 × 1.5 mm, zinc coated.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimensions: 500 × 250 mm, 600 × 280 mm, 700 × 300 mm, 800 × 320 mm, 900 × 340 mm, 1000 × 360 mm.
- Illustrative order: Carpenter's square, zinc coated, length 600 mm: KTC600



- Made of hardened spring steel, 35 × 1.5 mm, zinc coated, with marking holes in distance of 5 mm.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimensions: 700 × 300 mm, 800 × 320 mm, 900 × 340 mm, 1000 × 360 mm.
- Illustrative order: Carpenter's square, zinc coated, with marking holes, length 700 mm: KTCL700

KTR...

### CARPENTER'S SQUARE STAINLESS STEEL



- Made of stainless steel, 35 × 1.2 mm.
- Accuracy: +/- 0.0285° = 0.5 mm/m
- Dimensions: 500 × 250 mm, 600 × 280 mm, 700 × 300 mm, 800 × 320 mm, 900 × 340 mm, 1000 × 360 mm.
- Illustrative order: Carpenter's square, stainless steel, length 700 mm: KTR700



- Made of stainless steel, 35 × 1.2 mm, with marking holes in distance of 5 mm.
- Accuracy: +/- 0.0285° = 0.5 mm/m
- Dimensions: 700 × 300 mm, 800 × 320 mm, 900 × 340 mm, 1000 × 360 mm.
- Illustrative order: Carpenter's square, stainless steel, length 800 mm: KTRL800

## C A T A L O G U E

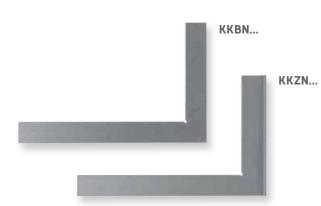
KTCL...

KZZN...

KKBN... FLAT SQUARE

KZBN... MASON'S SQUARE WITHOUT BACK

KKZN... BACK SQUARE



- Made of constructional steel, fine ground.
- Accuracy: +/- 0.01425° = 0.25 mm/m.
- Dimensions: 100 × 70 mm, 125 × 80 mm, 150 × 100 mm, 200 × 130 mm, 250 × 165 mm, 300 × 180 mm, 400 × 230 mm.
- Illustrative order:
- Flat square, length 150 mm: KKBN150
- Back square, length 300 mm: KKZN300

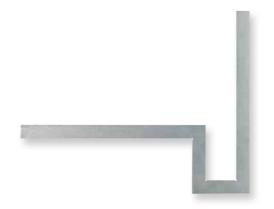


MASON'S SOUARE

WITH BACK

- Made of sharp-edge steel in St 37 quality, thickness 5 mm, zinc coated.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimensions: 100 × 70 mm, 125 × 80 mm, 150 × 100 mm, 200 × 130 mm, 250 × 160 mm, 300 × 180 mm, 400 × 230 mm, 500 × 280 mm, 600 × 330 mm, 700 × 375 mm, 750 × 395 mm, 800 × 420 mm, 1000 × 500 mm.
- Illustrative order:
- Mason's square without back, length 400 mm: KZBN400
- Mason's square with back, length 500 mm: KZZN500

### KZP400 FLANGE STEEL SQUARE



- Made of sharp-edge steel in St 37 quality, 30 × 5 mm, zinc coated.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Blade length: 400 mm
- Flange space required: 120 × 65 mm
- Application: for exact adjustment of flanges.
- Other dimensions per request.





- Made of hollow aluminium profile, box section 100 × 18 mm, wall thickness 1.2 mm; ends are closed with plastic plugs.
- Model KAZL1 with 1 horizontal plexiglass vial.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimensions: 60 × 80 cm, 80 × 80 cm, 80 × 120 cm, 100 × 100 cm, 100 × 150 cm, 120 × 160 cm, 150 × 150 cm.
- Illustrative order:
- Builder's square,  $80 \times 120$  cm: KAZL 80X120
- Builder's square with a vial, 80 × 80 cm: KAZL1 80X80



### KAZT... MASON'S SQUARE FOR SKIMMING MORTAR

- Trapezoid-shaped aluminium profile, box section 98 × 17 mm, wall thickness 1.1 mm, ends are closed with plastic plugs.
- Reinforcement profile  $15 \times 6$  mm.
- Accuracy: +/-0.0285°=0.5mm/m.
- Dimensions: 60 × 60 cm, 80 × 80 cm.
- Illustrative order: mason's square for skimming mortar 60 × 60 cm: KAZT 60X60

### KALT... CRAFTSMEN'S SQUARE, POWDER COATED

KALT2... CRAFTSMEN'S SQUARE WITH VIALS, POWDER COATED  Made of yellow powder coated hollow aluminium profile (LAT), box section 48 × 22 mm; ends are closed with plastic plugs.
 Model KALT2, with 1 horizontal and 1 vertical playinlass via

- Model KALT2 with 1 horizontal and 1 vertical plexiglass vial.
- Accuracy: +/- 0.0285° = 0.5 mm/m.
- Dimensions: Model KALT: 120  $\times$  80 cm, 150  $\times$  100 cm.
- Model KALT2: 80 × 40 cm.

#### Illustrative order:

- Craftsmen's square, 120 × 80 cm: KALT 120x80.
- Craftsmen's square with vials, 80 × 40 cm: KALT2 80x40.

KALT...

KALT2...



## C ATALOGUE

KALA... ANGLE MEASURER WITH DIAL GAUGES





- Made of orange coated hollow aluminium profile.
- For stepless measuring and transferring of angles in the area from 0° to 210°. Measuring clock steps are 1°. Mobility of measuring shanks is adjustable.
- Applicable also as a normal spirit level or as a circle (removable steel points).
- Packed in a strong, plastic case.
- Length without steel points: 45 cm (KALA045) and 60 cm (KALA060)

### KALDO60 ANGLE MEASURER - DIGITAL





- Made of orange coated hollow aluminium profile.
- For stepless measuring and transferring of angles in the area from 0° to 355°.
- Reading from the LCD display in steps of 0.1°.
- The measured values are saved with the HOLD button.
- Applicable also as a spirit level.
- Loading: battery 4 × 1,5 V AA (alkaline), included in delivery scope.
- Packed in a strong, plastic case.
- Length: 60 cm

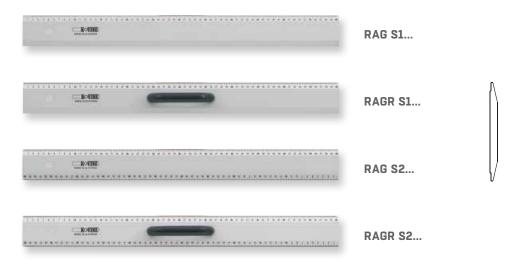


# METAL RULES

52 53 53 54

- For different applications in the building industry, crafts and in school.
- Made of quality and straight profiles.
- High-quality graduations for precise measuring.
- Long life.

### RAG... FLAT ALUMINIUM RULE RAGR... FLAT ALUMINIUM RULE WITH HANDLE



- Made of silver anodised aluminium profile, cross section 60 × 4.4 mm with facet, weight 0.60 kg/m, with one-sided mm-graduation (S1) or with two-sided mm-graduation (S2).
- Model RAGR with handle.
- Length: 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.

#### Illustrative order:

- Flat aluminium rule, length 50 cm with one-sided mm-graduation: RAG050S1.
- Flat aluminium rule with handle, length 60 cm, with two-sided mm-graduation: RAGR060S2.

### RAE... ERGONOMIC ALUMINIUM RULE

- Made of silver anodised aluminium profile, cross section 60 × 5 mm with facet, weight 0.60 kg/m, with one-sided mm-graduation (S1).
- Length: 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.
- Illustrative order: Ergonomic aluminium rule, length 50 cm: RAE050S1.

### RJB... STEEL RULE, POWDER COATED

COVARIA MERIL M

- Made of hardened spring steel,  $40 \times 1.2$  mm, yellow powder coated, with mm-graduation.
- Other colours by agreement.
- Length: 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm.
- Illustrative order: Steel rule, yellow, length 30 cm: RJB030.



### **METAL RULES**

## RAP125ALUMINIUM RULE WITH SUPPORTRAPR125ALUMINIUM RULE WITH SUPPORT AND HANDLE



- For carrying of rectangular lines in construction and in schools.
- Dimension: 1250 × 560 mm.
- For bigger orders, lengths are available on request.

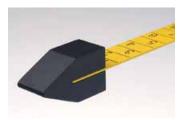
## RAN125ALUMINIUM RULE WITH FLEXIBLE SUPPORTRANR125ALUMINIUM RULE WITH FLEXIBLE SUPPORT AND HANDLE



- with a flexible fastening handle and a measuring angular graduation.
- For measuring and transferring of angles between 0° and 180°.
- Dimension: 1250 × 400 mm.
- For bigger orders, lengths are available on request.

### RJD060 STEEL RULE FOR BOARDS

- Made of hardened spring steel, 20 × 1.2 mm, with cm-graduation.
- Powder coated in yellow colour. Black quality plastic back is added.
- Used for measuring of the width of boards.
- Dimension: 60 cm.



## MEASURING TAPES, WOODEN RULES, TELESCOPIC MEASURING STAFFS

AND THE OWNER

• They are made of high-quality materials which assure high measuring accuracy and long life.

- Our program offers a wide range of metal and plastic tapes, and wooden rules for all kind of applications.
- They comply to the accuracy classes II and III.
- Length: from 1 m up to 100 m.



### MEASURING TAPES, WOODEN RULES, TELESCOPIC MEASURING STAFFS

MB...

### POCKET TAPE, YELLOW



- Yellow plastic case ABS, with lock lever. Yellow tape with mm-graduation.
- Accuracy: class II.
- Tape width: 13 mm (2 m, 3 m) and 16 mm (5 m).
- Length: 2 m, 3 m, 5 m.
- Illustrative order: Pocket tape, yellow, length 3 m: MB3

МК...

### POCKET TAPE, CHROMIUM PLATED



- Plastic case ABS, chromium plated, with lock lever. Silver tape with mm-graduation.
- Accuracy: class II.
- Tape width 13 mm.
- Length: 2 m, 3 m.
- Illustrative order: Pocket tape, chromium plated, length 3 m: MK3

#### MZB... POCKET TAPE WITH BELT CLIP

- Yellow plastic case ABS, with lock lever, belt clip and carrying strap. Yellow tape with mm-graduation. Accuracy: class II.
- Tape width: 13 mm (2 m, 3 m), 18 mm (5 m) and 25 mm (8 m, 10 m).
- Length: 2 m, 3 m, 5 m, 8 m, 10 m.
- Illustrative order: Pocket tape with belt clip, length 10 m: MZB10



### MM... POCKET TAPE WITH BELT CLIP, MAGNETIC

- Plastic case ABS, rubberized, with two dynamic and one lock levers, belt clip and carrying strap.
- Yellow tape with mm-graduation.
- Accuracy: class II.
- Tape width: 16 mm (3 m), 19 mm (5 m) and 25 mm (8 m, 10 m).
- Two strong magnets are mounted on the measuring hook, to facilitate work on ferromagnetic materials.
- Length: 3 m, 5 m, 8 m, 10 m.
- Illustrative order: Pocket tape with belt clip, magnetic, length 8 m: MM8



### MEASURING TAPES, WOODEN RULES, TELESCOPIC MEASURING STAFFS

### MVE... MEASURING TAPE ON FRAME-ERGOLINE

- Tape on a professional, rubberized, bearing-supported frame. Crank arm can be changed from the right to left hand operation. Steel tape, yellow colour, width 13 mm, protected with polyamid resin. Graduation on measuring tape in mm or cm begins with a shift of approx. 10 cm from its beginning.
- Accuracy: class II.
- Length: 20 m, 30 m and 50 m.

• **Illustrative order:** MVE + length in m + graduation. Example:

- length 50 m, graduation in cm: MVE050CM
- length 30 m, graduation in mm: MVE030MM



30 m, 50 m

### MVB... MEASURING TAPE ON FRAME - BASIC

- Tape on a bearing-supported frame. Steel tape, white colour (B), width 13 mm. Crank arm can be changed from the right to left hand operation. Graduation on measuring tape in mm begins with a shift of approx. 10 cm from its beginning.
- Accuracy: class II.
- Length: 20 m, 30 m, 50 m and 100 m.
- Possible delivery with yellow tape, protected with polyamid resin (R), up to 50 m length (as in case of MVE type).
- Illustrative order: MVB + tape + length in m.
- Example: white tape, length 50 m: MVBB050 yellow tape, length 30 m: MVBR030

### MVN... MEASURING TAPE ON FRAME, NYLON COATED

- Tape on a professional, rubberized, bearing-supported frame. Winding mechanism allows tape winding at trice speed. Steel tape, white colour, width 13 mm, nylon coated. Graduation on measuring tape in mm begins with a shift of approx. 15 cm from its beginning.
- Accuracy: class II.
- Length: 30 m and 50 m.
- Illustrative order: MVN + length in m.
- Example: Length 50 m: MVN050



20 m, 30 m, 50 m







### MEASURING TAPES, WOODEN RULES, TELESCOPIC MEASURING STAFFS

#### MVK... MEASURING TAPE ON FRAME

- Tape on a bearing-supported frame. Steel tape, yellow colour, width 13 mm. Graduation on measuring tape in mm begins with a shift of approx. 10 cm from its beginning.
- Accuracy: class II.
- Length: 30 m and 50 m.
- Illustrative order: MVK + length in m.
- Example: length 50 m: MVK050



#### MOR...

### MEASURING TAPE IN CASE - RADIUS

- Tape in a case made of high impact resistant plastics. Bearing-supported mechanism for the left or right-hand application. Plastic measuring tape strengthened with glass fibre, yellow colour, width 13 mm. Graduation on measuring tape in cm begins with a shift of approx. 10 cm from its beginning.
- Accuracy: class II.
- Length: 20 m and 30 m.
- Illustrative order: MOR + length in m.
- Example: length 30 m: MOR030

### MOF... MEASURING TAPE IN CASE, FIBERGLASS

- Tape in a case made of high impact and shock resistant plastics. Plastic measuring tape strengthened with glass fibre, yellow colour, width 13 mm. Graduation on measuring tape in mm begins with a shift of approx. 10 cm from its beginning.
- Accuracy: class III.
- Length: 20 m, 30 m and 50 m.
- Illustrative order: MOF + length in m.
- Example: length 30 m: MOF030

### M05... MEASURING TAPE IN CASE - 555

- Tape in a case made of shock resistant plastics. Steel tape, white colour, width 10 mm. Graduation on measuring tape in mm begins with a shift of approx. 10 cm from its beginning.
- Accuracy: class II.
- Length: 10 m, 20 m and 30 m.
- Illustrative order: MO5 + length in m.
- Example: length 20 m: MO5020







## C A T A L O G U E

# **MEASURING TAPES, WOODEN RULES, TELESCOPIC MEASURING STAFFS**

#### MOJ... STEEL MEASURING TAPE IN CASE

- Tape in a rubberized case made of shock resistant plastics. Steel tape, yellow colour, width 10 mm, nylon coated. Graduation on measuring tape in mm begins with a shift of approx. 10 cm from its beginning.
- Accuracy: class II.
- Length: 10 m, 20 m and 30 m.
- **Illustrative order:** MOJ + length in m.
- Example: length 10 m: MOJ010



#### ML... WOODEN FOLDING RULE

- Made of high-quality beech wood, with high breaking resistance.
- Ecological colours and lacquers for strong protection against moisture, temperature influence and mechanical damage.
- Riveted, brass-plated spring joints ensure permanent use and measuring accuracy.
- Section thickness: 3 mm, section height: 16 mm.
- Accuracy: class III.
- Length: 1 m, 2 m.
- Colours: white (code MLB), yellow (code MLR), white/ yellow (code MLK), transparent lacquer. (code MLN).
- Other colours on agreement.
- Different scales on first section: standard double scale (S) and advertising scale below (R).
- For advertising printing of customer logo on first section or sideways, one-sided or two-sided.

#### Illustrative order:

• ML + colour + length in m + scale-type.

#### Example:

- Wooden folding rule, white, length 2 m, advertising scale below: MLB2R.
- Wooden folding rule, yellow, length 1 m, standard scale: MLR1S.





# MEASURING TAPES, WOODEN RULES, TELESCOPIC MEASURING STAFFS

#### MT... TELESCOPIC MEASURING STAFF

- Made of six composed, quality aluminium profiles, with horizontal vial and vertical bull's-eye vial.
- Reading of the measured length in mm in inspection glass, with travelling measuring tape, when pulling out any section.
- Accuracy: class II.
- Illustrative order: MT + max. length in cm.

DATA STAFF	MT300	MT400	MT500
MAX. LENGTH (cm)	300	400	500
MIN. LENGTH (cm)	70	86.5	107
WEIGHT (kg)	1.3	1.5	2



#### MS TAILOR'S TAPE

- Tape made of fibre glass plastics, graduation on both sides, closed with a metal cap. Measuring scale in cm (the first 10 cm of the scale have mm-graduation), an added scale with 2:1 ratio (for defining of a ready-made number).
- Length: 150 cm.

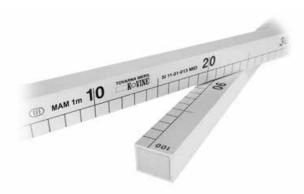


#### MKR TAILOR'S TAPE IN CASE

- Handy casing made of quality plastics, with mechanism for automatic tape winding, activated by pressing a button.
- Measuring tape made of fibre glass plastics with mm-graduation on both sides.
- Length: 150 cm.

#### MAM ALUMINIUM POLE METER

- Quality silver anodised ALU-profile, dimensions 1.5 × 2.5 × 100 cm, with metal caps.
- Graduation in cm on both sides.
- Accuracy DIN 6403.



S-2-3 4-4 9 1 9 9

ля по маля 10 Тяле, риплению 20 сс = их 30 40 50 60 70 80 90 #

# C A T A L O G U E

# LASER PROGRAM

daalaa hadaa ha

- High quality laser instruments for simple and single-hand application, time efficient.
- For simple and quick measuring of distances, different levelling, transfer of heights and for simple horizontal and vertical levelling.
- Laser technology complies with international safety standards.
- Wide range of accessories for different applications and situations.
- Laser technology is robust, allowing application under severe conditions; developed for practical applications.

## LASER PROGRAM

#### BLL... LASER LEVEL



- Made of quality aluminium profile, grey powder coated. With a strong magnet in the milled surface, for holding on a metal surface or on the levelling platform (BVG) that allows rotation of the level by 360°.
- Laser wave-length is 670 nm. The parallelism of the beam axis is 0.1 mm/m in relation to the measuring plane. The mounting tolerance of the horizontal vial is 0.25 mm/m.
- Laser: class 2, output < 1 mW.
- Loading: batteries, 2 × 1.5 V AAA (alkaline), included in delivery scope, 8 hours continuous light.
- Laser ray range in rooms: 30 m.
- Protected against dust and moisture.
- Delivered in a strong, plastic and transparent tube.
- Length: 35 cm (BLL035) and 80 cm (BLL080).

#### ACCESSORIES FOR LASER LEVEL

#### BVG LEVELLING PLATFORM

- Heavy-weight metal design. Rotating, bearingsupported. Bull's-eye vial integrated in the rotation disc. Quick calibration by means of 2 levelling screws.
- The device can be used as a stand-alone unit on the floor or on a tripod (1/4, 3/8 and 5/8 inch thread). Uncontrolled rotation avoided with an integrated brake.



#### BOP... BEAM DEFLECTING PRISM

- For deflection of a laser beam by 90° (model BOP1), with the possibility of 360° rotation. With adapter which is included in delivery scope it can be fixed on the laser level, and it can be easily removed with the integrated magnet.
- Model BOP2: deflection 50 % of laser power under angle 90°, and 50 % travel further in the direction of the basic ray without interruption.





BOP1

BOP2

#### BST... TRIPOD

- Made of light metal design. Connecting thread 5/8 inch. Height can be changed with a simple stretching mechanism. Model BST242 is additionally provided with a crank lift for legs' stretching.
- Model BST160: min. height 105 cm, max. height 160 cm
- Model BST242: min. height 112 cm, max. height 242 cm





**BST160** 

#### BOL LASER SPECTACLES

• Improve the visibility of laser rays in unfavourable light conditions.





## LASER PROGRAM

#### BLS LASER SET





Set in a carrying case ( $450 \times 300 \times 160$  mm) includes a laser level with 35 cm length (BLL035), a levelling platform (BVG), a beam deflecting prism (BOP1) and laser spectacles (BOL). Technical characteristics are the same as for single components.

#### BLM AUTO LEVELLING DOTS & LINES LASER - AUTOMAGIC

• Auto levelling 5 dot and lines laser is used for levelling and aligning inside. The laser dots and lines can be activated in combination. The laser unit can also provide inclined lines.

#### Technical data:

- Laser diode: red diode laser, 635 nm, power 2M (EN60825-1).
- Levelling: automatically in zone +/- 3°.
- Levelling precision: line laser +/- 3.0 mm/10 m; horizontal accuracy of dot laser +/- 3.0 mm/10 m.
- vertical accuracy of dot laser up +/- 1.5 mm/3 m; vertical accuracy. of dot laser – down +/- 1.5 mm/2 m.
- Receive range: to 30 m with receiver.
- Fan angle: 150°.
- Power voltage: 3 × 1.5 V battery type AA LR6.
- Dimension:  $116 \times 69 \times 112$  mm (L × W × H).
- Weight: 500 g.
- Included in set: Automagic, magnetic multifunction base with connecting.
- Thread 1/4" and 5/8" for the tripod, target plate, battery, soft bag.

#### BLM-SET AUTOLEVELLING LASER AUTOMAGIC + ELECTRONIC LASER DETECTOR

Additionally provided with the BLM laser is an electronic laser detector (charging 9V) which at usage outside acoustical signals reception of the laser beam. oft bag.



## LASER PROGRAM

#### BD LASER DISTANCE METRE – DISTO D5

- For accurate measurements, especially of larger distances on heavy approachable places, without additional assistance.
- Measuring is done quickly, exactly in the laser point that we see.
- Digital Point finder with 4 × zoom and high resolution colour display.
- Features like trapezium function, Pythagorean functions, 45° tilt sensor, power range technology.
- It allows defining of three different starting.
- Measuring points (in front, behind, tripod).
- Measuring accuracy: +/- 1 mm, range 200 m.
- All other models available.













#### BU ULTRASONIC DISTANCE METRE WITH LASER

- Professional instrument allows simple ultrasonic measuring of distance. Integrated accurate laser indicator of the area performing the measurement.
- Measured amounts and used functions are shown on a big LCD display. The calculating is done with special function buttons.
- It allows defining of two different starting measuring points (in front, behind). Function for automatic switch off.

#### Technical data:

- Loading: battery, 9 V (alkaline), included in delivery scope.
- Laser: 635–650 nm, laser power < 5 mW.
- Measuring range: from 0.6 m to 15 m.
- Accuracy: 0.5 %.
- Dimension:  $130 \times 60 \times 40$  mm.
- Packed in blister.





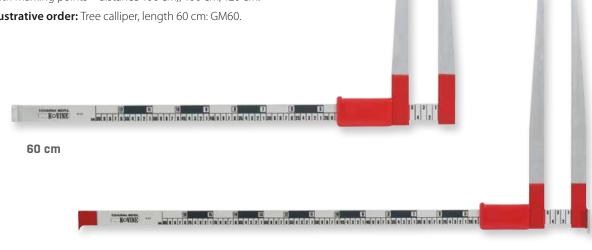




- Complement and round our measuring tool selection.
- Made of high-quality materials.
- High measuring precision.
- Long life.
- Different applications in industry, building, crafts and home works.

#### GM... TREE CALLIPER

- Made of silver anodised aluminium profile with a doublesided combined graduation, wear resistant.
- Length: 40 cm, 50 cm, 60 cm, 80 cm (with marking points - distance 100 cm), 100 cm, 120 cm.
- Illustrative order: Tree calliper, length 60 cm: GM60.



80 cm

#### PLUMB, POWDER COATED HSB

- Made of quality alloy Zn Al 4, weight 130 g with 5 m long nylon string.
- Yellow RAL 1021 powder coated or red RAL 2002 powder coated.

#### PLUMB, ZINC PLATED WITH PLATE HSC

- Made of quality steel, weight 170 g, with 4 m long string.
- Length of plate side is the same as the diameter of the plumb.





#### OPA VERNIER CALLIPER

- Made of stainless steel, satin-chromed graduation. For outside and inside measurements and depth measurements. Integrated locking screw.
- Measuring range: 150 mm.
- Minimal reading: 0.02 mm.
- Jaw length: 40 mm.

#### OPD DIGITAL CALLIPER

- Made of stainless steel, satin-chromed graduation. For outside and inside measurements and depth measurements. With big LCD display, 11 mm, showing the measured value in mm or inches. Integrated data output, locking screw and thread table.
- According to DIN 862.
- Measuring range: 150 mm.
- Minimal reading: 0.01 mm.
- Jaw length: 40 mm.





#### OPU DIAL CALLIPER

- Made of stainless steel, satin-chromed graduation. For outside and inside measurements and depth measurements. Integrated locking screw and thread table.
- According to DIN 862.
- Measuring range: 150 mm.
- Minimal reading: 0.02 mm.
- Jaw length: 40 mm.

#### OMZ EXTERNAL MICROMETER

- Made of quality casting. Measuring surface made of hardened alloy. Spindle 6.5 mm dia., with locking lever and ratchet.
- According to DIN 863.
- Measuring range: 0-25 mm.
- Minimal reading: 0.01 mm.





#### OMU DIAL GAUGE

- Clock: 58 mm dia.
- Clamp: 8 mm dia.
- Integrated adjustable tolerance marks.
- Measuring range: 10 mm.
- Minimal reading: 0.01 mm.



#### OK... PROTRACTOR

- Satin-chromed graduation allows measuring of angles from 0° to 180°.
- Fixing with locking screw.
- **Illustrative order:** OK + scale diameter in mm.



DATA	OK120	OK150	OK200
SCALE DIAMETER (mm)	120	150	200
LEG LENGTH (mm)	150	200	300

#### OML FEELER GAUGES

- Made of quality spring steel. 20 blades, thickness of 0.05 to 1 mm in raster of 0.05 mm in a chromed steel case.
- Blade length: 10 cm.





#### OMK1 MEASURING WHEEL, STANDARD

- Sturdy, disc-tape steel wheel with a solid rubber tyre allows measuring forwards and backwards. Nickel-plated, folding handle for easier transport. Measuring counter in cm has a reset lever. Integrated parking handle and a brake for simple application.
- Measuring range: 9,999.99 m.
- Tolerance: under 0.05 %.
- Wheel diameter: 318.3 mm = 1 m girth.
- Weight: 3.9 kg.
- Max. height: 109 cm.



#### OMK2 MEASURING WHEEL, LIGHT

- Made of high-quality plastics, very light. The wheel allows measuring forwards and backwards. Measuring counter in cm has a reset lever. Integrated parking handle and a brake for simple application. Nickel-plated, folding handle allows simple transport.
- Measuring range: 99,999.99 m.
- Wheel diameter: 318.3 mm = 1 m girth.
- Weight: 2.2 kg.
- Max. height: 99 cm.





# MARKING ASSORTMENT

hadaa ha

For drawing and marking on the field, by assembly, building construction, panelling and similar.



# MARKING ASSORTMENT

RVB....

#### **RTS** CARPENTER'S PENCIL – SET



- Made of quality wood with graphite, hardness HB.
- Length: 18 cm.
- Three pieces packed in a plastic foil with a hanging cardboard.



MASON'S LINE, WHITE

- Quality line made of polypropylene, 1.5 mm dia., white colour.
- Resistant to moisture and water.
- Length: 25 m, 50 m and 100 m.
- Illustrative order: Mason's line, white, length 100 m: RVB100

#### RI SCRIBER



• Made of quality steel, equipped with a pocket clip. With a point made of high-alloyed steel that assures long life of drawing on different hard grounds.

#### RVF100

#### MASON'S LINE, FLUORESCENT



- Quality line made of polypropylene, 1.5 mm dia., yellow fluorescent. Resistant to moisture and water.
- Length: 100 m.
- Illustrative order: Mason's line fluorescent, length 100 m: RVF100.



#### RS... SPRING DIVIDER

- Points made of hardened spring steel allow drawing of circumferences on different grounding. Shanks of quality steel are connected with a spring. Distance is regulated by a spindle and quick-locking nut.
- Shanks length: 150 mm, 200 mm, 250 mm, 300 mm.
- Illustrative order: Spring divider, length 150 mm: RS150

# CATALOGUE

# ADVERTISING ITEMS

- For advertising and gifts.
- Practical value.
- Printing of advertising and logo; one or more colours.



# **ADVERTISING ITEMS**

#### LAG.... ALU-SPIRIT LEVEL



- All levels of LAG model, in different colours and different types of horizontal vials are convenient for advertising. Colours and executions on agreement, with 1, 2 or 3 plexiglass vials.
- Accuracy: 0.5 mm/m in normal position.
- Length: 15 cm (with 1 horizontal vial), 20 cm (with 1 or 2 vials), 30 cm, 40 cm, 50 cm, 60 cm, 80 cm, 100 cm, 120 cm (with 2 or 3 vials).
- Illustrative order: see page 7: Order survey for alu-spirit levels.
- Max. size of the printing varies depending on the length of level, or on agreement.

HRL110

#### WOODEN ADVERTISING SPIRIT LEVEL



- Made of high quality, correctly stored and dried beech wood, with one horizontal plexiglas vial.
- With prismatic measuring surface for a measuring of round tubes, frames, shelves.
- Accuracy: 1 mm/mm.
- Length: 11 cm.
- Maximal print size: 90 × 10 mm.

HRL250

#### PLASTIC SPIRIT LEVEL - TORPEDO







- Made of high quality, correctly stored and dried beech wood, with one horizontal plexiglas vial.
- Accuracy: 1 mm/mm.
- Length: 15 cm.
- Maximal print size: 130 × 12 mm.

- Made of high quality plastic case, with two plexiglass vials.
- Accuracy: 1 mm/m in normal position.
- Length: 25 cm, colours : red and yellow.
- Maximal print size: 50 × 25 mm.

**HRL180** 



**ADVERTISING SPIRIT LEVEL** 

- High-quality plastic case, with horizontal plexiglass vial.
- Accuracy: 1 mm/m in normal position.
- Colours: yellow, red, black.
- Length: 180 mm.
- Maximal print size: 60 × 20 mm.



# **ADVERTISING ITEMS**





- Made of high-quality beech wood.
- Section thickness: 3 mm, section height: 16 mm.
- Accuracy: class III.
- Lengths: 1 m, 2 m.
- Colours: white (code MLB), yellow (code MLR), white/yellow (code MLK), transparent lacquer (code MLN).
   Other colours on agreement.
- Different scales on first section: standard double scale (S) and advertising scale below (R).
- For advertising printing of customer logo sideways or on first section, one or two-sided.
- Max. print size sideways, possible for all types of wooden rules: 110 × 20 mm.
- Max. print size on the model with the scale below: 60 × 5 mm.

#### Illustrative order:

ML + colour + length in m + scale-type. Example:

- Wooden folding rule, white, length 2 m, one-sided scale below: MLB2R.
- Wooden folding rule, yellow, length 1 m, standard scale: MLR1S.
- Model MLB2M: wooden folding rule, white, length 2 m, adverising.

#### MZB3 POCKET TAPE WITH BELT CLIP, 3M



- Yellow plastic case ABS, with lock lever, belt clip and carrying strap. Yellow tape with mm-graduation.
- Accuracy: class II.
- Tape width: 13 mm.
- Length: 3 m.
- Possible printing of labels on agreement.

нкм

#### ANGLE GAUGE



- Quality plastic case,  $100 \times 100 \times 14$  mm.
- For measuring of inclination in angle degrees.
- With table for inclination estimation from angle degrees in cm/m on the back side.
- Colours: black, white, blue.
- Possible printing on agreement on the front side label.

#### HOL KEY LOCKET – PLEXIGLASS VIAL HOM KEY LOCKET – TAPE MEASURE



- Plexiglass vial, 15 × 15 × 40 mm with a chain and spring hook HOL.
- Max. print size: 35 × 12 mm.
- Tape measure, 1 m with a chain and spring hook HOM.
- Max. print size: 20 mm.

#### RT CARPENTER'S PENCIL



- Made of quality wood with graphite, hardness HB.
- Length: 18 cm.
- Max. print size: 60 × 6 mm.



# HAND TOOLS

The production programme of hand tools supplements our sales programme.

**Application:** 

- Sand levelling.
- Levelling of bitumen, asphalt, concrete ground and different surfaces on buildings grounds.
- Cleaning of dirt, water, snow and oil spills from the streets.
- Getting the sand between concrete paving plates.
- Cleaning of toilet and bathroom, garage and swimming pools.
- Plate sealing.
- Made of high-quality aluminium, steel and other wear resistant materials.

# HAND TOOLS

#### CRGN060 FLAT LEVELLING TOOL

- Length: 60 cm.
- Possibility of delivery with high quality wooden handle.

#### CRGN080 FLAT LEVELLING TOOL

- Length: 80 cm.
- Possibility of delivery with high quality wooden handle.



#### COGGED LEVELLING TOOL

COGGED LEVELLING TOO

- Length: 60 cm.
- Possibility of delivery with high quality wooden handle.

#### CRZN080

**CRZN060** 

- Length: 80 cm.
- Possibility of delivery with high quality wooden handle.

#### CRTN060 TRAPEZOID LEVELLING TOOL

- Length: 60 cm.
- Possibility of delivery with high quality wooden handle.

#### CRTN080 TRAPEZOID LEVELLING TOOL

- Length: 80 cm
- Possibility of delivery with high quality wooden handle.





#### LEVELLING TOOL FOR CONCRETE

- Length: 100 cm.
- With flexible handle accessory.
- Possibility of delivery with high quality wooden handle.

#### CRTBN98X30 LEVELLING TOOL FOR LIQUID CONCRET

- Dimesions: 98 × 30 cm.
- With flexible handle accessory.
- Possibility of delivery with high quality wooden handle.





# HAND TOOLS

#### LEVELLING TOOL CRTVN070

- Length: 70 cm.
- Hollow profile with handle accessory
- Possibility of delivery with high quality wooden handle.

#### CRTVN100 LEVELLING TOOL

- Length: 100 cm.
- Hollow profile with handle accessory
- Possibility of delivery with high quality wooden handle.



#### CRTSN070 LEVELLING TOOL-S

- Length: 70 cm.
- Possibility of delivery with high quality wooden handle.

#### CRTSN100 **LEVELLING TOOL-S**

- Length: 100 cm.
- Possibility of delivery with high quality wooden handle.

#### CGPEN045 **RUBBER SPREADING TOOL**

- Length: 45 cm.
- With simple handle accessory
- Possibility of delivery with high quality wooden handle.

#### CGPON060

#### **RUBBER SPREADING TOOL**

- Length: 60 cm.
- With reinforced handle accessory
- Possibility of delivery with high quality wooden handle. •

#### **RUBBER SPREADING TOOL**

- Length: 80 cm. •
- With reinforced handle accessory •
- Possibility of delivery with high quality wooden handle. •



#### CATALOGUE

#### CPN... SNOW SPREADING TOOL

- For cleaning asphalt, ceramics and concrete surfaces.
- Height 13 cm, length 70 cm, thickness of rubber 0.8 cm, resistant against wear.
- Possibility of delivery with high quality wooden handle.





#### CRL ... WOODEN HAND TOOL FOR TENNIS COURT

- For smoothing and leveling sandy tennis courts.
- Skimmed board made of quality wood.
- Board with skimmed edges can be used on both sides.
- Height of board 8 cm, length 130 cm, thickness 2 cm.
- With reinforced metal handle accessory.
- Possibility of delivery with high quality wooden handle.

#### DCRT. WOODEN HANDLE FOR LEVELLING TOOL

- Made of quality beech wood, 32 mm dia., straight (DCRT2).
- Levelling tools CRTVN and CRTSN have a conical handle (DCRT1).
- Length: 180 cm.



# **PRODUCT DISPLAYS**

All displays are available without products.

#### DSI DISPLAY FOR COMBINATED PRODUCTS

- For combination of different products.
- Dimension: 200 × 100 cm.





#### DSZL DISPLAY FOR SREEDING LEVELS

- Capacity: 20 pcs of screeding levels.
- Dimension:  $50 \times 139 \times 50$  cm.





#### DSL DISPLAY FOR ALU - SPIRIT LEVELS

- Capacity: 40 pcs of Alu spirit levels (for models LAG, LAR, LAU, LAT, LAD).
- Dimension:  $24 \times 60 \times 30$  cm.





C A T A L O G U E



# PRODUCTION IN THE HANDS OF EXPERIENCED PROFESSIONALS. WE MASTER OUR QUALITY WITH PROOVED HIGH TECHNOLOGY.

#### Our advantages:

- Own development, production and maintenance of tools, machines and devices.
- Serial production of plexiglass vials.
- Software optical control of production process.
- Quick response and adjustment to special customer needs.







TOVARNA MERIL KOVINE d.d. Pameče 153 2380 Slovenj Gradec Slovenija

Tel: +386 (0)2 88 46 300 Fax: +386 (0)2 88 46 314 E-mail: info@tm-kovine.si www.tm-kovine.si