

## 36005 - 36006

## Workshop straight edges DIN 874/2

### Design

- Accuracy in accordance with DIN 874/2
- Top edges finely ground
- With factory test protocol

### Applications

For general work.

### Note:

Other dimensions available on request.



36005

| Length<br>mm | approx. mm | Normal steel |     | Stainless steel |     |
|--------------|------------|--------------|-----|-----------------|-----|
|              |            | 36005        | ... | 36006           | ... |
| 500          | 30 x 6     |              |     | 101             | 101 |
| 1000         | 40 x 8     |              |     | 102             | 102 |
| 1500         | 50 x 10    |              |     | 103             | 103 |

| Length<br>mm | approx. mm | Normal steel |     | Stainless steel |     |
|--------------|------------|--------------|-----|-----------------|-----|
|              |            | 36005        | ... | 36006           | ... |
| 2000         | 60 x 12    |              |     | 104             | 104 |
| 2500         | 70 x 14    |              |     | 105             | 105 |
| 3000         | 80 x 15    |              |     | 106             | 106 |

## 36010 - 36011

## Workshop straight edges DIN 874/1

### Design

- Accuracy in accordance with DIN 874/1
- Test surfaces carefully adjusted
- Flat sides finely ground
- From 2000 mm length, double T-shaped and with hand slots
- With factory test protocol

### Applications

For precision mechanical engineering.

### Note:

Other dimensions available on request.



36010 - 36011

| Length<br>mm | approx. mm | Normal steel |     | Stainless steel |     |
|--------------|------------|--------------|-----|-----------------|-----|
|              |            | 36010        | ... | 36011           | ... |
| 500          | 40 x 8     |              |     | 101             | 101 |
| 1000         | 50 x 10    |              |     | 102             | 102 |
| 1500         | 60 x 12    |              |     | 103             | 103 |

| Length<br>mm | approx. mm | Normal steel |     | Stainless steel |     |
|--------------|------------|--------------|-----|-----------------|-----|
|              |            | 36010        | ... | 36011           | ... |
| 2000         | 70 x 14    |              |     | 104             | 104 |
| 2500         | 80 x 15    |              |     | 105             | 105 |
| 3000         | 100 x 16   |              |     | 106             | 106 |

## 36015 - 36016

## Normal straight edges DIN 874/0

### Design

- Accuracy in accordance with DIN 874/0
- Test surfaces carefully adjusted
- Flat sides ground
- With factory test protocol

### Note:

Other dimensions available on request.



36015 - 36016

| Length<br>mm | approx. mm | Normal steel |     | Stainless steel |     |
|--------------|------------|--------------|-----|-----------------|-----|
|              |            | 36015        | ... | 36016           | ... |
| 500          | 50 x 10    |              |     | 101             | 101 |
| 1000         | 60 x 12    |              |     | 102             | 102 |
| 1500         | 70 x 14    |              |     | 103             | 103 |

| Length<br>mm | approx. mm | Normal steel |     | Stainless steel |     |
|--------------|------------|--------------|-----|-----------------|-----|
|              |            | 36015        | ... | 36016           | ... |
| 2000         | 80 x 15    |              |     | 104             | 104 |
| 2500         | 100 x 16   |              |     | 105             | 105 |
| 3000         | 120 x 18   |              |     | 106             | 106 |

## 36060 - 36062

## Straight edges DIN 874/00

**ATORN®**

### Design

- Accuracy in accordance with DIN 874/00
- Measuring surfaces hardened, ground and lapped
- Wedge-shaped cross section, pointed end
- With insulated handle
- In case

### Applications

To check evenness using the light gap method.



36060



36062

| Length<br>mm | Normal steel |     | Stainless steel |     |
|--------------|--------------|-----|-----------------|-----|
|              | 36060        | ... | 36062           | ... |
| 75           |              |     | 101             | 101 |
| 100          |              |     | 102             | 102 |
| 125          |              |     | 103             | 103 |
| 150          |              |     | 104             | 104 |

| Length<br>mm | Normal steel |     | Stainless steel |     |
|--------------|--------------|-----|-----------------|-----|
|              | 36060        | ... | 36062           | ... |
| 200          |              |     | 105             | 105 |
| 300          |              |     | 106             | 106 |
| 400          |              |     | 107             | 107 |
| 500          |              |     | 108             | 108 |

## Squares

## 36103 - 36105

## Metalwork squares

## Design

- Trued to 90°

## Quality

Steel, up to 1000 x 500 mm bright zinc-plated and rust protected.

## Applications

Only for the simplest metalwork.

## Note:

Cannot be calibrated.

| Arm length<br>mm | Arm □<br>mm | Without stop |     | With stop |     |
|------------------|-------------|--------------|-----|-----------|-----|
|                  |             | 36103        | ... | 36105     | ... |
| 100 x 70         | 20 x 5      |              | 101 |           | 101 |
| 150 x 100        | 20 x 5      |              | 102 |           | 102 |
| 200 x 130        | 20 x 5      |              | 103 |           | 103 |
| 250 x 160        | 25 x 5      |              | 104 |           | 104 |
| 300 x 180        | 25 x 5      |              | 105 |           | 105 |
| 400 x 230        | 30 x 5      |              | 106 |           | 106 |
| 500 x 280        | 30 x 5      |              | 107 |           | 107 |
| 750 x 375        | 30 x 5      |              | 108 |           | 108 |
| 1000 x 500       | 30 x 5      |              | 109 |           | 109 |
| 1500 x 750       | 30 x 5      |              | 110 |           | 110 |
| 2000 x 1000      | 40 x 5      |              | 111 |           |     |



## 36111 - 36113

## Workshop squares DIN 875/2

**ATORN®**

## Design

- Accuracy in accordance with DIN 875/2  
- Top edges and flat sides ground

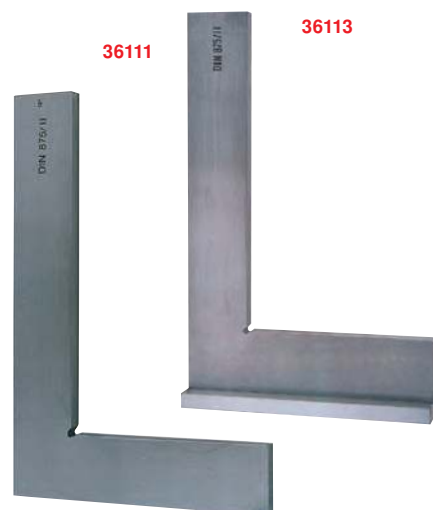
## Quality

Normal steel.

## Applications

For general work.

| Arm length<br>mm | Arm □<br>mm | Without stop |     | With stop |     |
|------------------|-------------|--------------|-----|-----------|-----|
|                  |             | 36111        | ... | 36113     | ... |
| 100 x 70         | 20 x 5      |              | 101 |           | 101 |
| 150 x 100        | 25 x 5      |              | 102 |           | 102 |
| 200 x 130        | 30 x 6      |              | 103 |           | 103 |
| 250 x 165        | 35 x 7      |              | 104 |           | 104 |
| 300 x 175        | 35 x 7      |              | 105 |           | 105 |
| 500 x 250        | 40 x 8      |              | 107 |           | 107 |
| 600 x 300        | 40 x 8      |              | 108 |           | 108 |
| 750 x 375        | 45 x 10     |              | 109 |           | 109 |
| 1000 x 500       | 50 x 10     |              | 110 |           | 110 |



## 36100 - 36101

## Workshop squares DIN 875/1

**HHW**

## Design

- Accuracy in accordance with DIN 875/1  
- Lasered scaling, mm graduation

## Quality

Hard-coded aluminium (HRC63).  
Scratch-resistant, black anodised surface.

**NEW**

| Arm length<br>mm | Without stop |     | With stop |     |
|------------------|--------------|-----|-----------|-----|
|                  | 36100        | ... | 36101     | ... |
| 75 x 50          |              | 101 |           | 101 |
| 100 x 70         |              | 102 |           | 102 |
| 150 x 100        |              | 103 |           | 103 |
| 200 x 130        |              | 104 |           | 104 |
| 250 x 165        |              | 105 |           | 105 |
| 300 x 200        |              | 106 |           | 106 |
| 400 x 265        |              | 107 |           | 107 |
| 500 x 330        |              | 108 |           | 108 |



## 36115 - 36119

## Workshop squares DIN 875/1

**ATORN®****Design**

- Accuracy in accordance with DIN 875/1

- Top edges and flat sides finely ground

**Applications**

For precision mechanical engineering.

**36115****Design**

Without stop.

**Quality**

Normal steel.

**36117****Design**

With stop.

**Quality**

Normal steel.

**36118****Design**

Without stop.

**Quality**

Stainless steel.

**36119****Design**

With stop.

**Quality**

Stainless steel.



| Arm length<br>mm | Arm $\square$<br>mm | Without stop/steel |     | With stop/steel |     | Without stop/stainless steel |     | With stop/stainless steel |     |
|------------------|---------------------|--------------------|-----|-----------------|-----|------------------------------|-----|---------------------------|-----|
|                  |                     | 36115              | ... | 36117           | ... | 36118                        | ... | 36119                     | ... |
| 75 x 50          | 15 x 5              |                    | 101 |                 |     | 101                          |     | 101                       |     |
| 100 x 70         | 20 x 5              |                    | 102 |                 |     | 102                          |     | 102                       |     |
| 150 x 100        | 25 x 5              |                    | 103 |                 |     | 103                          |     | 103                       |     |
| 200 x 130        | 30 x 6              |                    | 104 |                 |     | 104                          |     | 104                       |     |
| 250 x 165        | 35 x 7              |                    | 105 |                 |     | 105                          |     | 105                       |     |
| 300 x 200        | 40 x 8              |                    | 106 |                 |     | 106                          |     | 106                       |     |
| 500 x 330        | 50 x 10             |                    | 108 |                 |     | 108                          |     | 108                       |     |
| 750 x 500        | 60 x 12             |                    | 110 |                 |     | 110                          |     |                           |     |
| 1000 x 660       | 70 x 15             |                    | 111 |                 |     | 111                          |     |                           |     |

## 36120 - 36122

## Normal squares DIN 875/0

**ATORN®****Design**

- Accuracy in accordance with DIN 875/0

- With factory calibration certificate

- Measuring surfaces lapped

- Lateral surfaces finely ground

**Applications**

Suitable for inspection and mechanical engineering.

**Quality**

Steel.

| Arm length<br>mm | Arm $\square$<br>mm | Without stop |     | With stop |     |
|------------------|---------------------|--------------|-----|-----------|-----|
|                  |                     | 36120        | ... | 36122     | ... |
| 75 x 50          | 15 x 5              |              |     | 101       | 101 |
| 100 x 70         | 20 x 5              |              |     | 102       | 102 |
| 150 x 100        | 25 x 5              |              |     | 103       | 103 |
| 200 x 130        | 30 x 6              |              |     | 104       | 104 |
| 250 x 165        | 35 x 7              |              |     | 105       | 105 |
| 300 x 200        | 40 x 8              |              |     | 106       | 106 |



## 36135 - 36136

## Hardened precision squares DIN 875/0

**ATORN®****Design**

- Accuracy in accordance with DIN 875/0

- With factory calibration certificate

- Precisely adjusted

- Measuring surfaces lapped

- Lateral surfaces finely ground

**Quality**

Stainless steel.

| Arm length<br>mm | Arm $\square$<br>mm | Without stop |     | With stop |     |
|------------------|---------------------|--------------|-----|-----------|-----|
|                  |                     | 36135        | ... | 36136     | ... |
| 50 x 40          | 12 x 5              |              |     | 101       | 101 |
| 75 x 50          | 15 x 5              |              |     | 102       | 102 |
| 100 x 70         | 20 x 5              |              |     | 103       | 103 |
| 150 x 100        | 25 x 5              |              |     | 104       | 104 |
| 200 x 130        | 30 x 6              |              |     | 105       | 105 |



## Measuring instrument set | Squares

**36139**

### Measuring instrument set

#### Design

**5 pieces**, comprised of:  
**1 straight edge**, carbon steel,  
 DIN 874, length 100 mm,  
**1 knife-edge square**, rust-proof,  
 DIN 875/00, 75 x 50 mm,  
**2 incision squares**,  
 rust-proof, 25 x 20 and 40 x 28 mm,  
**1 end gauge scribing tip**,  
 60 x 8 x 8 mm.


**36139**

|              |       |     |
|--------------|-------|-----|
| Set contents | 36139 | ... |
| 5 pieces     |       | 101 |

**36142**

### Precision knife-edge square DIN 875/00

#### Design

- Accuracy in accordance with DIN 875/00
- Precisely adjusted
- Test surfaces lapped, fully hardened,  
with weak and strong arms,  
**stop** and **2 hairline measuring edges**

#### Quality

Stainless steel.

| Arm length<br>mm | Arm $\square$<br>mm | 36142 | ... |
|------------------|---------------------|-------|-----|
| 50 x 40          | 16 x 2/14 x 10      |       | 101 |
| 75 x 50          | 15 x 2/14 x 10      |       | 102 |
| 100 x 70         | 19 x 3/18 x 12      |       | 103 |
| 150 x 100        | 25 x 3/24 x 12      |       | 104 |
| 200 x 130        | 29 x 4/28 x 16      |       | 105 |


**36142**
**36151 - 36152**

### Knife-edge square DIN 875/00

**36151**

#### Design

- Accuracy in accordance with DIN 875/00
- Fully hardened
- With **2 hairline measuring edges**
- Top edges and flat sides ground  
and lapped

#### Applications

For tests using the light gap method.

#### Quality

Stainless steel.

**36152**

Wooden case

| Arm length<br>mm | Arm $\square$<br>mm | Knife-edge square |     | Wooden case |     |
|------------------|---------------------|-------------------|-----|-------------|-----|
|                  |                     | 36151             | ... | 36152       | ... |
| 50 x 40          | 13 x 4              |                   | 101 |             | 106 |
| 75 x 50          | 15 x 5              |                   | 102 |             | 107 |
| 100 x 70         | 20 x 6              |                   | 103 |             | 108 |
| 150 x 100        | 25 x 7              |                   | 104 |             | 109 |
| 200 x 130        | 33 x 7              |                   | 105 |             | 110 |


**36152**
**36151**
**36153**

### Incision square DIN 875/00

#### Design

- Accuracy in accordance with DIN 875/00
- Top edges and flat sides precisely  
and very finely ground
- With a hairline measuring edge inside  
the long arm
- Without stop

#### Applications

For checking surfaces on cutting, punching and  
embossing tools. As a normal square with 90°.  
For device and tool manufacture.

#### Quality

Stainless steel.

| Arm length<br>mm | Arm $\square$ Short/long arm<br>mm | 36153 | ... |
|------------------|------------------------------------|-------|-----|
| 25 x 20          | 6.0 x 3.5/5.0 x 3.5                |       | 201 |
| 40 x 28          | 6.0 x 3.5/5.5 x 3.5                |       | 202 |


**36153**

# 36154

## Adjustable knife-edge square

### Design

- **Error limit in accordance with DIN 875 GG 0**
- Hardened and ground
- The double-tightening claw prevents deflection of the thin measuring arm during tightening, with consistent precision
- Supplied in a case

### Applications

Multiple use in tool, punch and die and device manufacture.

| Straight edge<br>mm | Basic body<br>mm | 36154 | ... |
|---------------------|------------------|-------|-----|
| 60 x 4 x 4          | 40 x 22 x 10     |       | 101 |



36154

# 36171

## Hexagonal angle 120° DIN 875/2

### Design

- **Accuracy in accordance with DIN 875/2**
- Top edges and flat sides finely ground

### Applications

For precise marking off and inspection of 60° or 120°.

| Arm length<br>mm | Arm $\square$<br>mm | 36171 | ... |
|------------------|---------------------|-------|-----|
| 75 x 75          | 18 x 5              |       | 201 |
| 100 x 100        | 20 x 5              |       | 202 |



36171

# 36175

## Octagonal angle 135° DIN 875/2

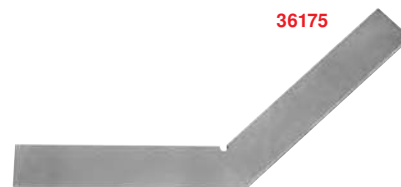
### Design

- **Accuracy in accordance with DIN 875/2**
- Top edges and flat sides finely ground

### Applications

For precise marking off and inspection of 45° or 135°.

| Arm length<br>mm | Arm $\square$<br>mm | 36175 | ... |
|------------------|---------------------|-------|-----|
| 75 x 75          | 18 x 5              |       | 201 |
| 100 x 100        | 20 x 5              |       | 202 |



36175

# 36181

## Mitre square 135° DIN 875/2

### Design

- With stop
- **Accuracy in accordance with DIN 875/2**
- Top edges and flat sides finely ground
- With equally strong arms

### Applications

For precise marking off and inspection of 45° or 135°, for 90° corner joints.

| Arm length<br>mm | Arm $\square$<br>mm | 36181 | ... |
|------------------|---------------------|-------|-----|
| 150 x 100        | 20 x 5              |       | 102 |
| 200 x 130        | 25 x 5              |       | 103 |



36181

# 36182

## Flange angle

### Applications

For installers.  
Special tool for aligning the flanges.

### Quality

Normal steel, zinc-plated.

### Note:

Cannot be calibrated.

| Arm length<br>mm | Arm $\square$<br>mm | 36182 | ... |
|------------------|---------------------|-------|-----|
| 300              | 30 x 5              |       | 100 |
| 400              | 30 x 5              |       | 101 |



36182

# 36186

## Centring angle



### Design

- Lasered scaling, mm graduation

### Quality

Hard-coded aluminium (HRC63).

Scratch-resistant, black anodised surface.

| Arm length<br>mm | For shafts<br>to Ø mm | 36186 | ... |
|------------------|-----------------------|-------|-----|
| 100 x 70         | 90                    |       | 101 |
| 150 x 130        | 190                   |       | 102 |
| 200 x 150        | 220                   |       | 103 |
| 250 x 160        | 230                   |       | 104 |

| Arm length<br>mm | For shafts<br>to Ø mm | 36186 | ... |
|------------------|-----------------------|-------|-----|
| 300 x 180        | 280                   |       | 105 |
| 400 x 240        | 400                   |       | 106 |
| 500 x 300        | 520                   |       | 107 |



36186

# Squares | Prisms | Precision vices

**36188**

## Folding square

### Design

- 3 pieces
- With locking screw

### Applications

Can be set to any angle and locked with a wing nut.

**36188**

| Length<br>mm | Shaft $\varnothing$<br>mm | 36188 | ... |
|--------------|---------------------------|-------|-----|
| 200          | 22 x 9                    |       | 103 |
| 300          | 30 x 9                    |       | 104 |
| 500          | 30 x 9                    |       | 106 |


**36191 - 36194**

## Angle plate DIN 876

### Design

- Fixed, 90°, with clamping slots
- Evenness in accordance with DIN 876
- Angular deviation in accordance with DIN 875
- 2 sides, exact

### Note:

Angle plates with different accuracies, larger dimensions and with T-clamp slots in accordance with DIN 650 in the clamping surface are available on request.

**36191 - 36194**

### Applications

For marking off and inspection work. Also suitable as a clamping device for millers, planers and drills.

### 36191

#### Design

- Quality 1
- Base and clamping surface, polished

### Quality

Dense special cast iron with high wear resistance.

### 36194

#### Design

- Quality 3
- Base and clamping surface, finely milled



| L x W x H<br>approx. mm | Weight<br>approx. kg | Quality 1 |     | Quality 3 |     |
|-------------------------|----------------------|-----------|-----|-----------|-----|
|                         |                      | 36191     | ... | 36194     | ... |
| 200 x 100 x 150         | 8                    |           | 102 |           | 102 |
| 275 x 150 x 200         | 20                   |           | 103 |           | 103 |
| 400 x 225 x 300         | 45                   |           | 105 |           | 105 |

**27610**

## Adjustable optical squares

### Design

- Accuracy +/- 0.1 mm
- Angular accuracy +/- 10 min

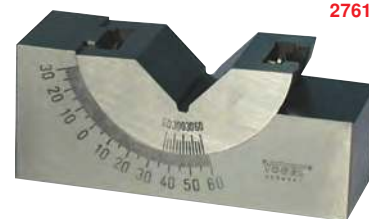
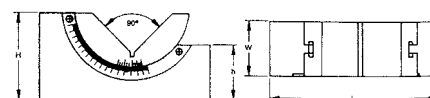
### Applications

Universal use for grinding, drilling, measuring and marking off. The prism is clamped in a vice. The desired angle is set and locked with a locking screw.

### Quality

Alloyed tool steel, hardened to HRC 55.

| Length<br>mm | W<br>mm | H<br>mm | h<br>mm | Weight<br>approx. g | 27610 | ... |
|--------------|---------|---------|---------|---------------------|-------|-----|
| 75           | 25      | 33      | 23      | 380                 |       | 101 |
| 102          | 30      | 46      | 29      | 850                 |       | 102 |


**27610**

**36330**

## Hardened vee block pairs (single prisms)

### Design

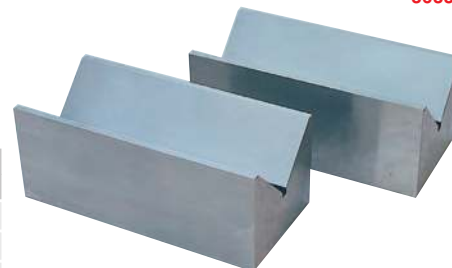
- Paired
- 90° grooves
- In precision design, made of steel
- Finely ground and adjusted in pairs
- Accuracy 0.004 mm

### Applications

For inspection, marking off and straightening work on cylindrical parts.

**36330**

| Length<br>mm | W x H<br>mm | For workpiece $\varnothing$<br>mm | 36330 | ... |
|--------------|-------------|-----------------------------------|-------|-----|
| 75           | 35 x 30     | 5-40                              |       | 201 |
| 100          | 47 x 40     | 5-55                              |       | 202 |
| 150          | 55 x 45     | 5-60                              |       | 203 |
| 200          | 65 x 55     | 5-75                              |       | 204 |
| 250          | 85 x 70     | 5-100                             |       | 205 |





## 36332 - 36335

### Vee block pairs (single prisms)

#### Design

- Paired
- Approx. 90° grooves

#### Applications

For inspection, marking off and straightening work on cylindrical parts.

#### Quality

Made of dense special cast iron with high wear resistance.

#### 36332

##### Design

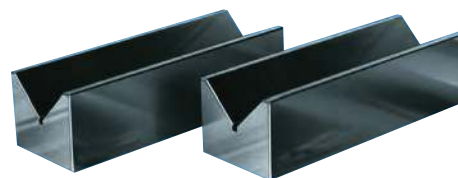
- Quality 1
- Groove and base area ground
- Parallelism deviation max. 0.016 mm

#### 36335

##### Design

- Quality 3
- Groove and base area finely milled
- Parallelism deviation max. 0.06 mm

36332 - 36335



#### Note:

Larger prism pairs up to 450 mm workpiece Ø are available on request.

| Length<br>mm | Width<br>mm | For workpiece Ø<br>mm | Quality 1 |     | Quality 3 |     |
|--------------|-------------|-----------------------|-----------|-----|-----------|-----|
|              |             |                       | 36332     | ... | 36335     | ... |
| 100          | 40          | 6-40                  |           | 102 |           | 102 |
| 150          | 50          | 8-50                  |           | 103 |           | 103 |
| 200          | 70          | 8-70                  |           | 104 |           | 104 |
| 300          | 100         | 12-100                |           | 106 |           | 106 |

## 36338

### Permanent magnetic prism block

#### Design

- Unhardened
- Individual
- 3 clamping surfaces with 2 prisms above and below
- Including on/off rotary switch

#### Applications

For measuring, testing and other purposes.

36338



| Parallelism<br>mm/100 mm | Angularity<br>mm/100 mm | Adhesive force<br>N | L x W x H<br>mm | Weight<br>kg | 36338 | ... |
|--------------------------|-------------------------|---------------------|-----------------|--------------|-------|-----|
| 0.025                    | 0.025                   | 2000                | 100 x 70 x 95   | 4            |       | 101 |

## 36341

### Magnetic measuring and clamping prisms (pair)

#### Design

- Paired
- Measuring surfaces and prism hardened, ground
- Prism processed with the highest precision, exactly even on all sides, parallel, precisely angled and finely ground
- With magnet that can be switched off with a rotary switch
- The face opposite the switch is designed as a magnetic surface

- Adhesive force of cylindrical parts in the prism approx. 400 N
- Supplied in a wooden case

#### applications

For material Ø 6-70 mm.  
For measuring, marking off and processing workpieces on machine tools.

36341



| Accuracy<br>mm | Adhesive force on<br>the surface approx. N | L x W x H<br>mm | Weight<br>kg/piece | 36341 | ... |
|----------------|--|-----------------|--------------------|-------|-----|
| 0.004          | 1800                                       | 100 x 70 x 96   | 3.8                |       | 102 |

# Prisms | Precision vices | Parallel rests

**36342**

## Hardened double vee block pairs with clamping bracket

**ATORN®**

Quality  
Special steel, hardened.

### Design

- With clamping bracket
- Evenness, parallelism and perpendicularity tolerance **0.004 mm**
- 2 x 90° incisions
- Machined in pairs
- Side, front and standing surfaces at angles

| Length<br>mm | Width<br>mm | Height<br>mm | For workpiece Ø<br>mm | 36342 | ... |
|--------------|-------------|--------------|-----------------------|-------|-----|
| 60           | 40          | 58           | 5-30                  |       | 101 |
| 75           | 54          | 70           | 5-50                  |       | 102 |
| 100          | 75          | 96           | 7-70                  |       | 103 |


**36342**
**36343 - 36344**

## Hardened vee block pairs

### Design

- In the finest precision design
- With clamping bracket
- **Pairs**
- **Finely ground** and adjusted
- With 2 different large incisions
- 90° grooves

**36343**

### Design

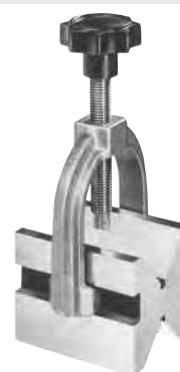
- Accuracy 0.01 mm

**36344**

### Design

- Accuracy 0.004 mm

| Length<br>mm | Width<br>mm | Height<br>mm | For workpiece Ø<br>mm | 36343 | ... | 36344 | ... |
|--------------|-------------|--------------|-----------------------|-------|-----|-------|-----|
| 50           | 40          | 40           | 5-30                  |       |     |       | 101 |
| 50           | 40          | 50           | 5-30                  |       | 101 |       |     |
| 75           | 55          | 55           | 5-50                  |       | 102 |       | 102 |
| 100          | 75          | 75           | 7-70                  |       | 103 |       | 103 |


**36343 - 36344**
**36383**

## Quadruple prisms (parallel pieces) DIN 876/1

### Design

- **Pairs**
- 4 grooves, approx. 90°
- **Parallelism deviation** of vee grooves in comparison to base area max. 0.016 mm
- **Accuracy class 1**

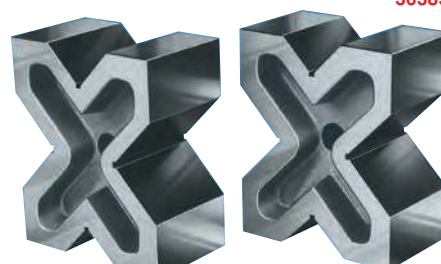
### Quality

Made of dense special cast iron with high wear resistance.

### Note:

Other accuracies available on request.

| Length<br>mm | Width<br>mm | Height<br>mm | For workpiece Ø<br>mm | 36383 | ... |
|--------------|-------------|--------------|-----------------------|-------|-----|
| 60           | 100         | 120          | 8-90                  |       | 101 |
| 75           | 130         | 150          | 10-120                |       | 102 |
| 90           | 170         | 200          | 12-180                |       | 103 |


**36383**
**36385**

## Precision vices (mini)

### Design

- With threaded spindle
- With horizontally and vertically ground prism
- Supplied with 1 plain jaw and 1 prism jaw
- With clamping grooves on the long sides

### Applications

For clamping small parts on profile projectors, measuring microscopes and for various other applications.


**36385 201**

**36385 202-203**

**36385 204**

| Jaw width<br>mm | Material                  | L x W x H<br>mm | Clamping width<br>mm | Clamping depth<br>mm | Angular accuracy<br>mm | 36385 | ... |
|-----------------|---------------------------|-----------------|----------------------|----------------------|------------------------|-------|-----|
| 15              | Brass, matt chrome plated | 50 x 15 x 15    | 14                   | 8                    | 0.02                   |       | 201 |
| 25              | Aluminium, matt anodised  | 75 x 25 x 25    | 23                   | 15                   | 0.02                   |       | 202 |
| 35              | Aluminium, matt anodised  | 100 x 35 x 35   | 32                   | 21                   | 0.02                   |       | 203 |
| 35              | Stainless steel           | 100 x 35 x 35   | 32                   | 21                   | 0.02                   |       | 204 |



# 36600

## Precision parallel rest sets



### Design

#### - Pairs

- Plane parallel, finely ground
- Size specifications on the face
- Sets cover a wide range with 1 mm increment
- Case-hardened.
- **Nominal dimensional tolerance  $\pm 0.01$  mm**
- Remaining dimensions in accordance with **DIN ISO 2768 m**
- In wooden holder

### Applications

For clamping and positioning a wide range of workpieces, e.g. when grinding, milling, eroding, measuring and marking off.  
In connection with corresponding clamping tools such as the precision grinding and eroding vice, ideal for exact-angle or exact-parallel processing of a wide range of workpieces.

### Note:

Designs of special dimensions, in high precision or as individual pairs available on request.

### 36600 101

#### Design

#### Length 100 mm.

Box contents one pair each:

2 x 5 / 2 x 10 / 2 x 15 / 2 x 20 / 3 x 6 / 3 x 11 /  
3 x 16 / 3 x 21 / 4 x 7 / 4 x 12 / 4 x 17 / 4 x 22 /  
5 x 8 / 5 x 13 / 5 x 18 / 5 x 23 / 6 x 9 / 6 x 14 /  
6 x 19 / 6 x 24 mm.

### 36600 103

#### Design

#### Length 125 mm.

Box contents one pair each:

8 x 11 / 8 x 16 / 8 x 21 / 8 x 26 / 8 x 31 / 8 x 36 /  
10 x 13 / 10 x 18 / 10 x 23 / 10 x 28 / 10 x 33 /  
10 x 38 / 12 x 15 / 12 x 20 / 12 x 25 / 12 x 30 /  
12 x 35 / 12 x 40 / 14 x 17 / 14 x 22 / 14 x 27 /  
14 x 32 / 14 x 37 / 14 x 42 mm.

### 36600 102

#### Design

#### Length 150 mm.

Box contents one pair each:

8 x 11 / 8 x 16 / 8 x 21 / 8 x 26 / 8 x 31 / 8 x 36 /  
10 x 13 / 10 x 18 / 10 x 23 / 10 x 28 / 10 x 33 /  
10 x 38 / 12 x 15 / 12 x 20 / 12 x 25 / 12 x 30 /  
12 x 35 / 12 x 40 / 14 x 17 / 14 x 22 / 14 x 27 /  
14 x 32 / 14 x 37 / 14 x 42 mm.



36600

| Pair tolerance in height<br>mm | Length<br>mm | Contents<br>pairs | 36600 | ... |
|--------------------------------|--------------|-------------------|-------|-----|
| IT 5                           | 100          | 20                |       | 101 |
| IT 5                           | 125          | 24                |       | 103 |
| IT 5                           | 150          | 24                |       | 102 |

# 36602

## Parallel rest sets

### Design

- Case-hardened and ground
- Contact surfaces finely ground
- **Nominal dimensional tolerance** up to height of 30 mm =  $\pm 0.2$  mm, from height 35 mm =  $\pm 0.3$  mm.
- Nominal dimensions in accordance with **ISO 2768 m**
- In wooden case with removable hinged lid

### Contents:

1 pair each (= 14 pairs).  
Height of the measuring surfaces mm:  
14/16/18/20/22/  
24/26/28/30/32/35/40/45/50.



36602

| Pair tolerance<br>in height mm | Length<br>mm | Width<br>mm | Contents<br>pairs | 36602 | ... |
|--------------------------------|--------------|-------------|-------------------|-------|-----|
| 0.01                           | 150          | 10          | 14                |       | 101 |

# 36615

## Parallel rest sets



### Design

- Case-hardened and ground
- Contact surfaces finely ground
- **Nominal size tolerance in height  $\pm 0.004$  mm**
- Nominal length and width in accordance with **ISO 2768 m**
- In wooden case with removable hinged lid

### Contents:

1 pair each (= 14 pairs).  
Height of the measuring surfaces mm: 14/16/18/20/  
22/24/26/28/30/32/35/40/45/50.



36615

| Pair tolerance<br>in height mm | Length<br>mm | Width<br>mm | Contents<br>pairs | 36615 | ... |
|--------------------------------|--------------|-------------|-------------------|-------|-----|
| 0.004                          | 150          | 10          | 14                |       | 101 |

## Marking-off and test plates | Measuring and control plates

### 36760 - 36761

### Marking-off and test plates DIN 876/0 and 876/3

#### Design

- Evenness in accordance with DIN 876-2
- Rib construction

#### Quality

Made of special cast iron.

#### 36760

Accuracy DIN 876/0, scraped.

#### 36761

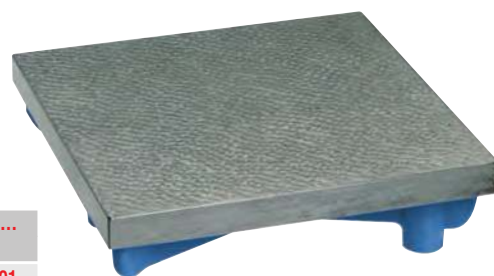
Accuracy DIN 876/3, ground.

36760 - 36761

#### Note:

We recommend using base frames. These as well as different sizes and accuracies are available on request.

| Dimension<br>approx. mm | Weight<br>approx. kg | DIN 876/0 |     | DIN 876/3 |     |
|-------------------------|----------------------|-----------|-----|-----------|-----|
|                         |                      | 36760     | ... | 36761     | ... |
| 300 x 300               | 15                   |           | 101 |           | 101 |
| 400 x 400               | 35                   |           | 102 |           | 102 |
| 500 x 400               | 40                   |           |     |           | 103 |
| 600 x 500               | 65                   |           |     |           | 104 |
| 800 x 500               | 95                   |           |     |           | 105 |



### 36763

### Hard stone measuring and control plates DIN 876/0 with floor unit

**ATORN®**

#### Design

- Accuracy DIN 876/0
- Fine diamond lapped
- Diamond-lapped measuring surfaces guarantee long service life
- Measuring and control plates made of **hard stone** are manufactured in climate and humidity-controlled rooms
- Vickers hardness HV: 850-900
- Tensile bending strength: 13–22 N/mm<sup>2</sup>
- Absolute warping resistance, temperature-insensitive, hard and wear-resistant, electrically non-conductive, absolutely acid resistant
- Housing RAL 7035, light grey
- Drawers RAL 5010, gentian blue
- Supplied with factory calibration certificate

#### Quality

Made of hard stone, diamond lapped, made of specially selected material of the highest quality, completely free of errors.

#### 36763 101

##### Scope of delivery:

- 1 x hard stone plate, 1 x table bearing (3 pieces), 1 x floor unit with level adjustment (20 mm), 3 drawers:
- 1 x VA 100/120, 100 kg,
- 1 x VA 130/150, 100 kg,
- 1 x VA 130/240, 100 kg.

#### 36763 102

##### Scope of delivery:

- 1 x hard stone plate, 1 x table storage (5 pieces), 1 x floor unit with level adjustment (20 mm)
- 3 drawers:
- 1 x VA 100/120, 100 kg,
- 1 x VA 130/150, 100 kg,
- 1 x VA 130/180, 100 kg.

36763 101

36763 102



| Hard stone plate                   |                |                      | Floor unit                 |                      | DIN 876/0 |     |
|------------------------------------|----------------|----------------------|----------------------------|----------------------|-----------|-----|
| Dimensions W x D x H<br>approx. mm | Evenness<br>mm | Weight<br>approx. kg | Dimensions W x D x H<br>mm | Weight<br>approx. kg | 36763     | ... |
| 1000 x 630 x 100                   | 0.008          | 189                  | 920 x 553 x 720            | 140                  |           | 101 |
| 1200 x 800 x 160                   | 0.009          | 460                  | 1100 x 703 x 660           | 180                  |           | 102 |

### 36762

### Hard stone measuring and control plates DIN 876/0

**ATORN®**

#### Design

- Accuracy DIN 876/0
- Fine diamond lapped
- Diamond-lapped measuring surfaces guarantee long service life
- Measuring and control plates made of **hard stone** are manufactured in climate and humidity-controlled rooms
- Vickers hardness HV: 850-900
- Tensile bending strength: 13–22 N/mm<sup>2</sup>

- Absolute warping resistance, temperature-insensitive, hard and wear-resistant, electrically non-conductive, absolutely acid resistant
- Blue-black colour
- Supplied with factory calibration certificate

#### Quality

Made of hard stone –diamond lapped, made of specially selected material of the highest quality, completely free of errors.

#### Note:

Installation on pedestals, base frames and cabinet bases is carried out by means of steel ball inserts. These are included in the scope of delivery from size 1000 x 630 x 100 mm. The steel ball inserts are positioned on the bottom of the plate in such a way that they fit for base frames (art. no. 36768) and individual supports (on request).

36762



|                                    |                |                      | DIN 876/0 |     |
|------------------------------------|----------------|----------------------|-----------|-----|
| Dimensions W x D x H<br>approx. mm | Evenness<br>mm | Weight<br>approx. kg | 36762     | ... |
| 400 x 400 x 50                     | 0.006          | 25                   |           | 103 |
| 630 x 400 x 70                     | 0.007          | 53                   |           | 106 |
| 1000 x 630 x 100                   | 0.008          | 189                  |           | 108 |
| 1200 x 800 x 160                   | 0.009          | 460                  |           | 109 |

## 36765 - 36766

## Hard stone measuring and control plates DIN 876/1 and 876/0

### PLANOLITH

#### Design

- Diamond-lapped measuring surfaces guarantee long service life
- Measuring and control plates made of **hard stone** are manufactured in climate and humidity-controlled rooms
- Vickers hardness HV: 850-900
- Tensile bending strength: 13–22 N/mm<sup>2</sup>
- Absolute warping resistance, temperature-insensitive, hard and wear-resistant, electrically non-conductive, absolutely acid resistant
- Blue-black colour
- Supplied with factory calibration certificate

#### Quality

Made of hard stone –diamond lapped, made of specially selected material of the highest quality, completely free of errors.

#### Note:

**Installation** on pedestals, base frames and cabinet bases **is carried out by means of steel ball inserts. These are included in the scope of delivery** (with the exception of end no. 101 + 102). The steel ball inserts are positioned on the bottom of the plate in such a way that they fit for base frames (art. no. 36768) and individual supports (on request). The plates are also available with T-grooves. Service: Use our measuring plates processing service. Our fitters will come to you and perform follow-up work on site. No packaging, no transportation, no loss of working hours.

#### 36765

- Accuracy DIN 876/1
- Diamond lapped

#### 36766

- Accuracy DIN 876/0
- Fine diamond lapped

36765 - 36766



| Dimension approx. mm | DIN 876/1   | DIN 876/0   | DIN 876/1 |     | DIN 876/0 |     |
|----------------------|-------------|-------------|-----------|-----|-----------|-----|
|                      | Evenness mm | Evenness mm | 36765     | ... | 36766     | ... |
| 250 x 250 x 50       | 0.012       | 0.005       |           | 101 |           | 101 |
| 400 x 250 x 50       | 0.014       | 0.006       |           | 102 |           | 102 |
| 400 x 400 x 50       | 0.014       | 0.006       |           | 103 |           | 103 |
| 500 x 400 x 90       | 0.015       | 0.006       |           | 104 |           | 104 |
| 600 x 500 x 100      | 0.016       | 0.007       |           | 105 |           | 105 |
| 800 x 600 x 120      | 0.018       | 0.007       |           | 106 |           | 106 |
| 1000 x 630 x 100     | 0.02        | 0.008       |           | 107 |           | 107 |
| 1200 x 800 x 160     | 0.022       | 0.009       |           | 108 |           | 108 |
| 1600 x 1000 x 160    | 0.025       | 0.01        |           | 109 |           | 109 |
| 2000 x 1000 x 220    | 0.03        | 0.012       |           | 110 |           | 110 |
|                      |             |             |           |     |           |     |

## Info

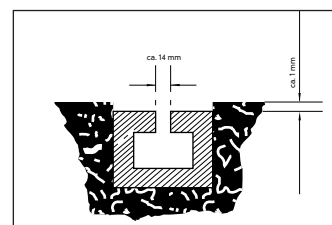
## Clamping and guide T-slot bars DIN 650

#### Design

Steel, anti-glare brushed chromium-plated, guide and clamping T-slots ground; the nominal size 14 mm is only an approx. size. Accessories such as tailstocks and similar are precisely adapted to this actual size, accuracy 0.01 mm/m.

#### Applications

For natural hard stone test plates, for mounting tailstocks, etc.  
**For plate length mm:**  
600/630/800/1000/1200/1500/1600/2000.



## 36768

## Base frames for measuring and control plates

#### Design

- Stable welded construction, including bearing set (3-point contact and 2 adjusting screws as tipping protection)
- Top edge of measuring plate approx. 900 mm
- Silver grey paint

#### Applications

For measuring and control plates (art. no. 36762, 36765 and 36766).

#### Quality

Sectional steel.

#### Note:

Special paints are available on request.

36768



Delivery **without** measurement and control plate (available separately, art. no. 36762, 36765 and 36766)

| For plate size approx. mm      | Weight approx. kg | 36768 | ... |
|--------------------------------|-------------------|-------|-----|
| 400 x 400 x 50                 | 20                |       | 101 |
| 500 x 400 x 90                 | 20                |       | 102 |
| 600 x 500 x 100/630 x 400 x 70 | 22                |       | 103 |
| 800 x 600 x 120                | 25                |       | 106 |
| 1000 x 630 x 100               | 28                |       | 107 |
| 1200 x 800 x 160               | 30                |       | 112 |
| 1600 x 1000 x 160              | 35                |       | 115 |
| 2000 x 1000 x 220              | 40                |       | 116 |

# Measuring angles | Cleaning/care products | Marker dyes | Surface contact paste | Solvent spray | Concentricity test devices

36781

## Natural hard stone measuring angle of 90° DIN 875/00

**ATORN®**

### Design

- Exactly 2-sided
- Hard and wear-resistant
- Surface accuracy in accordance with DIN 876/00
- Extra fine diamond lapped
- Angularity in accordance with DIN 875
- From arm length 600 x 400 mm with weight-reducing holes, which also serve as recessed handles for better handling

### Applications

For checking the 90° angle and straightness. E.g., for the assembly and removal of machine tools and for inspecting workpieces, machine elements, etc. on measurement and control plates. Can be used horizontally and vertically.

### Note:

Other dimensions available on request.

36781



| Arm length<br>mm | Width<br>mm | Permissible deviation of<br>the perpendicularity mm | Weight-reducing<br>holes mm | Weight<br>approx. kg | DIN 875/00 |     |
|------------------|-------------|---|-----------------------------|----------------------|------------|-----|
|                  |             |   |                             |                      | 36781      | ... |
| 400 x 250        | 50          | 0.003   | -                           | 10                   |            | 101 |
| 500 x 300        | 60          | 0.004   | -                           | 17                   |            | 102 |
| 600 x 400        | 70          | 0.005   | 2 x Ø 110                   | 30                   |            | 103 |
| 800 x 500        | 80          | 0.006   | 2 x Ø 130                   | 55                   |            | 104 |

36793

## Cleaning/care products for hard stone test plates

36793 101

**Cleaning agent**  
DURALIN

### Design

- In plastic container, approx. 5 l

### Applications

The liquid removes dirt, oil, surface contact dye, etc. and ensures that measuring and marking tools move smoothly over the plate.

36793 300

**Care product**  
Design

- In 500 ml spray bottle

### Applications

The liquid reduces wear and tear on the test plate and ensures smooth movement of the measured objects and specimens.

36793 101

36793 300



| Type           | Design       | Contents | 36793 | ... |
|----------------|--------------|----------|-------|-----|
| Cleaning agent | Container    | 5 l      |       | 101 |
| Care product   | Spray bottle | 500 ml   | 300   | NEW |

36795

## Marker dye/marking stick

### Applications

For marking machining points on metal surfaces. Ensures easy, clear marking off.

36795 101

**Marker dye**  
Design

- In pot, liquid, quick drying, well adhering. Apply with brush.

36795 102

**Marking stick**

36795 101



|               | Contents<br>ml | Colour | 36795 | ... |
|---------------|----------------|--------|-------|-----|
| Marker dye    | 500            | blue   |       | 101 |
| Marking stick | -              | blue   |       | 102 |



36795 102

36796

## Marker-dye spray

### Design

- In spray can
- Quick drying
- Optimal contrast effect
- Long lasting
- Filled with environmentally neutral release agent
- Flammable

### Applications

For all metals.

36796



| Contents<br>ml | Colour | 36796 | ... |
|----------------|--------|-------|-----|
| 400            | blue   |       | 101 |

36798

## Surface contact paste

### Applications

For surface inspection. The evenness of the colour layer provides information about the processing quality.

| Contents  | Colour | 36798 | ... |
|-----------|--------|-------|-----|
| 60 g tube | blue   |       | 101 |
| 225 g can | blue   |       | 102 |



36798 101



36798 102

36799

## Solvent spray

### Design

- Highly flammable

### Applications

For general cleaning, particularly for removing marker dye.

| Content<br>ml | 36799 | ... |
|---------------|-------|-----|
| 400           |       | 101 |



36799

36855

## Concentricity test benches



### Design

- Contact surface finely ground
- **Evenness in accordance with DIN 876/2**
- With 2 slidable tailstocks
- Left tailstock with fixed tip
- Right tailstock with spring-loaded tip, travel approx. 15 mm
- Tailstocks can be locked using eccentric clamping
- Lateral T-groove with measuring stand, dial gauge mount 8 mm H7 and fine adjustment

36855 100

### Design

Additionally with vee-block support.

### Note:

Accessories such as tailstocks with collet chuck device, prismatic inserts, vee blocks and roller blocks with ball bearings are available on request.

| Tip height<br>mm | Tip width<br>mm | T-groove width<br>mm | Base plate<br>mm | Weight<br>kg | 36855 | ... |
|------------------|-----------------|----------------------|------------------|--------------|-------|-----|
| 50               | 200             | 10                   | 350 x 110        | 8            |       | 099 |
| 75               | 350             | 10                   | 500 x 110        | 12           |       | 100 |
| 100              | 450             | 12                   | 700 x 180        | 35           |       | 102 |
| 150              | 450             | 12                   | 700 x 180        | 38           |       | 103 |



36855 099

## Info

Additional concentricity test devices and accessories such as tailstocks, prismatic inserts and vee blocks are available on request.

Please contact us!

