

# **Shakers**



# 3D Shakers | World in motion!

For over a century, IKA® has been leading the way with innovative technologies and applications in the field of laboratory, analytical and process equipment.

In 1925, IKA® first produced the conventional shaker and displayed this entire product line at ACHEMA. To give our loyal customers a leading edge, IKA® has ensured that new product innovation has been introduced time and time again. And once again, IKA® has completely revamped its' shaker line by incorporating advanced technology with unique designs. As always, we continue our 100 year old tradition of bringing design, innovation, ease of use and commitment to our customers!

IKA® already has a line of well known and proven orbital and horizontal shakers. IKA® is proud to introduce a brand new series of Rollers, Rockers and Overhead Rotators. The wide range of Rocking, Rolling, Rotating and Shaking covers the entire spectrum of motions in mixing technology. All new devices are available in a basic and digital version. IKA® has also added a sibling to its' voluminous incubator shaker KS 4000 i control and ic control. The expanded product range facilitates the use of our equipment in a wider range of applications, especially in the medical and biological field. The hallmark of IKA®, exceptional design, innovation, quality, high efficiency, smooth operation and excellent performance continues as it has for 100 years!

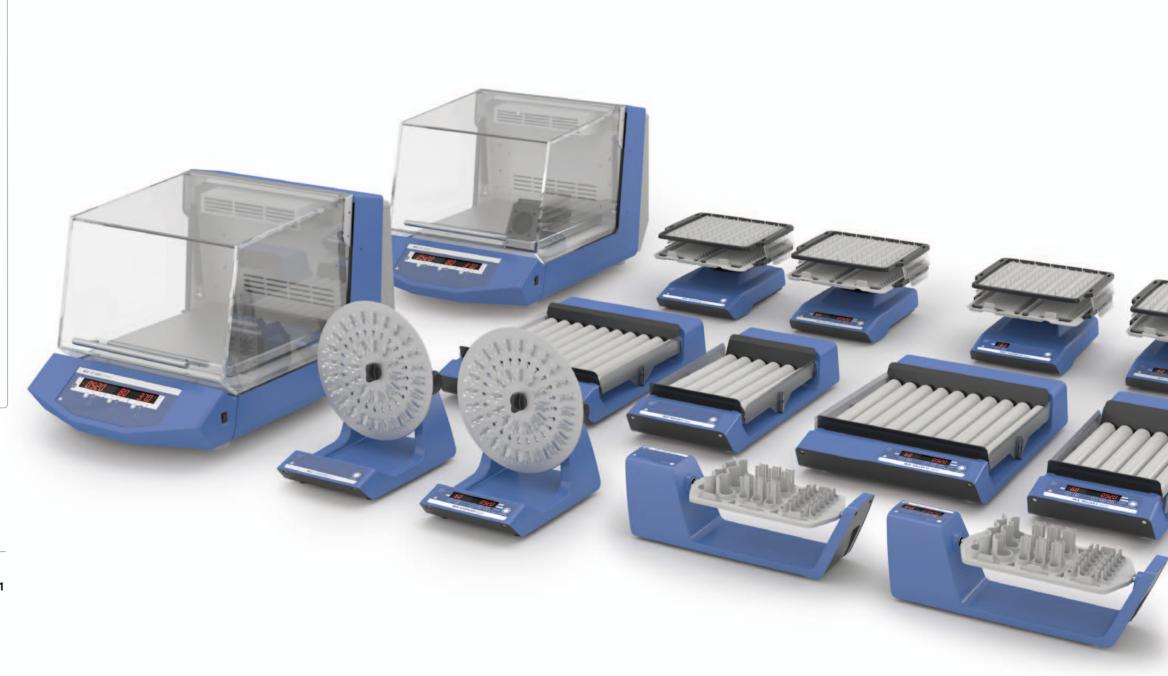


\* 2+1 years after registering at www.ika.com/register, glassware and wearing parts excluded

Protection class according to DIN EN 60529: IP 21







# 2D & 3D Rockers | Enhanced dimensions, Smaller footprints!



The brand new range of 2D and 3D Rockers provide gentle rocking/ see-saw action and are used for homogenous mixing in flasks, culture flasks, Petri dishes and tubes. The compact, small footprint and dual platform saves valuable bench space and facilitates easy-handling. Even with load and voltage fluctuations, shaking speeds remain constant. Precision in speed (available in fixed and variable) and adjustable tilt angle allow for a variety of applications.

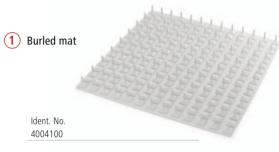
reproducible conditions



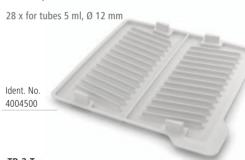
workspace











#### TB 2 Tray

16 x for tubes 15 ml, Ø 16 mm "standard 15 ml tubes" Ident. No.

### TB 3 Tray

14 x for tubes 30 ml, Ø 25 mm "standard 30 ml tubes"

Ident. No. 4231200

### TB 4 Tray

10 x for tubes 30 ml, Ø 28 mm "standard 50 ml tubes"

Ident. No. 4003500





Gentle mixing applications demand smooth rocking and rolling action. Our 6 and 10 Rollers, operated at fixed and infinitely adjustable speed deliver this requirement efficiently. Easily removable attachments provide for quick cleaning in case of sample spills. Removable rollers allow for the use of larger tubes. Truly, a Rock n' Roll experience in the laboratory!





IKA°+

Easy removable rollers allow for the use of larger tubes.



# Loopster | Spin your Loop!

# Loopster | Accessories

Ident. No. 4002700

4017500

4017600

Ident. No. 4017700





Timer display for accurate and reproducible conditions





Choice of tube holders to hold a number of different sized tubes



90 degree adjustable mixing angle



2+1 years after registering at www.ika.com/register



Touch keypad for easy operation



**C/T button** for choosing the counter or the timer function

Rotate your samples smoothly and effectively, at fixed or infinitely variable speeds with freely adjustable rotary angles. Ideal for biological samples, particularly blood samples and also suitable for separating and mixing of powdered and liquid samples in multiple tube sizes as large as 50 ml conical tubes. Easily removable attachments provide for quick cleaning in case of sample spills.







## DS 1 Tube attachment

48 x 1.5 ml microcentrifuge tubes; Ø 10 mm



DS 2 Tube attachment

24 x 5 ml tubes, Ø 12 mm



### DS 3 Tube attachment

20 x 15 ml centrifuge tubes, Ø 16 mm



#### DS 4 Tube attachment

12 x 30 ml, Ø 25 mm

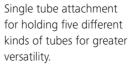


#### DS 5 Tube attachment

12 x 50 ml centrifuge tubes, Ø 28 mm



#### 5-in-1 Tube attachment!

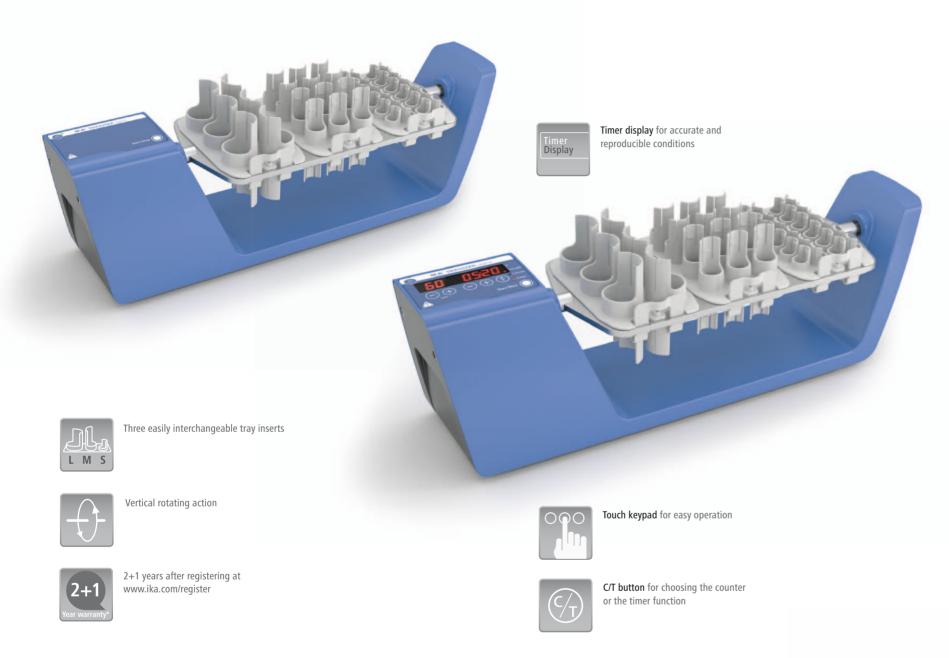




To get customized and additional accessories, please visit **www.ika.com/service** 

# Trayster | Swirl your way to perfect mixing!

# Trayster | Accessories



TR 1 Tube insert

24 x 1.5 ml microcentrifuge tubes; Ø 10 mm

Ident. No. 4006600



TR 2 Tube insert

24 x 5 ml tubes, Ø 12 mm

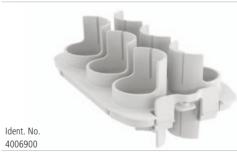
4006700



TR 3 Tube insert

12 x 15 ml centrifuge tubes, Ø 16 mm

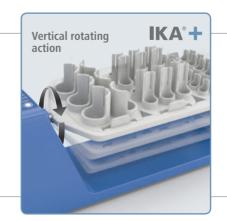
Ident. No. 4006800



TR 4 Tube insert

6 x 50 ml centrifuge tubes, Ø 28 mm

Overhead shakers with vertical rotating action for smooth and effective mixing at fixed or infinitely adjustable speed. Ideal for biological samples, particularly blood and suitable for the separating and mixing of powdered and liquid samples in tubes of up to 50 ml. Easily removable attachments provide for quick cleaning in case of sample spills.





# Incubator shakers | Shake with Control!

# Accessories

417 mm

Timer Display

Large LED display for speed, temperature and timer



Built-in cooling coil for connection to an external cooling unit (available only for KS 3000 ic control)

2+1 years after registering at

www.ika.com/register



Assure highly accurate temperature control



USB interface to control and document rheological changes and other parameters using labworldsoft® software and for updating your firmware



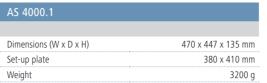
Wide range of attachments allows for using almost all shapes and sizes of vessels





The KS 3000 series is the latest addition to the incubator shaker family. These sleek, compact, high-performance shakers are designed for safe, unattended operation in a temperature-controlled environment. Additionally, KS 3000 ic control is equipped with a built-in cooling coil for connection to an external cooling unit. Precise temperature control makes the incubator shaker a reliable asset in every lab, ensuring quiet, vibration-free and reliable operation - an excellent device for controlled mixing!







#### AS 3000.1 Universal attachment

For use with various types of vessels. Infinitely variable clamping rolls allow universal adaptation to the vessels.

#### Included with delivery:

1 x Basic holder, 6 x Clamping roll, 12 x Fastening screw





### AS 1.401 Clamping roll

Spare for use with universal attachment AS 4000.1.



# AS 1.402 Fastening screw

Spare for use with universal attachment AS 4000.1. Two AS 1.402 fastening screws are required for fastening a clamping roll onto the corresponding basic holder.

AS 4000.2	
Dimensions (W x D x H)	470 x 444 x 25 mm
Number of fixing clips (volume)	50 x AS 2.1 (25 ml)
	48 x AS 2.2 (50 ml)
	25 x AS 2.3 (100 ml)
	16 x AS 2.4 (250 ml)
	12 x AS 2.5 (500 ml)
	7 x AS 2.6 (1000 ml)
Set-up plate	430 x 430 mm
Weight	2650 g



### AS 4000.2 Fixing clip attachment

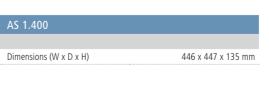
For shaking flasks, Erlenmeyer flasks and bottles with a round cross section (without fixing clips).





### AS 4000.3 Dish attachment

For smooth shaking operations in the low viscosity range, e.g. for cell cultures, nutrient media in Petri dishes, culture bottles and vessels with a low center of gravity. With integrated slip-resistant foil (PP).





#### AS 1.400 Basic holder

Spare for use with universal attachment AS 4000.1

# Incubator shakers | Technical data

7.5 kg

45 / 10 W

10 - 500 rpm

1 s - 999 h

1000 W

 $0.1 \pm K$ 

- | 12 − 80 °C 465 x 695 x 430 mm

35 kg | 37 kg

15 − 32 °C

RS 232, USB

RS 232, USB

3525,- EUR | 4325,- EUR

KS 3000 i control: Ident. No. 3940000

80%

IP 30

230 V

50/60 Hz

timer and continuous operation

RT +5 - 80 °C | RT -10 - 80 °C

1120 W

100%

LED



Rocker 2D basic | digital

8° (angle) | 0 – 15° (angle)

5 – 80 rpm | 0 – 80 rpm

no | ∞ / 1 s - 99.9 h

none | 7 segment LED

280 x 330 x 150 mm

2.2 kg

IP 21

4 - 50 °C

100 - 240 V

395,- EUR | 445,- EUR

Rocker 2D basic: Ident. No. 4002000

Rocker 2D digital: Ident. No. 4003000

50/60 Hz

continuous operation | timer and continuous operation

7 segment LED

16 / 9 W

Technical data

Type of movement

Shaking diameter

(incl. attachment)

Permissible ON time

Speed range

Speed display

Timer display

Weight

EN 60529

Interface

Voltage

Frequency

DC Voltage

Price

Operating mode

Dimensions (W x D x H)

Permissible ambient temp.

Permissible relative moisture

Protection class acc. to DIN

Permissible shaking weight

Motor rating input / output



Rocker 3D digital: Ident. No. 4001000



Rocker 3D basic   digital	Loopster basic   digital
tumbling	rotating
8° (angle)   0 – 15° (angle)	adjustable from horizontal to vertical
2 kg	2 kg
16/9 W	16 / 9 W
100%	100%
30 rpm (fixed)   0 – 80 rpm	20 rpm (fixed)   0 – 80 rpm
none   7 segment LED	none   7 segment LED
no   ∞ / 1 s − 99.9 h	no   ∞ / 1 s − 99.9 h
none   7 segment LED	none   7 segment LED
continuous operation   timer and continuous operation	continuous operation   timer and continuous operation
280 x 330 x 165 mm   280 x 330 x 185 mm	300 x 300 x 360 mm
2.3 kg	3 kg
4 – 50 °C	4 – 50 °C
80%	80%
IP 21	IP 21
no	no
100 – 240 V	100 – 240 V
50/60 Hz	50/60 Hz
24 V	24 V
475,- EUR   525,- EUR	295,- EUR   395,- EUR
Rocker 3D basic: Ident. No. 4000000	Loopster basic: Ident. No. 4015000



-	
Ī	Trayster basic   digital
	otating
١	vertical or horizontal
2	2 kg
	16 / 9 W
	100%
	20 rpm (fixed)   0 — 80 rpm
	none   7 segment LED
	no   ∞ / 1 s − 99.9 h
	none   7 segment LED
	continuous operation   timer and continuous op
4	160 x 160 x 150
	1.7 kg
4	1 − 50 °C
8	30%
I	P 21
r	10
	100 – 240 V
E	50/60 Hz
2	24 V
	359,- EUR   495,- EUR

Trayster basic: Ident. No. 4005000

Trayster digital: Ident. No. 4006000

Technical data

Type of movement

Shaking diameter

(incl. attachment)

Permissible ON time

Speed range

Speed display

Timer display

Weight

Interface

Voltage

Frequency

DC Voltage

Price

Operating mode

Dimensions (W x D x H)

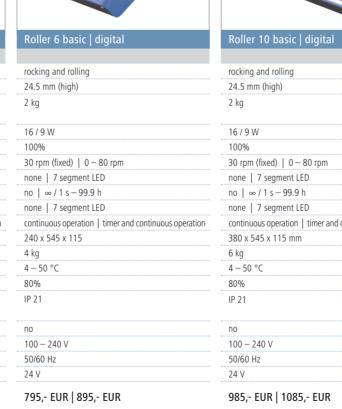
Permissible ambient temp.

Permissible relative moisture

Protection class acc. to DIN

Permissible shaking weight

Motor rating input / output



Roller 6 basic: Ident. No. 4010000

Roller 6 digital: Ident. No. 4011000



Roller 10 digital: Ident. No. 4013000

Roller 10 basic   digital	
rocking and rolling	
24.5 mm (high)	
2 kg	
16 / 9 W	
100%	
30 rpm (fixed)   0 – 80 rpm	
none   7 segment LED	
no   ∞ / 1 s − 99.9 h	
none   7 segment LED	
continuous operation   timer and continuous operation	
380 x 545 x 115 mm	
6 kg	
4 – 50 °C	
80%	To
IP 21	Te
	Tem
no	Dime
100 – 240 V	Weigh
50/60 Hz	Permis
24 V	Permi
OOF FUR 100F FUR	Prote
985,- EUR   1085,- EUR	Interfa
Roller 10 basic: Ident. No. 4012000	USB in

Voltage

Price

Frequency



KS 4000 i control   ic control
orbital
20 mm
20 kg
82 / 24 W
1120 W
100%
10 – 500 rpm
LED
yes
LED
1 s – 999 h
timer and continuous operation
RT +5 - 80 °C   RT -10 - 80 °C
1000 W
LED
0.1 ±K
-   12 - 80 °C
580 x 525 x 750 mm
50 kg   55 kg
15 – 32 °C
80%
IP 30
RS 232
RS 232
230 V
50/60 Hz
4688,- EUR   5643,- EUR

KS 4000 i control: Ident. No. 3510000

KS 3000 ic control: Ident. No. 3940100 KS 4000 ic control: Ident. No. 3510100

# Shakers | Technical data



orbital

4.5 mm

0.5 kg

10 / 8 W

0 - 3000 rpm

scale | digital

none | digital

148 x 205 x 63 mm

no | ∞ / 1 s – 999 min

continuous / touch operation

timer and continuous / touch operation

100%

2.9 kg

80%

IP 21

5 – 40 °C

100 - 240 V

405,- EUR | 555,- EUR

MS 3 basic: Ident. No. 3617000

MS 3 digital: Ident. No. 3319000

50/60 Hz

Technical data

Type of movement

Shaking diameter

(incl. attachment)

Permissible ON time

Speed range

Speed display

Timer display

EN 60529

Interface

Voltage

Price

Frequency

Operating mode

Dimensions (W x D x H)

Permissible ambient temp.

Permissible relative moisture

Protection class acc. to DIN

Permissible shaking weight

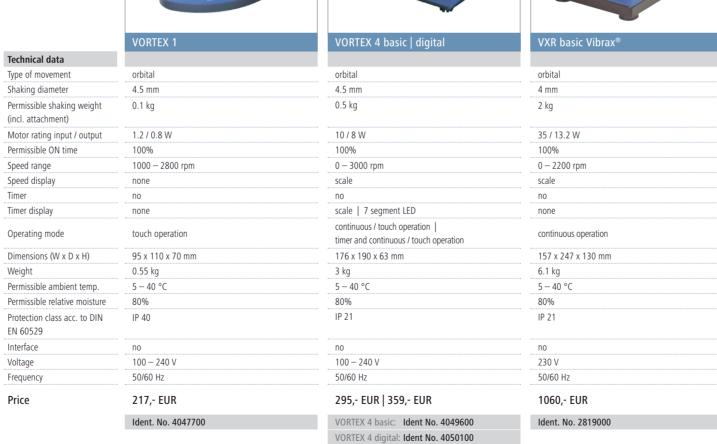
Motor rating input / output



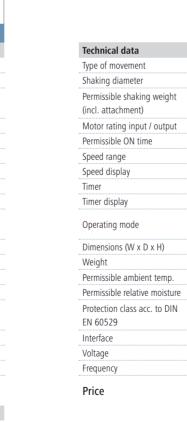














orbital

3 mm

35 / 13.2 W

0 — 1100 rpm

100%

scale ∞ / 1 – 99 min

digital

2.7 kg

80%

IP 21

230 V

50/60 Hz

1133,- EUR

Ident. No. 3208000

5 – 40 °C

2 or 4 microtiter plates

timer and continuous operation

185 x 320 x 105 mm



KS 130 basic: Ident. No. 2980000

KS 130 control: Ident. No. 2980100



KS 260 basic: Ident. No. 2980200

KS 260 control: Ident. No. 2980300

Daniel De la Contraction de la	
KS 130 basic   control	KS 260 basic   control
orbital	orbital
4 mm	10 mm
2 kg	7.5 kg
45 / 10 W	45 / 10 W
100%	100%
80 — 800 rpm	20 – 500 rpm   10 – 500 rpm
LED line   digital	LED line   digital
∞ / 5 – 50 min   ∞ / 0 – 9 h 59 min	$\infty$ / 5 – 50 min   $\infty$ / 0 – 9 h 59 min
LED line   digital	LED line   digital
timer and continuous operation	timer and continuous operation
270 x 316 x 98 mm	360 x 420 x 98 mm
8.8 kg	8.5 kg   8.8 kg
5 – 50 °C	5 – 50 °C
80%	80%
IP 21	IP 21
no   RS 232	no   RS 232
230 V	230 V
50/60 Hz	50/60 Hz
1111,- EUR   1671,- EUR	1772,- EUR   2312,- EUR

# Shakers | **Technical data**

# Shakers | Accessories







Technical data	
Type of movement	(
Shaking diameter	
Permissible shaking weight (incl. attachment)	
Motor rating input / output	
Permissible ON time	
Speed range	(
Speed display	(
Timer	
Timer display	(
Operating mode	
Dimensions (W x D x H)	. !
Weight	-
Permissible ambient temp.	!
Permissible relative moisture	8
Protection class acc. to DIN EN 60529	I
Interface	1
Voltage	

KS 501 digital	
orbital	
30 mm	
15 kg	
70 / 19 W	
100%	
0 – 300 rpm	
digital	
∞ / 1 – 56 min	
digital	
timer and continuous o	peration
505 x 585 x 120 mm	
26 kg	
5 – 50 °C	
80%	
IP 21	
no	
230 V	
50/60 Hz	

Ident. No. 2526400

- Control	
reciprocating	
20 mm	
7.5 kg	
45 / 10 W	
100%	
20 – 300 rpm   10 – 300 rp	m
LED line   digital	
∞ / 5 – 50 min   ∞ / 0 – 9 h	n 59 min
LED line   digital	
timer and continuous operation	1
360 x 420 x 100 mm	
8.5 kg   8.8 kg	
5 – 50 °C	
80%	
IP 21	
no   RS 232	
230 V	
50/60 Hz	
1772,- EUR   2312,- EU	R
HS 260 basic: Ident. No. 3	3066600

HS 260 control: Ident. No. 3066700

HS 501 digital
reciprocating
30 mm
15 kg
70 / 19 W
100%
0 – 300 rpm
digital
∞ / 1 – 56 min
digital
timer and continuous operation
505 x 585 x 120 mm
26 kg
5 – 50 °C
80%
IP 21
no
230 V
50/60 Hz
3467,- EUR
Ident No. 2527000

AS 130.1	
Dimensions (W x D x H)	325 x 234 x 88 mm
Set-up plate	220 x 220 mm
Weight	850 g



#### AS 130.1 Universal attachment

For use with various types of vessels by means of universal, infinitely variable clamping rolls.

### Included with delivery:

1 x AS 1.30 Basic holder, 3 x AS 1.31 Clamping roll,

Ident. No. 8017300

6 x AS 1.5 Fastening screw

AS 130.2	
Dimensions (W x D x H)	230 x 230 x 24 ı
Number of fixing clips (volume)	20 x AS 2.1 (25
	12 x AS 2.2 (50
	12 x AS 2.3 (100
	4 x AS 2.4 (250
	4 x AS 2.5 (500
Weight	65
Ident. No.	
3115000	

### AS 130.2 Fixing clip attachment

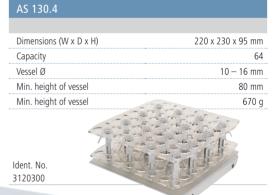
For processing round flasks, measuring flasks and Erlenmeyer flasks. Please order fixing clips separately.

Fixing clips: AS 2.1, AS 2.2, AS 2.3, AS 2.4, AS 2.5

420 x 270 x 32 mi
220 x 340 mi
370

## AS 130.3 Dish attachment

For smooth shaking operations in the low viscosity range, e.g. Petri dishes or culture bottles. With integrated slip-resistant foil (PP).



### AS 130.4 Test tube attachment

For intensive shaking, e.g. small tubes, test tubes, cuvettes, centrifuge tubes.





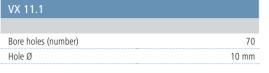


(1)



Frequency

Price



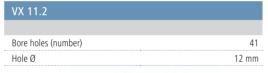


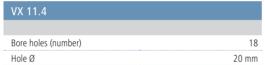


VX 11.1 Test tube insert
Attachment for Eppendorf tubes or test tubes.



VX 11.3 Test tube insert Attachment for test tubes.







VX 11.2 Test tube insert Attachment for test tubes.

Ident. No.

3659100



VX 11.4 Test tube insert Attachment for test tubes.





VX 1 One-hand attachment

For shaking single, non-fixed vessels of 1 - 250 ml.

Dimensions (	W x D x H)	410 x 210 x 40 mm
Weight		740 g
Ident. No. 0953300		

VX 7 Dish attachment

For careful mixing of culture bottles, Petri dishes, etc.

Dimensions (W x D x H)	140 x 145 x 115 mm
Material	macrolon
Weight	300 q



VX 2 Test tube attachment

For up to 36 test tubes or centrifugal tubes with a diameter of 16 mm.

VX 8	
Dimensions (W x D x H)	265 x 136 x 60 mm
Clamping range	25 — 135 mm
Min. height of vessel	80 mm
Weight	760 g



VX 8 Universal attachment

For rapid and secure clamping, e.g. 2 Erlenmeyer flasks up to 500 ml.

Ident. No. 3375400

### VX 8.1 Clamping roll

Spare for use with VX 8 universal attachment.

Dimensions (W x D x H)	210 x 210 x 65 mm
Weight	790 g

VX 2E "Eppendorf" attachment For intensive mixing of up to 64

"microcentrifuge" tubes (1.5 ml).

1618100

VX 11	
Dimensions (W x D x H)	220 x 230 x 95 m
Capacity	220 X 230 X 33 II
Vessel Ø	10 – 16 m
Min. height of vessel	80 n
Weight	670
Ident. No. 3627700	

VX 11 Basic holder

Attachment for test tube inserts.

#### AS 501.1 Dimensions (W x D x H) 480 x 500 x 120 mm Set-up plate 420 x 420 mm 4000 g Weight



#### AS 501.1 Universal attachment

For various types of vessels with a minimum volume of 50 ml. Ideally more than 250 ml. The clamping rolls may be adjusted to two levels. Included with delivery:

1 x AS 1.10 Basic holder, 6 x AS 1.11 Clamping roll, 12 x AS 1.6 Fastening screw

AS 501.2	
Dimensions (W x D x H)	480 x 505 x 190 mm
Capacity:	12 x 50 ml
(number of separating funnels	10 x 100 ml
per volume, pear-shaped)	6 x 250 ml
Weight	4180 g



### AS 501.2 Separating funnel attachment

For shaking out, eluting, extracting, gassing out, dissolving, enriching, etc. Adjustment for the clamping rolls is infinitely variable, the set-up height can be changed by means of clamping devices.

Included with delivery:

1 x AS 1.10, 6 x AS 1.11, 6 x AS 1.6, 6 x AS 1.7

AS 501.3	
Dimensions (W x D x H)	480 x 505 x 190 mm
Capacity:	4 x 500 ml
(number of separating funnels	3 x 1000 ml
per volume, pear-shaped)	2 x 2000 ml
Weight	3720 g

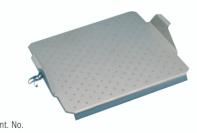


### AS 501.3 Separating funnel attachment

Same features as AS 501.2. Included with delivery:

1 x AS 1.10, 4 x AS 1.11, 4 x AS 1.6, 4 x AS 1.7

AS 501.4	
Dimensions (W x D x H)	475 x 460 x 95 mm
Number of fixing clips	110 x AS 2.1 (25 ml)
(volume)	55 x AS 2.2 (50 ml)
	35 x AS 2.3 (100 ml)
	16 x AS 2.4 (250 ml)
	12 x AS 2.5 (500 ml)
	8 x AS 2.6 (1000 ml)
Weight	2640 g



For shaking flasks, Erlenmeyer flasks and pear-shaped flasks (without fixing clips). Accessories:

AS 501.5	
Dimensions (W x D x H)	450 x 450 x 45 mm
Set-up plate	420 x 420 mm
Weight	1120 g



#### AS 501.5 Dish attachment

For smoothly shaking dishes, but also for smooth mixing in vessels with a large, flat bottom (wide-necked Erlenmeyer flasks and beakers). A plastic foil with mild adhesive prevents the vessel from slipping.

AS 501.6	
Dimensions (W x D x H)	480 x 505 x 225 mm
Capacity: (number of separating funnels per volume, pear-shaped)	4 x 1000 ml
Weight	5500 g



8000500

Ident. No.

### AS 501.6 Separating funnel attachment

Same features as AS 501.2. This attachment will hold 4 x 1000 ml separating funnels. Included with delivery:

1 x AS 1.10, 4 x AS 1.6, 4 x AS 1.12, 8 x AS 1.13

STICKMAX		
Dimensions (W x D x H)	20	00 x 200 mm
Permissible ambient temperature		5 – 80 °C
Max. speed		300 rpm
Number of adhesive mats per shaker	KS 130	1 pcs.
	KS/HS 260	3 pcs.
	KS/HS 501	4 pcs.
	KS 4000 i	4 pcs.



### STICKMAX

New universal adhesive mat for the fixing clip attachments of KS 130, KS/HS 260, KS/HS 501 and KS 4000 i shakers.

- Ideal for frequently changing vessel types
- Self-adhesive
- Devices can be easily removed by side tilting
- Suitable for disinfection
- Peel-away strength required: 5 N/cm<sup>2</sup>



#### AS 260.1 Dimensions (W x D x H) 425 x 335 x 135 mm Set-up plate 320 x 320 mm Weight 1600 g



#### AS 260.1 Universal attachment

For various types of vessels. Infinitely variable clamping rolls allow universal adaptation to the vessels.

### Included with delivery:

Ident. No.

8017400

1 x AS 1.60 Basic holder,

4 x AS 1.61 Clamping roll,

8 x AS 1.5 Fastening screw

AS 260.2	
Dimensions (W x D x H)	330 x 330 x 24 mm
Number of fixing clips (volume)	56 x AS 2.1 (25 ml)
	23 x AS 2.2 (50 ml)
	23 x AS 2.3 (100 ml)
	11 x AS 2.4 (250 ml)
	9 x AS 2.5 (500 ml)
	5 x AS 2.6 (1000 ml)
Weight	1290 g

## AS 260.2 Fixing clip attachment

Ident. No. 3115500

For shaking flasks, Erlenmeyer flasks and bottles with a round cross-section (without fixing clips).

Fixing clips: AS 2.1, AS 2.2, AS 2.3, AS 2.4, AS 2.5

AS 260.3	
Dimensions (W x D x H)	410 x 370 x 32 mi
Set-up plate	320 x 320 mi
Weight	460
Ident. No. 3120600	

For smooth movement for cell cultures, nutrient



AS 260.5	
Dimensions (W x D x H)	334 x 425 x 145 mm
Capacity: (number of separating	6 x 50 ml
funnels per volume, pear-shaped)	5 x 100 ml
	3 x 250 ml
	3 x 500 ml
Weight	1550 g



Ident. No. 3120900

AS 260.5 Separating funnel attachment

For shaking out, salting out, extracting, eluting and enriching. The 3 clamping rolls (included in delivery) are height-adjustable for adaption to different separating funnel sizes. The separating funnels are secured with O-rings (6 O-rings included).

AS 1.30	
Dimensions ( W x D x H )	252 x 234 x 88 mm

AS 1.60

Dimensions (WxDxH)



#### AS 1.30 Basic holder

For use with universal attachment AS 130.1. Accessories: AS 1.31, AS 1.5

Ident. No.

3148000

AS 1.60 Basic holder

For use with universal attachment AS 260.1. Accessories:

AS 1.61, AS 1.5



Ident. No. 3149000

Ident. No. 2339700

348 x 335 x 135 mm

AS 1.10	
Dimensions (W x D x H)	480 x 480 x 120 mm



#### AS 1.10 Basic holder

For use with universal attachment AS 501.1 and separating funnel attachments AS 501.2, AS 501.3 and AS 501.6.

Accessories:

AS 1.11, AS 1.6, AS 1.7, AS 1.8, AS 1.12, AS 1.13

AS 1.31 AS 1.30 For basic holder 228 mm Length

AS 1.61	
For basic holder	AS 1.6
Length	335 mi





Ident. No. 3030500 AS 1.31 3030501 AS 1.61 2339800 AS 1.11

Clamping roll

AS 1.31 AS 1.61

AS 1.11



2979400

1268400

### AS 1.5 Fastening screw

Fastening screw for the universal attachments AS 130.1, AS 260.1 and the separating funnel attachment AS 260.5. Two AS 1.5 fastening screws are required for fastening a clamping roll onto the corresponding basic holder.



1269200

## AS 1.7 Clamping device

Two AS 1.6 and two AS 1.7 clamping devices are required for fastening two clamping rolls one above the other (for clamping separating funnels). For basic holder AS 1.10 only.

VG 3.1 Standard attachment

VG 3.2 One-hand attachment

VG 3.3 Universal attachment Universal attachment, 150 mm, with

rubber insert (continuous operation).

One-hand attachment, 88 mm, round, with

rubber insert (continuous / touch operation).

with delivery.

Ident. No.

3341200

3342300

3342400

Standard attachment for reagent glasses / small

vessels (continuous / touch operation), included



#### AS 1.6 Fastening screw

Two AS 1.6 clamping devices are required for fastening a clamping roll to the corresponding basic holder (for basic holder AS 1.10 only).



### AS 1.8 Supporting clamping device

Two AS 1.6 clamping devices and two AS 1.8 supporting clamping devices are required if a clamping roll is to be attached at a higher position (e.g. for fixing a vessel which has a higher point of gravity). For basic holder AS 1.10 only.



For attaching two AS 1.13 ground section holders for fixing 1000 ml separating funnels. For basic holder AS 1.10 only.



2594500

Length 437 mm



#### AS 1.13 Ground section holder

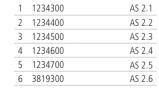
For attaching separating funnels with ground opening NS 29 (2 x AS 1.13 necessary per separating funnel). For basic holder AS 1.10 only.



Ident. No. 2597000

#### For flask volume AS 2.1 25 ml 2 1234400 AS 2.2 50 ml 3 1234500 AS 2.3 100 ml 200 ml / 250 ml 4 1234600 AS 2.4





Ident. No.





4 AS 2.4 Fixing clip

5 AS 2.5 Fixing clip 6 AS 2.6 Fixing clip

### VG 3.31 Test tube attachment\*

For 54 Eppendorf tubes (continuous operation).



### VG 3.32 Test tube attachment\*

For 18 reagent glasses, 10 mm (continuous operation).



### VG 3.33 Test tube attachment\*

For 12 reagent glasses, 12 mm (continuous operation).



IKA® VORTEX

# VG 3.35 Test tube attachment\*

VG 3.34 Test tube attachment\*

operation).

Ident. No

3344100

For 8 reagent glasses, 16 mm (continuous

For 8 reagent glasses, 20 mm (continuous operation)



### VG 3.36 Erlenmeyer flask attachment\*

For 1 Erlenmeyer / round flask from 100 to 250 ml (continuous operation).



#### VG 3.37 Microtiter plate attachment\*

For 1 standard microtiter plate (continuous operation).



### \* For VG 3.3 Universal attachment

#### MS 3.1 Standard attachment

For test tubes and small vessels up to Ø 50 mm, included with the minishakers MS 3 basic and



# MS 3.3 Universal attachment

For various foam inserts, included with the minishakers MS 3 basic and MS 3 digital.



#### MS 3.4 Microtiter plate attachment

For use with a microtiter plate, included with the minishaker MS 3 digital.

Ident, No

3426600



#### MS 3.5 PCR plate attachment

For holding PCR plates, 96-well.



#### MS 1.21 One-hand insert

For inserting into the universal attachment, included with the minishakers MS 3 basic and MS 3 digital.



#### MS 1.31 Test tube insert

For inserting into universal attachment, for 14 test tubes Ø 10 mm, material: ethylvinyl-acetate.



## MS 1.32 Test tube insert

For inserting into the universal attachment, for 6 test tubes Ø 12 mm. Material: ethylvinyl-acetate. Included with the minishakers MS 3 digital.



# MS 1.33 Test tube insert

For inserting into the universal attachment, for 4 test tubes Ø 16 mm. Material: ethylvinyl-acetate.



L001860

#### MS 1.34 Test tube insert

For inserting into the universal attachment, for any number of bore holes. Material: ethylvinyl-acetate.



Ident. No. L001830



Erlenmeyer	Flasks									
IKA® Shaker	Attachment Combination	25 ml	50 ml	100 ml	250 ml	500 ml	1000 ml	2000 ml	3000 ml	5000 ml
KS 130	Stickmax	23	15	6	5	4	1	1**		0
KS 130	AS 130.1	15	12	6	2	2	1	1**		0
KS 130	required clamping rolls	4	4	3	2	2	2	2		0
KS 130	AS 130.2 Fixing Clip Attachment	12	12	8	4	4	1	0		0
KS 260	Stickmax	25	16	9	10	9	5	2		1
KS 260	AS 260.1	21	18	15	8	6	3	1		1
KS 260	required clamping rolls	4	4	4	4	4	3	2		2 (4)
KS 260	AS 260.2 Fixing Clip Attachment	31	28	16	10	8	5	4		0
KS 501	Stickmax	25	16	9	25	16	9	5	1	1
KS 501	AS 501.1	50	40	30	16	12	9	4	4	1
KS 501	required clamping rolls	6	6	6	5	4	6	3	3	2
KS 501	AS 501.4 Fixing Clip Attachment	50	35	30	16	12	8	5	0	0
KS 4000 i	Stickmax	25	16	9	29	16	9	4	1	0
KS 4000 i	AS 4000.1	45	40	30	16	9	8	4	2	0
KS 4000 i	required clamping rolls	6	6	6	8	4	4	4	2	0
KS 4000 i	AS 4000.2 Fixing Clip Attachment	55	38	25	16	11	7	4	0	0



									-	-		
Beakers (hig	ıh form)											
IKA® Shaker	Attachment Combination	25 ml	50 ml	100 ml	150 ml	250 ml	400 ml	600 ml	800 ml	1000 ml	2000 ml	3000 ml
KS 130	Stickmax	25	16	9	9	9	5	4	4	4*	1*	1*
KS 130	AS 130.1 max. quantity	18	15	8	6	6	3	2	2	2	1*	1*
KS 130	required clamping rolls for AS 130.1	4	3	3	3	3	2	2	2	2	2	2
KS 260	Stickmax	64	36	25	25	16	9	9	9	9	4*	4*
KS 260	AS 130.1 max. quantity	45	28	18	15	15	8	6	6	6	2	2
KS 260	required clamping rolls for AS 130.1	6	5	4	4	4	3	3	3	3	2	2
KS 501	Stickmax	121	81	49	36	36	25	16	16	9	9	4
KS 501	AS 130.1 max. quantity	96	90	40	35	24	20	12	12	12	12	4
KS 501	required clamping rolls for AS 130.1	9	8	5	5	5	4	4	4	4	3	4
KS 4000	Stickmax	121	81	49	36	36	25	16	16	9	9	4
KS 4000	AS 130.1 max. quantity	77	48	35	30	24	20	12	12	12	6	4
KS 4000	required clamping rolls for AS 130.1	8	7	6	5	5	4	4	4	4	3	3

<sup>\*</sup> Limited recommendation! \*\* Not recommended!

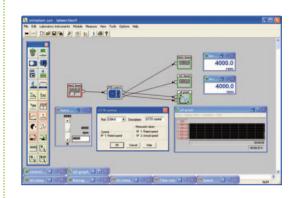
KA® Shaker	Attachment Combination	25 ml	50 ml	100 ml	200 ml	250 ml	500 ml	1000 ml	2000 ml
KS 130	Stickmax	25	16	9	5	5	2	1**	**
(S 130	AS 130.1	16	12	6	3	2	2	0	0
KS 130	required clamping rolls for AS 130.1	5	4	3	3	2	2	0	0
KS 130	AS 130.2	15	8	8	4	4	4	1	0
KS 260	Stickmax	49	36	25	10	10	9	4	**
<b>KS 260</b>	AS 260.1 max. quantity	32	24	20	12	16	6	2	**
KS 260	required clamping rolls for AS 230.1	5	5	7	6	6	4	2	**
KS 260	AS 260.2	30	29	23	9	9	8	4	3
KS 501	Stickmax	100	64	36	20	16	9	20	**
(S 501	AS 501.1 + 10 AS 1.11 Clamping Roll + 20 AS 1.6 Fastening Screw	70	56	30	25	20	12	6	**
(S 501	required clamping rolls for AS 501.1	8	14	10	6	5	6	4	**
(S 501	AS 501.2	55	50	35	20	20	11	8	5
<b>(S 4000</b>	Stickmax	100	64	36	20	20	16	6*	0
<b>KS 4000</b>	AS 4000.1	70	40	24	20	20	12	6	0
<b>KS 4000</b>	required clamping rolls for AS 4000.1	8	6	5	8	8	6	4	0
(S 4000	AS 4000.2	52	49	30	19	19	11	6	0



						25				1000			/	
Beakers (lov	w form)													
IKA® Shaker	Attachment Combination	25 ml	50 ml	100 ml	150 ml	250 ml	400 ml	600 ml	800 ml	1000 ml	2000 ml	3000 ml	5000 ml	10000 m
KS 130	Stickmax	25	16	9	9	5	4	4	4	2	1	1*	1*	**
KS 130	AS 130.1 max. quantity	15	8	8	8	4	2	2	2	2	2	1*	0	**
KS 130	required clamping rolls for AS 130.1	4	3	3	3	3	2	2	2	2	2	2		
KS 260	Stickmax	64	36	25	16	10	9	9	6	6	4	2	1	1*
KS 260	AS 260.1 max. quantity	32	24	15	12	8	6	6	6	2	2	2	1	1*
KS 260	required clamping rolls for AS 230.1	5	5	4	4	3	3	3	3	2	2	2	2	2
KS 501	Stickmax	100	64	49	36	25	16	16	10	9	9	4	4	1
KS 501	AS 501.1 max. quantity	70	48	42	30	20	16	12	9	9	6	4	1	1
KS 501	required clamping rolls for AS 501.1	8	7	6	5	4	4	3	3	3	3	3	2	2
KS 4000	Stickmax	100	64	49	36	25	16	16	10	9	9	4	4	1*
KS 4000	AS 4000.1 max. quantity	70	48	30	20	20	12	12	9	6	4	4	2	1*
KS 4000	required clamping rolls for AS 4000.1	8	7	6	5	5	4	4	4	3	3	3	2	2

<sup>\*</sup> Limited recommendation! \*\* Not recommended!

# labworldsoft®



IKA® laboratory software labworldsoft® is an advanced software for all your laboratory needs. With the help of this software, you can network up to 64 laboratory devices via one PC. All test parameters can be documented ensuring complete automation of your laboratory experiments. Measurements and processes may be run independently. Long waits and processing times are reduced, which increases productivity.



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# Integrated Safety



With customer safety as a priority, all IKA® shakers adhere to the requirements set forth by the norms DIN EN IEC 61010-1. They meet and exceed CE standards and fulfill international safety regulations.





# Knowledge | Select your ideal shaker

Type of motion	Description	Diagram	Shaking diameter	Max. Permissible shaking weight
Vortex	The cup generates a	(A)	4.5 mm	0.5 kg
	'whirlpool' vortex action		4.5 mm	0.5 kg
			4.5 mm	max. 50 ml (1 test tube)
			4.5 mm	0.1 kg
			4 mm	0.4 kg
			4.5 mm	0.5 kg
			4.5 mm	0.5 kg
Orbital	The platform moves in a	(B)	20 mm	20 kg
	circular orbit		20 mm	20 kg
			20 mm	7.5 kg
			20 mm	7.5 kg
			4 mm	2 kg
			3 mm	2 or 4 microtiter plates
			4 mm	2 kg
			4 mm	2 kg
			10 mm	7.5 kg
			10 mm	7.5 kg
			30 mm	15 kg
Reciprocating	The platform moves back	(C)	20 mm	7.5 kg
	and forth horizontally		20 mm	7.5 kg
			30 mm	15 kg
Rocking	The platform rocks on a	(D) 1	8° (angle)	2 kg
(See-saw action)	central pivot	+ 🛆	0 – 15° (angle)	2 kg
Rocking	The platform moves in a	E 💮	8° (angle)	2 kg
(3D Tumbling motion)	three-dimensional motion		0 – 15° (angle)	2 kg
Rocking and Rolling	The platform rocks on a	(F)	24.5 mm (high)	2 kg
	central pivot as well as revolves around a fixed	* Ž	24.5 mm (high)	2 kg
	point		24.5 mm (high)	2 kg
			24.5 mm (high)	2 kg
Rotating	Platform revolves at a		adjustable from horizontal to vertical	2 kg
,	tilted angle	G D	adjustable from horizontal to vertical	
			vertical or horizontal	2 kg
			vertical or horizontal	
			vertical of Horizofflal	2 kg

Speed range	Recommended IKA® device	Applications
0 – 3000 rpm	MS 3 basic	Suitable for shaking small vessels and microtiter plates
0 – 3000 rpm	MS 3 digital	
2800 rpm (fixed)	lab dancer	Ideal for use with all small vessels of up to 30 mm in diameter, e.g. test tubes, centrifuge tubes and microcentrifuge tubes
1000 – 2800 rpm	VORTEX 1	
500 – 2500 rpm	VORTEX Genius 3	Suitable for mixing in test tubes, microcentrifuge tubes, reagent glasses/small vessels, Erlenmeyer/round flask and microtiter plates
0 – 3000 rpm	VORTEX 4 basic	
0 – 3000 rpm	VORTEX 4 digital	
10 – 500 rpm	KS 4000 i control	Ideal for unattended operation in a temperature-controlled environment
10 – 500 rpm	KS 4000 ic control	
10 – 500 rpm	KS 3000 i control	
10 – 500 rpm	KS 3000 ic control	
0 – 2200 rpm	VXR basic Vibrax®	Ideal for mixing in test tubes, microtiter plates, bottles, flasks and beakers. A wide range of attachment combinations allows for using almost all shapes and sizes of vessels
0 – 1100 rpm	MTS 2/4 digital microtiter shaker	
80 – 800 rpm	KS 130 basic	
80 – 800 rpm	KS 130 control	
20 – 500 rpm	KS 260 basic	
10 – 500 rpm	KS 260 control	
0 – 300 rpm	KS 501 digital	
20 – 300 rpm	HS 260 basic	Ideal for shaking out, eluting, extracting, gassing out, dissolving, enriching, etc.
10 – 300 rpm	HS 260 control	
0 – 300 rpm	HS 501 digital	
5 – 80 rpm	Rocker 2D basic	Used for homogenous mixing in flasks, culture flasks, Petri dishes and tubes
0 – 80 rpm	Rocker 2D digital	
30 rpm (fixed)	Rocker 3D basic	Ideal for low foaming agitation, DNA extractions, staining and de-staining procedures, etc.
0 – 80 rpm	Rocker 3D digital	
30 rpm (fixed)	Roller 6 basic	Recommended for mixing blood samples, viscous substances and liquid-solid suspensions where minimum aeration is required
0 – 80 rpm	Roller 6 digital	
30 rpm (fixed)	Roller 10 basic	
0 – 80 rpm	Roller 10 digital	
20 rpm (fixed)	Loopster basic	Ideal for keeping biological samples in suspension and for general mixing applications
0 – 80 rpm	Loopster digital	
20 rpm (fixed)		
0 – 80 rpm	Trayster digital	











lab dancer VORTEX 1 VORTEX Genius 3 VORTEX 4

















KS 260 basic | control



KS 501 digital

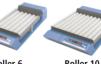
















Rocker 3D basic | digital

Roller 6 basic | digital Roller 10

**Loopster** basic | digital

Prices valid until 31st of December 2013 All prices exclusive to VAT Subject to alteration of prices



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# Shakers | FAQ Is it possible to operate using IKA® laboratory software? labworldsoft® is an advanced software for all your laboratory needs. With the help of this software, you can network up to 64 laboratory devices via one PC. All test parameters can be documented ensuring complete automation of your laboratory experiments. Measurements and processes may be run independently. Long waits and processing times are reduced, which increases productivity. Can I place my shaker in a CO, chamber or in an incubator? If the relative humidity does not exceed 80% and the temperature stays within 5 – 40 °C (partially until 50°C), the shaker can be used in a CO<sub>2</sub> chamber or an incubator. Which IKA® shaker of the HS/KS series starts automatically after a power failure? KS 130, KS 260, KS 3000 and KS 4000 start automatically in certain modes (C, C+B) after a power failure. What kind of vortex shakers does IKA® offer? (They should have a touch function, but also come equipped with various attachments, e.g. for microtiter plates) The Lab Dancer, MS 3 basic, digital VORTEX 4 and VORTEX Genius 3 are the appropriate devices. MS 3 basic, digital and VORTEX Genius 3 have a variety of attachments for most variable shaking tasks. Is it possible to shake deepwell plates with the MTS 2/4? No, deepwell plates cannot be fixed properly; their center of gravity is simply too high.

