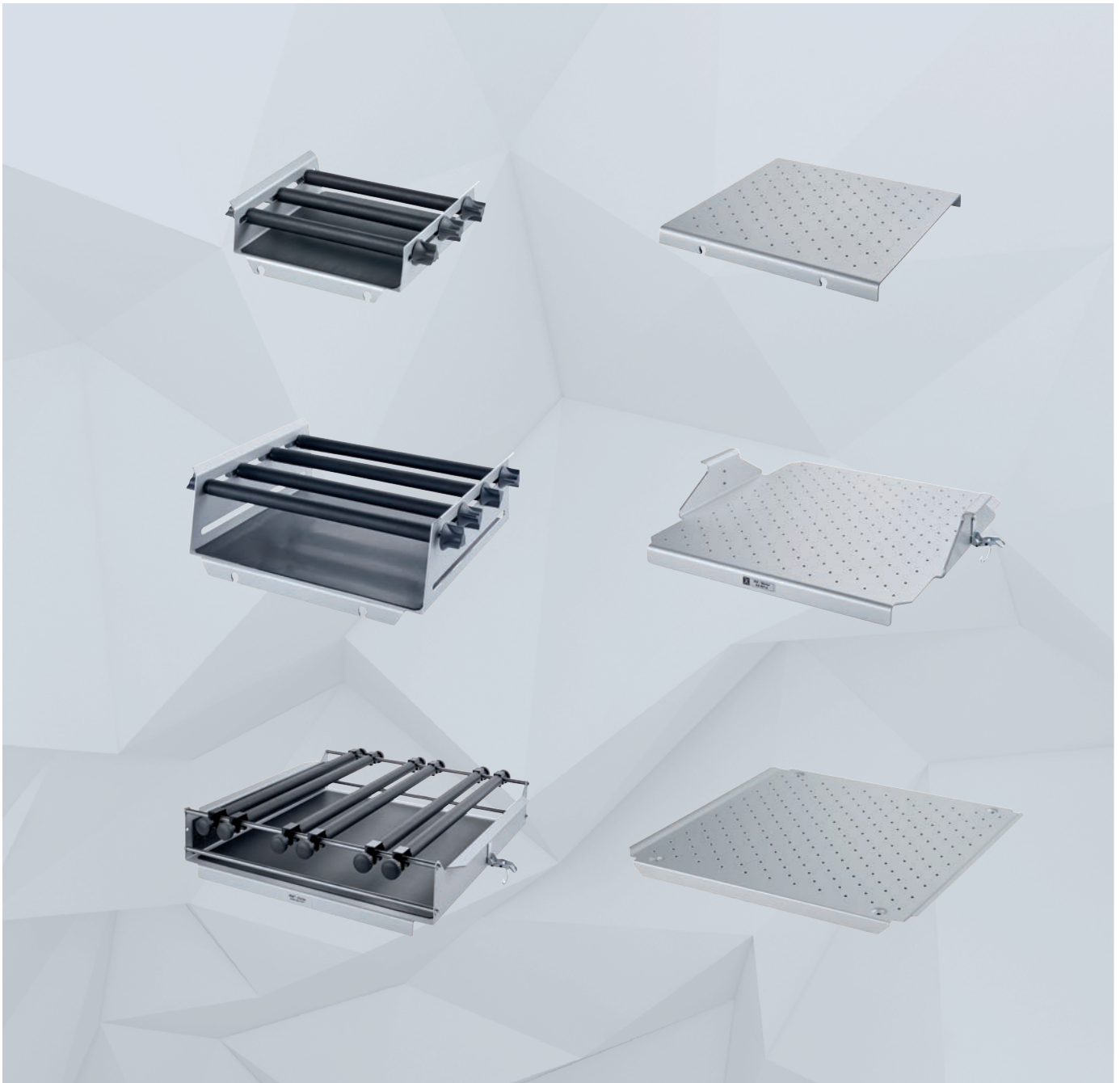


# IKA

designed for scientists

EN

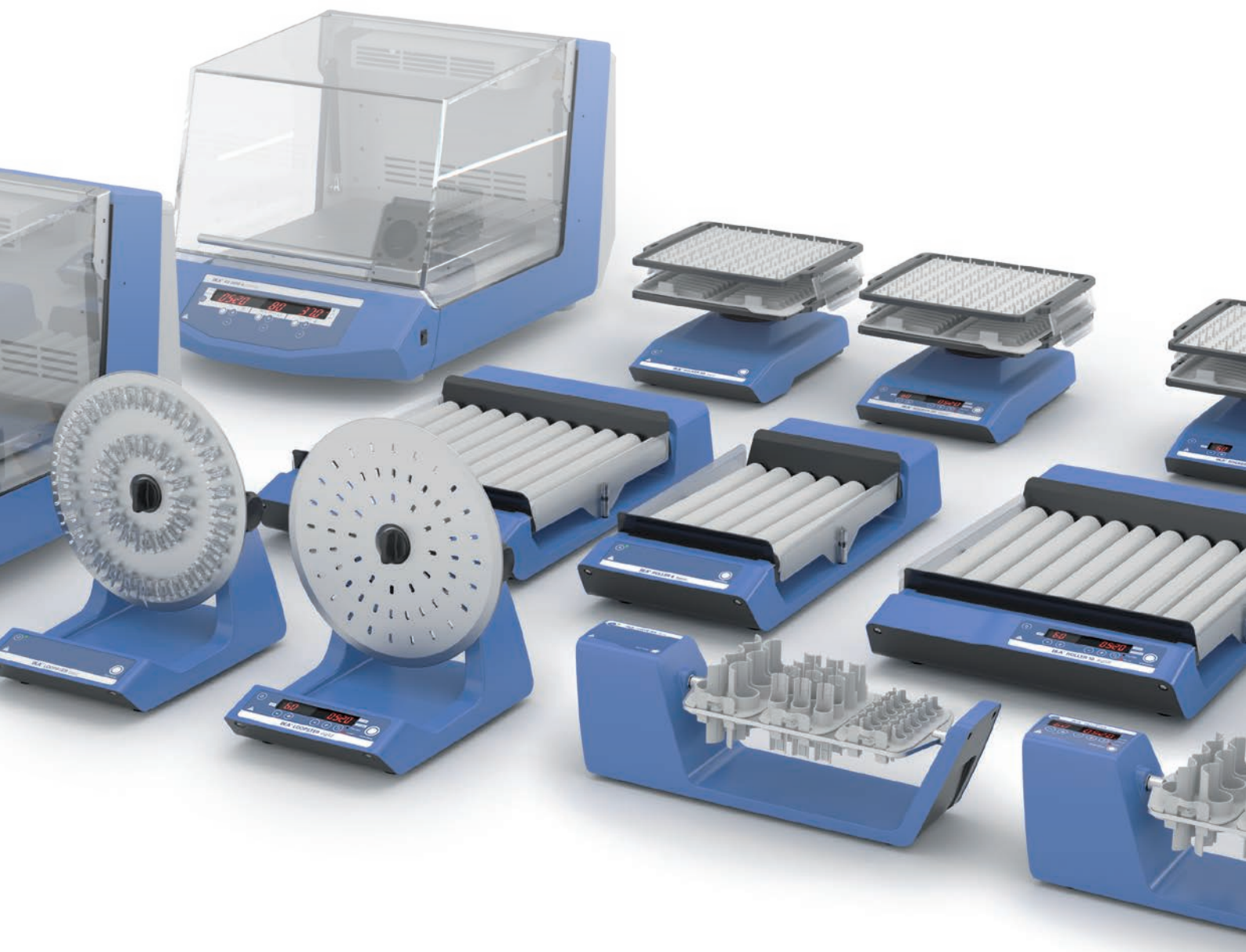


## SELECTION GUIDE HOW TO FIND THE RIGHT SHAKER AND ATTACHMENTS

# Shakers

/// Finding the right attachment for your application

IKA offers the perfect lab shakers for mixing and shaking tasks. In addition to the tried and tested orbital shakers and horizontal shakers, the innovative incubator shakers are gaining popularity in laboratories. Their precise temperature control make the devices a reliable asset in every lab. They can carry various attachment combinations like fixing clip attachments, universal attachments or STICKMAX.



# How to find the right shaker

## /// Your selection guide

Application	Shaking diameter	Max. permissible shaking weight	Speed range	Recommended IKA device
-------------	------------------	---------------------------------	-------------	------------------------

**Vortex**  
The cup generates a 'whirlpool' vortex action

Suitable for shaking small vessels and microtiter plates	3 mm	0,5 kg	0 – 3000 rpm	MATRIX Orbital MATRIX Orbital Delta MATRIX Orbital Delta Plus
	4,5 mm	0,5 kg	0/200 – 3000 rpm	MS 3 basic   digital   control
	4,5 mm	0,5 kg	2800 rpm (fixed)	Hula Dancer basic
Ideal for use with all small vessels of up to 30 mm in diameter, e.g. test tubes, centrifuge tubes and microcentrifuge tubes	4,5 mm	0,5 kg	1200 – 2800 rpm	Hula Dancer digital
	4,5 mm	max. 50 ml (1 test tube)	2800 rpm (fixed)	lab dancer
	4,5 mm	0,1 kg	1000 – 2800 rpm	VORTEX 1
	4 mm	0,4 kg	500 – 2500 rpm	VORTEX 2
Suitable for mixing in test tubes, microcentrifuge tubes, reagent glasses / small vessels, and microtiter plates	4 mm	0,4 kg	500 – 2500 rpm	VORTEX 3
	4 mm	2 kg	100 – 2200 rpm	VXR basic Vibrax®
	3 mm	2 or 4 microtiter plates	50 – 1100 rpm	MTS 2/4 digital microtiter shaker

**Orbital**  
The platform moves in a circular orbit

Ideal for unattended operation in a temperature-controlled environment	20 mm	20 kg	10 – 500 rpm	KS 4000 i control   ic control
	20 mm	7,5 kg	10 – 500 rpm	KS 3000 i control   ic control
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	4 mm	2 kg	80 – 800 rpm	KS 130 basic   control
	10 mm	7,5 kg	50 – 500 rpm	KS 260 basic
	10 mm	7,5 kg	10 – 500 rpm	KS 260 control
	30 mm	15 kg	0 – 300 rpm	KS 501 digital



MATRIX Orbital



lab dancer



VORTEX 3



KS 3000 i control

# How to find the right shaker

## /// Your selection guide

Application	Shaking diameter	Max. permissible shaking weight	Speed range	Recommended IKA device
<b>Reciprocating</b> The platform moves back and forth horizontally				
Ideal for shaking out, eluting, extracting, gassing out, dissolving, enriching, etc.	20 mm	7,5 kg	20 – 300 rpm	HS 260 basic
	20 mm	7,5 kg	10 – 300 rpm	HS 260 control
	30 mm	15 kg	0 – 300 rpm	HS 501 digital
<b>Rocking (See-saw action)</b> The platform rocks on a central pivot				
Used for homogenous mixing in flasks, culture flasks, Petri dishes and tubes	8° (angle)	2 kg	5 – 80 rpm	ROCKER 2D basic
	0 – 15° (angle)	2 kg	5 – 80 rpm	ROCKER 2D digital
<b>Rocking (3D Tumbling motion)</b> The platform moves in a three-dimensional motion				
Ideal for low foaming agitation, DNA extractions, staining and de-staining procedures, etc.	8° (angle)	2 kg	30 rpm (fixed)	ROCKER 3D basic
	0 – 15° (angle)	2 kg	0 – 80 rpm	ROCKER 3D digital
<b>Rocking and Rolling</b> The platform rocks on a central pivot as well as revolves around a fixed point				
Recommended for mixing blood samples, viscous substances and liquid-solid suspensions where minimum aeration is required	24,5 mm (high)	2 kg	30 rpm (fixed)	ROLLER 6 basic
	24,5 mm (high)	2 kg	0 – 80 rpm	ROLLER 6 digital
	24,5 mm (high)	2 kg	30 rpm (fixed)	ROLLER 10 basic
	24,5 mm (high)	2 kg	0 – 80 rpm	ROLLER 10 digital
<b>Rotating</b> Platform revolves at a tilted angle				
Ideal for keeping biological samples in suspension and for general mixing applications	Adjustable from horizontal to vertical	2 kg	20 rpm (fixed)	Loopster basic
	Adjustable from horizontal to vertical	2 kg	0 – 80 rpm	Loopster digital
	Vertical or horizontal	2 kg	20 rpm (fixed)	Trayster basic
	Vertical or horizontal	2 kg	0 – 80 rpm	Trayster digital



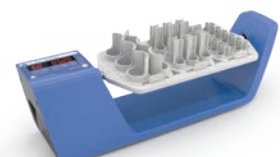
ROCKER 3D digital



ROLLER 6 digital



Loopster digital



Trayster digital

# Shaker attachments and their vessel capacities

/// Recommendations for various vessel sizes

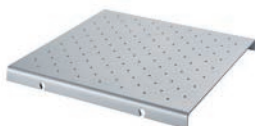
IKA shaker	Attachment combination	25 ml	50 ml	100 ml	200 ml	250 ml	500 ml	1000 ml	2000 ml	3000 ml	5000 ml
<b>ERLENMEYER FLASKS</b>											
KS 130 basic KS 130 digital	STICKMAX	25	16	9	-	5	4	2	1	1	-
	AS 130.1 Universal attachment	15	12	6	-	2	2	1	1	1	-
	required clamping rolls for AS 130.1	4	4	3	-	2	2	2	2	2	-
	AS 130.2 Fixing clip attachment	12	12	9	-	4	4	-	-	-	-
KS 260 basic KS 260 digital HS 260 basic HS 260 control	STICKMAX	44	36	25	-	9	9	4	2	2	1
	AS 260.1 Universal attachment	28	24	15	-	6	6	2	1	1	1
	required clamping rolls for AS 260.1	5	5	4	-	3	3	2	2	2	2
	AS 260.2 Fixing clip attachment	31	28	17	-	10	9	5	4	-	-
KS 501 digital HS 501 digital	STICKMAX	100	64	36	-	25	16	9	4	4	2
	AS 501.1 Universal attachment	70	48	30	-	20	12	9	4	4	1
	required clamping rolls for AS 501.1	7	6	5	-	4	3	6	3	3	2
	AS 501.4 Fixing clip support	55	50	30	-	12	11	8	5	-	-
KS 3000 i control KS 3000 ic control	STICKMAX	44	36	25	-	9	9	4	2	-	-
	AS 260.1 Universal attachment	28	24	15	-	6	6	2	-	-	-
	required clamping rolls for AS 260.1	5	5	4	-	3	3	2	-	-	-
	AS 260.2 Fixing clip attachment	31	28	17	-	10	9	5	-	-	-
KS 4000 i control KS 4000 ic control	STICKMAX	81	49	36	-	16	9	9	4	2	-
	AS 4000.1 Universal attachment	54	35	24	-	12	9	6	4	2	-
	required clamping rolls for AS 4000.1	7	6	5	-	4	4	3	3	2	-
	AS 4000.2 Fixing clip attachment	55	52	25	-	16	11	7	4	-	-
<b>VOLUMETRIC FLASKS</b>											
KS 130 basic KS 130 digital	STICKMAX	25	16	9	6	6	4	2	**	-	-
	AS 130.1 Universal attachment	20	12	6	6	2	2	-	-	-	-
	required clamping rolls for AS 130.1	5	4	3	3	2	2	-	-	-	-
	AS 130.2 Fixing clip attachment	18	9	8	4	4	4	-	-	-	-
KS 260 basic KS 260 digital HS 260 basic HS 260 control	STICKMAX	49	36	25	16	9	9	4	**	-	-
	AS 260.1 Universal attachment	32	24	15	8	8	6	2	**	-	-
	required clamping rolls for AS 260.1	5	5	4	3	3	4	2	**	-	-
	AS 260.2 Fixing clip attachment	30	30	23	9	9	9	5	4	-	-
KS 501 digital HS 501 digital	STICKMAX	100	64	36	25	16	9	9	**	-	-
	AS 501.1 Universal attachment + 10 AS 1.11 Clamping roll + 20 AS 1.6 Clamping device	70	48	30	20	20	12	9	**	-	-
	required clamping rolls for AS 501.1	7	6	5	4	4	3	3	**	-	-
	AS 501.2 Separating funnel attachment	55	54	35	19	19	11	8	5	-	-
KS 3000 i control KS 3000 ic control	STICKMAX	49	36	25	16	9	6	-	-	-	-
	AS 260.1 Universal attachment	32	24	15	8	8	6	-	-	-	-
	required clamping rolls for AS 260.1	5	5	4	3	3	4	-	-	-	-
	AS 260.2 Fixing clip attachment	30	30	23	9	9	5	-	-	-	-
KS 4000 i control KS 4000 ic control	STICKMAX	100	64	36	25	25	16	6	-	-	-
	AS 4000.1 Universal attachment	60	40	24	20	15	12	6	-	-	-
	required clamping rolls for AS 4000.1	7	6	5	5	5	6	4	-	-	-
	AS 4000.2 Fixing clip attachment	55	55	32	21	21	12	5	-	-	-

Subject to technical changes

\* Limited recommendation! \*\* Not recommended! \*\*\* 4 = only up; 10 = up + down



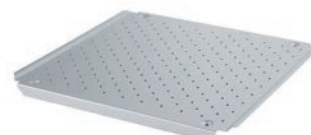
AS 130.2



AS 260.2



AS 501.4



AS 4000.2

# Shaker attachments and their vessel capacities

/// Recommendations for various vessel sizes

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	10 000 ml
<b>BEAKERS (HIGH FORM)</b>														
KS 130 basic KS 130 digital	STICKMAX	36	16	9	9	9	5	4	4	4	1	1	-	-
	AS 130.1 Universal attachment	18	15	8	6	6	4	2	2	2	1	1	-	-
	required clamping rolls for AS 130.1	4	4	3	3	3	3	2	2	2	2	2	-	-
KS 260 basic KS 260 digital HS 260 basic HS 260 control	STICKMAX	81	49	25	25	16	16	9	9	9	4	4	-	-
	AS 260.1 Universal attachment	45	28	18	15	15	8	6	6	6	2	2	-	-
	required clamping rolls for AS 260.1	6	5	4	4	4	3	3	3	3	2	2	-	-
KS 501 digital HS 501 digital	STICKMAX	121	81	49	36	36	25	16	16	9	9	4	-	-
	AS 501.1 Universal attachment	96	63	42	36	30	25	16	12	12	9	4	-	-
	required clamping rolls for AS 501.1	8	7	6	5	5	4	4	3	3	3	2	-	-
KS 3000 i control KS 3000 ic control	STICKMAX	81	49	25	25	25	16	9	9	9	4	-	-	-
	AS 260.1 Universal attachment	45	28	18	15	15	8	6	6	6	2	-	-	-
	required clamping rolls for AS 260.1	6	5	4	4	3	3	3	3	3	2	-	-	-
KS 4000 i control KS 4000 ic control	STICKMAX	121	81	49	36	36	25	16	16	9	9	4	-	-
	AS 4000.1 Universal attachment	84	48	35	24	20	20	12	12	12	6	4	-	-
	required clamping rolls for AS 4000.1	8	7	6	5	5	5	4	4	4	3	3	-	-
<b>BEAKERS (LOW FORM)</b>														
KS 130 basic KS 130 digital	STICKMAX	25	16	9	9	5	4	4	4	4	1	1*	1*	**
	AS 130.1 Universal attachment	15	8	8	6	3	2	2	2	2	1	1*	-	-
	required clamping rolls for AS 130.1	4	3	3	3	3	2	2	2	2	2	2	-	-
KS 260 basic KS 260 digital HS 260 basic HS 260 control	STICKMAX	64	49	25	25	16	9	9	5	5	4	2	1	1*
	AS 260.1 Universal attachment	32	24	15	12	8	6	6	6	4	2	2	1	1*
	required clamping rolls for AS 260.1	5	5	4	4	3	3	3	3	3	2	2	2	2
KS 501 digital HS 501 digital	STICKMAX	100	64	49	36	25	16	16	9	9	9	4	4	1
	AS 501.1 Universal attachment	70	48	42	30	20	16	12	12	9	6	4	1	1
	required clamping rolls for AS 501.1	7	6	6	5	4	4	3	3	3	2	2	2	2
KS 3000 i control KS 3000 ic control	STICKMAX	64	49	25	25	16	9	9	5	5	4	-	-	-
	AS 260.1 Universal attachment	32	24	15	12	8	6	6	4	4	2	2	-	-
	required clamping rolls for AS 260.1	5	5	4	4	3	3	3	3	4	2	1	-	-
KS 4000 i control KS 4000 ic control	STICKMAX	100	64	49	36	25	16	16	10	10	9	4	2	-
	AS 4000.1 Universal attachment	66	40	35	20	20	12	12	9	6	4	4	2	-
	required clamping rolls for AS 4000.1	7	6	6	5	5	4	4	4	4	3	3	2	-

Subject to technical changes

\* Limited recommendation! \*\* Not recommended! + recommended!



AS 130.1



AS 260.1



AS 501.1



AS 4000.1