

# **SPINDLE** MOULDERS

245 300

PANLIC

MADE IN GERMANY



245|10

245|20

245|100

245|200

245|300

WWW.PANHANS.DE

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MADE IN GERMANY







# FOREWORD



REINHOLD BECK, MANAGING DIRECTOR (RIGHT IN THE PICTURE) ALEXANDER BECK, OPERATIONS MANAGER (I FET IN THE PICTURE)

#### THE FAMILY COMPANY WITH EXPERIENCE

HO|KU|BE|MA Maschinenbau GmbH is a family-owned company that develops and distributes reliable and innovative machines for PANHANS. As a competent specialist company, we offer a comprehensive range of services in the development and manufacture of machines and systems for wood, plastic and metal processing companies. Our traditional company combines many years of knowledge from professional activity with the most modern requirements of today and develops innovative solutions.

Equipped with the most modern machines, we guarantee the conscientious and high quality of our products. Decades of experience and expertise flow into every job. Our quality standards are extremely high in order to achieve the best possible product for you. In compliance with the test criteria, the solid German machine construction is produced in accordance with the regulations. As a successful mediumsized company, we manufacture high-quality machines with precision "Made in Germany" at our Sigmaringen site in Baden-Württemberg.

With our machines, we not only want to satisfy you as a customer, but also to make you enjoy working with products from HO|KU|BE|MA. For us, service means that you as a customer are satisfied and can get the information you need in different ways at any time. Sometimes the service by phone, mail or WhatsApp is not enough. In this case we are also happy to offer you our on-site service. A trained and competent service technician will assist you in your workshop. The on-site service also includes maintenance and repair work on the machines, if required. If required, the on-site service also includes maintenance and repair work on the machines.

The longevity of your PANHANS machine is close to our hearts. We see ourselves not only as a service provider and supplier, but much more as the specialist partner at your side.

Reinhold Jed

REINHOLD BECK MANAGING DIRECTOR

Cookander Bak

ALEXANDER BECK OPERATIONS MANAGER



# **SPINDLE** MOULDERS

## MACHINE OVERVIEW

Precise work at the highest level is required for the production of a wide variety of parts. Components have to be manufactured with an exact fit and later brought together. This precision work requires not only specific tools, but also a reliable machine with a pleasant and advantageous operating concept. A spindle moulder from PANHANS has such a well thought-out operating concept for precise work. In addition to effective, economical and safe working, the tilting spindle moulder also provide a special customer benefit: The storage of various tools and programs.









### SPINDLE MOULDER

245|100

EQUIPMENT DETAILS FROM PAGE 24

**OPTIONS + EXTENSIONS** FROM PAGE 25





# **245**|10



Solid basis and highest quality level: The tilting spindle moulder 245|10 consciously abstains from electronic controls and functional elements.

#### **TECHNICAL** SPECIFICATIONS

Table size		1100 x 760 mm
Table height		870 mm
Milling spindle quick clampin		30 mm
Clamping heig	ght	140 mm
Height adjust	ment	140 mm
Spindle tilt rar	ıge	- 5 / + 45.5°
Speed	30	000 / 4500 / 6000 / 9000 rpm
Milling protect pressure device		GAMMA V 1629
Ring fence		1639 Tapoa
Suction nozzle	es	2 x ø 120 mm
Net weight		approx. 800 kg
Drive belt tens	sioning device	
Optional millin	ng spindle with	different diameter
Counterclocky	vise and clockv	vise rotation
Finely planed	cast iron table	
Operation via stand	handwheel at 1	the bottom of the machine
Milling fence 2 tiplex fence pla		ent via handwheel incl. mul-
Mechanical m	otor brake	
Digital positio	n and speed in	dicators
Height and til		

ART. NO.: 4523





#### HIGHLIGHT **FOCUS ON QUALITY**

Manual adjustment wheels and analogue displays have been combined with highquality materials, careful manufacturing and maximum functionality.



#### **FUNCTIONS**



#### MILLING SPINDLE

Table spindle moulder with one-sided tiltable fixed spindle. Tilt range -5° to +45.5°.



#### MILLING FENCE

Equipped with milling fence type 215, with multiplex fence plates, total adjustment via handwheel and individual jaw adjustment via star grip and scale.

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**GREY CAST IRON TABLE** Finely planed cast iron table for op-

timum machining and durability.

#### **MAIN SWITCH**

Lockable main switch for more safety when working. Also equipped with an electric motor brake and a machine socket.

#### CONTROL 5

Operation via handwheel, clearly visible at the bottom of the machine body.

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#### **ENGINE POWER**

With an engine power of 5.5 kW, 4 speeds are available in the standard version by shifting the drive belt.

#### GAUGES

Indication and adjustment for height and swivel adjustment is carried out via the analogue dial gauges and handwheels.



# EQUIPMENT DETAILS + OPTIONS: 245|10

#### **ADJUSTMENT WHEELS OPERATION**

The analogue dial indicators show the current values. The height and swivel adjustments are carried out manually via adjustment wheels.



#### 4 SPEEDS

The four speeds 3000 / 4500 / 6000 / 9000 rpm are indicated by an electric speed indicator and changed over by a quick belt tensioning device.



#### OPTION:

**MILLING FENCE 216** 

The total adjustment can be made via the handwheel and the LCD indicator. The individual jaw adjustments including cast fence plates are made via star knob and scale. ART. NO: 4274



#### OPTION:

HYDRAULIC SWIVEL-AWAY DEVICE The hydraulic swivel-away device ensures comfortable and safe lifting and swivelling of the milling fence. The fence can be lifted off and swivelled backwards quickly and effortlessly during curved milling work. ART. NO: 4349



#### OPTION:

TURNTABLE This allows the milling fence to be

rotated 360° on the machine table (only for table top 1100 x 760 mm). ART. NO.: 4466

#### OPTION:

EXTENDABLE FRAME SUPPORT, FOR TABLE TOP 1100X760 MM Total length approx. 1375 mm, pull-out depth approx. 892 mm from the mil-

ling spindle centre, guided in separate bearing blocks at the side of the machine table, smooth-running, with emergency stop button. ART. NO: 4232

#### OPTION:

**TABLE TOP EXTENSION ON BOTH SIDES** For table top 1100 x 760 mm, total length 2300 mm, consisting of 2 pieces of finely planed cast iron table tops as extension each on the left and right side of the standard machine table, with smooth-running frame support approx. 870 mm extendable to the front, with emergency stop button. ART. NO: 4630

#### OPTION:

KICKBACK GUARD 1648 For safe insertion milling of long and short parts, infinitely adjustable from 0–1500 mm, for spindle moulders with table top extension. ART. NO: 2002





# EQUIPMENT DETAILS + OPTIONS: 245|10

OPTION:

#### TABLE SLIDE PLATE, FOR TABLE TOP 1100X760 MM

The patented slide plate top with grid structure does not change the total depth when the table slide is placed on the max. table openings. The distance from the front edge to the spindle remains the same, for easy operation. The table slide plate is infinitely adjustable in depth. A high fitting accuracy without interfering edges is guaranteed. ART. NO:: 4467



#### OPTION:

#### 1 SET OF SAFETY RULERS FOR MILLING FENCES

As a continuous guide between the two fence plates consisting of 2 pieces of ruler 260 x 6 mm, 3 pieces of ruler 260 x 3 mm, 1 moulding board of multiplex 260 x 150 x 12 mm, including sliding blocks and Allen key. ART. NO: 2093



#### OPTION:

#### CENTREX

Milling protection and pressure device for secure fixing of workpieces during manual milling operations; the special shape of the pressure shoe ensures precise workpiece guidance during all milling operations, fixed to the milling fence, can be folded up, instead of standard milling protection and pressure device GAMMA V 1629. ART. NO: 2220



#### OPTION:

**TENONING AND SLOTTING DEVICE 1376** Mounted on the machine table for light tenoning and slotting work with eccentric clamp and adjustable mitre fence. Sliding length 710 mm, height above table approx. 56 mm. When working with the tenoning and slotting device 1376, the protective cover type 1641 must be used. ART. NO:: 4547



#### OPTION:

**PROTECTIVE COVER 1641** 

For tenoning and slotting attachment with suction nozzle Ø 120 mm for tool diameters from 250 to 350 mm. ART. NO.: 2235



#### OPTION:

**POWER FEEDER PV 84** 4 rollers 120 x 60 mm, 8 speeds: 2/4 /5.6/6.7/11/13/16.5/33 m/min, two directions of rotation, stand with extension arm 1050 mm, can be used individually horizontally and vertically, incl. mounting, cable and plug. ART. NO:: 4029

#### OPTION:

POWER FEEDER VARIOMATIC 4 N 4 rollers, infinitely variable feed speed from 2–18 m/min. Two directions of rotation, quick turning from horizontal to vertical use; easy swivelling away and positioning with memory-lock system; with comfort stand, numerical height display, extension arm 1050 mm long, incl. mounting, cable and plug. ART. NO: 4638

#### OPTION:

**RIGID CONSOLE** 

For mounting a feed unit approx. 195 x 180 mm laterally on the left side of the table top; mandatory when using routing fence 204, 302, 320 and integral fence plates 650 + 650 mm, with table top 1100 x 760 mm. ART. NO.: 4664





# **OPTIONS + EXTENSIONS:** 245|10

#### TECHNICAL EXTENSION



#### **DRIVE MOTOR**

Motor with 7.5kW (10HP) instead of 5.5kW

#### **ACCESSORIES** TABLE SYSTEMS

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AR	T. NO.
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#### TABLE TOP EXTENSION ON BOTH SIDES

For table top 1340x800mm, total length 2500mm, consisting of 2 pieces of fine planed cast iron table tops as extension, each on the left and right side of the standard machine table



4423

ART. NO.

4274

#### LARGE TABLE TOP, SIZE 1340 X 800 MM, WITH TURN-TABLE

And frame support 1340 mm, extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215, table slide plate not possible

#### ACCESSORIES MILLING FENCES

#### MILLING FENCE 216

Made of die-cast aluminium with flat-milled cast iron stop plates with aluminium splinter tongues, length 500 mm; to attach optional safety rulers and a moulding board. Total adjustment via handwheel and LED display, adjustment of fence plate left via star grip and scale, +5 to -25 mm, max. tool diameter 250 mm, instead of standard milling fence 215

#### **SPECIAL ACCESSORIES**

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#### MACHINE ACCESS CONTROL

User database and machine access control TM-100, key system for individual machine accesses with a total of 5 key tags, 1 of which is an administrator key for full access; a reliable and secure solution for machine activation

# ART. NO.

# LARGE TABLE TOP, SIZE 1340 X 800 MM, WITHOUT TURNTABLE

 ART.N0. 4423.1
With frame support 1340 mm extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215



#### MANUAL-HYDRAULIC SWIVEL-AWAY DEVICE

For comfortable and safe lifting and swivelling of the fence into a neutral position without exerting force. Recommendation: additional console for power feeder Art. No. 4561

#### **RECOMMENDED SPECIAL ACCESSORIES:**

**SAFETY TECHNOLOGY** | ON PAGE 50

MACHINE ACCESS CONTROL | ON PAGE 51

#### **ACCESSORIES** SERVICES



#### **ASSEMBLY OF A FEED UNIT**

Delivery by the customer to us by a carriage paid delivery



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#### **INSTRUCTION BY FACTORY TECHNICIAN**

Or training at the Sigmaringen factory for the machine ordered, plus travel expenses if the instruction takes place at the customer's site

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#### WARRANTY PLUS+12

12 months extended warranty (following the

legal warranty period of 12 months), not on wear parts-warranty l year on parts

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#### **MAINTENANCE AND INSPECTION**

Annual maintenance and inspection on site ART. NO. according to maintenance plan, spare parts are charged separately, plus travel expenses



#### MACHINES AND ACCESSORIES TO TRY OUT, EXPERIEN-**CE, FALL IN LOVE ...**

Our showroom in Sigmaringen in southern Germany is a year-round product presentation and is used for trying out machines and our SI-TEC safety products. Test\* our professional woodworking and plastics processing machines before you buy. We will also be happy to advise you personally on site.

WE OFFER YOU:

- Machine demonstration by experts
- Qualified advice from specialist personnel
- Professional instruction for your personal protection
- Explanation of functions and accessories
- Trying out all products

\*Please note that for safety reasons the exhibits may only be used by the visitor with his own material and tools during the machine test.



# **245**|20



The table of the tilting spindle moulder 245|20 is made of thick-walled, highly ribbed and torsion-resistant grey cast iron.

#### **TECHNICAL** SPECIFICATIONS

Table size		1100 x 760 mm
Table height		870 mm
Milling spindle quick clampin		30 mm
Clamping heig	ght	140 mm
Height adjusti	ment	125 mm
Spindle tilt rar	nge	- 5 / + 45.5°
Speed		3000 / 4500 / 6000 / 9000 rpm
Milling protect pressure devic		GAMMA V 1629
Ring fence		1639 Tapoa
Suction nozzle	es	2 x ø 120 mm
Net weight		approx. 800 kg
		ight and tilt adjustment d incremental offset mode
Digital positio	n and spee	d indicators
Drive belt tens	sioning dev	ice
Counterclockv	vise and clo	ckwise rotation
Optional millir	ng spindle v	with different diameter
Control panel	at the botto	om of the rigid frame support
Mechanical m	otor brake	
Milling fonce t	vpe 216 wit	h total adjustment via hand

Milling fence type 216 with total adjustment via handwheel and LCD indicator incl. cast fence plates and aluminium splitter tongues

ART. NO.: 4529





Watch user video: https://youtu.be/qBTW\_UjDVRI



#### HIGHLIGHT MODERN STEEL CONSTRUCTION

The modern and robust steel construction of the machine stand ensures perfect and safe working.



#### **FUNCTIONS**

#### MACHINE CONSTRUCTION

Solid machine construction "Made in Germany" for a long service life and robust operation.



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#### MILLING FENCE

216 milling fence with total adjustment via handwheel and LCD indicator incl. cast fence plates and aluminium splitter tongues.

#### **GREY CAST IRON TABLE**

The table is made of thick-walled, highly ribbed and torsion-resistant grey cast iron.

#### CONTROL

Electronic position and speed display. Electrical height and tilt adjustment of the milling spindle via positioning control as well as push-buttons for conventional or climb milling.

#### MILLING SPINDLE

Table moulder with one-sided tiltable fixed  $\emptyset$  30 mm milling spindle. Tilt range -5° to +45.5°.

#### SAFETY

Various functions ensure greater safety during work, such as a lockable main switch and electric motor brake.

#### QUICK BELT TENSIONER

Four speeds of 3000 / 4500 / 6000 / 9000 rpm make it possible to work with maximum precision and at the highest quality level.

#### 8 OPTION: HYDRAULIC SWIVEL-AWAY DEVICE

The swivel-away device ensures that the fence can be lifted off the table and swivelled to the rear quickly and without effort during curved milling operations. ART. NO: 4349

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#### OPTION: EXTENDABLE FRAME SUPPORT

Guided in separate bearing blocks on the side of the machine table and smooth-running. Including emergency stop button and additional support for control panel. ART. NO.: 4232



# EQUIPMENT DETAILS + OPTIONS: 245 20

#### **POSITION CONTROL**

The positions for the height and tilt adjustment as well as for the zeroing of the height and offset are visualised by two digital display windows. Exact values can be entered via keyboard. Additional push buttons for positioning, spindle start and stop as well as the direction of rotation switch are located next to the input keys on the control panel.



#### MILLING SPINDLE WITH QUICK-CLAMPING NUT

The 30mm milling spindle has a quick-action clamping nut for fast tool change and for process optimisation in your workflow.



#### OPTION:

SPINDLE TILT RANGE +/- 45.5° Instead of +45.5° to -5°, you can optionally extend the tilt range of the milling spindle to +45.5° to -45.5° for a wider range of applications (Illustration with table slide plate). ART.NO:: 4541



#### OPTION:

TURNTABLE

The turntable is used to rotate the fence type 216 on the machine table by 360°.



# OPTION: CONTROL PANEL ON TOP Ergonomic and user-friendly, operating elements always at eye level, mounted on the right side behind the table top, instead of the control panel below. ART.NO: 4632 OPTION: OPTION: Second Seco

OPTION:

ART NO · 2093

#### **POWER FEEDER PV 84**

4 rollers 120 x 60 mm, 8 speeds: 2/4 /5.6/6.7/11/13/16.5/33 m/min, two directions of rotation, stand with extension arm 1050 mm, can be used individually horizontally and vertically, incl. mounting, cable and plug. ART. NO: 4029

ruler 260 x 3 mm, 1 moulding board of multiplex 260 x 150 x 12 mm, including

sliding blocks and Allen key.



#### OPTION:

**POWER FEEDER VARIOMATIC 4 N** 4 rollers, infinitely variable feed speed from 2–18 m/min. Two directions of rotation, quick turning from horizontal to vertical use; easy swivelling away and positioning with memory-lock system; with comfort stand, numerical height display, extension arm 1050 mm long, incl. mounting, cable and plug. ART. NO: 4638





# **EQUIPMENT DETAILS + OPTIONS:** 245|20



#### OPTION:

TABLE SLIDE PLATE, FOR TABLE TOP 1100 X 760 MM

The patented slide plate top with grid structure does not change the total depth when the table slide is placed on the max. table openings. The distance from the front edge to the spindle remains the same, for easy operation. The table slide plate is infinitely adjustable in depth. A high fitting accuracy without interfering edges is guaranteed. ART. NO.: 4467



#### OPTION:

EXTENDABLE FRAME SUPPORT, FOR TABLE TOP 1100X760 MM Total length approx. 1375 mm, pull-

out depth approx. 1375 mm, pullout depth approx. 892 mm from the milling spindle centre, guided in separate bearing blocks at the side of the machine table, smooth-running with emergency stop button. ART. NO.: 4232



#### **OPTION:**

**TABLE TOP EXTENSION ON BOTH SIDES** For table top 1100 x 760 mm, Total length 2300 mm, consisting of 2 pieces of finely planed cast iron table tops as extension each on the left and right of the standard machine table, with smooth-running frame support approx. 892 mm, extendable to the front. Emergency stop button included. ART. NO: 4465



#### **OPTION:**

**TABLE EXTENSION ONE-SIDED RIGHT** For table top 1340 x 800 mm: Finely planed cast iron table top as extension on the right side of the standard machine table, thus total length = 1950 mm, with smooth-running frame support approx. 970 mm, extendable to the front. Emergency stop button included. ART. NO: 4217



#### OPTION:

# MANUAL MILLING ARBOR QUICK CHANGE SYSTEM HSK-80

Instead of fixed standard milling spindle, the optional HSK system serves as interface for different clamping spigot diameters, with 30 mm milling arbor and quick-action clamping nut. Unique system as it ensures higher concentricity and enables easy exchange of the milling arbor. Other arbors with different diameters are available on request. Optionally with spanner nut instead of quick clamping nut. ART.NO: 4635



#### OPTION:

MILLING ARBOR HSK 80 Ø 40MM Exchangeable, dynamically balanced for optimum concentricity, clamping height 160mm, with cutter arbor rings and cutter quick-clamping device via Allen key with anti-rotation device, instead of standard milling spindle 30 mm, available in different diameters e.g. 40 mm (Note: other milling arbor diameters on request). ART. NO: 4444





# EQUIPMENT DETAILS + OPTIONS: 245 20

#### OPTION:

#### **INTEGRAL FENCE PLATES**

INFEED/OUTFEED 500 + 500 MM With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates. Further lengths on page 50. ART. NO: 4170



#### OPTION:

#### **MOVABLE CONSOLE**

Mounted on the left side of the machine column with joint for swivelling away the feed attachment, mandatory for roller table No. 4491.1 as well as milling fence types 204, 302, 320 and integral fence plates 650 + 650 mm. ART.NO.: 4663



#### OPTION:

#### **RIGID CONSOLE**

For mounting a feed unit approx. 195x180 mm laterally on the left side of the table top; mandatory when using milling fence types 204, 302, 320 and integral fence plates 650+650 mm with table top 1100x760 mm. ART. NO: 4664



#### OPTION:

MILLING FENCE 204

Made of die-cast aluminium, with aluminium splitter tongues, to attach optional safety rulers and moulding board. Total adjustment via handwheel and LCD indicator to 0.1mm, adjustment range approx. 140mm, partial fence adjustment via handwheel and LCD indicator to 0.1mm, adjustment range approx. +10 to -22mm with comfort clamping on the machine table. ART. NO: 4404



#### **OPTION:**

# MILLING AND PROTECTION DEVICE CENTREX 1624

Ensures for secure fixing of workpieces during manual milling operations; the special shape of the pressure shoe ensures precise workpiece guidance during all milling operations and is infinitely adjustable horizontally and vertically. With good view of the workpiece. Suitable for all milling fences. ART. NO: 2220



#### OPTION:

**TENONING AND SLOTTING DEVICE 1376** Mounted on the machine table for light tenoning and slotting work with eccentric clamp and adjustable mitre fence. Sliding range 710 mm, height above table approx. 56 mm. When working with the tenoning and slotting device 1376, the protective cover type 1641 must be used. ART. NO: 4547



#### OPTION:

**PROTECTIVE COVER 1641** Addition for the tenoning and slotting device, with suction nozzle Ø 120 mm for tool diameters from 250 to 350 mm. ART. NO.: 2235



#### **OPTION:**

**CROSS-CUT FENCE LAS-M AND EXTENSION FOR LAS-M** With its length of 1750 mm, the crosscut fence LAS-M offers an ideal addition to the roller table Art. No. 4491.1. As a further option, the cross-cut fence LAS-M can be extended up to 2750 mm. ART. NO: 4417, 4418





# EQUIPMENT DETAILS + OPTIONS: 245 20



# **OPTIONS + EXTENSIONS:** 245|20

#### TECHNICAL EXTENSION



TILT RANGE OF THE MILLING SPINDLE +/- 45.5° Instead of +45.5° to -5°

#### ACCESSORIES TABLE SYSTEMS

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#### TABLE TOP EXTENSION ON BOTH SIDES

For table top 1340x800 mm, total length 2500 mm, consisting of 2 pieces of fine planed cast iron table tops as extension, each on the left and right side of the standard machine table, with smooth-running frame support approx. 970 mm extendable to the front and with emergency stop button



#### LARGE TABLE TOP, SIZE 1340 X 800 MM, WITH TURN-TABLE

And frame support 1340 mm, extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215, table slide plate not possible



#### DRIVE MOTOR

<sup>/</sup> Motor with 7.5 kW (10 HP) instead of 5.5 kW



# LARGE TABLE TOP, SIZE 1340 X 800 MM, WITHOUT TURNTABLE

ART.NO. 4423.1 With frame support 1340 mm extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215

#### **ACCESSORIES MILLING FENCE**



#### **INTEGRAL FENCE PLATES**

**INFEED/OUTFEED 650/500 MM** 

With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates



#### **INTEGRAL FENCE PLATES**

INFEED/OUTFEED 650/650 MM

ART.NO. With swivelling guide rods integrated in the 4171 fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates



#### **CROSS-CUT FENCE LAS-M**

Right-hand version for system tools to process ART. NO. workpieces in pairs, effective length = 1750 mm, slide system with multiple stop and 3 adjustment rings for cross-cut positioning with splitter tongue



4417

#### **EXTENSION FOR CROSS-CUT FENCE LAS-M**

Total length 1000 mm, effective length 1750 to 2750 mm





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#### MACHINE ACCESS CONTROL

User database and machine access control TM-100, key system for individual machine accesses with a total of 5 key tags, 1 of which is an administrator key for full access; a reliable and secure solution for machine activation

#### **ACCESSORIES** SERVICES



#### **ASSEMBLY OF A FEED UNIT**

Delivery by the customer to us by a carriage paid delivery



4172

#### **INSTRUCTION BY FACTORY TECHNICIAN**

Or training at the Sigmaringen factory for the machine ordered, plus travel expenses if the instruction takes place at the customer's site

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ART. NO.	

4349

#### MANUAL-HYDRAULIC SWIVEL-AWAY DEVICE

For comfortable and safe lifting and swivelling of the fence into a neutral position without exerting force. Recommendation: additional console for power feeder Art. No. 4663



4547

#### **TENONING AND SLOTTING DEVICE 1376**

Mounted on the machine table for light tenoning and slotting work, with eccentric clamp and adjustable mitre fence. Sliding length 710 mm, height above table approx. 56 mm



#### **PROTECTIVE COVER 1641**

Addition for the tenoning and slotting device, with suction nozzle ø 120 mm for tool diameters from 250 to 350 mm

#### **RECOMMENDED SPECIAL ACCESSORIES:**

**SAFETY TECHNOLOGY** | ON PAGE 50

MACHINE ACCCESS CONTROL | ON PAGE 51



#### WARRANTY PLUS+12

12 months extended warranty (following the legal warranty period of 12 months), not on wear parts-warranty 1 year on parts

#### MAINTENANCE AND INSPECTION

Annual maintenance and inspection on site ART. NO. 4175 according to maintenance plan, spare parts are charged separately, plus travel expenses



# **245**|100



The proven features and equipment characteristics of well-known PANHANS spindle moulders have been have been paired with new functions and components.

#### **TECHNICAL** SPECIFICATIONS

Table size		1100 x 760 mm
Table height		870 mm
Clamping hei	ight	140 mm
Height adjust	tment	125 mm
Spindle tilt ra	nge	- 5 / + 45.5°
Tool and program mer	mory	with 3 tools and 20 programs per tool
Speed		3000/4500/6000/9000rpm
Control system Capacitive 7"		scratch and shock resistant
Milling protect pressure devi		GAMMA V 1629
Ring fence		1639 Tapoa
Milling spindl clamping nut		30 mm
Suction nozzl	es	2 x ø 120 mm
Net weight		approx. 800 kg
2-axis positio	ning control fo	r height and tilt adjustment
Digital positio	on and speed i	ndicators
Counterclock	wise and clock	wise rotation
Fine-planed g (drawing see		able with rigid frame support
Mechanical m	otor brake	
Control pane	l can be attach	ned on top or bottom
Milling fence		/ operated via handwheel,

eadable on touchscreen

ART. NO.: 4620



Drawing with frame support Art. No. 4232.



#### HIGHLIGHT

# FROM NOW ON IT'S DIGITAL: WITH TOUCHSCREEN CONTROL AND TOOL PROGRAM MEMORY

7" capacitive touchscreen with language switch in DE, EN and FR (other languages on request) as well as a tool database for storing up to 3 tools (20 programs are possible per tool).



#### FUNCTIONS



#### MILLING SPINDLE

Table spindle moulder with double-sided tiltable fixed spindle. Tilt range -5° to +45.5°.



#### MILLING FENCE 301

Total adjustment manually via handwheel on the right side, position is visualised on touchscreen +/- 0.1mm; partial fence adjustment (chip removal) +5mm to -25mm via a star knob screw on the left side, position readable on vernier scale; milling fence made of die-cast aluminium with two 500mm long face-milled cast iron fence plates with aluminium splinter tongues.

#### WORK SCREEN

The touchscreen unit shows tools and programs, as well as height, angle, speed and milling fence information.

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#### **7" TOUCHSCREEN CONTROL**

The capacitive touchscreen (scratch and shock resistant) can also be controlled with gloves. With menu languages in German, English and French (other languages on request). In addition, it contains a tool memory for up to 3 tools and 20 programs per tool.

#### **USB INTERFACE**

USB interface for data backups and updates as well as tool, program and user import.

#### SAFETY

Various functions ensure greater safety during work, such as a lockable main switch, warning messages in the event of incorrect operation and an operating hours counter.

#### PARTIAL FENCE ADJUSTMENT

The partial fence adjustment with chip removal from +5 mm to -25 mm is carried out via a star knob screw on the left side.

#### **OPTION: EXTENDABLE FRAME SUPPORT**

Guided in separate bearing blocks at the side of the machine table, smooth-running. With emergency stop button and additional holder for control panel. ART. NO:: 4232





# EQUIPMENT DETAILS + OPTIONS: 245 100

#### **CONTROL PANEL**

For more freedom in machining, the control panel can be attached either on top or on the bottom.



#### **FENCE 301**

Total adjustment manually via handwheel on the right side, position is visualised on touchscreen +/- 0.1mm, adjustment range approx. 140mm. Partial fence adjustment (chip removal) +5mm to -25mm via a star knob screw on the left side, position readable on vernier scale.



#### OPTION:

#### **FENCE 302**

Total fence and partial fence adjustment (chip removal) is done manually via 2 handwheels. Adjustment range of the total fence approx. 140 mm (left side), partial fence adjustment approx. +10 mm/-22 mm (right side). The positions of the total and partial fence are readable via touchscreen +/- 0.1 mm. (Figure with optional integral fence plates) ART. NO: 4624



#### OPTION:

#### **FENCE 311**

The total fence adjustment is motorised, the partial fence adjustment (chip removal) via a star knob on the left side. Dimension display for total stop via touchscreen and for partial fence via vernier. ART. NO.: 4625



#### OPTION:

#### **FENCE 320**

The total and partial (chip removal) fence adjustment of the type 320 with is fully electronically controlled. The target positions are entered via the via the 10-key keyboard on the touchscreen whilst the adjustment is fully motorised. (Figure with optional integral fence plates) ART. NO: 4623



#### **OPTION:**

#### ZEROMASTER

Zeromaster is the PANHANS calibration device which ensures short set-up times for tool calibration. ART. NO: 2205



#### OPTION:

MILLING AND PROTECTION DEVICE CEN-TREX 1624

Ensures for secure fixing of workpieces during manual milling operations; the special shape of the pressure shoe ensures precise workpiece guidance during all milling operations and is infinitely adjustable horizontally and vertically. With good view of the workpiece. Suitable for all milling fences. ART. NO: 2220



#### **OPTION:**

# MANUAL MILLING ARBOR QUICK CHANGE SYSTEM HSK-80

Instead of fixed standard milling spindle, the optional HSK system serves as interface for different clamping spigot diameters, with 30mm milling arbor and quick-action clamping nut. Unique system as it ensures higher concentricity and enables easy exchange of the milling arbor. Other arbors with different diameters are available on request. Optionally with spanner nut instead of quick clamping nut. ARI.NO: 4635





# EQUIPMENT DETAILS + OPTIONS: 245 100

#### **OPTION: COLLET ARBOR** Optional collet arbor with nut and hook spanner (without collet) for the HSK 80 guick-change system. Dynamically balanced for optimum concentricity for holding shaft tools, depending on the shaft diameter, the necessary collets are required. ART. NO.: 4560 **OPTION: COMFORT SWIVEL-AWAY DEVICE FOR** MILLING FENCES Electromotive lifting and lowering, the fence can be rotated 360° around the guide column and also swivelled away to the front.

ART. NO.: 4627



#### OPTION:

1 SET OF SAFETY RULERS FOR MILLING FENCES As a continuous guide between the

two fence plates consisting of 2 pieces of ruler 260×6 mm, 3 pieces of ruler 260×3 mm, 1 moulding board of multiplex 260×150×12 mm, including sliding blocks and Allen key. ART. NO:: 2093



#### OPTION:

#### TURNTABLE

This allows the milling fence to be rotated 360° on the machine table (only for table top 1100 x 760 mm). ART. NO.: 4658



#### **OPTION:**

**INTEGRAL FENCE PLATES** 

INFEED/OUTFEED 650/500 MM With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates. ART. NO.: 4169



#### OPTION:

#### **INTEGRAL FENCE PLATES INFEED/OUTFEED 650/650 MM**

With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates.

ART. NO.: 4171

#### **OPTION:**

**INTEGRAL FENCE PLATES** INFEED/OUTFEED 500/500 MM With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates. ART. NO.: 4170



#### **OPTION:**

#### TABLE SLIDE PLATE, FOR TABLE TOP 1100X760MM

The patented slide plate top with grid structure does not change the total depth when the table slide is placed on the max. table openings. The distance from the front edge to the spindle remains the same, for easy operation. The table slide plate is infinitely adjustable in depth. A high fitting accuracy without interfering edges is guaranteed. ART. NO.: 4467





# EQUIPMENT DETAILS + OPTIONS: 245 100

#### **OPTION:**

#### **POWER FEEDER PV 84**

4 rollers 120 x 60 mm, 8 speeds: 2/4 /5.6/6.7/11/13/16.5/33 m/min, two directions of rotation, stand with extension arm 1050 mm, can be used individually horizontally and vertically, incl. mounting, cable and plug. ART. NO:: 4029



#### OPTION:

POWER FEEDER VARIOMATIC 4 N 4 rollers, infinitely variable feed speed from 2–18 m/min. Two directions of rotation, quick turning from horizontal to vertical use; easy swivelling away and positioning with memory-lock system; with comfort stand, numerical height display, extension arm 1050 mm long, incl. mounting, cable and plug. ART.NO: 4638



#### OPTION:

#### **MOVABLE CONSOLE**

Mounted on the left side of the machine column with joint for swivelling away the feed attachment, mandatory for roller table No. 4491.1 as well as milling fence types 204, 302, 320 and integral fence plates 650 + 650 mm. ART.NO.: 4663



#### OPTION:

#### **RIGID CONSOLE**

For mounting a feed unit approx. 195x180 mm laterally on the left side of the table top; mandatory when using milling fence types 204, 302, 320 and integral fence plates 650+650 mm with table top 1100x760 mm. ART.NO: 4664



#### OPTION:

**TENONING AND SLOTTING DEVICE 1376** Mounted on the machine table for light tenoning and slotting work with eccentric clamp and adjustable mitre fence. Sliding range 710 mm, height above table approx. 56 mm. When working with the tenoning and slotting device 1376, the protective cover type 1641 must be used. ART. NO:: 4547



#### OPTION:

**CROSS-CUT FENCE LAS-M AND EXTENSION FOR LAS-M** With its length of 1750 mm, the crosscut fence LAS-M offers an ideal addition to the roller table No. 4491.1. As a further option, the cross-cut fence LAS-M can be extended up to 2750 mm. ART. NO: 4417, 4418



#### OPTION:

#### **ROLLER TABLE**

With stop fixture, eccentric clamp, clamping table can be pushed in up to the milling spindle incl. protective bonnet 1641, suction nozzle Ø 120 mm, with graduated

height adjustment, upper position as roller table, lower position as table extension left. ART. NO:: 4491.1



Watch user video: https://youtu.be/TUurWuNXC8Q









# **OPTIONS + EXTENSIONS:** 245|100

#### TECHNICAL EXTENSION

ART. NO. 4541 TILT RANGE OF THE MILLING SPINDLE +/- 45.5° Instead of +45.5° to -5°

#### ACCESSORIES MILLING FENCES

## ART. NO. 4625

ART. NO.

#### MILLING FENCE 311

Total adjustment automatically, adjustment range approx. 140 mm, target positions are entered via keyboard, positions are visualised on touchscreen +/- 0.1 m. Partial fence adjustment (chip removal) +5mm to -25mm via star grip screw on the left side, position can be read via vernier scale; manual clamping on the machine table via clamping lever screws; milling fence made of diecast aluminium with 2 flat milled, 500 mm long cast iron fence plates with aluminium splinter tongues; maximum tool diameter is 250 mm

#### MILLING FENCE 302

Total and partial fence adjustment (chip removal) are carried out manually via 2 handwheels, both positions are visualised on touchscreen +/- 0.1mm; total fence adjustment range approx. 140mm via handwheel on the left side; partial fence adjustment (chip removal) approx. +10mm/-22mm via handwheel on the right side; clamping/fixing on the machine table is done manually via quick clamping levers; milling fence made of die-cast aluminium with 2 plane-milled, 500mm long cast iron fence plates and aluminium splinter tongues; maximum tool diameter is 250mm; Note: Turntable is not available in combination with the milling fence 302. Recommendation: large table top 1340x800mm No. 4423.1



#### **DRIVE MOTOR**

Motor with 7.5kW (10 HP) instead of 5.5kW



4271

#### MILLING FENCE 320

Electronic adjustment of total fence and partial fence automatically (2 motors). Adjustment range of total fence is 140 mm; adjustment range of partial fence is +10 mm to -22 mm; positioning via keyboard on touchscreen; both positions are visualised on touchscreen +/- 0.1 mm; clamping of total and partial fence on the machine table is motorised; fence made of die-cast aluminium with 2 flat-milled, 500 mm long cast fence plates and aluminium splitter tongues; maximum tool diameter is 250 mm; Note: Turntable is not available in combination with fence type 320. Recommendation: large table top 1340 x800 mm No. 4423.1

#### **ACCESSORIES** MILLING SPINDLES AND ARBORS

#### -) MILLING SPINDLE Ø 50 MM

ART. NO.

4152

Not interchangeable, dynamically balanced for optimum concentricity, clamping height 160 mm with cutter arbor rings and cutter quick-clamping device via Allen key with anti-rotation lock, instead of standard 30 mm spindle (Note: others on request)

#### **ACCESSORIES** TABLE SYSTEMS



#### **EXTENDABLE FRAME SUPPORT. FOR TABLE TOP** 1100 X 760 MM

Total length approx. 1375 mm, pull-out depth approx, 892 mm from the milling spindle centre. guided in separate bearing blocks at the side of the machine table, smooth-running with emergency stop button



#### TABLE TOP EXTENSION ON BOTH SIDES

For table top 1100 x 760 mm, Total length

2300 mm, consisting of 2 pieces of finely planed cast iron table tops as extension each on the left and right of the standard machine table, with smooth-running frame support approx. 892mm, extendable to the front. Emergency stop button included



#### TABLE TOP EXTENSION ON BOTH SIDES

For table top 1340 x 800 mm, Total length ART. NO. 2500 mm, consisting of 2 pieces of finely planed cast iron table tops as extension each on the left and right of the standard machine table, with smooth-running frame support approx. 970 mm, extendable to the front. Emergency stop button included

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4217

#### TABLE EXTENSION ONE-SIDED RIGHT

For table top 1340 x 800 mm: Finely planed cast iron table top as extension on the right side of the standard machine table, thus total length = 1950 mm, with smooth-running frame support approx. 970 mm, extendable to the front. Emergency stop button included



# LARGE TABLE TOP, SIZE 1340 X 800 MM, WITH TURN-

ART. NO. 4423 And frame support 1340 mm, extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215, table slide plate not possible

-)	LARGE TABLE TOP, SIZ	E 1340 X 800 MM,	WITHOUT
	TURNTABLE		
IO			

ART. NO 4423.1 With frame support 1340 mm extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215

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#### **KICKBACK GUARD 1648**

For safe insertion milling of long and short parts, infinitely adjustable from 0–1500 mm, for milling machines with table top extension

#### SPECIAL ACCESSORIES



#### MACHINE ACCESS CONTROL

User database and Machine Access Control TM-300 with personalised RFID based keys, full version for authorised and instructed personnel, including master key for parameter settings and staff instructions and 5 user tags for different

#### **RECOMMENDED SPECIAL ACCESSORIES:**

#### **SAFETY TECHNOLOGY** | ON PAGE 50

MACHINE ACCESS CONTROL | ON PAGE 51

#### **ACCESSORIES** SERVICES

machine operators



#### **ASSEMBLY OF A FEED UNIT**

Delivery by the customer to us by a carriage paid delivery



4172

#### **INSTRUCTION BY FACTORY TECHNICIAN**

Or training at the Sigmaringen factory for the machine ordered, plus travel expenses if the instruction takes place at the customer's site

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ART. NO.	

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#### WARRANTY PLUS+12

12 months extended warranty (following the legal warranty period of 12 months), not on wear parts-warranty 1 year on parts

#### MAINTENANCE AND INSPECTION

Annual maintenance and inspection on site ART. NO. 4175 according to maintenance plan, spare parts are charged separately, plus travel expenses



# **245**|200



The 245/200 series milling machines enable more effective, more economical and, above all, safer working. All the functional elements required for working are optimally placed, safely accessible and ergonomically arranged.

#### **TECHNICAL** SPECIFICATIONS

Table size		1100 x 760 mm
Table height		905 mm
Clamping heig	ght	140 mm
Height adjust	ment	125 mm
Spindle tilt rar	nge	+/- 45.5°
Tool and program men	nory	5 tools, 20 programs per tool
Variable speed	d regulation	1500–10000 rpm
Control syster Capacitive 7" 1		scratch and shock resistant
Milling protec device	tion and pressure	GAMMA V 1629
Ring fence		1639 Tapoa
Milling spindle with quick cla		30 mm
Suction nozzle	es	2 x ø 120 mm
Net weight		approx. 880 kg
2-axis positior	ning control for heigh	t and tilt adjustment
Digital positio	n and speed indicate	ors
Counterclock	vise and clockwise ro	otation
Finely planed (Drawing see	cast iron table with ri page 12)	gid frame support
Electronic, we	ar-free motor brake	
Milling fence	301, manual via hand <sup>,</sup>	wheel, visualised on

ART. NO.: 4621





#### HIGHLIGHT COMPONENTS CAN BE SWIVELLED AWAY

When machining very large workpieces, it is possible to swivel all the unnecessary elements behind the machine until only the milling spindle protrudes from the table.



#### **FUNCTIONS**



#### MILLING SPINDLE

Fixed and double-sided swivelling of  $+/-45.5^{\circ}$  with quick-release nut.



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#### **7" TOUCHSCREEN CONTROL**

The capacitive touchscreen (scratch and shock resistant) can also be controlled with gloves. With menu languages in German, English and French (other languages on request). In addition, it contains a tool memory for up to 5 tools and 20 programs per tool. Height and tilt adjustment with digital position and speed indicators, as well as zeroing of height and tool-offset.

#### PARTIAL FENCE ADJUSTMENT

The partial fence adjustment with chip removal from +5 mm to -25 mm is carried out via a star grip screw on the left side.

#### SPEED REGULATION

Electronic, infinitely variable speed regulation from 1500–10000 rpm (11 kW frequency inverter).

#### **5** OPTION: TABLE EXTENSION

Table extension on both sides with extendable frame support. ART. NO.: 4465

#### **OPTION: TABLE SLIDE PLATE**

The table slide plate allows the table opening to be adjusted quickly and steplessly without tools. ART. NO.: 4467



## EQUIPMENT DETAILS: 245|200

#### **CONTROL SYSTEM**

The touchscreen controller enables convenient communication between man and machine. By touching the smooth monitor surface, program sequences and command inputs can be controlled directly. Particular emphasis is placed on intuitive and simple operation. For optimal readability, the displays are designed with high brightness and contrast.



#### OPTION:

#### **EXTENDABLE FRAME SUPPORT**

Total length approx. 1375 mm, pullout depth approx. 892 mm from the milling spindle centre, guided in separate bearing blocks at the side of the machine table, smooth-running with emergency stop button. ART. NO: 4232



#### OPTION:

#### **RIGID CONSOLE FOR FEEDER**

The rigid console is used for mounting a feed unit and is required for versions with the roller table. The removable brackets are made of high-strength metal alloy. ART. NO: 4664



#### OPTION:

#### MOVABLE CONSOLE

For completely free working on the milling table, the feed unit can be swivelled away with this option. This optimises the workflow, as the feed unit does not have to be dismantled when working with a ring fence for curved millings. ART. NO:: 4663


**ZEROMASTER CALIBRATING DEVICE** For exact zero-point height adjustment from the milling tool to the table top. ART. NO.: 2205



#### OPTION:

**TURNTABLE** This allows the milling fence to be rotated 360° on the machine table (only for table top 1100 x 760 mm). ART. NO:: 4658

#### OPTION:

TABLE SLIDE PLATE, FOR TABLE TOP 1100 X 760 MM

The patented slide plate top with grid structure does not change the total depth when the table slide is placed on the max. table openings. The distance from the front edge to the spindle remains the same, for easy operation. The table slide plate is infinitely adjustable in depth. A high fitting accuracy without interfering edges is guaranteed. ART. NO.: 4467

#### OPTION:

**TABLE TOP EXTENSION ON BOTH SIDES** For table top 1100 x 760 mm, Total length 2300 mm, consisting of 2 pieces of finely planed cast iron table tops as extension each on the left and right of the standard machine table, with smooth-running frame support approx. 892 mm, extendable to the front. Emergency stop button included. ART.N0: 4465





# EQUIPMENT DETAILS: 245|200

#### OPTION:

TABLE EXTENSION ONE-SIDED RIGHT For table top 1340 x 800 mm: Finely planed cast iron table top as extension on the right side of the standard machine table, thus total length = 1950 mm, with smooth-running frame support approx. 970 mm, extendable to the front. Emergency stop button included. ART.NO:: 4217



#### OPTION:

KICKBACK GUARD 1648 For safe insertion milling of long and short parts, infinitely adjustable from 0–1500 mm, for milling machines with table top extension. ART. NO: 2002



#### OPTION:

COMFORT SWIVEL-AWAY DEVICE FOR MILLING FENCES Electromotive lifting and lowering, the fence can be rotated 360° around the guide column and also swivelled away to the front. ART. NO: 4627



#### OPTION:

1 SET OF SAFETY RULERS FOR MILLING FENCES

As a continuous guide between the two fence plates consisting of 2 pieces of ruler 260×6 mm, 3 pieces of ruler 260×3 mm, 1 moulding board of multiplex 260×150×12 mm, including sliding blocks and Allen key. ART. NO: 2093



**INTEGRAL FENCE PLATES INFEED/OUTFEED 500/500 MM** With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates. ART. NO.: 4170



#### OPTION:

#### **INTEGRAL FENCE PLATES** INFEED/OUTFEED 650/500 MM

With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates. ART. NO.: 4169

#### OPTION:

**INTEGRAL FENCE PLATES** INFEED/OUTFEED 650/650 MM With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates. ART. NO.: 4171



#### **OPTION:**

#### CENTREX

Milling protection and pressure device for secure fixing of workpieces during manual milling operations; the special shape of the pressure shoe ensures precise workpiece guidance during all milling operations, fixed to the milling fence, can be folded up, instead of standard milling protection and pressure device GAMMA V 1629. ART. NO.: 2220





# EQUIPMENT DETAILS: 245|200

**OPTION:** 

AUTOMATIC HSK-63-F TOOL CHANGE SYSTEM

Electromechanical clamping system for convenient tool change. The tool change is operated by a switch. Including 1 piece quick-change milling arbor HSK-63-F with Ø 30 mm. Clamping length 140 mm with milling arbor rings and quick-action clamping nut. ART.NO:: 4661

#### OPTION:

#### MANUAL MILLING ARBOR QUICK CHANGE SYSTEM HSK-80

Instead of fixed standard milling spindle, the optional HSK system serves as interface for different clamping spigot diameters, with 30 mm milling arbor and quick-action clamping nut. Unique system as it ensures higher concentricity and enables easy exchange of the milling arbor. Other arbors with different diameters are available on request. Optionally with spanner nut instead of quick clamping nut. ART.NO: 4635



#### OPTION:

#### **POWER FEEDER PV 84**

4 rollers 120 x 60 mm, 8 speeds: 2/ 4/5.6/6.7/11/13/16.5/33 m/min, two directions of rotation, stand with extension arm 1050 mm, can be used individually horizontally and vertically, incl. mounting, cable and plug. ART. NO.: 4029



#### OPTION:

POWER FEEDER VARIOMATIC 4 N 4 rollers, infinitely variable feed speed from 2–18 m/min. Two directions of rotation, quick turning from horizontal to vertical use; easy swivelling away and positioning with memory-lock system; with comfort stand, numerical height display, extension arm 1050 mm long, incl. mounting, cable and plug. ART. NO: 4638



**TENONING AND SLOTTING DEVICE 1376** Mounted on the machine table for light tenoning and slotting work with eccentric clamp and adjustable mitre fence. Sliding range 710 mm, height above table approx. 56 mm. When working with the tenoning and slotting device 1376, the protective cover type 1641 must be used. ART. NO:: 4547



#### OPTION:

**CROSS-CUT FENCE LAS-M AND EXTENSION FOR LAS-M** With its length of 1750 mm, the crosscut fence LAS-M offers an ideal addition to the roller table No. 4491.1. As a further option, the cross-cut fence LAS-M can be extended up to 2750 mm. ART. NO.: 4417, 4418



#### OPTION:

#### **ROLLER TABLE**

With stop fixture, eccentric clamp, clamping table can be pushed in up to the milling spindle incl. protective bonnet 1641, suction nozzle Ø 120 mm, with graduated

height adjustment, upper position as roller table, lower position as table extension left. ART.NO: 4491.1



Watch user video: https://youtu.be/TUurWuNXC8Q









# OPTIONS + EXTENSIONS: 245|200

#### TECHNICAL EXTENSION



VARIABLE SPEED REGULATION

7.5 kW motor with 11 kW frequency inverter incl. oil lubrication of the milling spindle bearings

#### ACCESSORIES TABLE SYSTEMS



#### EXTENDABLE FRAME SUPPORT, FOR TABLE TOP 1100X 760 MM

Total length approx. 1375mm, pull-out depth approx. 892mm from the milling spindle centre, guided in separate bearing blocks at the side of the machine table, smooth-running with emergency stop button



#### TABLE TOP EXTENSION ON BOTH SIDES

For table top 1340 x 800 mm, total length 2500 mm, consisting of 2 pieces of fine planed cast iron table tops as extension, each on the left and right side of the standard machine table. Emergency stop button included

#### ACCESSORIES MILLING SPINDLES AND ARBORS



#### QUICK-CHANGE SYSTEM HSK-80

With spindle lock and milling arbor 30 mm instead of milling spindle 30 mm (higher concentricity and no sticking in the spindle as with MK 5 system or steep taper); Note: other arbors on request

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#### LARGE TABLE TOP, SIZE 1340 X 800 MM, WITH TURN-TABLE

And frame support 1340 mm, extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215, table slide plate not possible

ART.NO. 4423.1 With frame support 1340 mm extendable u

With frame support 1340 mm extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215

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🕱 www.hokubema.com

#### ACCESSORIES MILLING FENCES



ART. NO.

4624

#### MILLING FENCE 311

Total adjustment automatically, adjustment range approx. 140 mm, target positions are entered via keyboard, positions are visualised on touchscreen +/- 0.1 m. Partial fence adjustment (chip removal) +5 mm to -25 mm via star grip screw on the left side, position can be read via vernier scale; manual clamping on the machine table via clamping lever screws; milling fence made of die-cast aluminium with 2 flat milled, 500 mm long cast iron fence plates with aluminium splinter tongues; maximum tool diameter is 250 mm

#### MILLING FENCE 302

Total and partial fence adjustment (chip removal) are carried out manually via 2 handwheels, both positions are visualised on touchscreen +/- 0.1mm; total fence adjustment range approx. 140mm via handwheel on the left side; partial fence adjustment (chip removal) approx. +10mm/-22mm via handwheel on the right side; clamping/fixing on the machine table is done manually via quick clamping levers; milling fence made of die-cast aluminium with 2 plane-milled, 500mm long cast iron fence plates and aluminium splinter tongues; maximum tool diameter is 250mm; Note: Turntable is not available in combination with the milling fence 302. Recommendation: large table top 1340x800mm No. 4423.1

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ART. NO. 4623

#### MILLING FENCE 320

Electronic adjustment of total fence and partial fence automatically (2 motors). Adjustment range of total fence is 140 mm; adjustment range of partial fence is +10 mm to -22 mm; positioning via keyboard on touchscreen; both positions are visualised on touchscreen +/-0.1 mm; clamping of total and partial fence on the machine table is motorised; fence made of die-cast aluminium with 2 flat-milled, 500 mm long cast fence plates and aluminium splitter tongues; maximum tool diameter is 250 mm; Note: Turntable is not available in combination with fence type 320. Recommendation: large table top 1340 x 800 mm No. 4423.1



#### **SPECIAL ACCESSORIES**



#### MACHINE ACCESS CONTROL

User database and Machine Access Control TM-300 with personalised RFID based keys, full version for authorised and instructed personnel, including master key for parameter settings and staff instructions and 5 user tags for machine operators

#### **RECOMMENDED SPECIAL ACCESSORIES:**

#### **SAFETY TECHNOLOGY** | ON PAGE 50

MACHINE ACCESS CONTROL | ON PAGE 51

#### **ACCESSORIES** SERVICES

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#### INSTRUCTION BY FACTORY TECHNICIAN

Or training at the Sigmaringen factory for the machine ordered, plus travel expenses if the instruction takes place at the customer's site



#### WARRANTY PLUS+12

12 months extended warranty (following the legal warranty period of 12 months), not on wear parts-warranty 1 year on parts

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ART. NO. 4175	ć

#### MAINTENANCE AND INSPECTION

 Annual maintenance and inspection on site
according to maintenance plan, spare parts are charged separately, plus travel expenses



#### ASSEMBLY OF A FEED UNIT

ART.NO. 4028 paid delivery



# **245**|300



Our tilting spindle moulder 245|300 in full equipment is the absolute all-rounder for small and large joineries.

#### **TECHNICAL** SPECIFICATIONS

Table size		1100 x 760 mm
Table height		905 mm
Clamping heig	yht	140 mm
Height adjusti	nent	125 mm
Spindle tilt rar	ige	+/- 45.5°
Tool and program mem	nory	500 tools, 100 programs per tool
Variable speed	l regulation	1500–10000 rpm
Control systen Capacitive 7" t		scratch and shock resistant
Milling protect device	tion and pressure	GAMMA V 1629
Ring fence		1639 Tapoa
Milling spindle quick clampin		30 mm
Suction nozzle	25	2 x ø 120 mm
Net weight		approx. 1050 kg
		ht and tilt adjustment, t and partial fence on

Digital position and speed indicators Counterclockwise and clockwise rotation Finely planed cast iron table with rigid frame support

Control panel can be used either up or down

Milling fence 320 fully electronically controlled total and partial fence adjustment

ART. NO.: 4622





Watch user video: https://youtu.be/0ge-N1friCl



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#### HIGHLIGHT

#### THE PERFECT ONE WITH TOUCHSCREEN CONTROL

7" capacitive touchscreen with language switch in DE, EN, FR and NL (further languages on request) as well as a tool memory for up to 500 tools (100 programs are possible per tool).



#### **FUNCTIONS**



#### MILLING SPINDLE

Fixed and double-sided swivelling of +/- 45.5° with quick-release nut.



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#### **GREY CAST IRON TABLE**

Finely planed and with rigid frame support.

#### **7" TOUCHSCREEN CONTROL**

The capacitive touchscreen (scratch and shock resistant) can also be controlled with gloves. The touch control can also be mounted on the rigid (or optionally extendable) frame support. For height and tilt adjustment, milling fences: total fence on right and partial fence on left side.

#### SPEED REGULATION

Electronic, infinitely variable speed regulation from 1500–10000 rpm (11 kW frequency inverter).

# 5 OPTION: TABLE EXTENSION ON BOTH SIDES

The table extension is double-sided and has a total length of 2300 mm, with extendable frame support to the front.

ART. NO.: 4465

#### OPTION: COMFORT SWIVEL-AWAY DE-VICE

By swivelling the milling fence away, you achieve an absolutely flat working surface. ART. NO: 4627

#### INTEGRAL FENCE SYSTEM

Made of swivelling guide rods integrated in the fence plates for a gap-free guide surface of all milling operations; precise and stepless adjustment to tool diameter and height, usable instead of the standard cast iron fence plates. ART. NO.: 4170



# EQUIPMENT DETAILS + OPTIONS: 245|300

#### **CONVENIENT OPERATION**

The control panel can be individually adapted to the mode of operation. By simply attaching it to the frame support, the operating panel can be used either at the top or at the bottom.



#### OPTION:

SWIVEL-AWAY DEVICE FOR MILLING FENCES The swivel-away device enables the milling fence to be raised and swivelled away into a neutral position by means of an electric motor. This makes working on the machine more comfortable and safer. ART. NO:: 4627



#### OPTION:

AUTOMATIC HSK-63-F TOOL CHANGE SYS-TEM

Electromechanical clamping system for convenient tool change. The tool change is operated by a switch. Including 1 piece quick-change milling arbor HSK-63-F with Ø 30 mm Clamping length 140 mm with milling arbor rings and quick-action clamping nut. ART. NO.: 4661



#### OPTION:

INTEGRAL FENCE PLATES INFEED/OUTFEED 500/500MM With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates. Other lengths on request. ART.NO: 4170



**TENONING AND SLOTTING DEVICE 1376** Mounted on the machine table for light tenoning and slotting work with eccentric clamp and adjustable mitre fence. Sliding range 710 mm, height above table approx. 56 mm. When working with the tenoning and slotting device 1376, the protective cover type 1641 must be used. ART. NO: 4547



#### OPTION:

**POWER FEEDER PV 84** 4 rollers 120 x 60 mm, 8 speeds: 2/ 4/5.6/6.7/11/13/16.5/33 m/min, two directions of rotation, stand with extension arm 1050 mm, can be used individually horizontally and vertically, incl. mounting, cable and plug. ART. NO:: 4029

#### OPTION:

**TABLE EXTENSION ONE-SIDED RIGHT** For table top 1340 x 800 mm: Finely planed cast iron table top as extension on the right side of the standard machine table, thus total length = 1950 mm, with smooth-running frame support approx. 970 mm, extendable to the front. Emergency stop button included. ART. NO.: 4217



#### OPTION:

KICKBACK GUARD 1648 For safe insertion milling of long and short parts, infinitely adjustable from O–1500 mm, for milling machines with table top extension. ART. NO: 2002





# EQUIPMENT DETAILS + OPTIONS: 245|300

# <section-header>

#### OPTION:

TABLE SLIDE PLATE, FOR TABLE TOP 1100 X 760 MM

The patented slide plate top with grid structure does not change the total depth when the table slide is placed on the max. table openings. The distance from the front edge to the spindle remains the same, for easy operation. The table slide plate is infinitely adjustable in depth. A high fitting accuracy without interfering edges is guaranteed. ART. NO: 4467



#### OPTION:

**TABLE TOP EXTENSION ON BOTH SIDES** For table top 1100 x 760 mm, Total length 2300 mm, consisting of 2 pieces of finely planed cast iron table tops as extension each on the left and right of the standard machine table, with smooth-running frame support approx. 892 mm, extendable to the front. Emergency stop button included. ART. NO: 4465



1 SET OF SAFETY RULERS FOR MILLING FENCES As a continuous guide between the two fence plates consisting of 2 pieces of ruler 260×6mm, 3 pieces of ruler 260×3mm, 1 moulding board of multiplex 260×150×12mm, including sliding blocks and Allen key. ARI. NO: 2093



# **OPTIONS + EXTENSIONS:** 245|300

#### TECHNICAL EXTENSION



VARIABLE SPEED REGULATION 1500-12000 RPM 7.5 kW motor with 11 kW frequency inverter

#### ACCESSORIES TABLE SYSTEMS

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AR 42	T. NO. 15	

#### TABLE TOP EXTENSION ON BOTH SIDES

For table top 1340x800 mm, total length 2500 mm, consisting of 2 pieces of fine planed cast iron table tops as extension, each on the left and right side of the standard machine table.

Emergency stop button included



# LARGE TABLE TOP, SIZE 1340X 800 MM, WITH TURN-TABLE

ARLNU. And frame support 1340 mm, extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215, table slide plate not possible

#### ACCESSORIES MILLING FENCES



4169

#### INTEGRAL FENCE PLATES INFEED/OUTFEED 650/500 MM

<sup>U</sup> With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates



#### LARGE TABLE TOP, SIZE 1340 X 800 MM, WITHOUT TURNTABLE

With frame support 1340 mm extendable up to approx. 970 mm instead of standard table top 1100 x 760 mm, option: table top extension Art. No. 4215



4171

#### INTEGRAL FENCE PLATES INFEED/OUTFEED 650/650 MM

With swivelling guide rods integrated in the fence plates for an uninterrupted guide surface of all milling operations; the exact adjustment to tool diameter and height is achieved by a stepless adjustment, instead of standard cast iron fence plates



# **OPTIONS + EXTENSIONS:** 245|300

#### **ACCESSORIES MILLING FENCES**



#### CENTREX

Milling protection and pressure device for secure fixing of workpieces during manual milling operations; the special shape of the pressure shoe ensures precise workpiece guidance during all milling operations, fixed to the milling fence, can be folded up, instead of standard milling protection and pressure device GAMMA V 1629

#### **ACCESSORIES** MILLING SPINDLES AND ARBORS

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#### OUICK-CHANGE SYSTEM HSK-80

With spindle lock and milling arbor 30 mm instead of milling spindle 30 mm (higher con-4544 centricity and no sticking in the spindle as with MK 5 system or steep taper); Note: other arbors on request

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#### **AUTOMATIC HSK-63-F TOOL CHANGE SYSTEM**

Tool interface suitable for HSK-63-F, compatible with CNC machining centres instead of standard milling spindle, incl. 1 piece quick-change milling arbor HSK-63-F with ø 30 mm, clamping length = 140 mm, with milling arbor rings and cutter quick-clamping device via Allen key and rotation lock; electromechanical clamping system for convenient tool change; actuated via switch, clamping/releasing (no compressed air required). Important: Before ordering, please be sure to check the compatibility of the HSK clamping system!

#### **AUTOMATIC OUICK-CHANGE SYSTEM HSK-85-PO-**WERLOCK

ART. NO. Tool interface suitable for HSK-85-PowerLock compatible to "Weinig" instead of 30 mm standard milling spindle, incl. 1 piece quickchange milling arbor HSK-. 85-PowerLock with ø 30 mm; clamping length = 140 mm, with cutter arbor rings and cutter quickchange clamping device via Allen key and rotation lock; electromechanical clamping system, for convenient tool change; actuated via switch, clamping/releasing (no com-pressed air required). Important: Please check the compatibility of the HSK clamping system before ordering

#### **ACCESSORIES** ROLLER TABLE AND SLOTTING DEVICE



#### **ROLLER TABLE**

With stop fixture, eccentric clamp, clamping table can be pushed in up to the milling spindle incl. protective bonnet 1641, suction nozzle ø 120 mm, with graduated height adjustment, upper position as roller table, lower position as table extension left. Important: With this option the machine must be equipped with the large table top No. 4423 and if necessary, additionally with table top extension right No. 4217

#### **CROSS-CUT FENCE LAS-M**

Right-hand version for system tools to process ART. NO. workpieces in pairs, effective length = 1750 mm, slide system with multiple stop and 3 adjustment rings for cross-cut positioning with splitter tonque



4417

4662

#### **EXTENSION FOR CROSS-CUT FENCE LAS-M** Total length 1000 mm, effective length 1750 to

2750 mm



#### **ACCESSORIES** ROLLER TABLE AND SLOTTING DEVICE



#### **ZTENONING AND SLOTTING DEVICE 1376**

Mounted on the machine table for light teno-ART.NO. 4547 ning and slotting work, with eccentric clamp and adjustable mitre fence. Sliding length 710 mm, height above table approx. 56 mm

#### **ACCESSORIES** POWER FEEDER

#### **POWER FEEDER VARIOMATIC 4 N**

4 rollers, infinitely variable feed speed from 2–18 m/min. Two directions of rotation, quick turning from horizontal to vertical use; easy swivelling away and positioning with memory-lock system; with comfort stand, numerical height

display, extension arm 1050 mm long, incl. mounting, cable and plug



ART. NO. 4638

#### **MOVABLE CONSOLE**

Mounted on the left side of the machine column with joint for swivelling away the feed attachment, mandatory for roller table No. 4491.1 as well as milling fence types 204, 302, 320 and integral fence plates 650+650 mm

#### SPECIAL ACCESSORIES



#### MACHINE ACCESS CONTROL

User database and Machine Access Control ARI.NO. TM-300 with personalised RFID based keys, full version for authorised and instructed personnel, including master key for parameter settings and staff instructions and 5 user tags for machine operators

#### **ACCESSORIES** SERVICES



#### **ASSEMBLY OF A FEED UNIT**

Delivery by the customer to us by a carriage paid delivery



4172

#### **INSTRUCTION BY FACTORY TECHNICIAN**

Or training at the Sigmaringen factory for the machine ordered, plus travel expenses if the instruction takes place at the customer's site



4664

#### **RIGID CONSOLE**

For mounting a feed unit approx. 195 x 180 mm laterally on the left side of the table top; mandatory when using routing fence 204, 302, 320 and integral fence plates 650+650 mm, with table top 1100 x 760 mm

#### **RECOMMENDED SPECIAL ACCESSORIES:**

**SAFETY TECHNOLOGY** | ON PAGE 50

MACHINE ACCESS CONTROL | ON PAGE 51



#### WARRANTY PLUS+12

12 months extended warranty (following the legal warranty period of 12 months), not on wear parts-warranty l year on parts

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ART. NO. 4175	

#### MAINTENANCE AND INSPECTION

Annual maintenance and inspection on site according to maintenance plan, spare parts are charged separately, plus travel expenses



# SAFETY TECHNOLOGY

Future-oriented work provides for occupational safety on machines, health at work and safety for staff. The profitability of a company depends on healthy employees who can work effectively, safely and optimally. Various accessories from SI-TEC optimise work processes and workplaces in the long term.

SICHERHEITSTECHNIK



#### SAFETY RULERS AND MILLING BOARD SET

1 set = 5 safety rulers consisting of:

- 3 rulers 260 x 3 mm
- 2 rulers 260 x 6 mm
- I wooden grooved milling board
- 10 turnable brass sliding blocks with screws
- 4 steel sliding blocks with screws
- 1 Allen key

1 set of safety rulers for milling fences Art. No.: 2093



#### **KICKBACK GUARD 1648**

For safe insertion milling of long and short parts, infinitely adjustable from 0–1500 mm, for milling machines with table top extension. Delivery includes the mechanical components for mounting on existing table top extensions.

Recommended accessories: Clamping drawer type 212, Art. No.: 3053

#### Kick-back protection 1648 Art. No.: 2002



#### **INTEGRAL FENCE SYSTEM 211**

Attachable to an existing milling fence, the system ensures safe and dimensionally accurate work on tilting spindle moulders. The integral fence system provides an uninterrupted guide surface for all milling work on the tool. The exact adjustment to the tool diameter and height is achieved by a stepless adjustment.

Both halves 500 mm long Art, No.: 4170

Left half 500 mm long outfeed Right half 650 mm long infeed Art. No.: 4169

Both halves 650mm long Art. No.: 4171

1 set of adapters for mounting integral fence plates on fence 204 Art. No.: 2128



Q. Konfiguration

Schulung

# MACHINE ACCESS

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#### ELECTRONIC KEY SYSTEM FOR MACHINE ACCESS

The electronic key system is a simple and cost-effective solution for reliable and secure machine access control, which was previously realised with a key switch or password. There are 3 variants, offering the right system for every application. 5 tags (RFID keys) are supplied with each unit of the TM (1x red and 4x blue).





#### SPECIAL ACCESSORIES FOR MORE SAFETY

For a fast and safe workflow, the extensive tool database enables the storage of all types of milling cutters.

Tool database, for 10 tools 20 programs per tool Art. No.: 4614

Tool database, for 20 tools Per tool 20 programs Art. No.: 4615

Tool database, for 500 tools Per tool 100 programs Art. No.: 4616

#### TECHNICAL SPECIFICATIONS TM-100 DND TM-300

Mounting	Panel mounting or surface-	
	mounted housing (aluminium)	
Dimensions	72 x 48 x 82.5 mm (W x H x D)	
Panel cut-out	67 x 46 mm (W x H)	
Installation depth	75.5 mm	
	(without connector plug)	
Dimensions of surface-		
mounted housing	$107 \times 56 \times 110 \text{ mm} (W \times H \times D)$	

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#### TM-100 5 AUTHORISATION LEVELS

- TM-100 tags optionally pre-configured with authorisation level 1–5
- 1 digital output (PNP, active high) for administrator access (e.g. as a key switch alternative)
- 4 digital outputs (PNP, active high) for additional machine functions

#### TM-300 UNLIMITED NUMBER OF TAGS

- Unlimited number of tags (TM-100 tags can also be taught)
- Database and network connection via Modbus/TCP
- 1 digital output (PNP, active high) for administrator access (e.g. as key switch alternative)
- 4 digital outputs (PNP, active high) for other machine functions (available as an option)
- Modbus/TCP for parameterisation and connection to the network
- Additional serial RS232 interface for error analysis
- Panel-mounted housing (optional surface-mounted housing)

#### Personalised user key

(blue) for user database TM-300 and TM-100 ,VP = 10 pieces Art. No.: 4670

#### Master key

(red) for user database TM-300 and TM-100, 1 piece Art. No.: 4671

External reader including software For tags TM-300 and TM-100, 1 piece Art. No.: 4672











# PRODUCT OVERVIEW

# **SLIDING TABLE SAWS**

### TILTING SPINDLE MOULDERS





#### YOU CAN ALSO FIND ALL OUR PRODUCTS ON: WWW.PANHANS.DE

PANHANS

# SERVICE CONCEPT

#### **QUALITY IN EVERY RESPECT**

Deeply rooted in our company philosophy is the honest attitude towards customers and business partners, which at the same time forms the basis for a trusting cooperation. In the production of our machines, we always strive to keep the consumption of resources and energy as low as possible and thus make a meaningful contribution to environmental protection. In addition, we are constantly developing our wood processing machines to keep efficiency high and energy consumption low.

In order to guarantee the longevity of a PANHANS machine as well as customer satisfaction, we offer comprehensive service and a wide range of additional services before the purchase and after the investment. Among other things, our service philosophy includes detailed advice and, if required, a machine demonstration in our showroom. In the showroom, you receive professional instruction, an explanation of the functions and can test all products extensively.

After the purchase, our versatile online shop and our extensive website provide a free service. Tools, accessories and consumables can be ordered easily in the online shop and our website serves as an information platform. Which maintenance and servicing work is required for which machines?

The table on www.panhans.de gives you an overview and helps to optimise the performance of your PANHANS machines.

PANHANS woodworking machines are sustainably designed and solidly built in Germany.

CUSTOMER SATISFACTION High-quality machines combined with extensive service for long-lasting reliability.



#### ADVICE

Qualified and dedicated advice from expert staff from purchase to beyond the scope.



**ENVIRONMENTAL AWARENESS** Innovative machine development for high efficiency despite low energy consumption.



#### SERVICES

Extensive and versatile range of services tailored to the needs of the customer.







🖵 www.panhans.de | 🖵 www.beck-maschinenbau.de | 🗎 www.hokubema.com



Scan QR code and go directly to the **spindle moulders** 





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