



Selection Guide for CNC Rotary Tables ...



Bluetooth®

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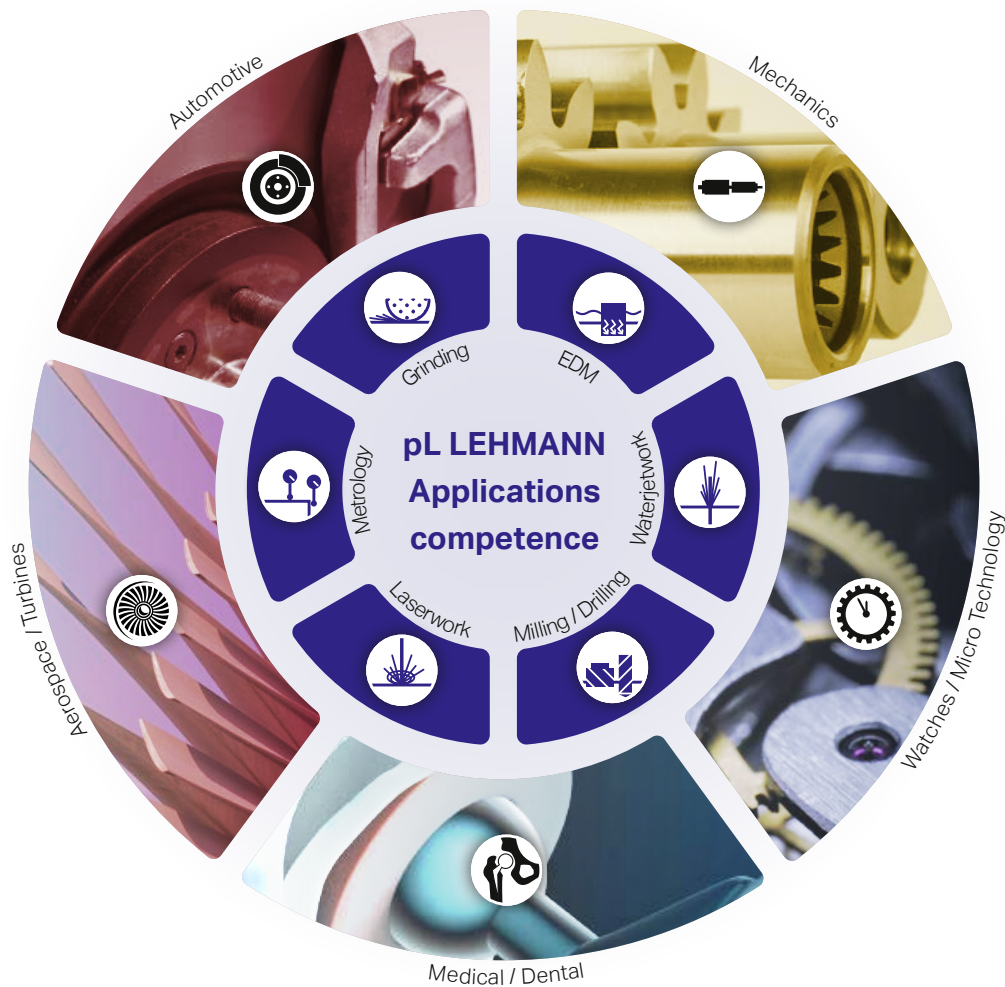


QUASER
we cut faster

10/2018 | EN

... for MK- and MV-series

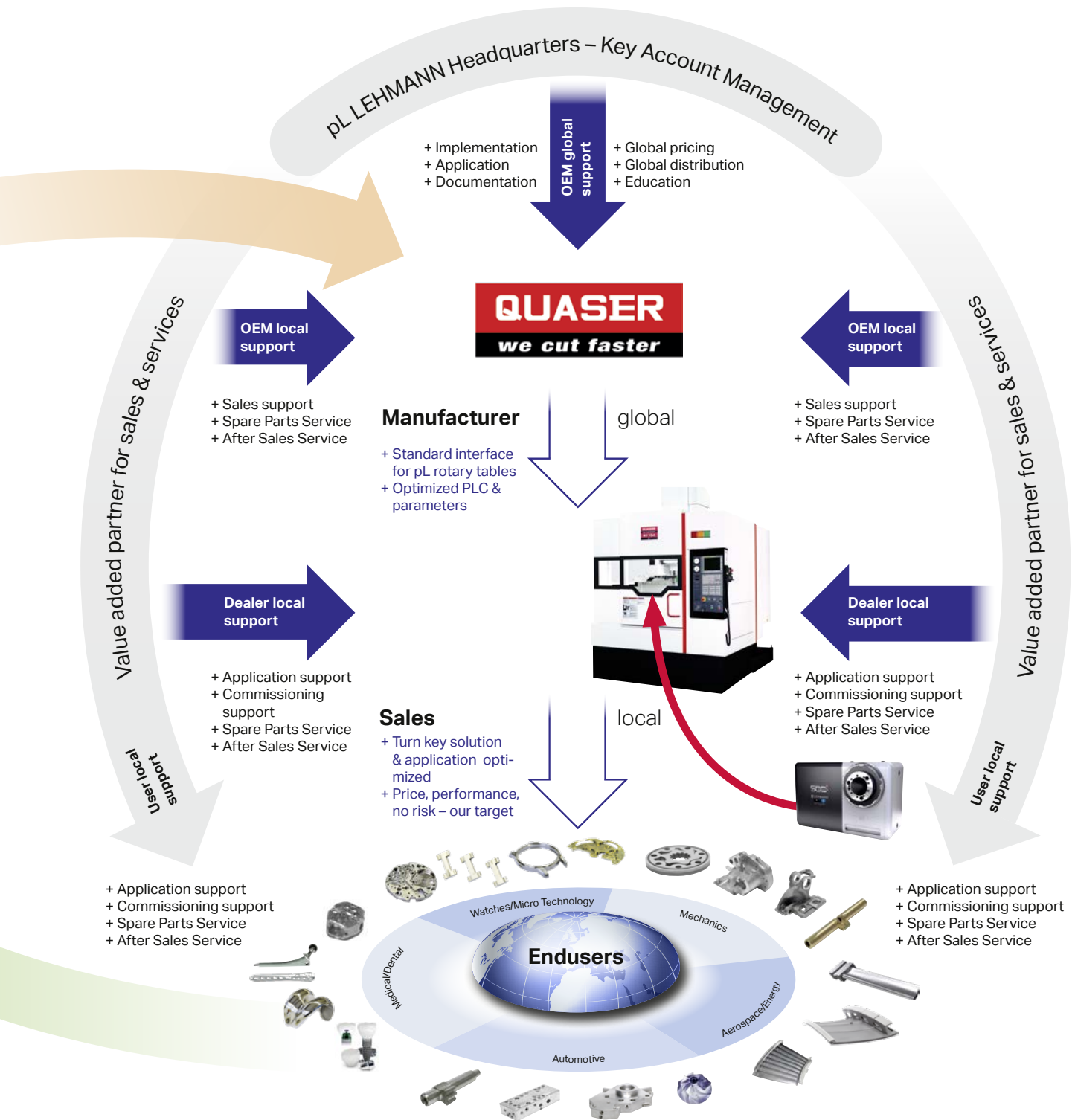
CNC rotary tables for economical manufacturing:
pL LEHMANN has suitable and rational solutions for
nearly every industry



pL rotary tables in use: on over **40** different machine brands
and over **160** different machine models.

pL competence: Integration in **all known** CNC control systems
(Fanuc, Siemens, Heidenhain, Haas, Winmax, Mitsubishi, Brother,
Mazatrol, Okuma ...), for new machines as well as for retrofits

Professional products from professional partners:
 QUASER and pL LEHMANN provide
 first-class service to common customers



NEW
up to +30 %

Up to 210 rpm
up to 0.21 sec / 90°

High speed

Extended travel in
Z- and X-direction

More space

High spindle load,
heavy-duty bearing

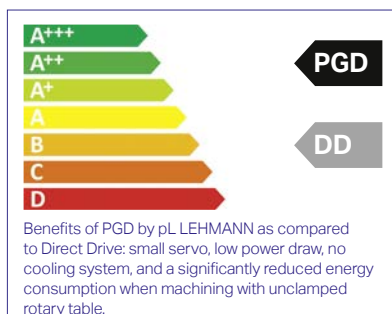
Heavy duty

E-Series



Rotary tables suitable for simultaneous operation!

Save energy



Energy label at the left
An intuitive rating as consumption greatly depends on usage, and without any liability assumed, following the directives on energy labelling

See main catalog for more features

NEW
up to +30 %

High torque

Feed torque up to
850 Nm (provisional)

Adaptability

Multifunctional
spindle HSK

Precision

On the workpiece, as
precise as 2 µm / 100 mm

NEW
up to +150%

Pneum. clamping
up to 7,000 Nm

High clamp

Large parts
up to \varnothing 500

Big size

PGD backlash-free
long-life gear unit

No backlash

T-Series



**All base plates
made of steel**

NEW

with integrated hole pattern for
slot spacing of 100 and 125 mm,
integrated alignment system
lineFIX for lengthwise or cross-
wise clamping.

M-Series



NEW

Connectivity

Wireless monitoring,
for operation & service

No adjust

Load change without
parameter adjustment

Less cost

No cooling system,
no hydraulics



MK603S



MV154



MV154APC



MV214



MV234

A word from QUASER:

«We build machines in a hybrid way. Very classic craftsmanship combined with most advanced modern equipments in a clean environment.

QUASER builds long-term relations with prestigious OEM and international distributor partners. We have developed innovative machine tool technologies, a strong international supplier network, loyal sales and distribution network and global customer base. In order to maintain competitive advantage in the global machine tool industry, we commit to provide our employees continuous training, creating high standards of manufacturing productivity and efficiency.»

The company name QUASER is based on success principles in machine tool industry-QUALITY, SERVICE and continuous DESIGN INNOVATION.



The right machine/rotary table combination
for economical production: this Selection
Guide helps you make the right selection

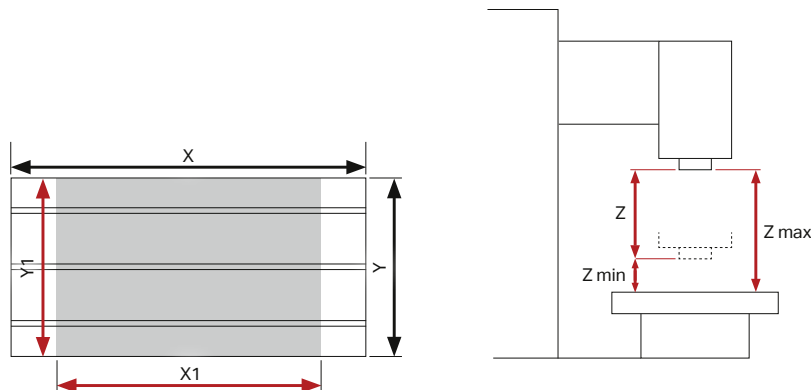


	Table diameter [mm]		Permissible overhang *	Traverse stroke [mm]					Table load ** max [kg]
	X	Y		X1	Y1	Z	Zmin	Zmax	
MK603S	1'050	550	10%	1'020	610	600	130	730	300
MV154	900	500	10%	762	530	520	150	670	500
MV154APC	800	500	10%	700	500	560	150	710	250
MV184	1'200	600	10%	1'020	610	610	100	710	500
MV204	1'400	700	10%	1'270	700	610	150	760	1'000
MV205	1'400	700	10%	1'270	700	610	190	800	1'800
MV214	1'700	700	10%	1'524	700	610	150	760	1'800
MV215	1'700	700	10%	1'524	700	610	190	800	2'000
MV234	2'250	800	10%	2'040	762	661	150	811	2'000

* The recommended rotary tables can overhang the machine table by so many % (e.g. 10 % means: the rotary table length can be greater than dimension Y or X by max. 10 % of the machine width Y with Y-clamping or 10 % of the table length X with X-clamping.)

** The recommended rotary tables do not exceed 50 % of the allowed table load.

Table explanation for pp. 8–11

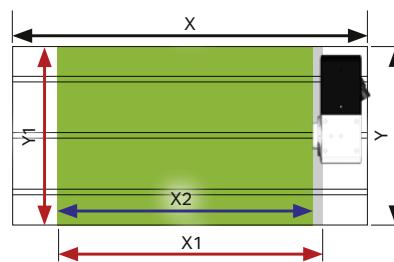
	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
MK603S	868	852	826	

Wherever values are listed, the combination is recommended. Empty cells mean that a combination is not possible, because the rotary table is too large, or is not recommended, because the rotary table is disproportionately small or heavier than 50% of the table load.

For further details about the rotary tables, see p. 12 and higher or refer to the main catalog

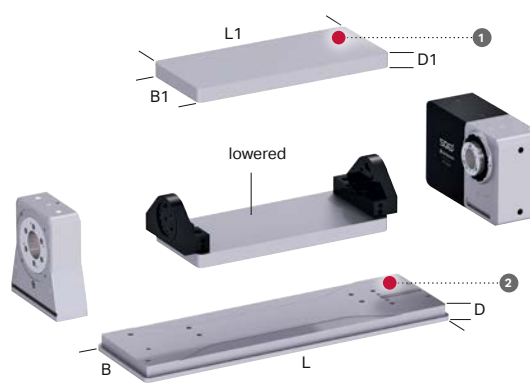


	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
MK603S	868	852	826	
MV154	664	648	622	593
MV154APC	583	567	541	
MV184	943	927	901	872
MV204			1'126	1'097
MV205			1'126	1'097
MV214			1'403	1'374
MV215			1'403	1'374
MV234			1'936	1'907



Rotary table installation with pL clamping claws in accordance with the operating manual

Clamping yokes for EA-type rotary tables



			EA-507		EA-510		EA-520			EA-530	
1 Clamping yokes	Sph	[mm]	190		180		210			218	
	Length L1	[mm]	350	450	500	600	600	700	800	800	1000
	Width B1	[mm]	165		215			270			270
	Thickness D1	[mm]	20		35			40			40
2 Base plates	Length L	[mm]	622	722	785	885	916	1016	1116	1172	1372
	Width B	[mm]	168		248			301			368
	Thickness D	[mm]	30		30			30			38
Weights / moments of inertia (without rotary table, without counter bearing)	Weight (Al)	[kg]	10	12	23	28	40	45	52	on request	
	Weight (steel)	[kg]	29	34	66	80	117	130	152		
	Mom. inert. (Al)	[kgm ²]	0.02	0.02	0.06	0.07	0.16	0.17	0.21		
	Mom. inert. (steel)	[kgm ²]	0.04	0.05	0.17	0.21	0.46	0.50	0.60		

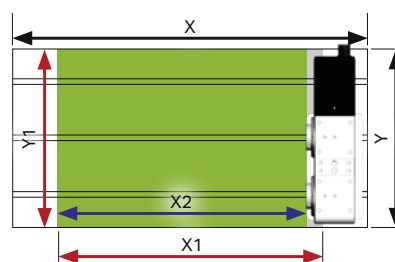
Explanations for pp. 8 to 11

The recommendations are for information purposes only. We recommend that you verify the effective dimensions prior to ordering. Modifications on the machine can lead to collisions and affect the dimensions X2 and Y2.



	M2-507	M2-510	M3-507	M3-510
	X2			
MK603S	809	799	809	
MV154	605	595		
MV154APC	524	514		
MV184	884	874	884	
MV204	1'109	1'099	1'109	1'099
MV205	1'109	1'099	1'109	1'099
MV214	1'386	1'376	1'386	1'376
MV215	1'386	1'376	1'386	1'376
MV234	1'919	1'909	1'919	1'909

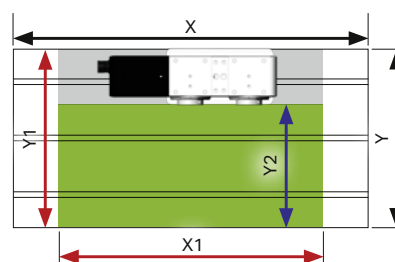
Y-mounting



Rotary table installation with pL clamping claws in accordance with the operating manual

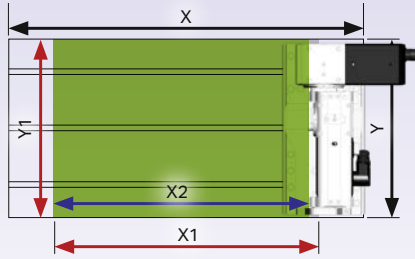
	M2-507	M2-510	M3-507	M3-510
	Y2			
MK603S				344
MV154			289	279
MV154APC			274	264
MV184				369
MV204				
MV205				
MV214				
MV215				
MV234				

X-mounting



Rotary table installation with pL clamping claws in accordance with the operating manual

Y-mounting



Rotary table installation using hole pattern in base plate



TIP1



TAP1

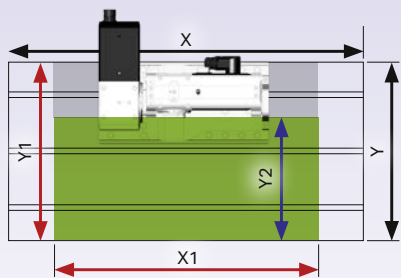


TOP1.2

	TIP1c TF-507510 X2	TIP2c TF-510520 X2	TIP3c TF-520530 X2	TAP1c T1-507510 X2	TAP2c T1-510520 X2	TAP3c T1-520530 X2	TAP1 T1-507510 X2	TAP2 T1-510520 X2	TAP3 T1-520530 X2	TOP1 T1-507510 X2
MK603S	905	861		865	845		865			
MV154	701	657		661						
MV154APC	620	576		580						
MV184	980	936	916	940	920		940	920		940
MV204	1'205	1'161	1'141	1'165	1'145	1'111	1'165	1'145		1'165
MV205	1'205	1'161	1'141	1'165	1'145	1'111	1'165	1'145		1'165
MV214	1'482	1'438	1'418	1'442	1'422	1'388	1'442	1'422		1'442
MV215	1'482	1'438	1'418	1'442	1'422	1'388	1'442	1'422		1'442
MV234	2'015	1'971	1'951	1'975	1'955	1'921	1'975	1'955	1'921	1'975

	TOP2 T1-510520 X2	TOP3 T1-520530 X2	TAP1c.2 T1-507510 X2	TAP2c.2 T1-510520 X2	TAP3c.2 T1-520530 X2	TAP1.2 T1-507510 X2	TAP2.2 T1-510520 X2	TAP3.2 T1-520530 X2	TOP1.2 T2-507510 X2	TOP2.2 T2-510520 X2	TOP3.2 T2-520530 X2
MK603S											
MV154											
MV154APC											
MV184			940								
MV204	1'145		1'165			1'165			1'165		
MV205	1'145		1'165			1'165			1'165		
MV214	1'422		1'442			1'442			1'442		
MV215	1'422		1'442			1'442			1'442		
MV234	1'955	1'921	1'975	1'955		1'975	1'955		1'975		

X-mounting



Rotary table installation using hole pattern in base plate



TIP1

TAP1

TOP1.2

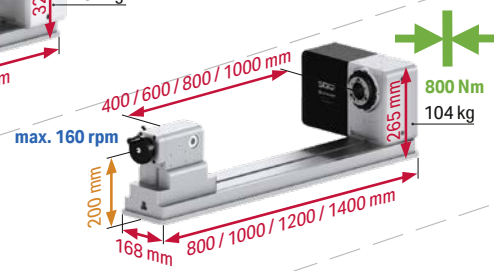
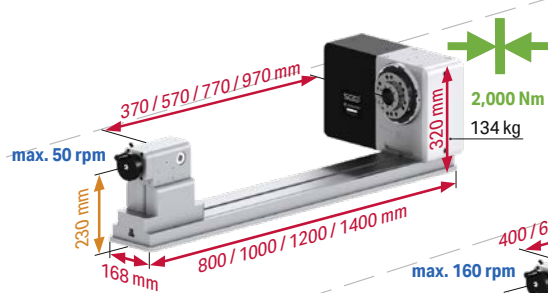
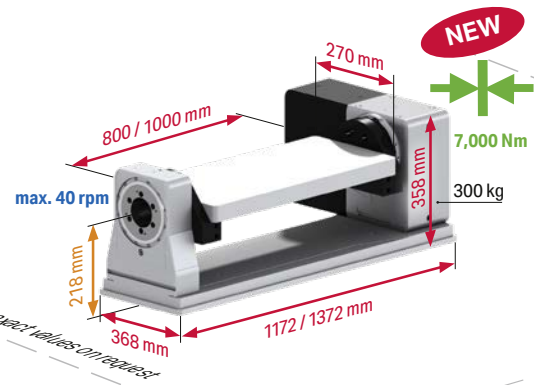
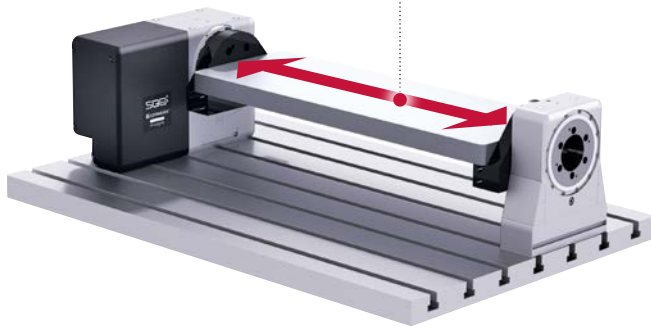
	TIP1c TF-507510 Y2	TIP2c TF-510520 Y2	TIP3c TF-520530 Y2	TAP1c T1-507510 Y2	TAP2c T1-510520 Y2	TAP3c T1-520530 Y2	TAP1 T1-507510 Y2	TAP2 T1-510520 Y2	TAP3 T1-520530 Y2	TOP1 T1-507510 Y2
MK603S										410
MV154			321		325		345	325		345
MV154APC							330			330
MV184										
MV204									476	
MV205									476	
MV214										
MV215										
MV234										

	TOP2 T1-510520 Y2	TOP3 T1-520530 Y2	TAP1c.2 T1-507510 Y2	TAP2c.2 T1-510520 Y2	TAP3c.2 T1-520530 Y2	TAP1.2 T1-507510 Y2	TAP2.2 T1-510520 Y2	TAP3.2 T1-520530 Y2	TOP1.2 T2-507510 Y2	TOP2.2 T2-510520 Y2	TOP3.2 T2-520530 Y2
MK603S			410	390		410			410		
MV154	325		345	325		345	325		345	325	
MV154APC			330			330			330		
MV184	415			415		435	415		435	415	
MV204		476		510	476		510	476		510	476
MV205		476		510	476		510	476		510	476
MV214					476		510	476		510	476
MV215					476		510	476		510	476
MV234					557			557			557



Very good accessibility, even with short tools

More space for workpieces and fixtures



530

520


51x

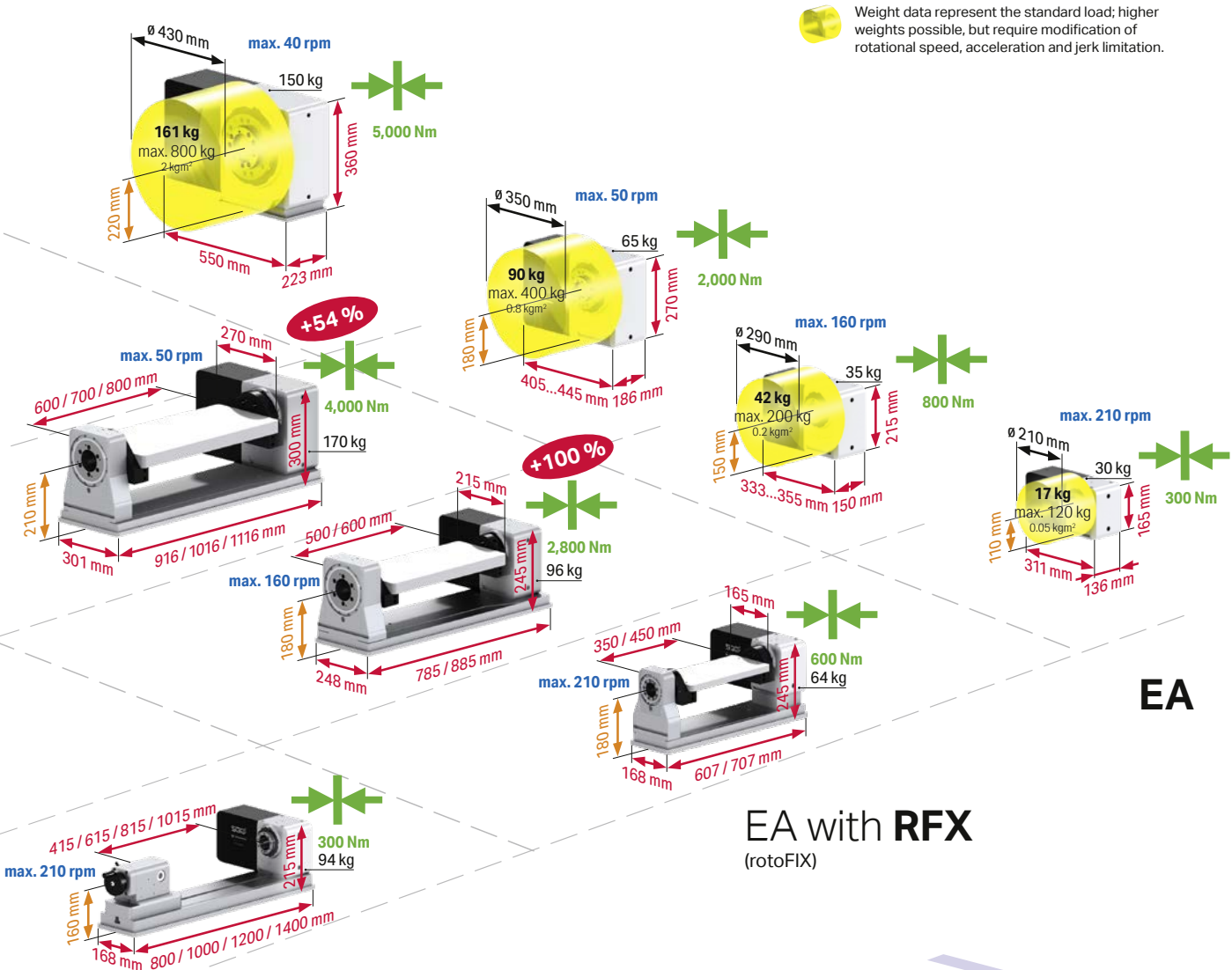
50x

SIZE

News in brief

1. High speed up to 210 rpm
2. Feed torque up to 850 Nm (tentative)
3. Steel base plates with hole pattern (suitable for slot spacing of 100 and 125 mm)
4. Cycle time 90° as fast as 0.21 sec.

 Weight data represent the standard load; higher weights possible, but require modification of rotational speed, acceleration and jerk limitation.



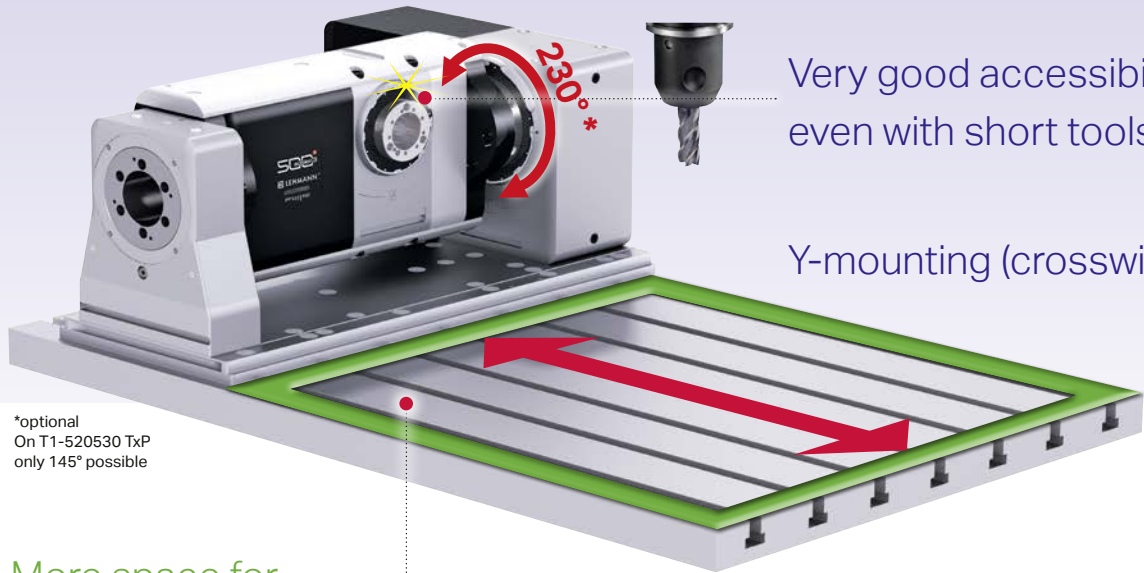
EA

EA with **RFX**
(rotoFIX)

EA with **LFX**
(longFLEX)

MODEL

- 50x 507 (standard) or 508 (high speed)
- 51x 510 (standard) or 511 (high speed)
- EA single-axis, single-spindle CNC rotary table
- rotoFIX modular clamping yoke system
- longFLEX modular shaft clamping system

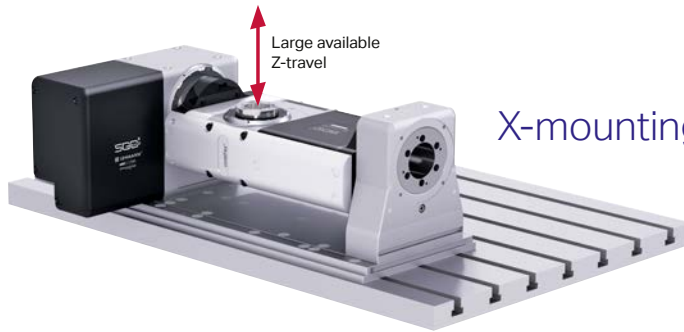


Very good accessibility, even with short tools

Y-mounting (crosswise)

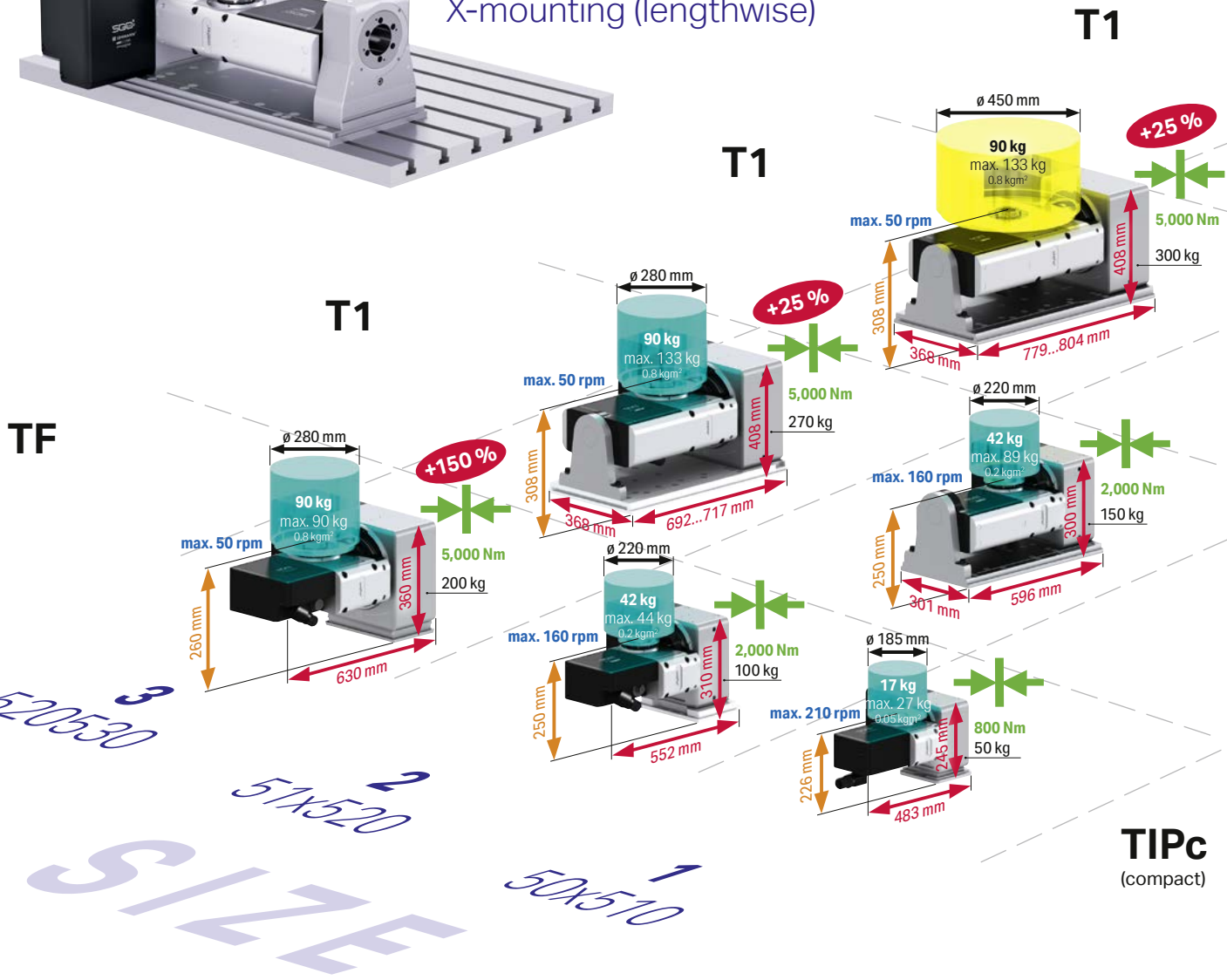
*optional
On T1-520530 TxP
only 145° possible

More space for workpiece and fixtures



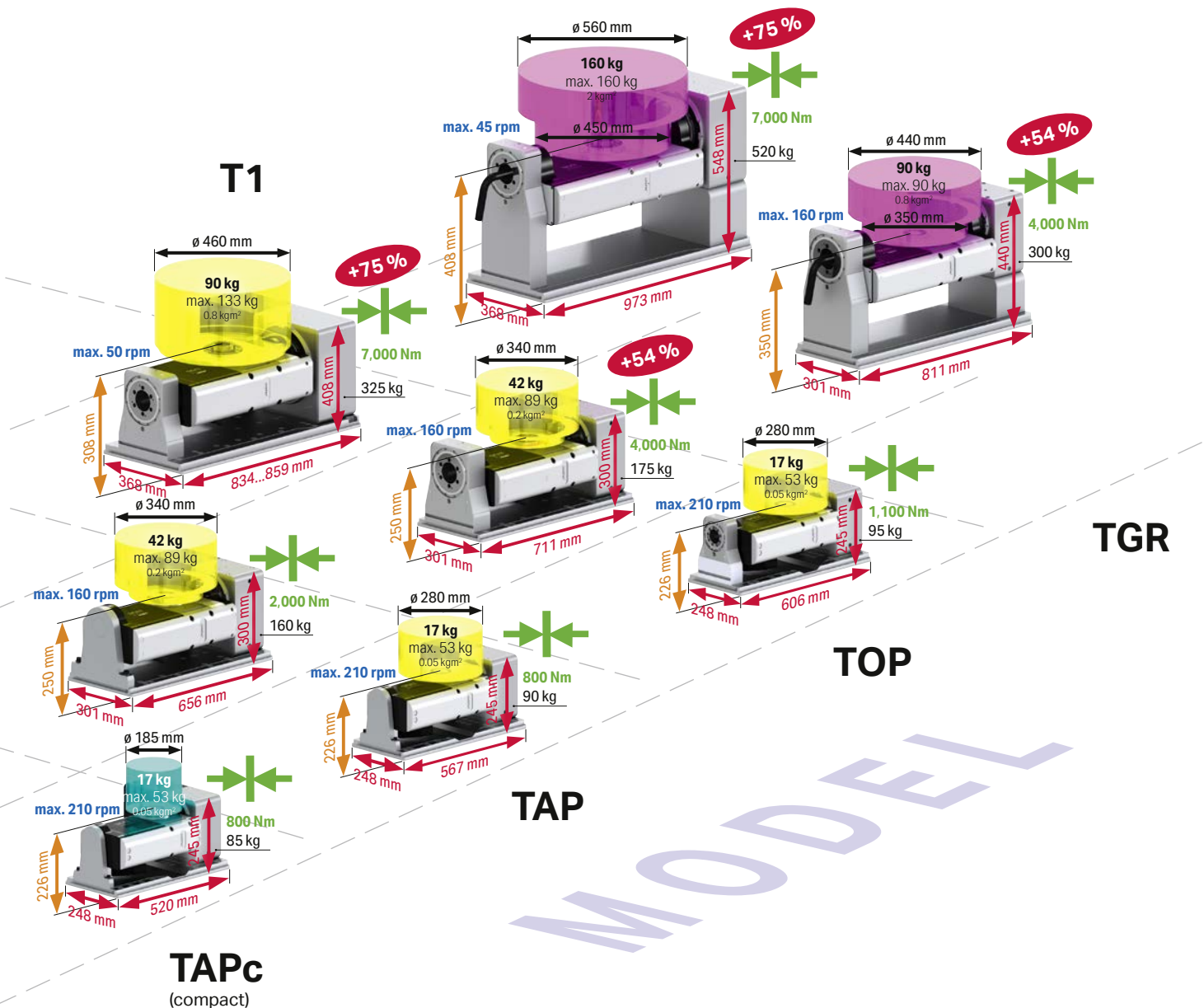
X-mounting (lengthwise)

T1



News in brief

1. Up to 150% higher clamping torque in tilting axis
2. Fewer variant – more solution
3. Larger workpiece \varnothing possible
4. Spatially optimized arrangement of the dividing axis

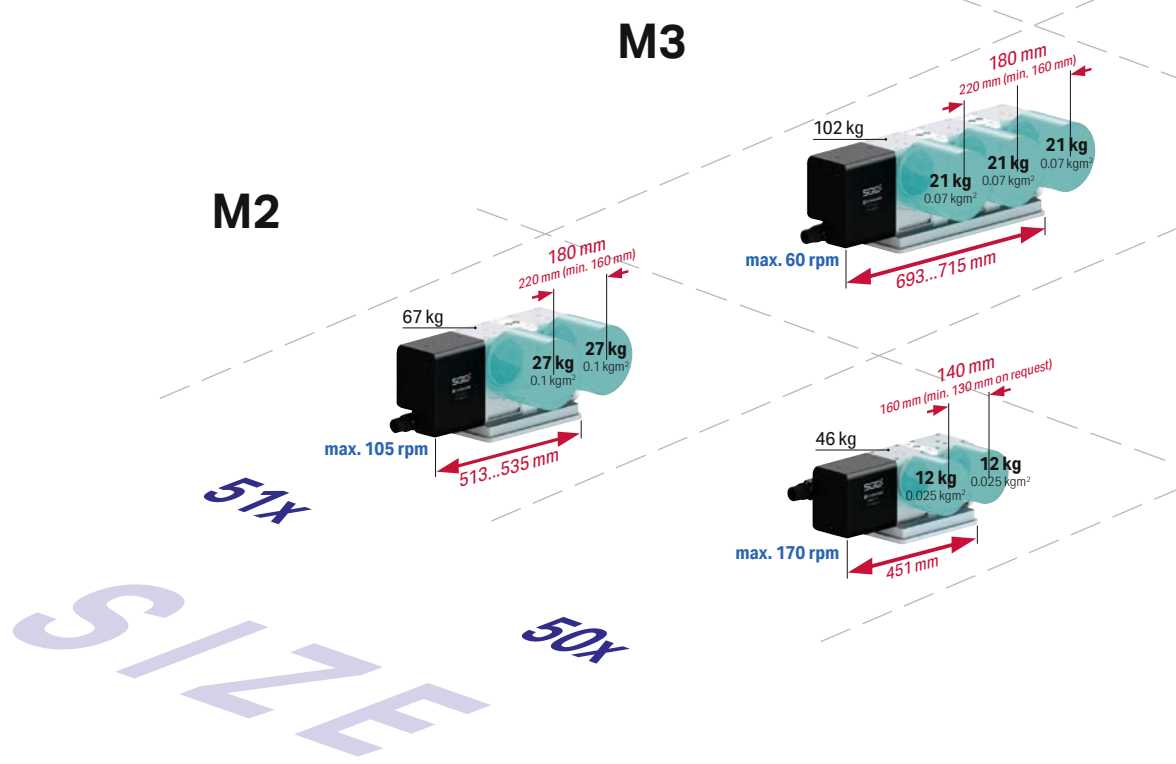


Weight data represent the standard load; higher weights possible, but require modification of rotational speed, acceleration and jerk limitation.

- 50x510 508510 (standard) or 508510 (high speed)
- 51x520 510520 (standard) or 511520 (high speed)
- TIPc Two-axis rotary table, no counter bearing, compact
- TAPc Two-axis rotary table, with supporting bearing, compact
- TAP Two-axis rotary table, with supporting bearing
- TOP Two-axis rotary table, with clamped counter bearing
- TGR Two-axis rotary table, with clamped counter bearing, specifically for grinding applications

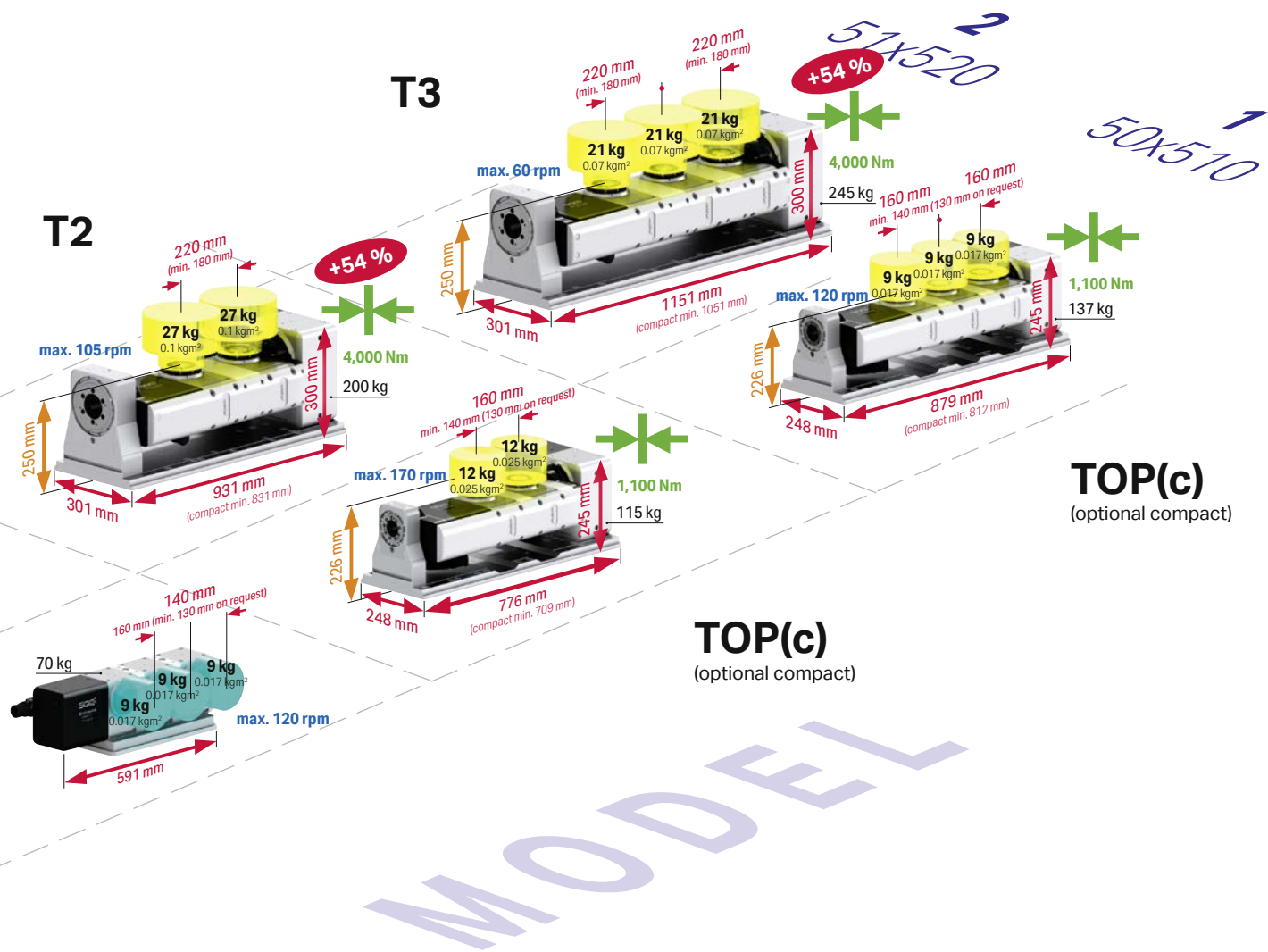


More space for workpiece and fixtures



News in brief

1. Up to **54 %** higher clamping torque in tilting axis
2. Fewer variant – more solution
3. Spindle distance min. **130 mm**
4. Spatially optimized arrangement of the dividing axis



Weight data represent the standard load; higher weights possible, but require modification of rotational speed, acceleration and jerk limitation.

- 50x 507 (standard) or 508 (high speed)
- 51x 510 (standard) or 511 (high speed)
- M2 Single-axis, multi-spindle rotary table, 2-position
- M3 Single-axis, multi-spindle rotary table, 3-position
- T2 Two-axis multi-spindle rotary table, 2-position
- T3 Two-axis multi-spindle rotary table, 3-position

Extremely wide assortment for workpiece clamping.
Standardized interface in front and rear: maximum universality

Spindle accessories in rear

- + Rotary unions **up to 250 bar**
- + Clamping cylinder **23 kN at 120 bar**
- + Angular position measuring systems **as precise as ± 1 arcsec**



Spindle accessories in front



Tailstock and counter bearing



ripas zero point clamping system



EA-507 with ripas auto and ripas adapter

CAPTO clamping (on request)

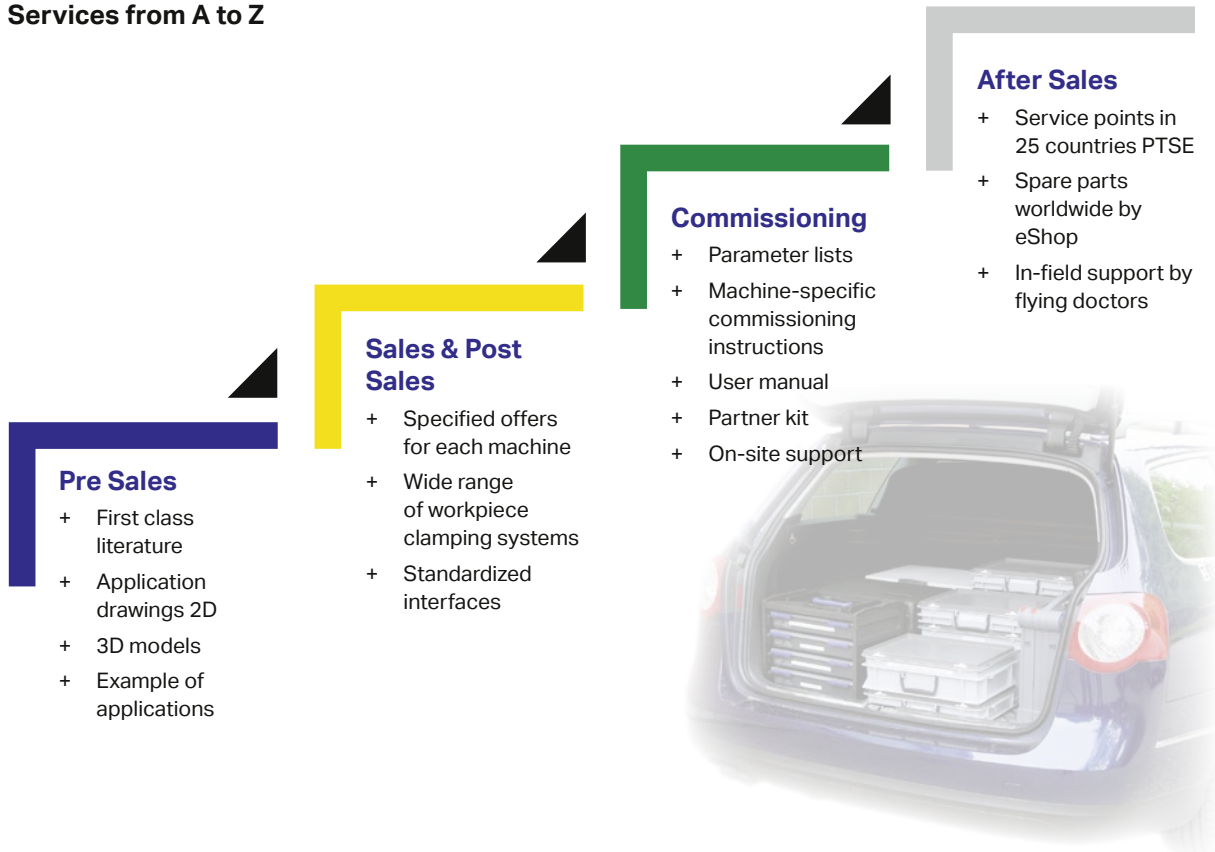


EA-507 with CAPTO retrofit kit

Present in over 20 countries: from sales consultation to the final service

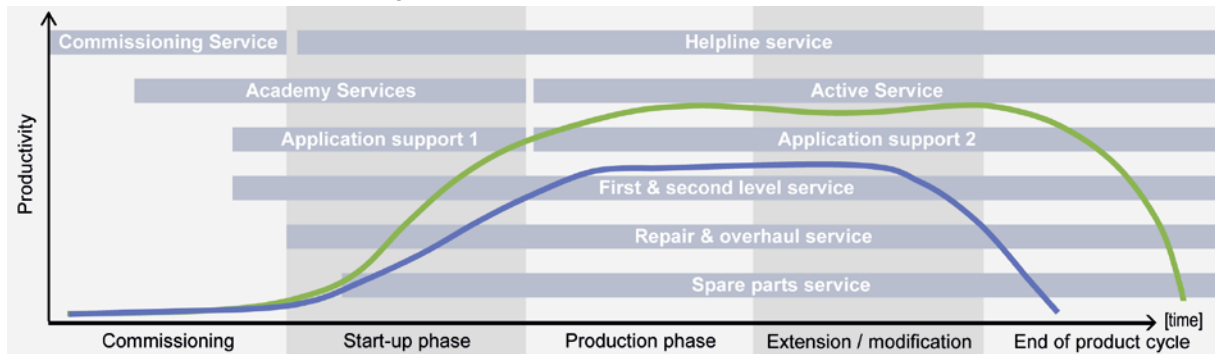


Services from A to Z



Increase productivity – Extend lifecycle

Comprehensive and professional services throughout the product life cycle – maximum availability with consistent quality and high productivity.



— Productivity with LifeCycle service products from pL LEHMANN
 — Productivity without service support

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- UK

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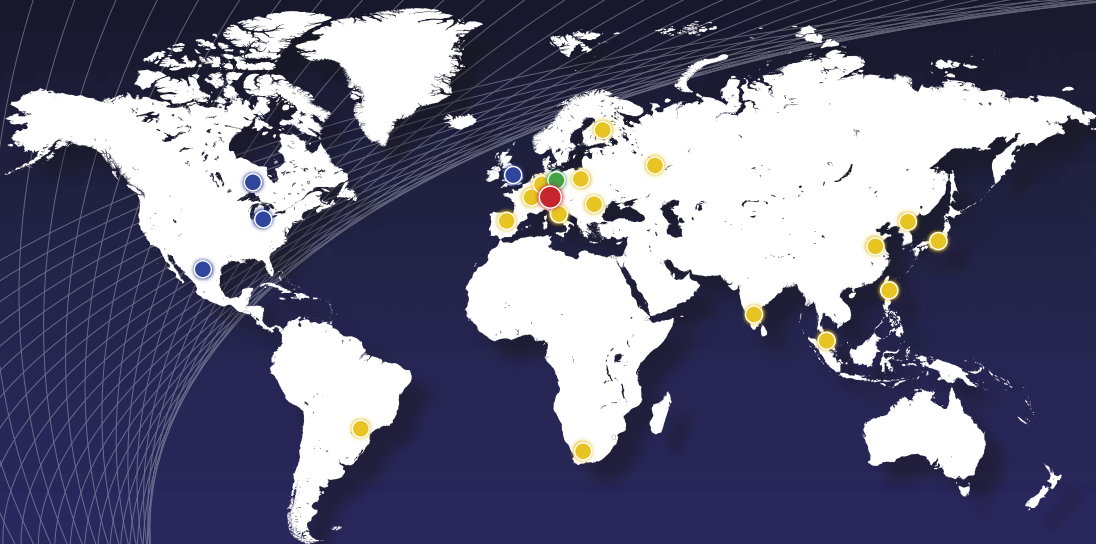
- Brazil
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- Mexico
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- China
- India
- Japan
- Malaysia
- Singapore
- South Korea
- Taiwan
- Thailand
- Vietnam

Africa

- South Africa



● Headquarters ● direct sales partner ● pL Solutions® partner ● value added reseller & partner

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