



# Selection Guide for CNC Rotary Tables ...



Bluetooth®

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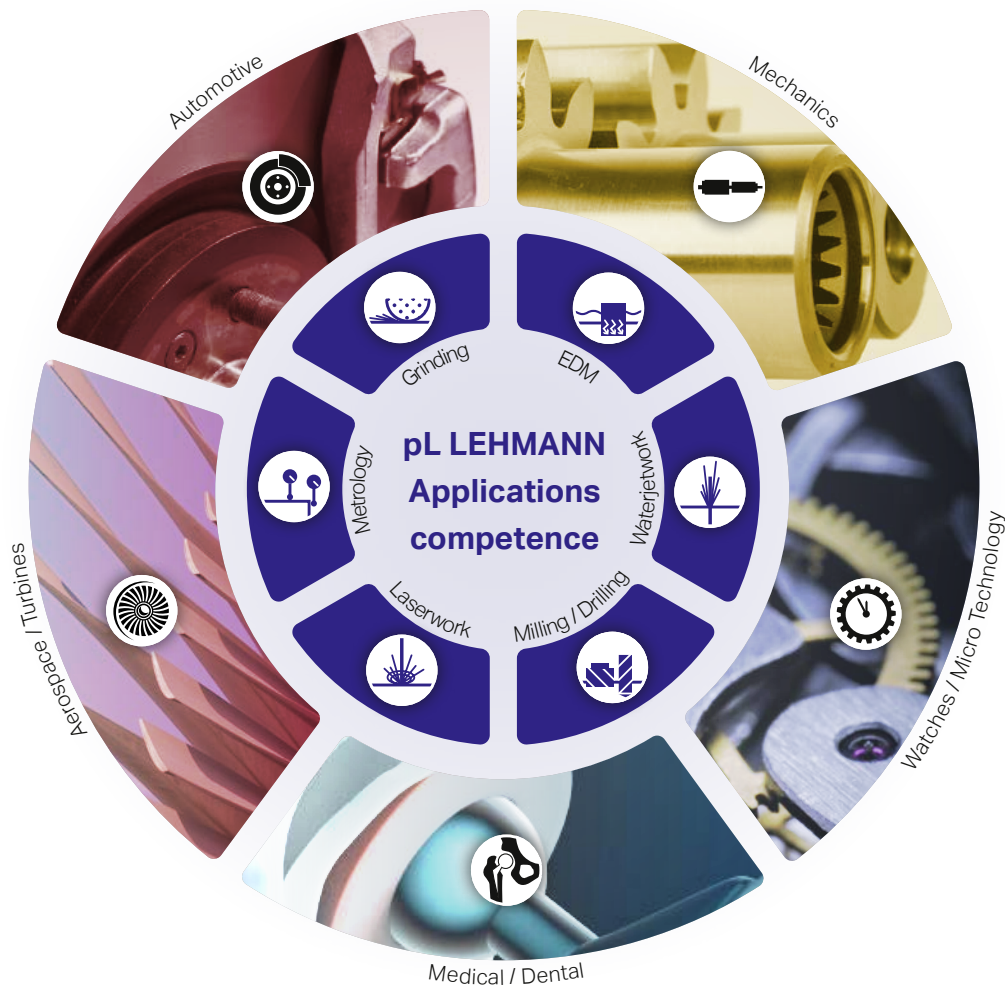
PRIMINER

10/2018 | EN



... for Alpha Center-, Delta Center-,  
Double Column-, Mini Center-,  
Power Center- and VF-series

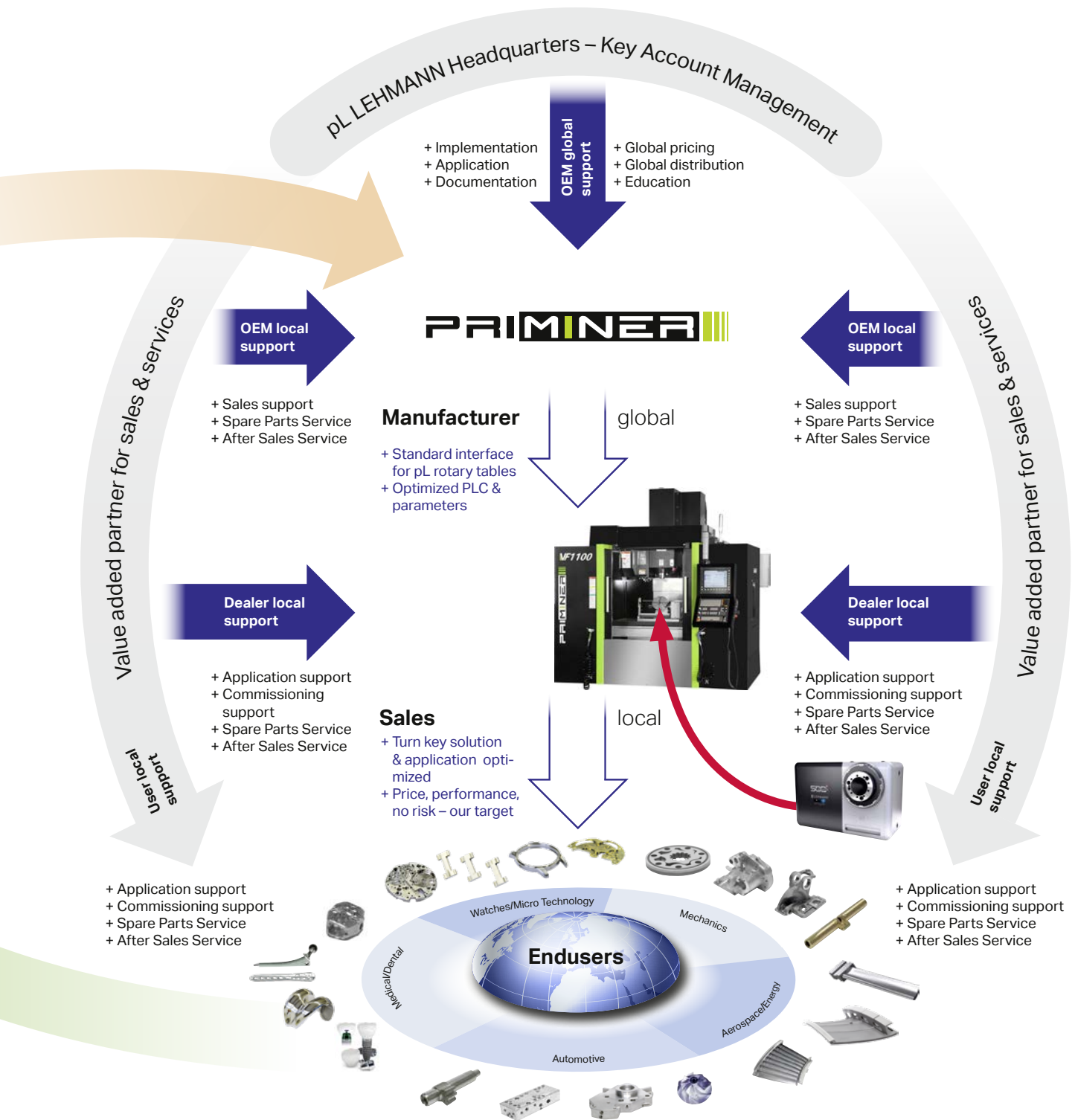
CNC rotary tables for economical manufacturing:  
pL LEHMANN has suitable and rational solutions for  
nearly every industry



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:  
 PRIMINER 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

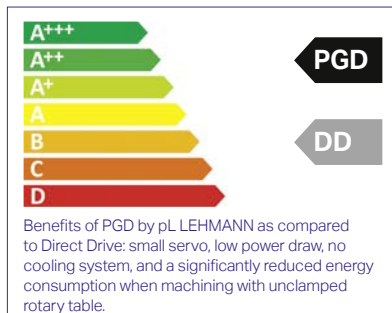
**Heavy duty**

## 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



Alpha Center V15L



Delta Center V10L



Double Column V1613HS



Mini Center



Power Center V11



Delta Center T6

## A word from PRIMINER:

### «Join us for your success!»

Consequent QS-management according to international norms, a highly motivated team of specialists, advantages of serial production and reliable top sub-suppliers with global leading positions are columns of our success. An open and result-oriented company culture through all levels is the basement for a permanent high level of our reliability and products.»

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

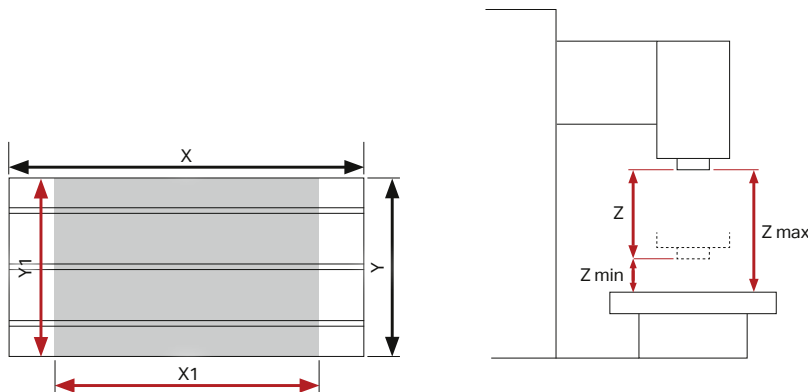


	Table diameter [mm]		Permissible overhang *	Traverse stroke [mm]					Table load ** max [kg]
	X	Y		X1	Y1	Z	Zmin	Zmax	
Alpha Center V9L	1'000	500	10%	900	550	600	80	680	650
Alpha Center V11L	1'200	550	10%	1'100	550	600	80	680	800
Alpha Center V15L	1'700	600	10%	1'500	760	670	80	750	1'200
Delta Center T6	750	400	40%	600	400	330	150	480	350
Delta Center V6L	750	400	10%	600	400	450	80	530	350
Delta Center V10L	1'100	500	10%	1'020	520	550	120	670	600
Double Column V1613HS	1'700	1'200	10%	1'600	1'300	600	200	800	3'000
Mini Center	650	300	10%	500	300	400	120	520	200
Power Center V11	1'200	550	10%	1'150	550	520	150	670	800
Power Center V18	1'900	900	10%	1'800	900	700	180	880	3'000
VF650	1'300	600	10%	1'100	650	600	150	750	600

\* 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

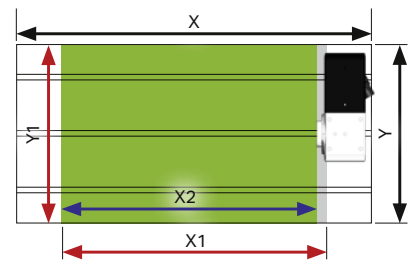
	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
Delta Center V6L	508	492	466	

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

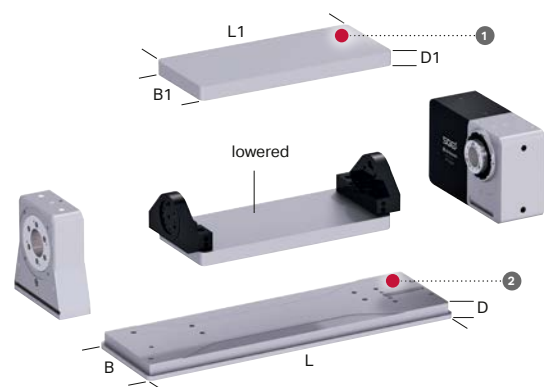


	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
Alpha Center V9L	783	767	741	712
Alpha Center V11L	983	967	941	912
Alpha Center V15L	1'433	1'417	1'391	1'362
Delta Center T6	508	492	466	437
Delta Center V6L	508	492	466	
Delta Center V10L	893	877	851	822
Double Column V1613HS				
Mini Center	408			
Power Center V11	1'008	992	966	937
Power Center V18				1'612
VF650	1'033	1'017	991	962



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 <sup>2</sup> ]	0.02	0.02	0.06	0.07	0.16	0.17	0.21		
	Mom. inert. (steel)	[kgm <sup>2</sup> ]	0.04	0.05	0.17	0.21	0.46	0.50	0.60		



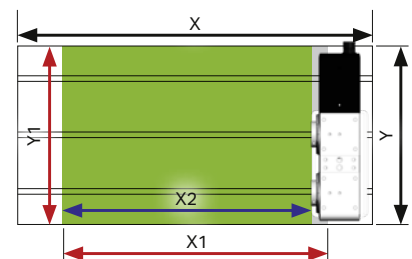
## Explanations for pp. 8 to 11

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
	<b>X2</b>			
Alpha Center V9L	724	714		
Alpha Center V11L	924	914	924	
Alpha Center V15L	1'374	1'364	1'374	
Delta Center T6	449	439		
Delta Center V6L				
Delta Center V10L	834	824		
Double Column V1613HS				1'414
Mini Center				
Power Center V11	949	939	949	
Power Center V18	1'624	1'614	1'624	1'614
VF650	974	964	974	

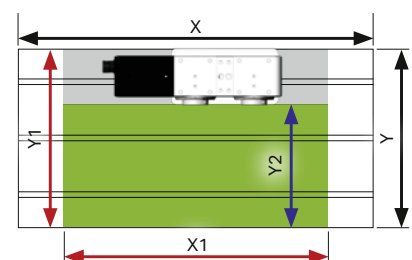
### Y-mounting



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

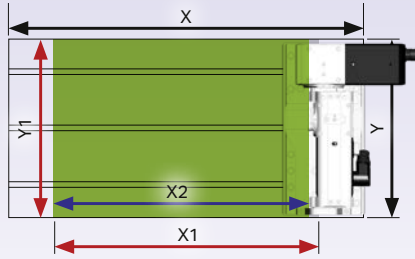
	M2-507	M2-510	M3-507	M3-510
	<b>Y2</b>			
Alpha Center V9L			299	289
Alpha Center V11L				314
Alpha Center V15L				
Delta Center T6			174	164
Delta Center V6L	174	164	174	164
Delta Center V10L			284	274
Double Column V1613HS				
Mini Center	74	64	74	
Power Center V11				314
Power Center V18				
VF650				389

### X-mounting



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

## Y-mounting



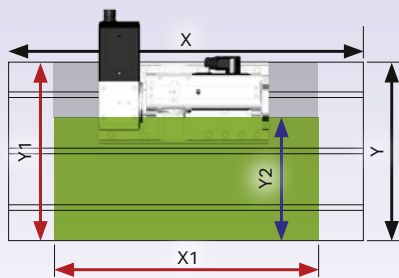
Rotary table installation using hole pattern in base plate



	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
Alpha Center V9L	820	776		780						
Alpha Center V11L	1'020	976		980	960		980			
Alpha Center V15L	1'470	1'426	1'406	1'430	1'410		1'430	1'410		1'430
Delta Center T6	545	501		505						
Delta Center V6L										
Delta Center V10L	930	886		890						
Double Column V1613HS			1'456			1'426		1'460	1'426	1'480
Mini Center										
Power Center V11	1'045	1'001		1'005	985		1'005			
Power Center V18	1'720	1'676	1'656	1'680	1'660	1'626	1'680	1'660	1'626	1'680
VF650	1'070	1'026	1'006	1'030	1'010		1'030	1'010		1'030

	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
Alpha Center V9L											
Alpha Center V11L											
Alpha Center V15L			1'430								
Delta Center T6											
Delta Center V6L											
Delta Center V10L											
Double Column V1613HS	1'460	1'426	1'480	1'460	1'426	1'480	1'460	1'426	1'480	1'460	1'426
Mini Center											
Power Center V11											
Power Center V18	1'660	1'626	1'680	1'660		1'680	1'660		1'680	1'660	
VF650			1'030								

## X-mounting



Rotary table installation using hole pattern in base plate



TIP1

TAP1

TOP1.2

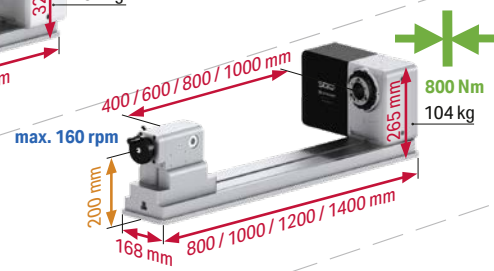
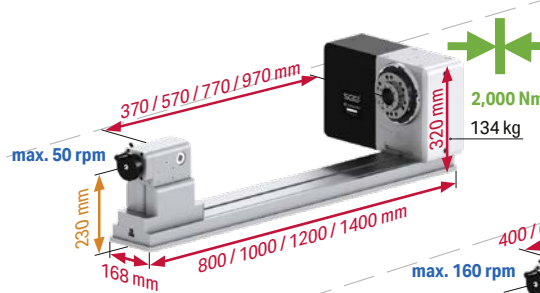
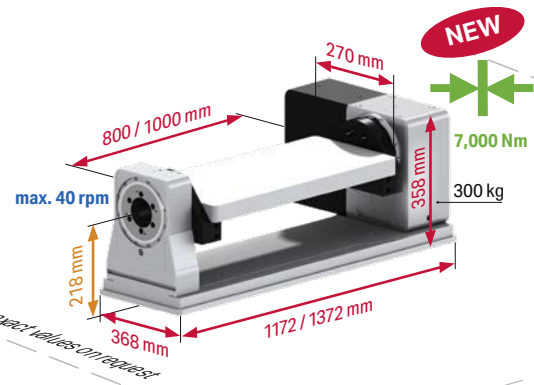
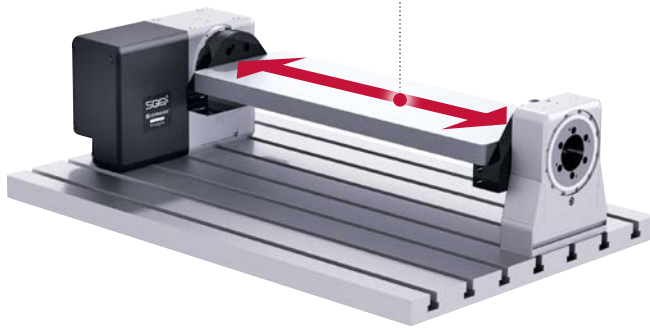
	TIP1c TF-507510 Y2	TIP2c TF-510520 Y2	TIP3c TF-520530 Y2	TAP1c T1-507510 Y2	TAP2c T1-510520 Y2	TAP3c T1-520530 Y2	TAP1 T1-507510 Y2	TAP2 T1-510520 Y2	TAP3 T1-520530 Y2	TOP1 T1-507510 Y2
Alpha Center V9L			331		335	301	355	335	301	355
Alpha Center V11L			356			326		360	326	380
Alpha Center V15L										
Delta Center T6					210		230	210		230
Delta Center V6L	270	226		230	210		230	210		230
Delta Center V10L			316		320	286	340	320	286	340
Double Column V1613HS										
Mini Center	170	126		130			130			130
Power Center V11			356			326		360	326	380
Power Center V18										
VF650						401			401	

	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
Alpha Center V9L	335	301	355	335		355	335		355	335	
Alpha Center V11L	360	326	380	360	326	380	360	326	380	360	326
Alpha Center V15L					456		490	456		490	456
Delta Center T6	210		230	210		230			230		
Delta Center V6L	210		230	210		230			230		
Delta Center V10L	320		340	320	286	340	320		340	320	
Double Column V1613HS											
Mini Center			130			130					
Power Center V11	360	326	380	360	326	380	360	326	380	360	326
Power Center V18					676			676			676
VF650	435			435	401	455	435	401	455	435	



Very good accessibility, even with short tools

More space for workpieces and fixtures



530

520


51x

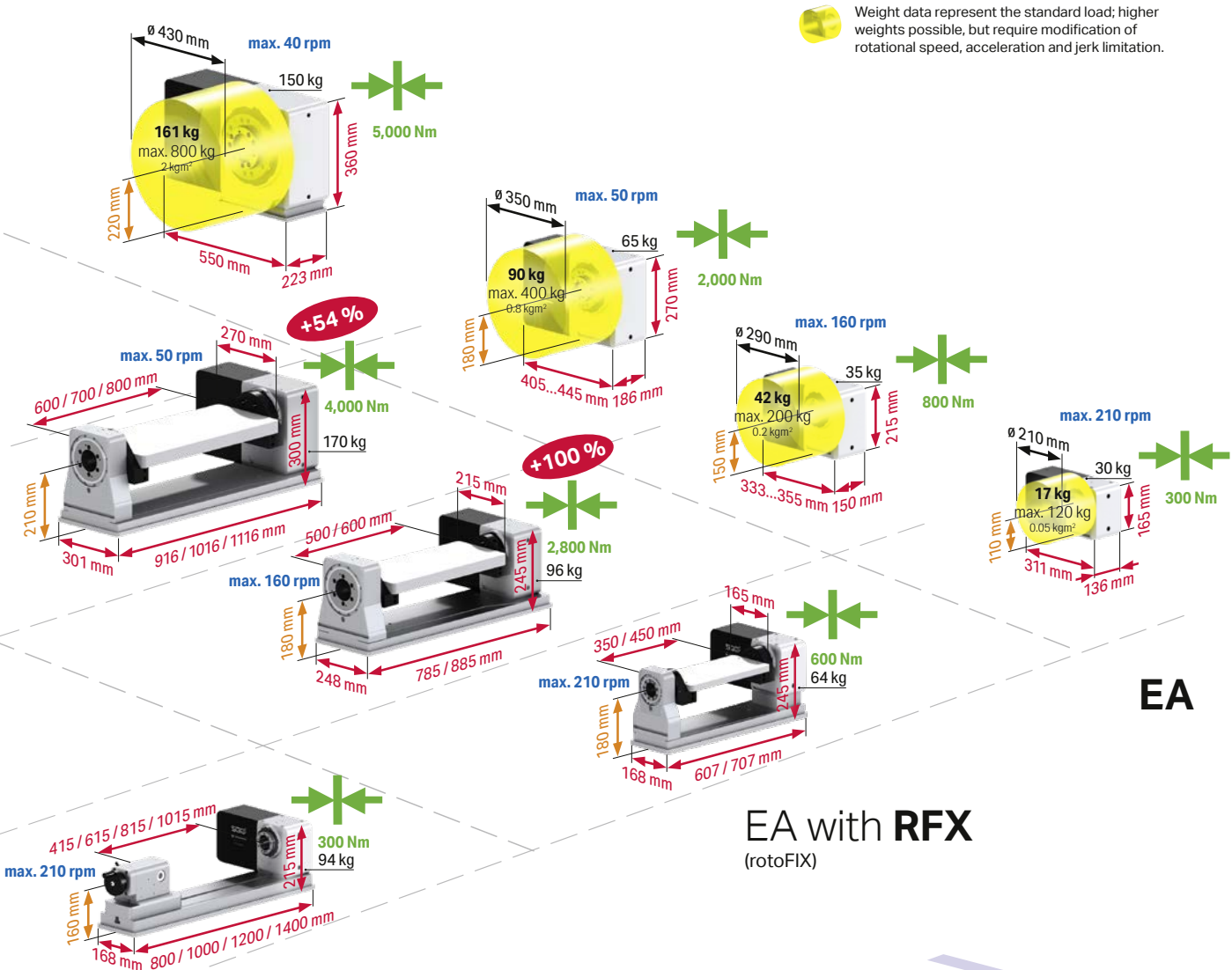
50x

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

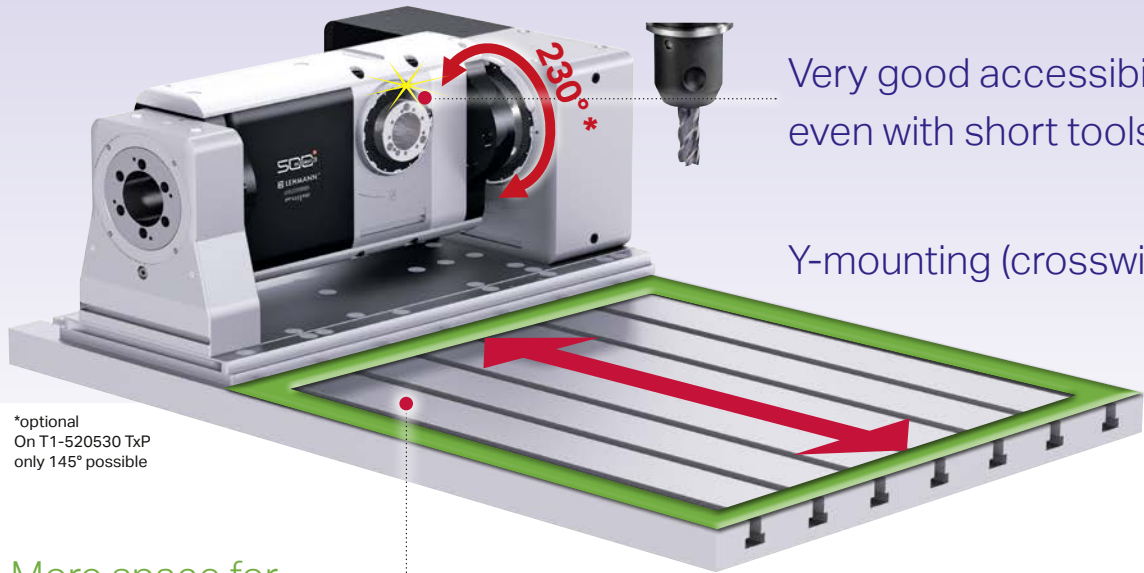
EA with **RFX**  
(rotoFIX)

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



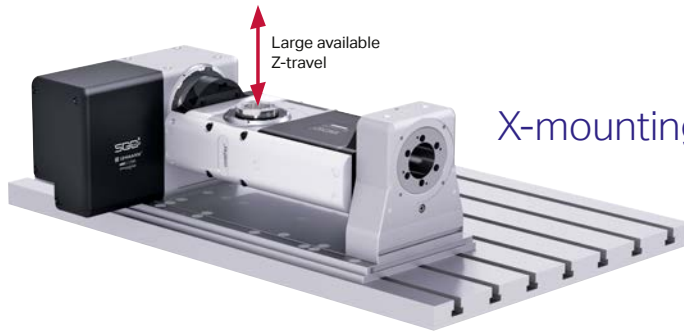


Very good accessibility, even with short tools

Y-mounting (crosswise)

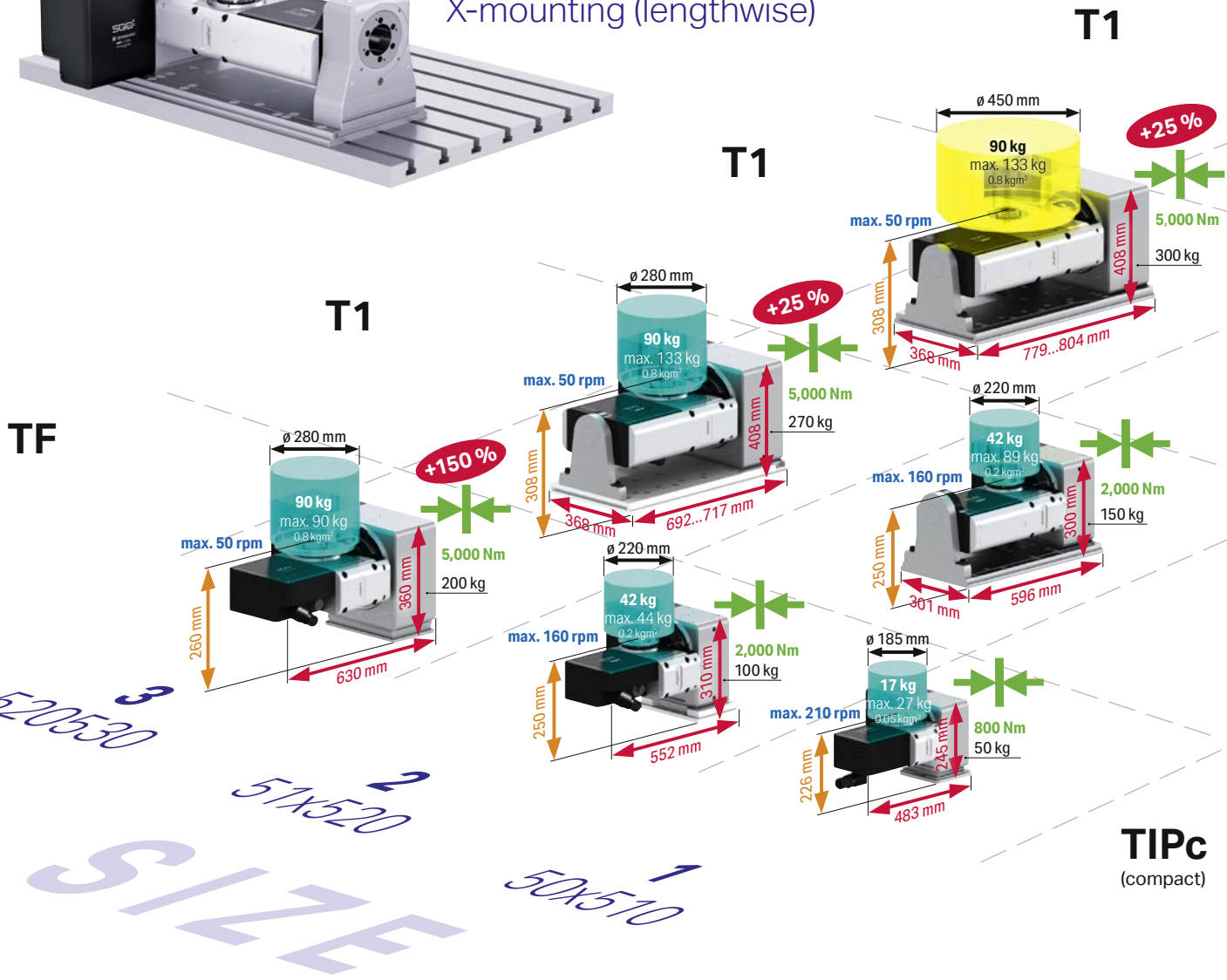
\*optional  
On T1-520530 TxP  
only 145° possible

More space for workpiece and fixtures



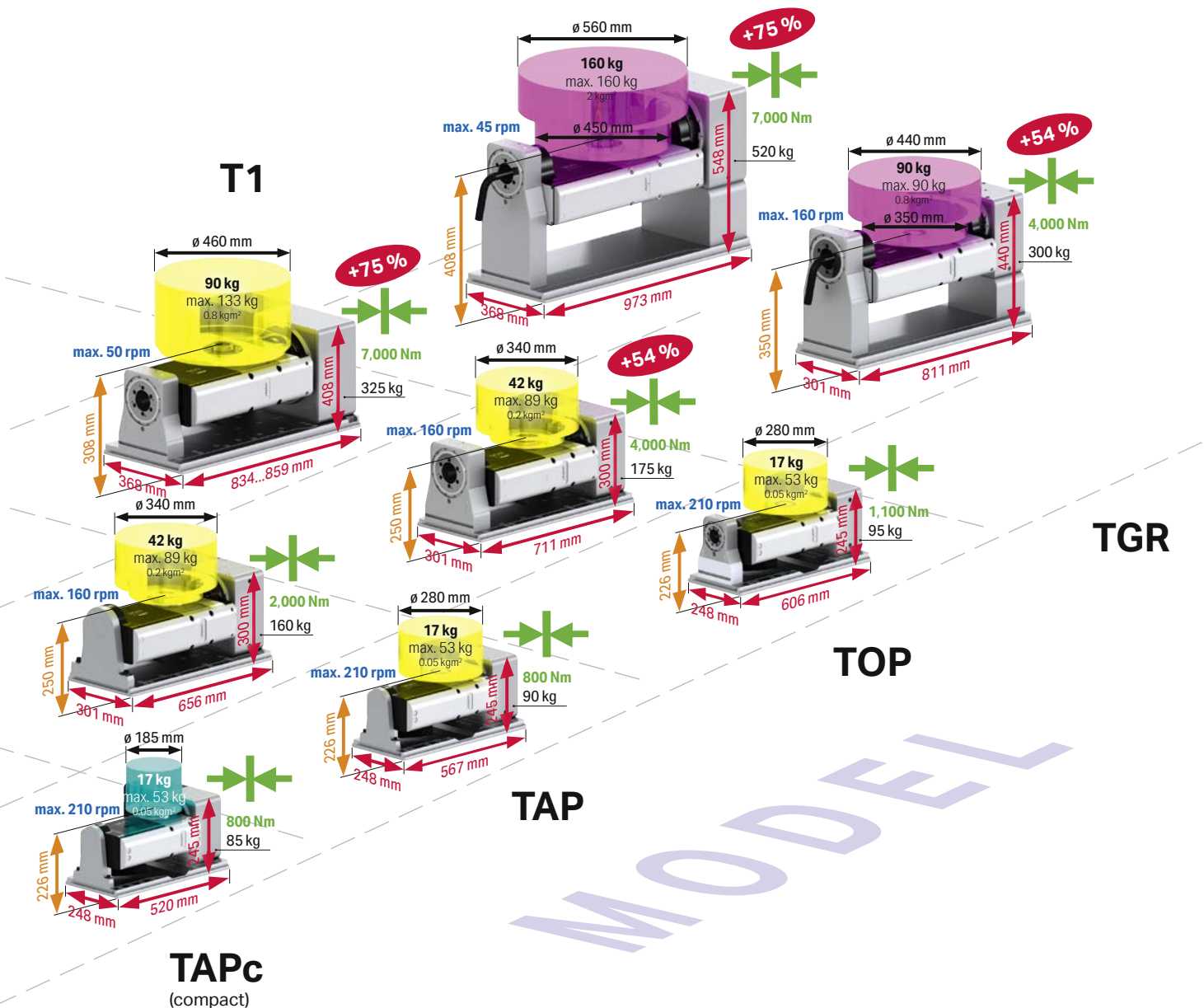
X-mounting (lengthwise)

**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.

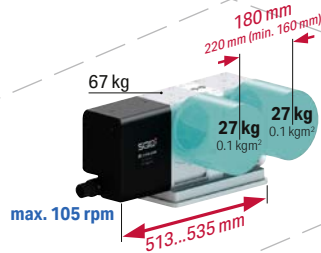
- 50x510 508510 (standard) or 508510 (high speed)
- 51x520 510520 (standard) or 511520 (high speed)
- TIPc Two-axis rotary table, no counter bearing, compact
- TAPc Two-axis rotary table, with supporting bearing, compact
- TAP Two-axis rotary table, with supporting bearing
- TOP Two-axis rotary table,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



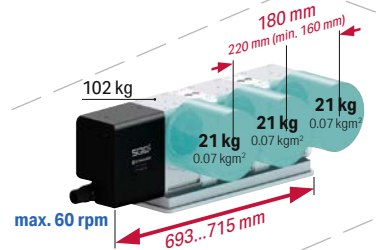
More space for workpiece and fixtures



M2



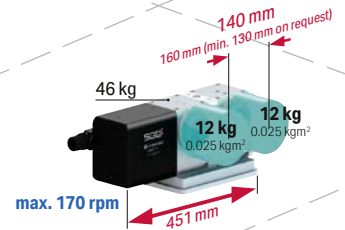
M3



51x

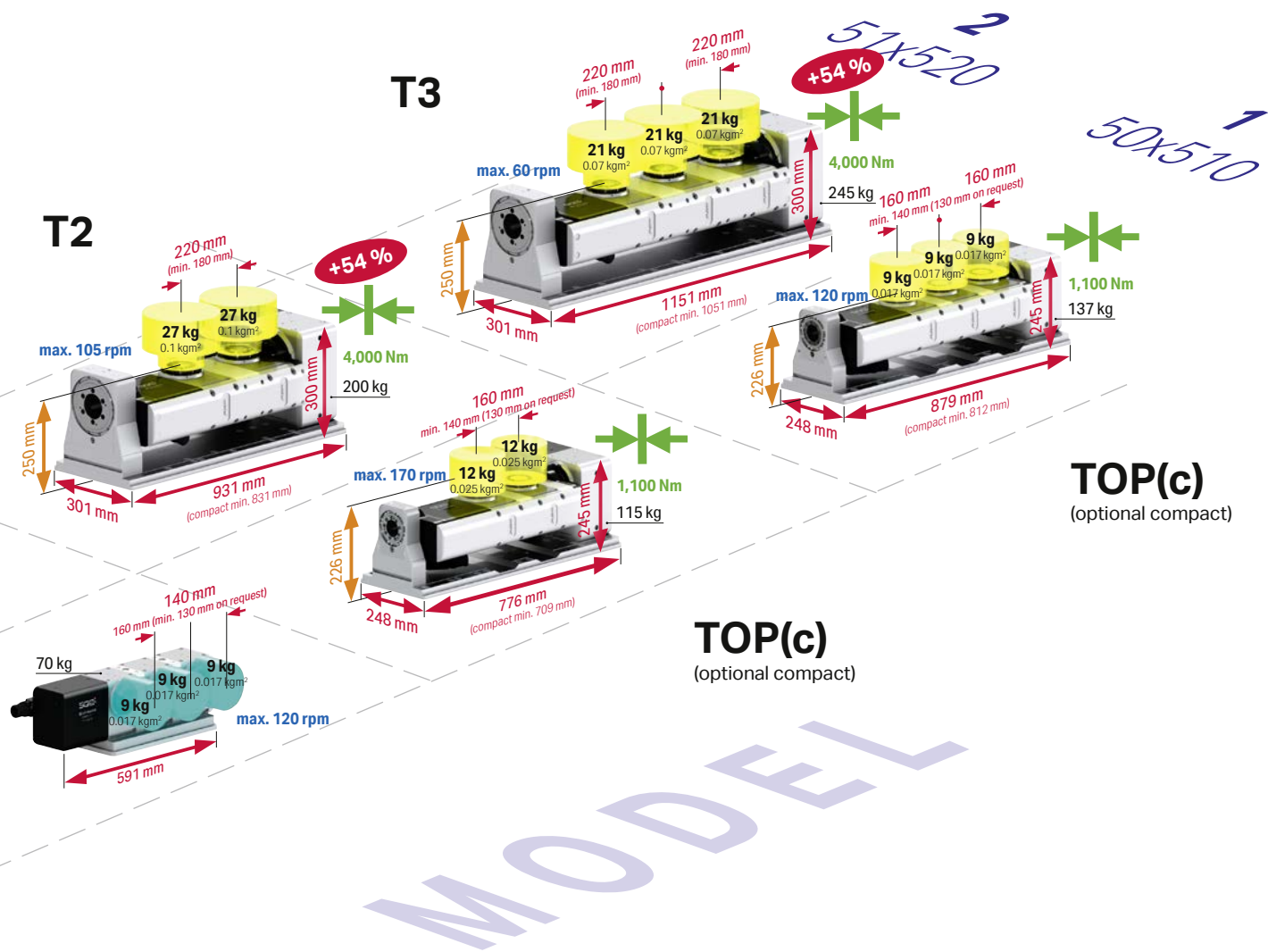
SIZE

50x



## 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  $\pm 1$  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)



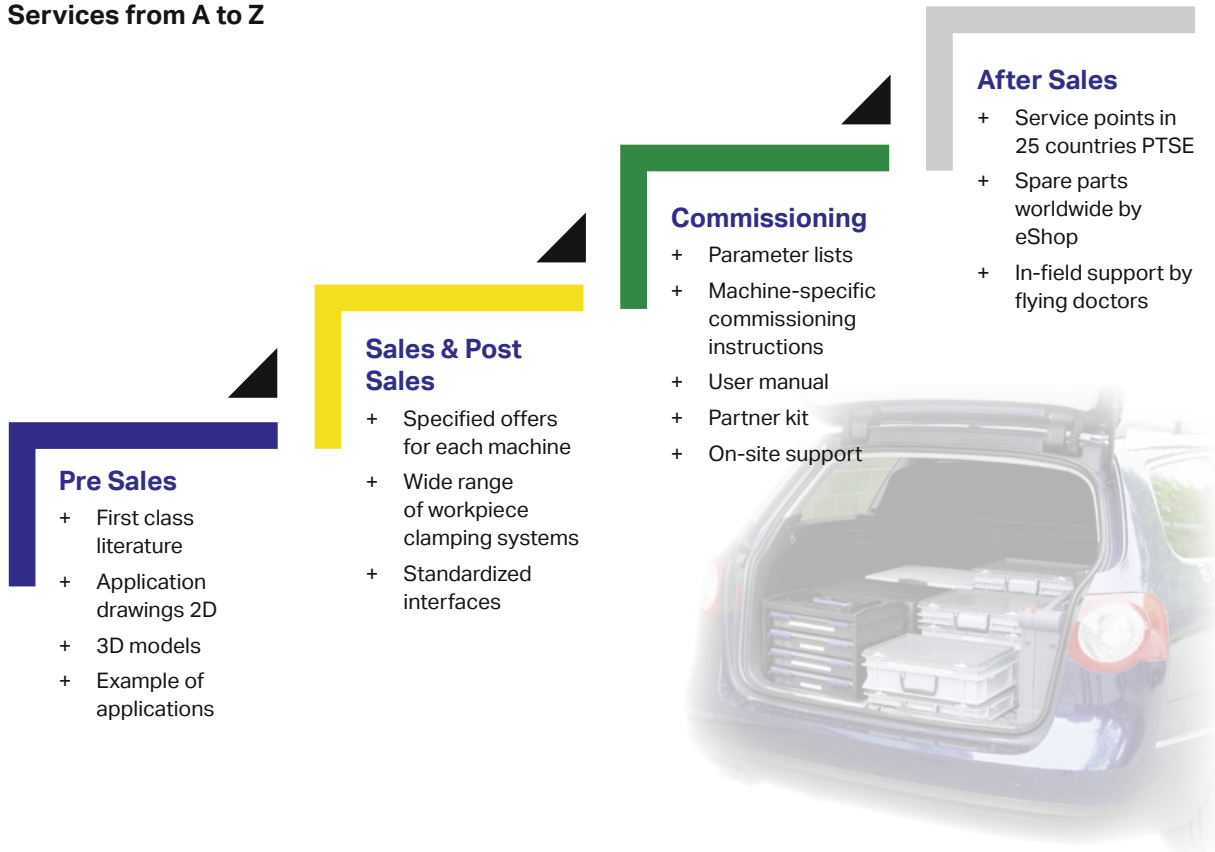
EA-507 with CAPTO retrofit kit



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

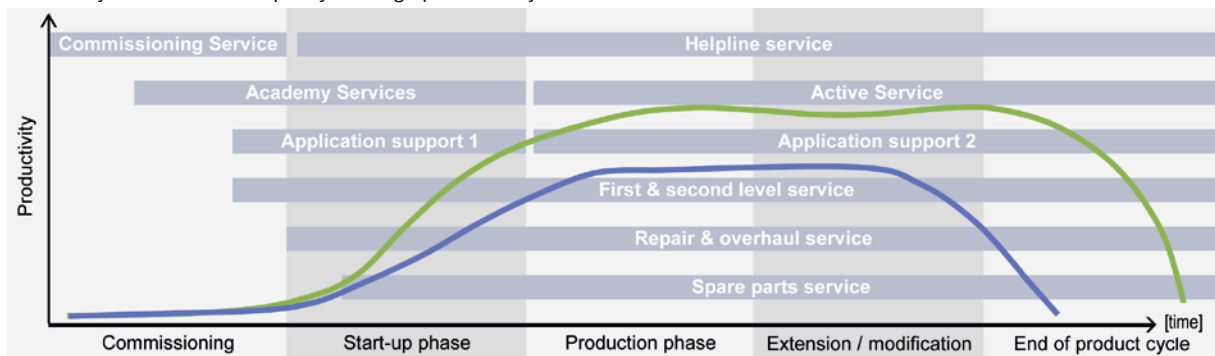


**Services from A to Z**



**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

For more information please see [www.lehmann-rotary-tables.com](http://www.lehmann-rotary-tables.com).



ROTARY TABLES · PRECISION TECHNOLOGY · SOFTWARE

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#### Representatives / Agencies

##### Europe

- Austria
- Benelux
- Czech Republic (vacant)
- Finland
- France
- Germany
- Hungary (vacant)
- Italy
- Norway
- Poland
- Portugal
- Russia
- Slovenia
- Spain
- Sweden
- Turkey
- UK

##### America

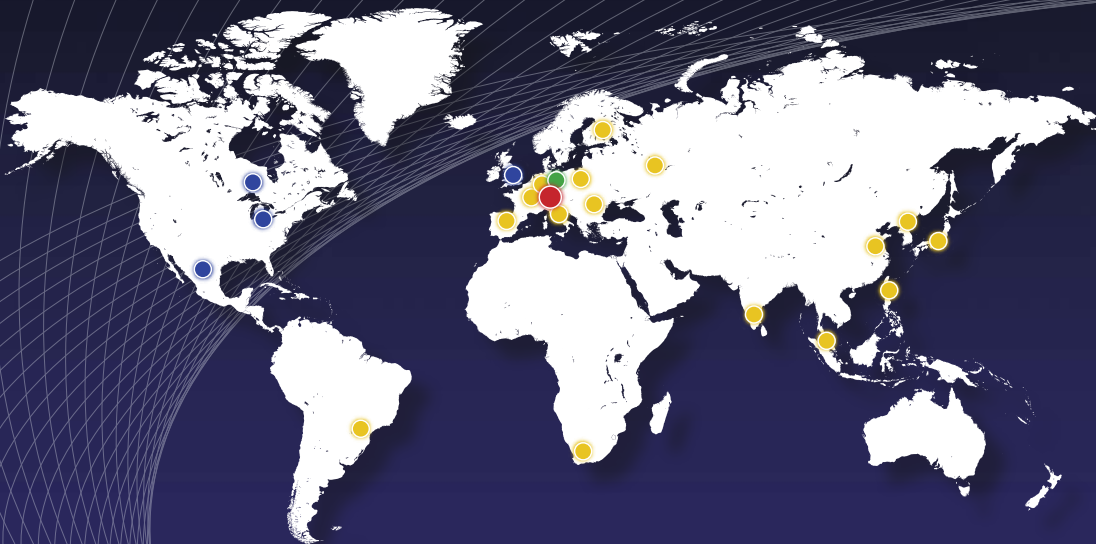
- Brazil
- Canada
- Mexico
- USA

##### Asia

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

##### Africa

- South Africa



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

More information (address, telephone number...) at [www.lehmann-rotary-tables.com](http://www.lehmann-rotary-tables.com)