



Selection Guide for CNC Rotary Tables ...



Bluetooth®

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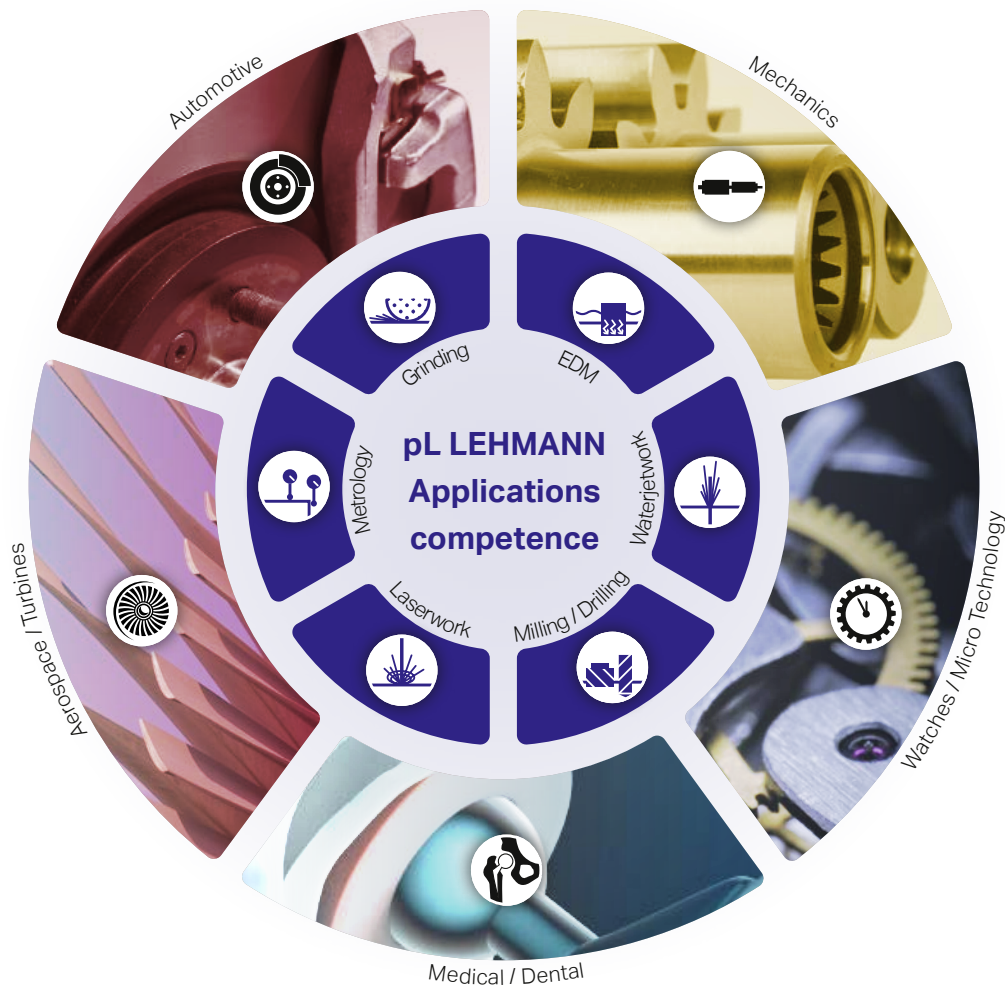
Tongtai

10/2018 | EN



... for DC-, QVM-, TMV-, VC-, VU-
and VP-series

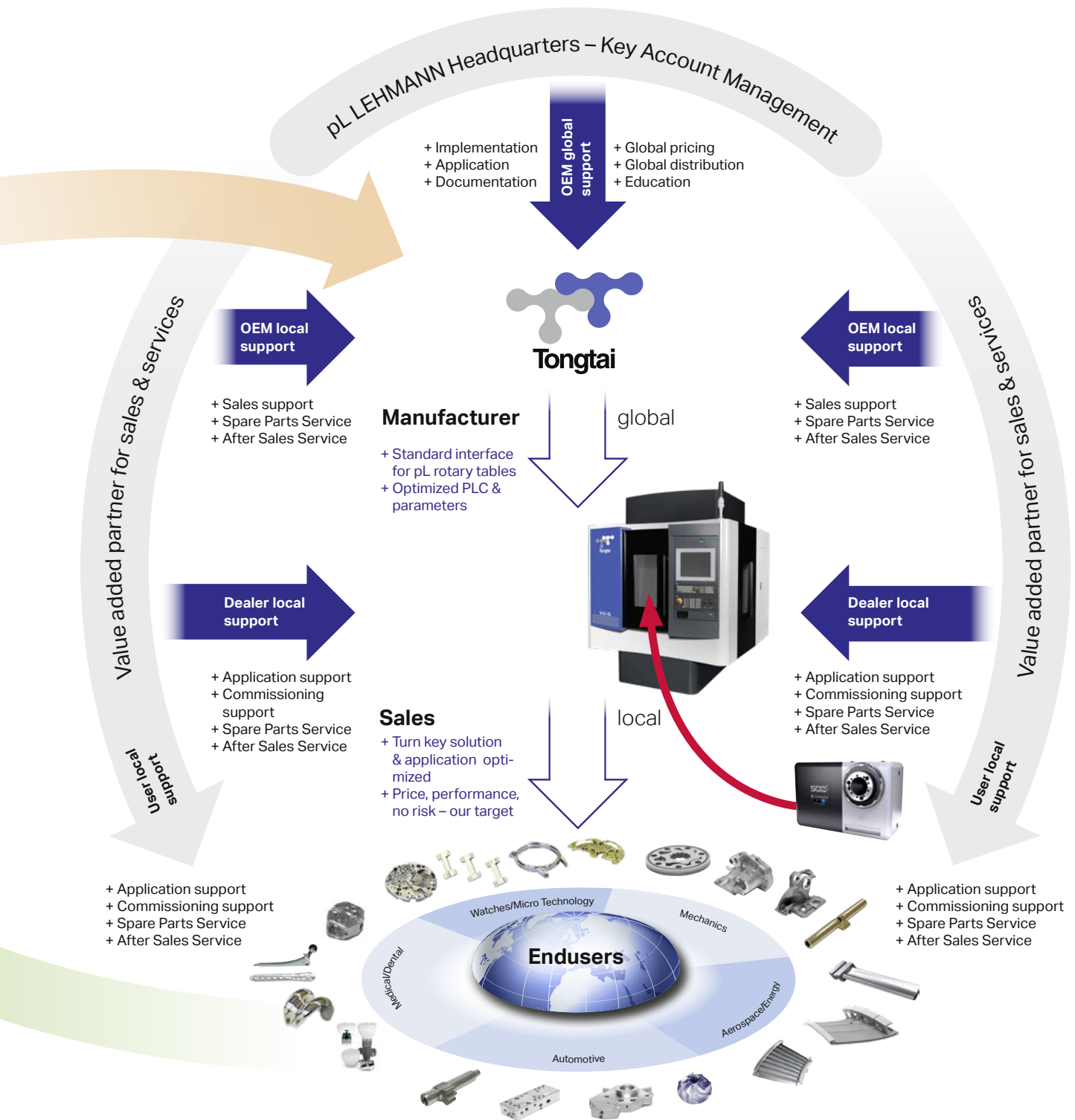
CNC rotary tables for economical manufacturing:
pL LEHMANN has suitable and rational solutions for
nearly every industry



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:
 Tongtai 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

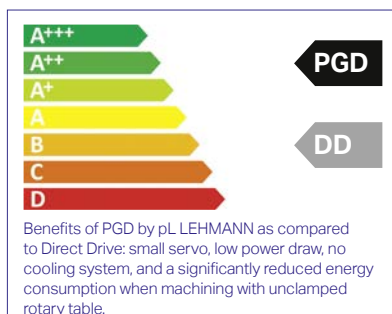
Heavy duty

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



Bluetooth®

Connectivity

Wireless monitoring,
for operation & service

No adjust

Load change without
parameter adjustment

Less cost

No cooling system,
no hydraulics



DC-45



VP-8



VC-610



VU-5

A word from Tongtai:

«Trust & Technology»

Tongtai emphasizes providing an excellent investment strategy to our clients with high cost-performance ratio. We give our customers supreme machine performance with reasonable prices. Our management team and the members of all five of its departments will ceaselessly search for innovative solutions for your processing needs. All your sales and after sales concerns will be satisfied! That means, when you purchase our machines, the service never stops!

Our company slogan «Trust & Technology» is always backed with passion for our product improvements and responsibility for our service to you.»



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

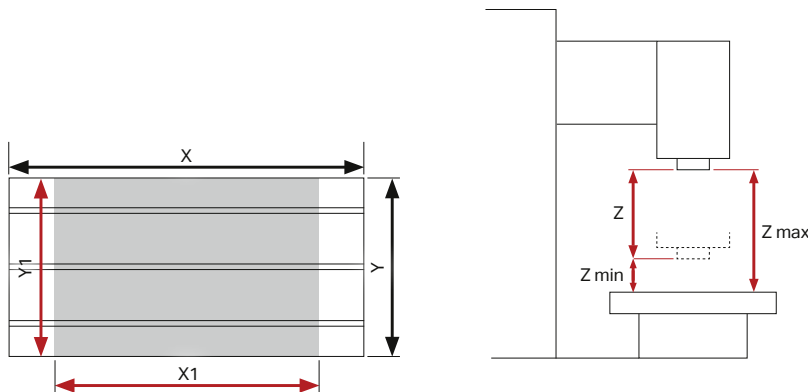


	Table diameter [mm]		Permissible overhang *	Traverse stroke [mm]					Table load ** max [kg]
	X	Y		X1	Y1	Z	Zmin	Zmax	
DC-45	750	450	10%	650	450	350	150	500	400
QVM-610All	700	410	10%	610	410	510	180	690	400
TMV-510All	600	400	40%	510	400	350	200	550	250
TMV-510CII	600	400	40%	510	400	300	200	500	250
TMV-710A	850	410	40%	710	400	350	200	550	250
TMV-710C	850	410	40%	710	400	300	200	500	250
VC-608	950	600	10%	850	610	530	100	630	500
VC-610	1'100	650	10%	1'050	610	530	100	630	500
VC-711	1'200	710	10%	1'100	710	710	100	810	500
VP-6	700	410	10%	610	410	350	178	528	350
VP-8	900	510	10%	820	510	510	178	688	500
VP-10	1'070	510	10%	1'020	510	535	178	713	500
VU-5	600	400	10%	510	400	350	178	528	250

* 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

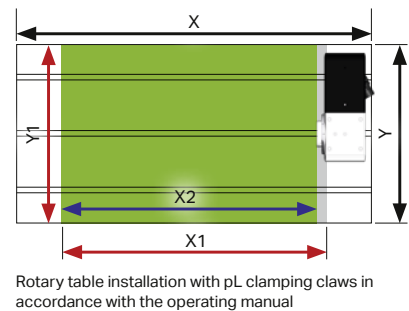
	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
DC-45	533	517	491	

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.

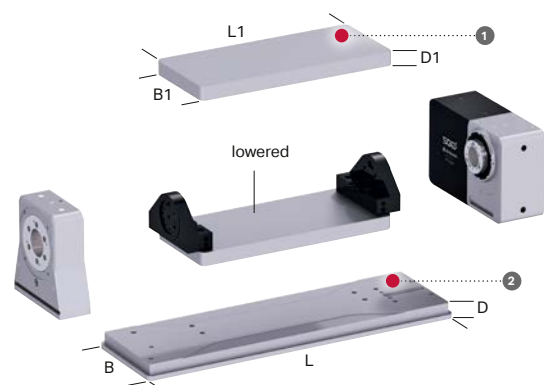
For further details about the rotary tables, see p. 12 and higher or refer to the main catalog



	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
DC-45	533	517	491	
QVM-610All	488	472	446	
TMV-510All	388	372	346	
TMV-510CII	388	372	346	
TMV-710A	613	597	571	
TMV-710C	613	597	571	
VC-608	733	717	691	662
VC-610		892	866	837
VC-711			941	912
VP-6	488	472	446	
VP-8	693	677	651	622
VP-10	878	862	836	807
VU-5	388	372	346	



Clamping yokes for EA-type rotary tables



		EA-507		EA-510		EA-520			EA-530	
1 Clamping yokes	Sph	[mm]	190	450	180	600	210	800	218	1000
	Length L1	[mm]	350		500	600	700		800	
	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	

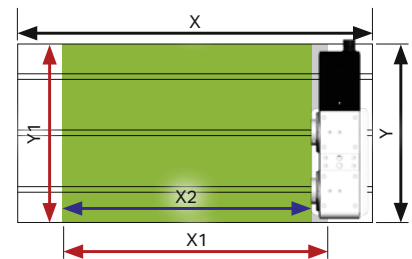
Explanations for pp. 8 to 11

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			
DC-45	474			
QVM-610AII	429			
TMV-510AII	329	319		
TMV-510CII	329	319		
TMV-710A	554	544		
TMV-710C	554	544		
VC-608	674	664	674	
VC-610	849	839	849	839
VC-711	924	914	924	914
VP-6	429			
VP-8	634	624		
VP-10	819	809		
VU-5				

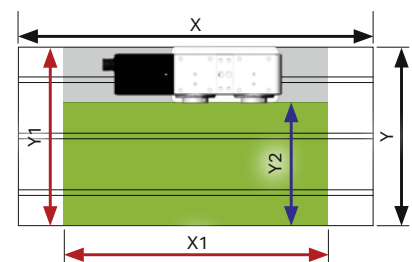
Y-mounting



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

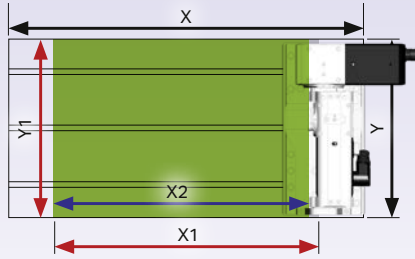
	M2-507	M2-510	M3-507	M3-510
	Y2			
DC-45		214	224	214
QVM-610AII		174	184	174
TMV-510AII			174	
TMV-510CII			174	
TMV-710A			179	169
TMV-710C			179	169
VC-608				369
VC-610				
VC-711				
VP-6		174	184	174
VP-8			284	274
VP-10			284	274
VU-5	174	164	174	

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

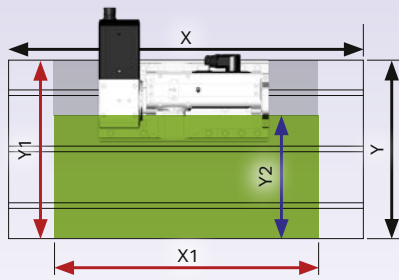


TOP1.2

	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
DC-45	570									
QVM-610All										
TMV-510All	425	381		385						
TMV-510CII	425	381		385						
TMV-710A	650	606		610			610			
TMV-710C	650	606		610			610			
VC-608	770	726	706	730	710		730	710		730
VC-610	945	901	881	905	885		905	885		905
VC-711	1'020	976	956	980	960		980	960		980
VP-6										
VP-8	730	686		690						
VP-10	915	871		875						
VU-5										

	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
DC-45											
QVM-610All											
TMV-510All											
TMV-510CII											
TMV-710A											
TMV-710C											
VC-608			730								
VC-610	885		905			905					
VC-711	960		980			980			980		
VP-6											
VP-8											
VP-10											
VU-5											

X-mounting



Rotary table installation using hole pattern in base plate



TIP1



TAP1



TOP1.2

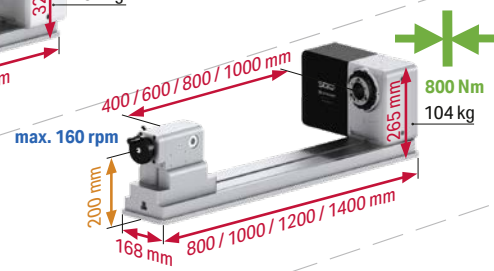
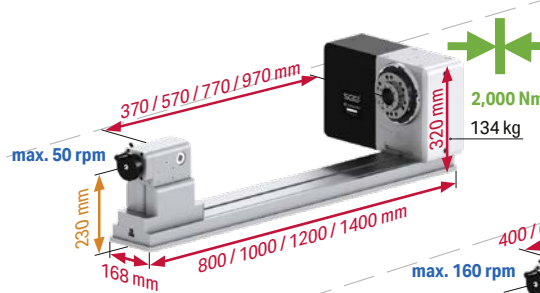
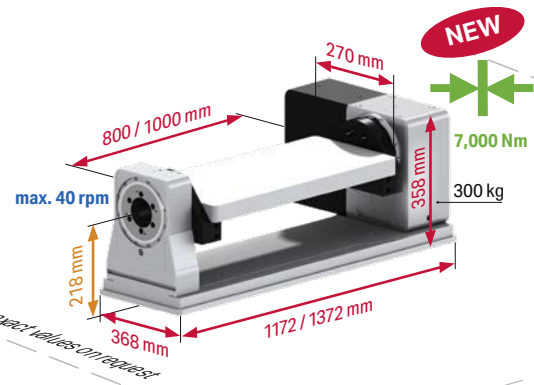
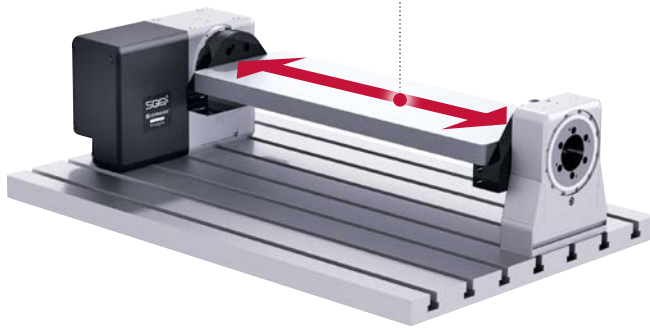
	TIP1c TF-507510 Y2	TIP2c TF-510520 Y2	TIP3c TF-520530 Y2	TAP1c T1-507510 Y2	TAP2c T1-510520 Y2	TAP3c T1-520530 Y2	TAP1 T1-507510 Y2	TAP2 T1-510520 Y2	TAP3 T1-520530 Y2	TOP1 T1-507510 Y2
DC-45		276	256	280	260		280	260		280
QVM-610All	280	236	216	240	220		240	220		240
TMV-510All							230			230
TMV-510CII							230			230
TMV-710A										235
TMV-710C										235
VC-608										
VC-610										
VC-711										
VP-6	280	236		240	220		240	220		240
VP-8			316		320		340	320		340
VP-10			316		320		340	320		340
VU-5	270	226		230			230			230

	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
DC-45	260		280	260		280			280		
QVM-610All	220		240			240			240		
TMV-510All			230								
TMV-510CII			230								
TMV-710A			235			235			235		
TMV-710C			235			235			235		
VC-608	415			415		435	415		435	415	
VC-610				440			440		460	440	
VC-711				520			520			520	
VP-6	220		240			240			240		
VP-8	320		340	320		340	320		340	320	
VP-10	320		340	320		340	320		340	320	
VU-5			230								



Very good accessibility, even with short tools

More space for workpieces and fixtures



530

520


51x

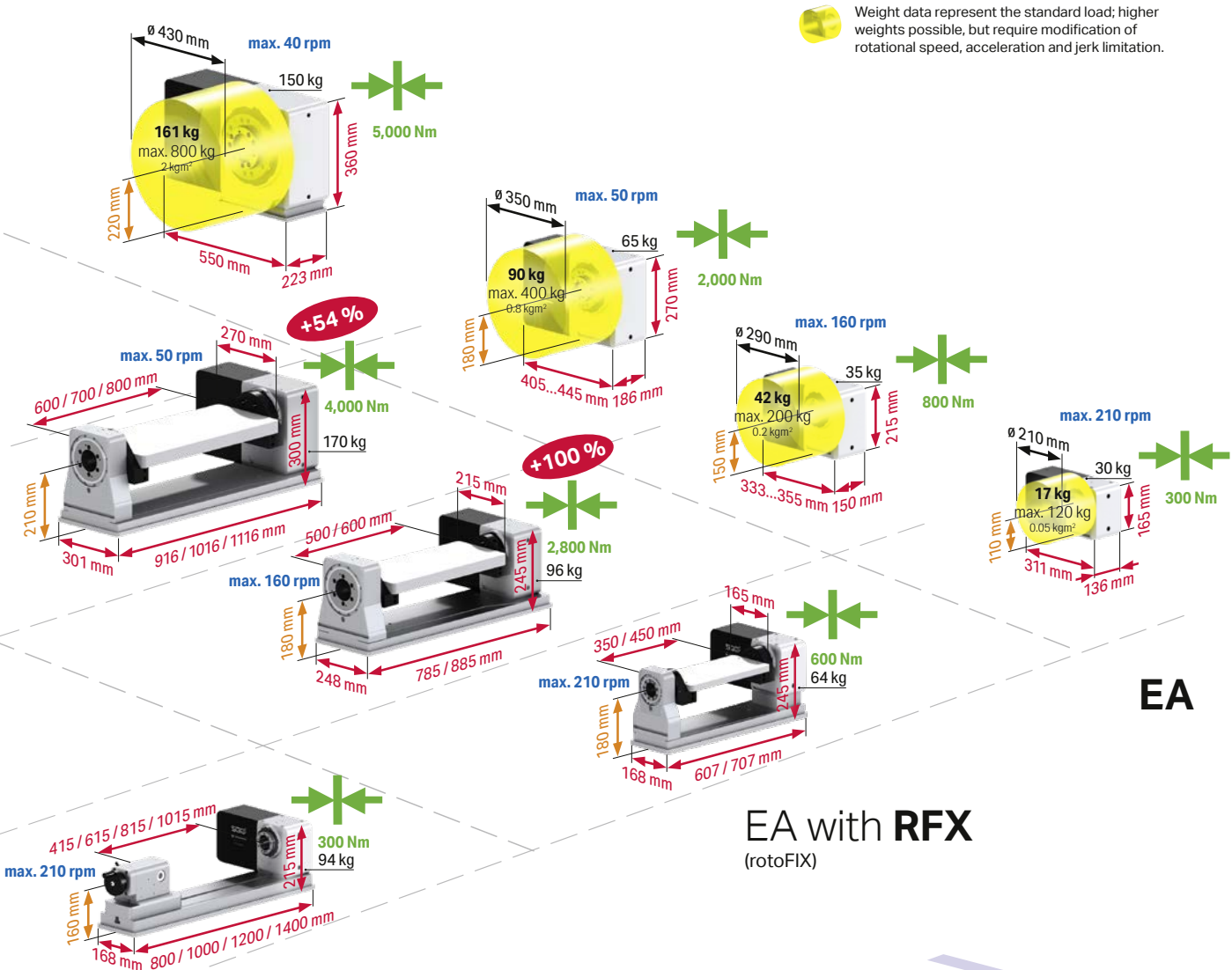
50x

SIZE

News in brief

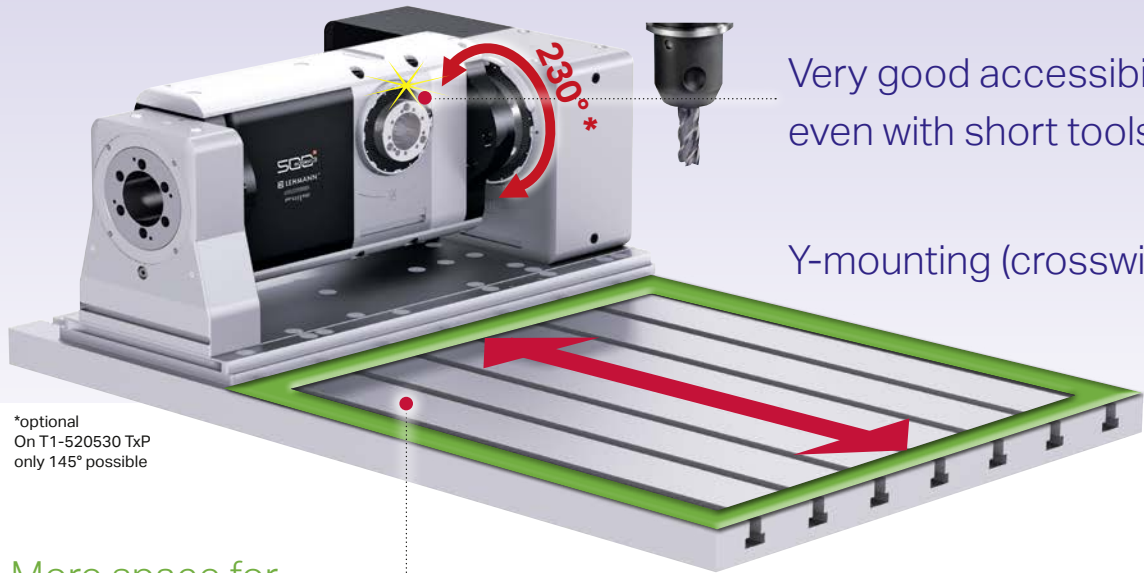
1. High speed up to 210 rpm
2. Feed torque up to 850 Nm (tentative)
3. Steel base plates with hole pattern (suitable for slot spacing of 100 and 125 mm)
4. Cycle time 90° as fast as 0.21 sec.

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



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

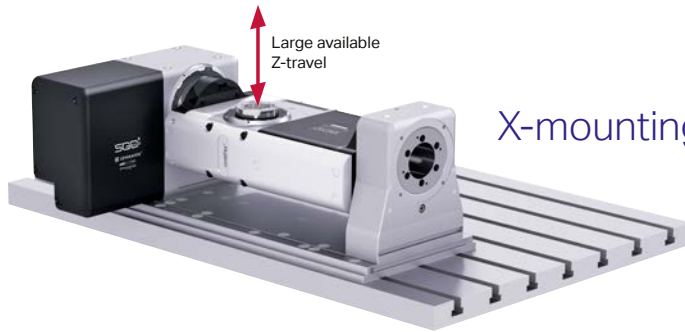


Very good accessibility, even with short tools

Y-mounting (crosswise)

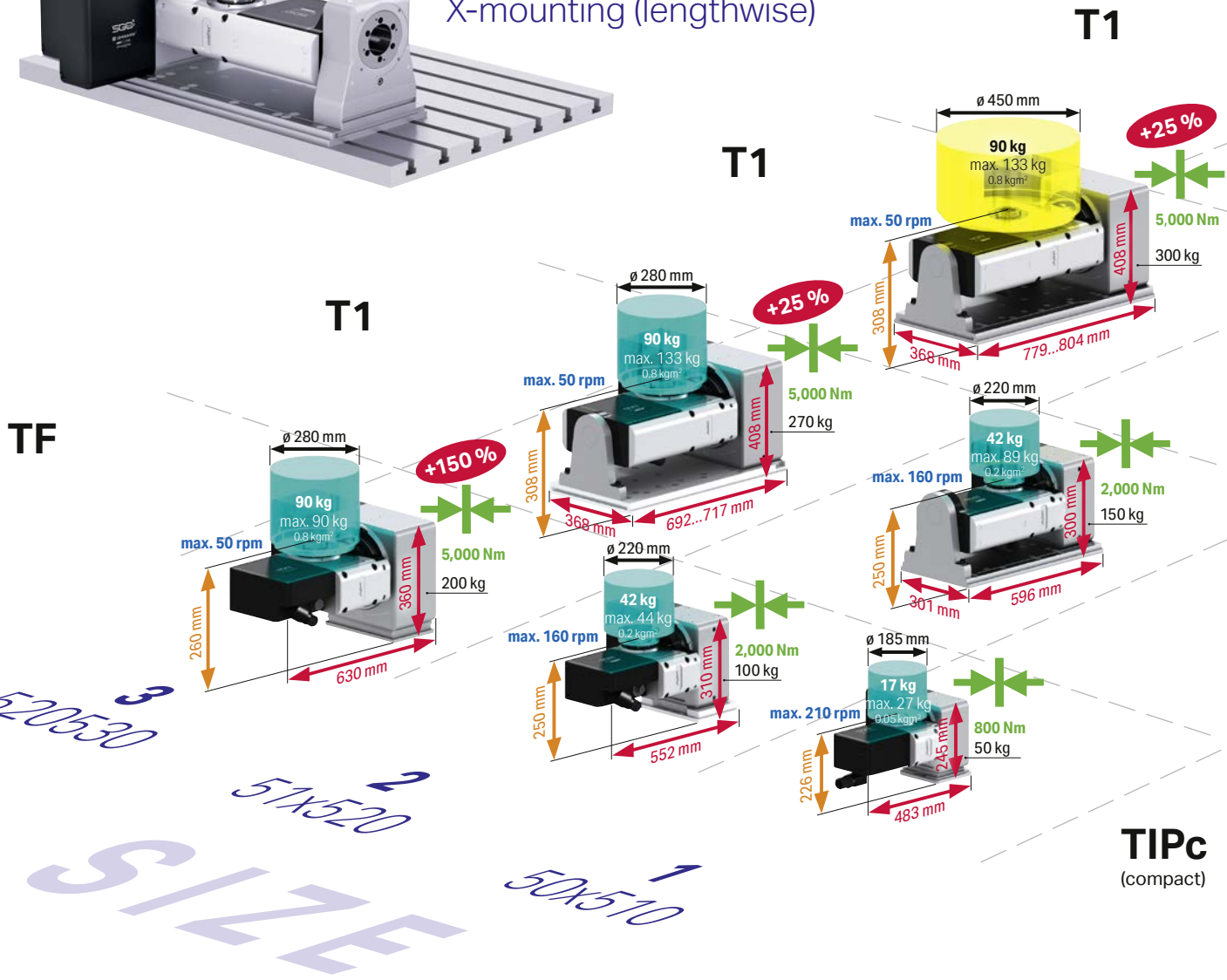
*optional
On T1-520530 TxP
only 145° possible

More space for workpiece and fixtures



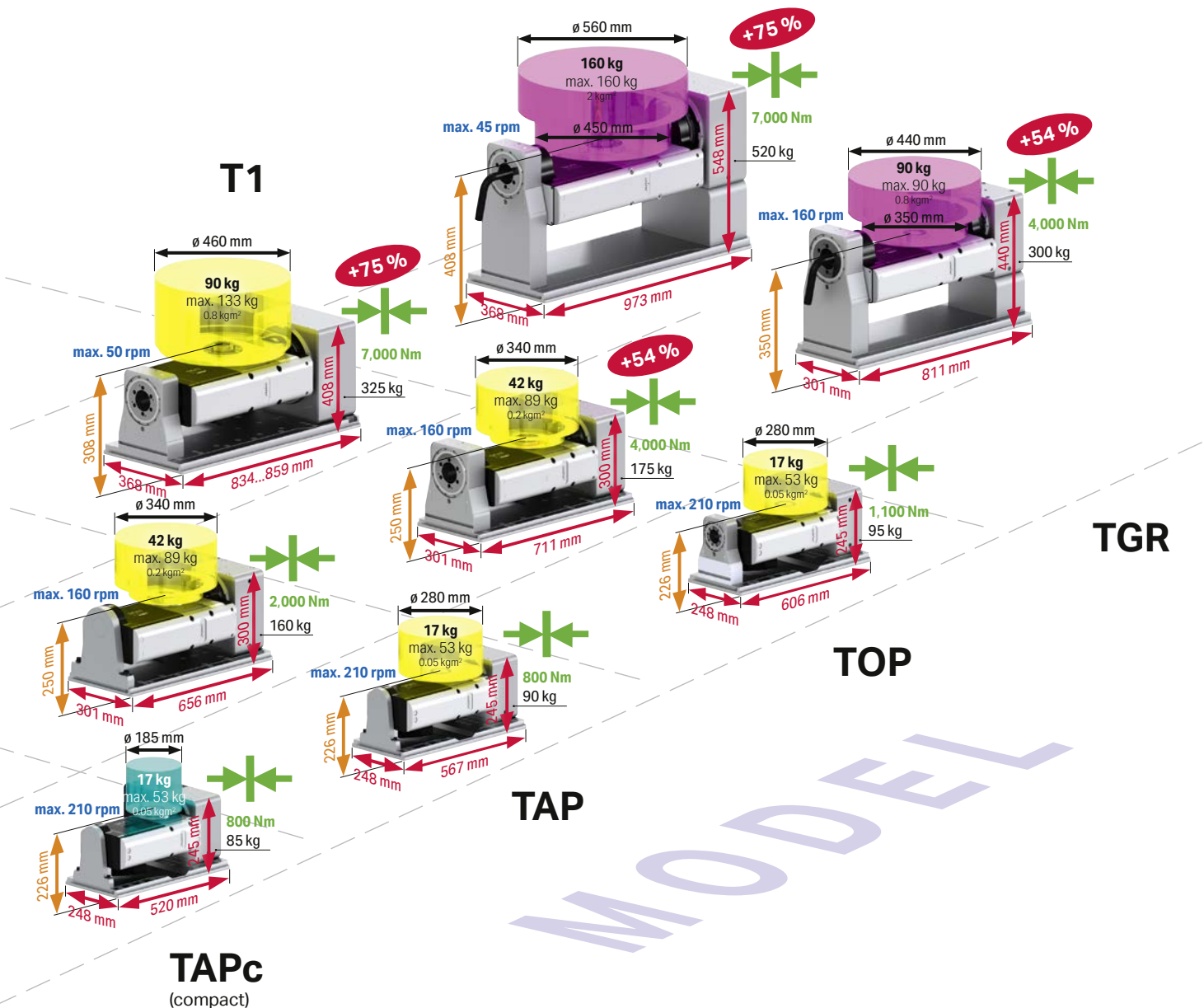
X-mounting (lengthwise)

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

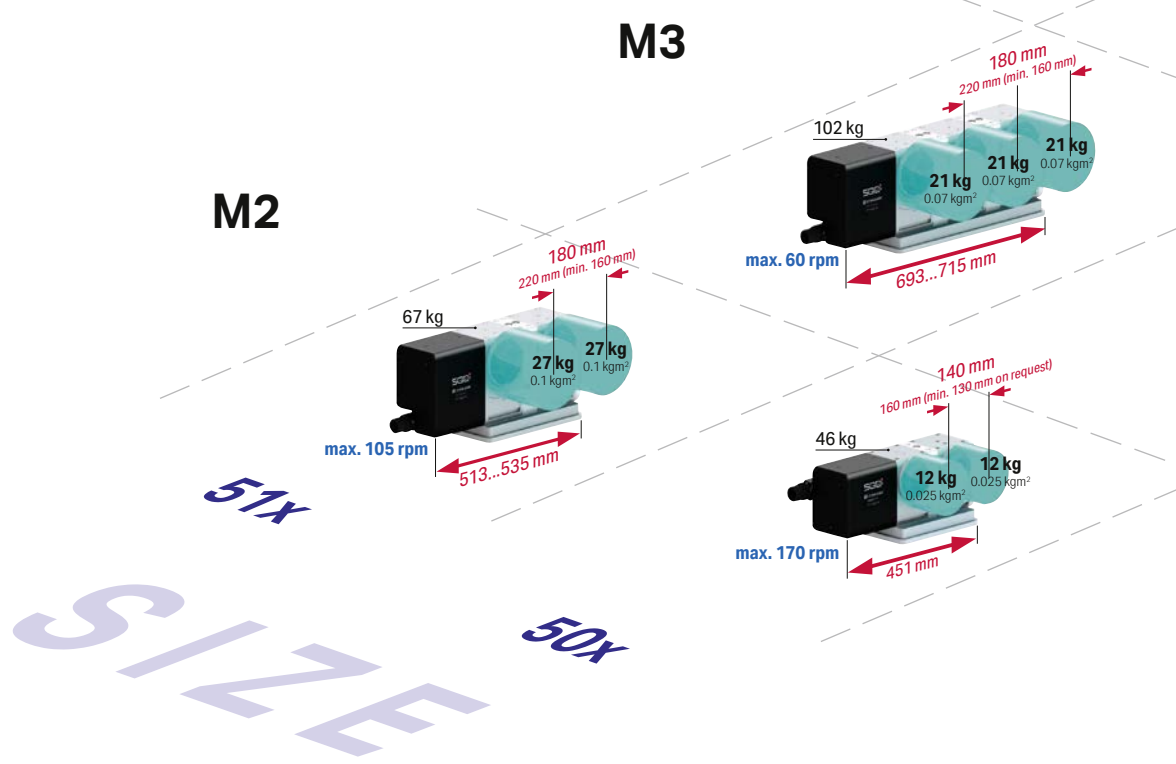


Weight data represent the standard load; higher weights possible, but require modification of rotational speed, acceleration and jerk limitation.

- 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

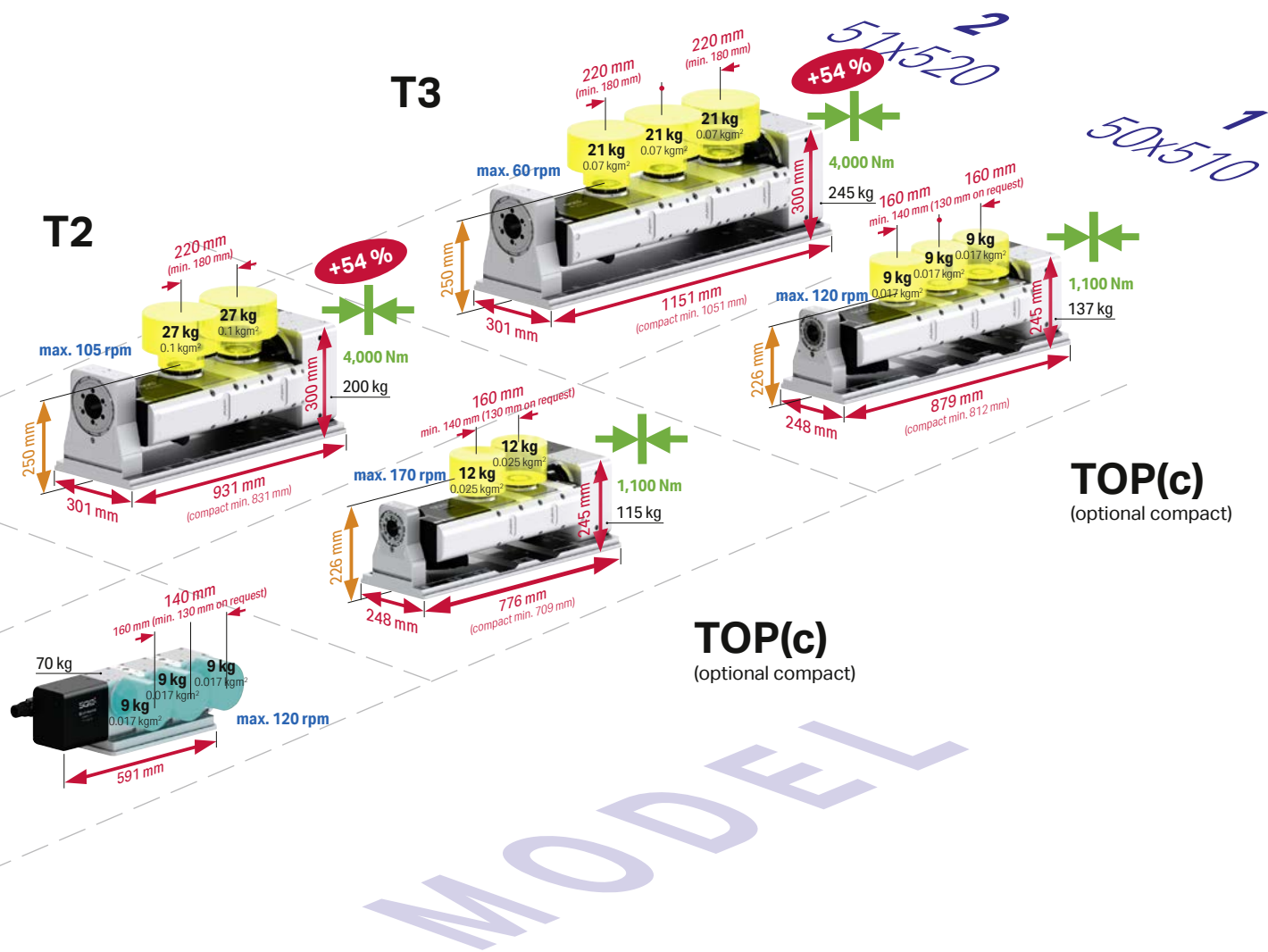


More space for workpiece and fixtures



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)

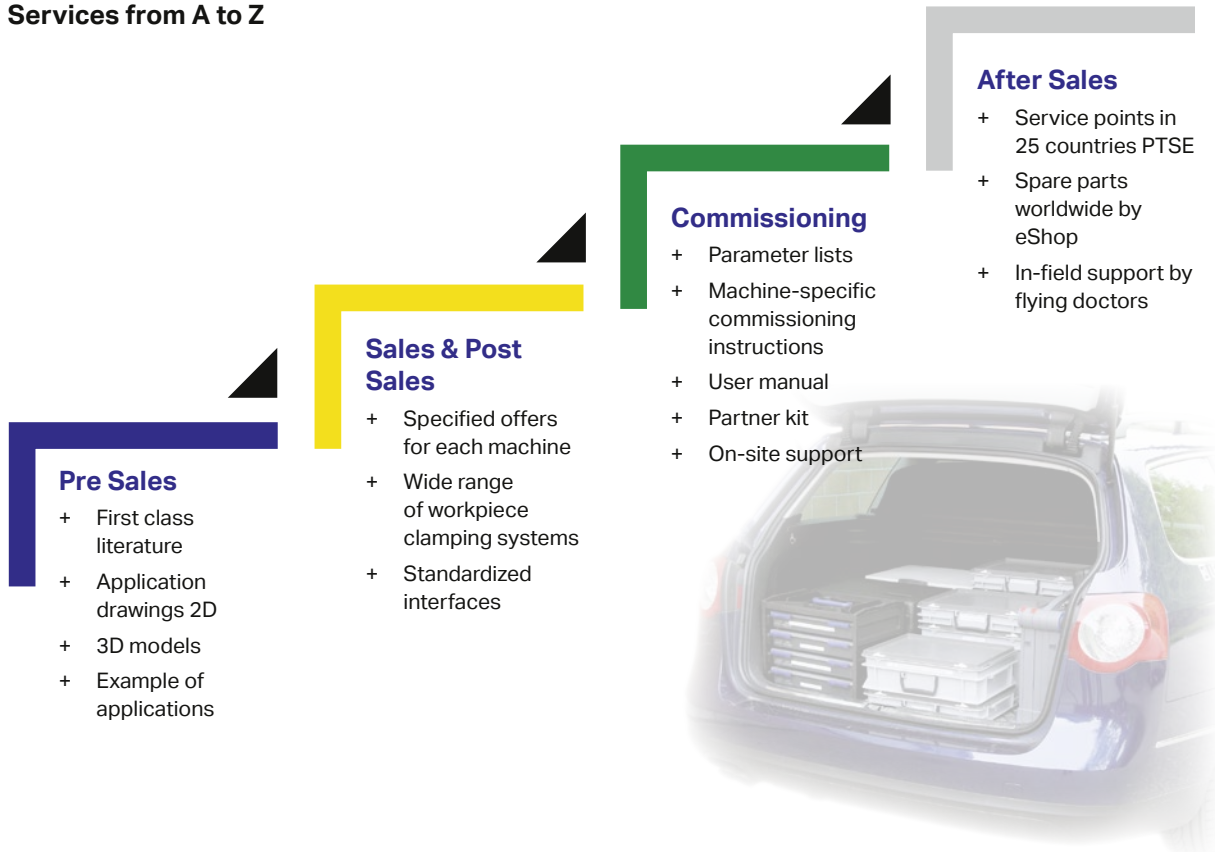


EA-507 with CAPTO retrofit kit

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

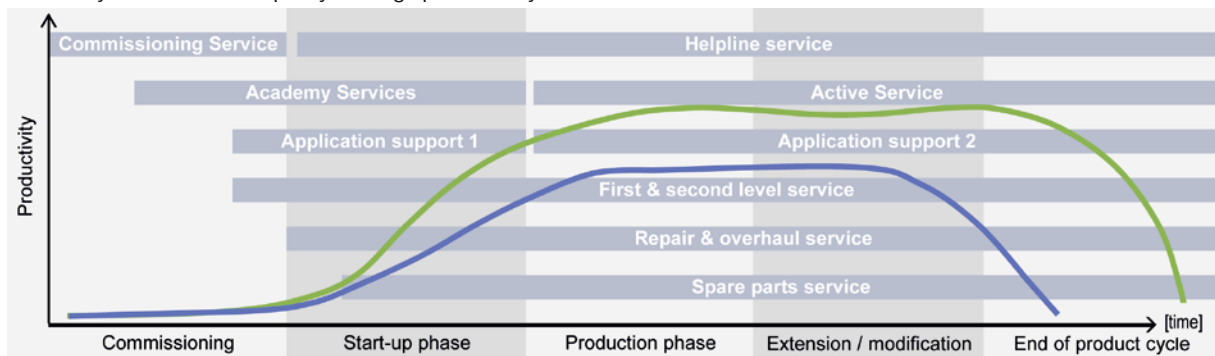


Services from A to Z



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

For more information please see www.lehmann-rotary-tables.com.



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Europe

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

America

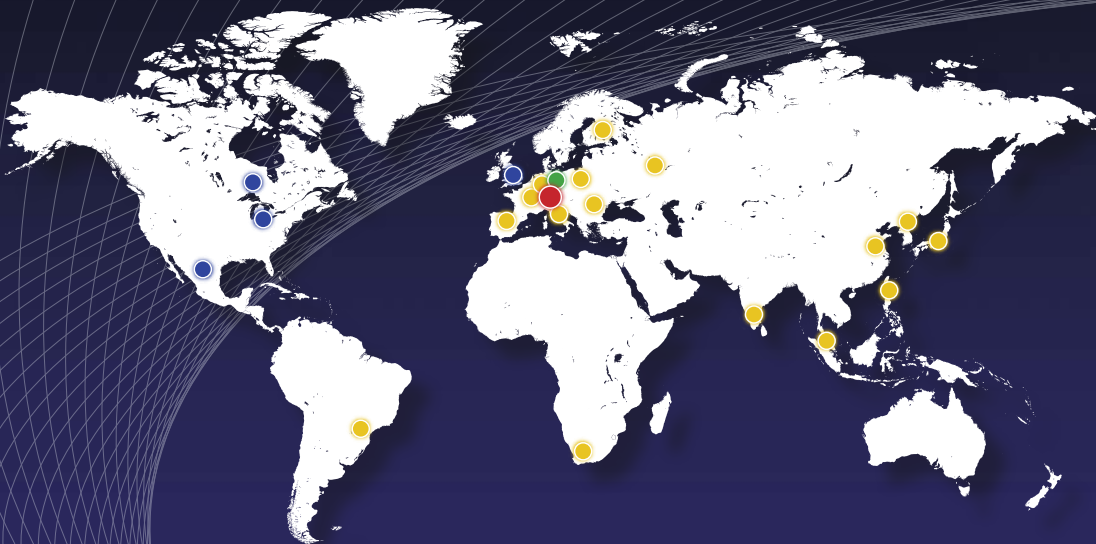
- Brazil
- Canada
- Mexico
- USA

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