



Selection Guide for CNC Rotary Tables ...

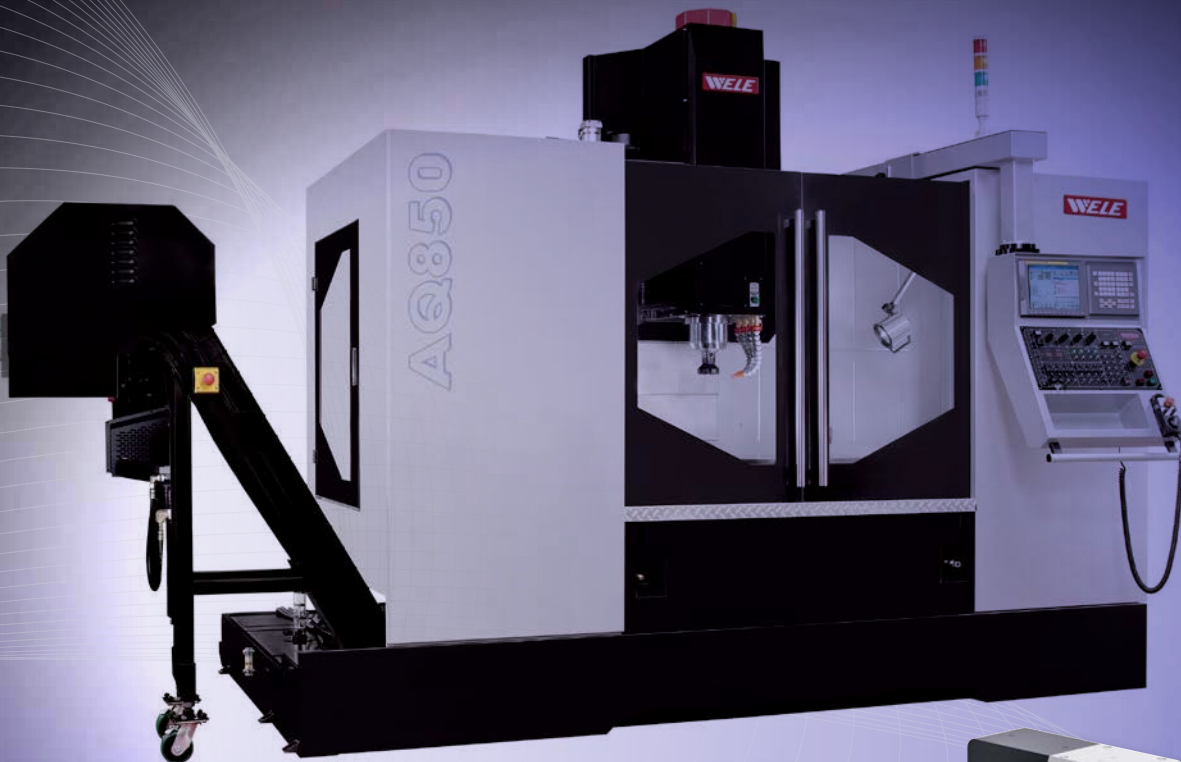


Bluetooth®

pl

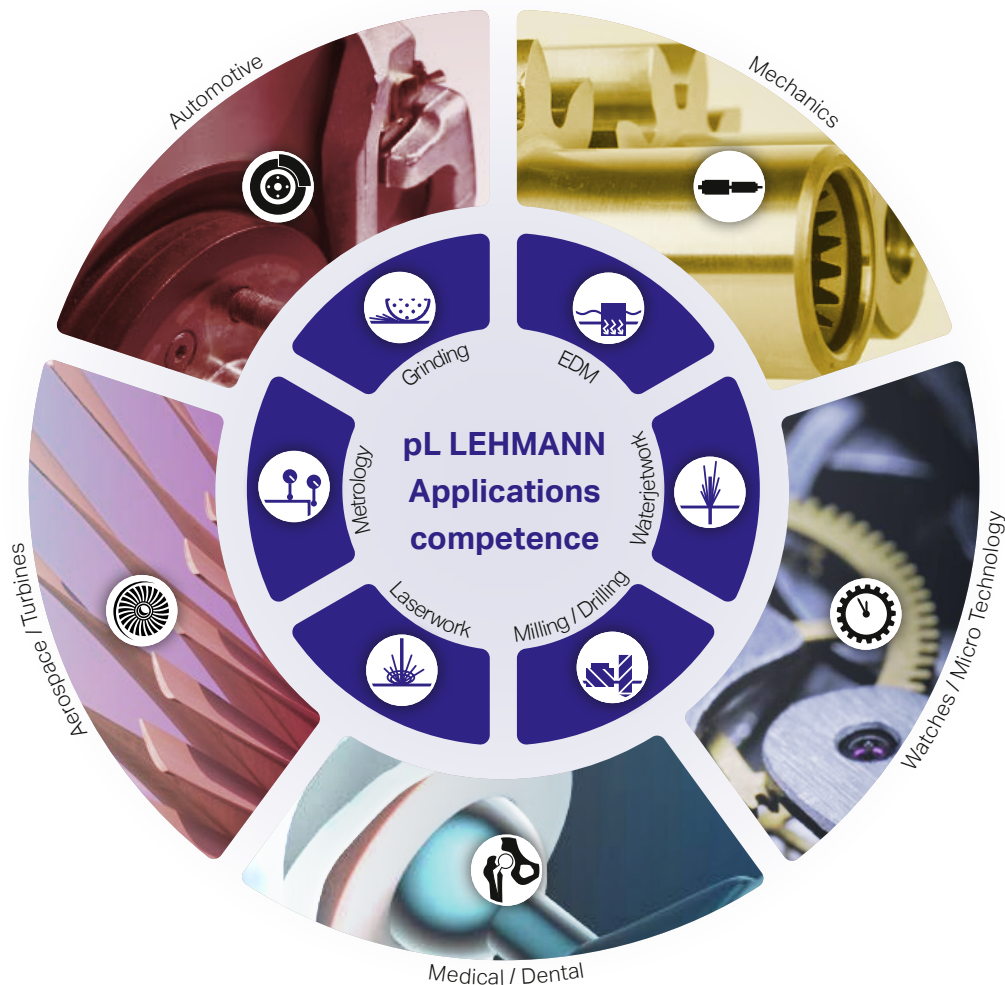
WELE

10/2018 | EN



... for AA- and AQ-series

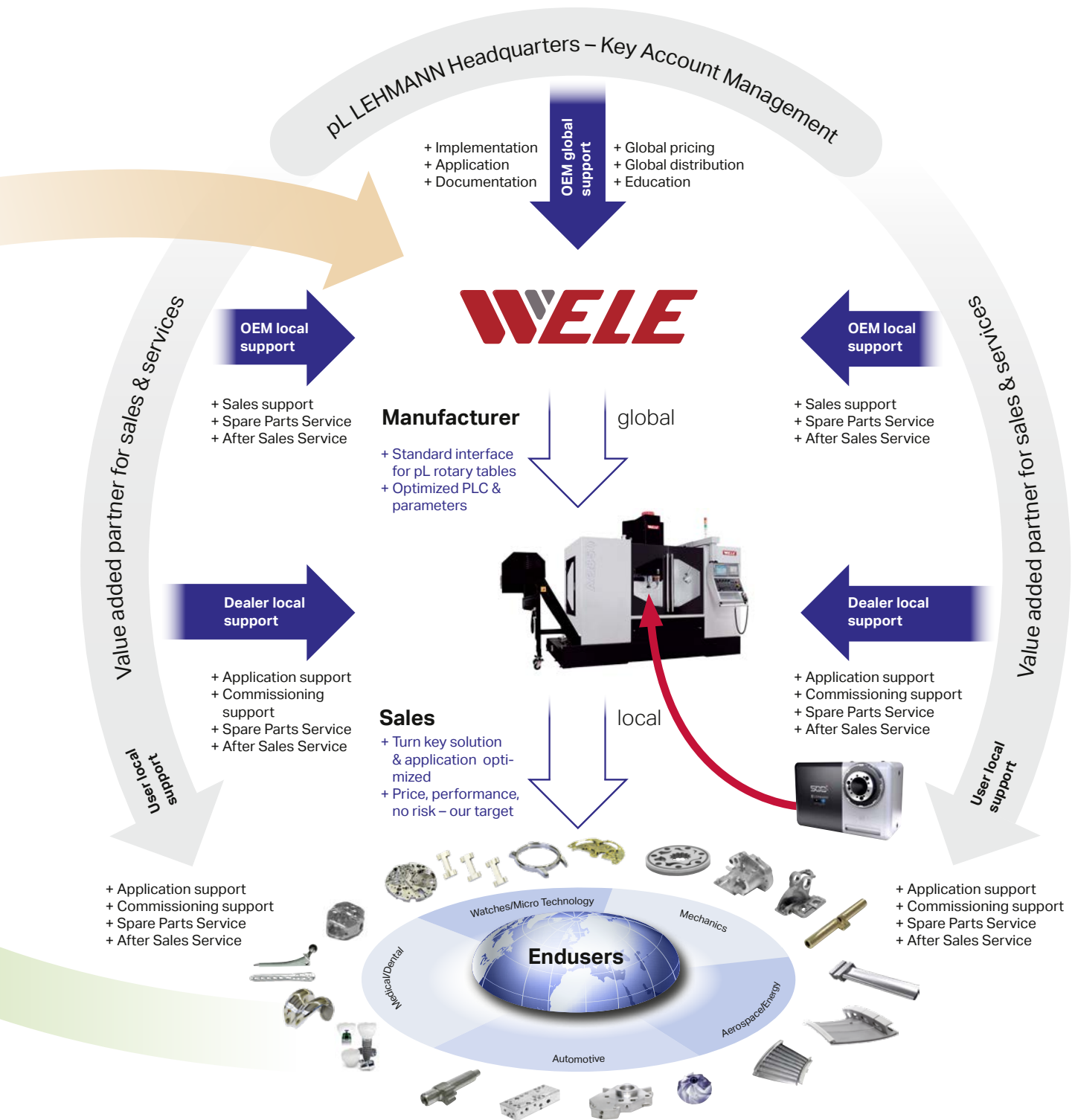
CNC rotary tables for economical manufacturing:
pL LEHMANN has suitable and rational solutions for
nearly every industry



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:
WELE and pL LEHMANN provide
first-class service to common customers



NEW
up to +30 %

Up to 210 rpm
up to 0.21 sec / 90°

Extended travel in
Z- and X-direction

High spindle load,
heavy-duty bearing

High speed

More space

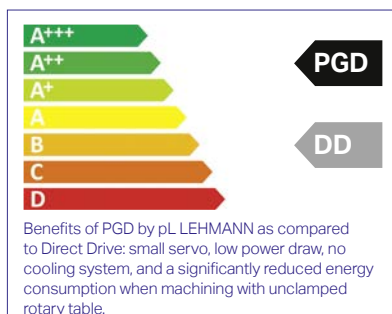
Heavy duty

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



Connectivity

Wireless monitoring,
for operation & service

No adjust

Load change without
parameter adjustment

Less cost

No cooling system,
no hydraulics



AA1365



AQ850



AQ1050

A word from WELE:

«Tolerating mutually is the way to grow

WELE's excellent ability is to offer our customers the reliable products and innovative technology with rich and experimental service resources. WELE will always be your best partner.»

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

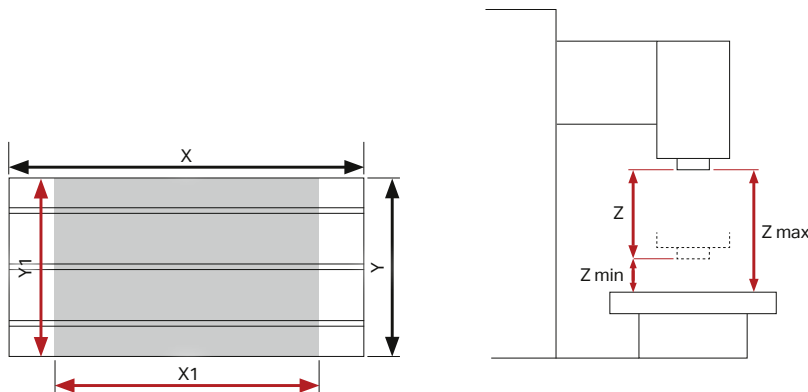


	Table diameter [mm]		Permissible overhang *	Traverse stroke [mm]					Table load ** max [kg]
	X	Y		X1	Y1	Z	Zmin	Zmax	
AA965	1'100	650	10%	900	650	600	125	725	900
AA1165	1'300	650	10%	1'100	650	600	125	725	1'100
AA1365	1'450	650	10%	1'300	650	600	125	725	1'300
AA1480	1'550	800	10%	1'400	800	700	200	900	1'800
AA1565	1'650	650	10%	1'500	650	600	125	725	1'500
AA1680	1'750	800	10%	1'600	800	800	200	1'000	2'000
AQ850	1'000	510	10%	800	510	510	125	635	500
AQ1050	1'200	510	10%	1'000	510	510	125	635	500
AQ1265	1'400	650	10%	1'200	650	610	150	760	500
AQ1465	1'600	650	10%	1'400	650	610	150	760	500
AQ1665	1'750	650	10%	1'600	650	610	150	760	500

* 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

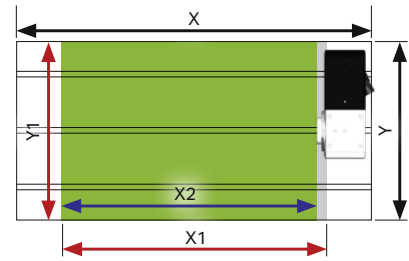
	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
AA965		817	791	762

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

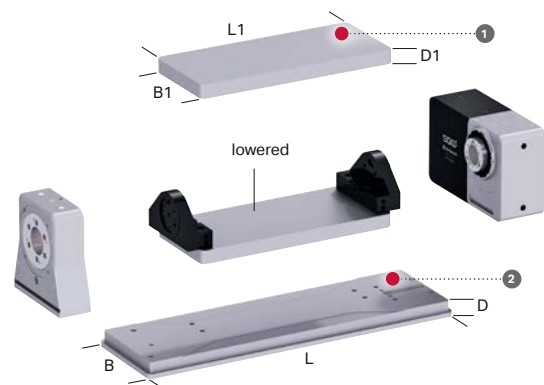


	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
AA965		817	791	762
AA1165		1'017	991	962
AA1365		1'192	1'166	1'137
AA1480			1'266	1'237
AA1565		1'392	1'366	1'337
AA1680			1'466	1'437
AQ850	733	717	691	662
AQ1050	933	917	891	862
AQ1265		1'117	1'091	1'062
AQ1465		1'317	1'291	1'262
AQ1665		1'492	1'466	1'437



Rotary table installation with p.L 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]				210	218
	Length L1 [mm]			600	700 800	800 1000
	Width B1 [mm]				270	270
	Thickness D1 [mm]				40	40
2 Base plates	Length L [mm]		916	1016	1116	1172 1372
	Width B [mm]			301		368
	Thickness D [mm]			30		38
Weights / moments of inertia (without rotary table, without counter bearing)	Weight (Al) [kg]		40	45	52	on request
	Weight (steel) [kg]		117	130	152	
	Mom. inert. (Al) [kgm²]		0.16	0.17	0.21	
	Mom. inert. (steel) [kgm²]		0.46	0.50	0.60	

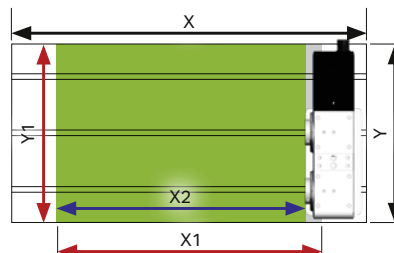
Explanations for pp. 8 to 11

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			
AA965	774	764	774	764
AA1165	974	964	974	964
AA1365	1'149	1'139	1'149	1'139
AA1480	1'249	1'239	1'249	1'239
AA1565	1'349	1'339	1'349	1'339
AA1680	1'449	1'439	1'449	1'439
AQ850	674	664		
AQ1050	874	864		
AQ1265	1'074	1'064	1'074	1'064
AQ1465	1'274	1'264	1'274	1'264
AQ1665	1'449	1'439	1'449	1'439

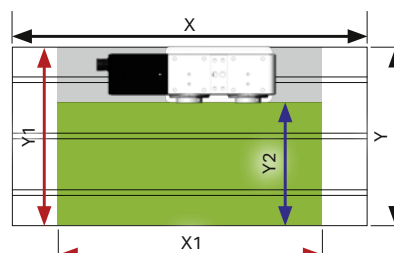
Y-mounting



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

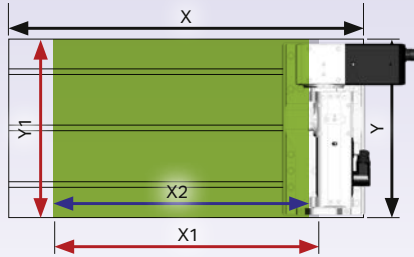
	M2-507	M2-510	M3-507	M3-510
	Y2			
AA965				
AA1165				
AA1365				
AA1480				
AA1565				
AA1680				
AQ850			284	274
AQ1050				274
AQ1265				
AQ1465				
AQ1665				

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

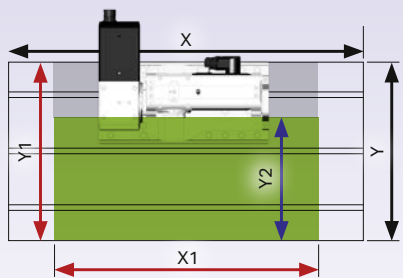
TAP1

TOP1.2

	TIP1c TF-507510	TIP2c TF-510520	TIP3c TF-520530	TAP1c T1-507510	TAP2c T1-510520	TAP3c T1-520530	TAP1 T1-507510	TAP2 T1-510520	TAP3 T1-520530	TOP1 T1-507510
	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2
AA965	870	826	806	830	810	776	830	810		830
AA1165	1'070	1'026	1'006	1'030	1'010	976	1'030	1'010		1'030
AA1365	1'245	1'201	1'181	1'205	1'185	1'151	1'205	1'185		1'205
AA1480	1'345	1'301	1'281	1'305	1'285	1'251	1'305	1'285	1'251	1'305
AA1565	1'445	1'401	1'381	1'405	1'385	1'351	1'405	1'385		1'405
AA1680	1'545	1'501	1'481	1'505	1'485	1'451	1'505	1'485	1'451	1'505
AQ850	770	726		730						
AQ1050	970	926		930						
AQ1265	1'170	1'126	1'106	1'130	1'110		1'130	1'110		1'130
AQ1465	1'370	1'326	1'306	1'330	1'310		1'330	1'310		1'330
AQ1665	1'545	1'501	1'481	1'505	1'485		1'505	1'485		1'505

	TOP2 T1-510520	TOP3 T1-520530	TAP1c.2 T1-507510	TAP2c.2 T1-510520	TAP3c.2 T1-520530	TAP1.2 T1-507510	TAP2.2 T1-510520	TAP3.2 T1-520530	TOP1.2 T2-507510	TOP2.2 T2-510520	TOP3.2 T2-520530
	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2
AA965	810		830			830					
AA1165	1'010		1'030			1'030					
AA1365	1'185		1'205			1'205					
AA1480	1'285	1'251	1'305	1'285		1'305	1'285		1'305		
AA1565	1'385		1'405			1'405					
AA1680	1'485	1'451	1'505	1'485		1'505	1'485		1'505		
AQ850											
AQ1050											
AQ1265	1'110		1'130			1'130					
AQ1465	1'310		1'330			1'330					
AQ1665	1'485		1'505			1'505					

X-mounting



Rotary table installation using hole pattern in base plate



TIP1



TAP1



TOP1.2

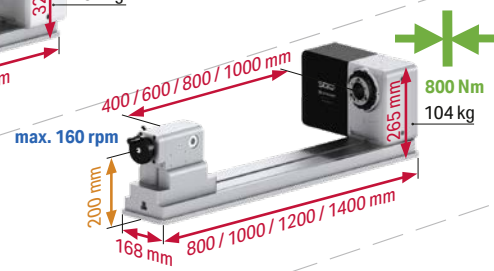
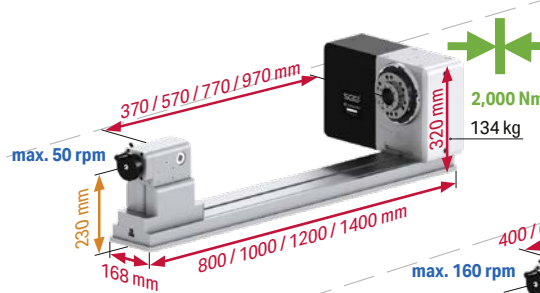
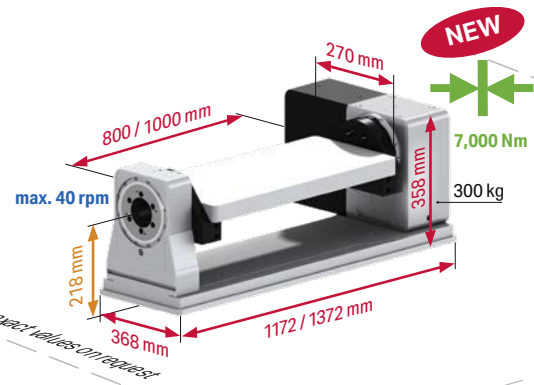
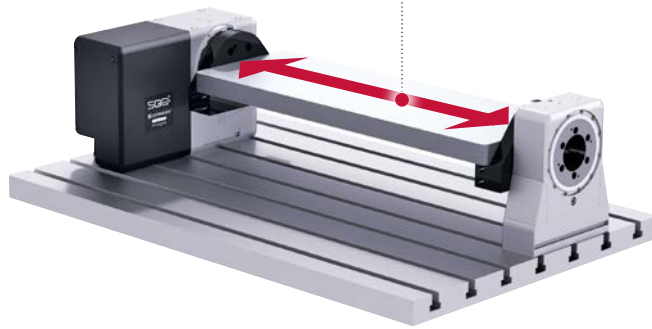
	TIP1c TF-507510 Y2	TIP2c TF-510520 Y2	TIP3c TF-520530 Y2	TAP1c T1-507510 Y2	TAP2c T1-510520 Y2	TAP3c T1-520530 Y2	TAP1 T1-507510 Y2	TAP2 T1-510520 Y2	TAP3 T1-520530 Y2	TOP1 T1-507510 Y2
AA965									426	
AA1165									426	
AA1365									426	
AA1480										
AA1565										
AA1680										
AQ850			316		320		340	320		340
AQ1050			316					320		340
AQ1265										
AQ1465										
AQ1665										

	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
AA965		426		460	426		460		480	460	
AA1165		426		460	426		460	426	480	460	426
AA1365		426		460	426		460	426	480	460	426
AA1480					576			576		610	576
AA1565		426			426		460	426		460	426
AA1680					576			576		610	576
AQ850	320		340	320		340	320		340	320	
AQ1050	320		340	320		340	320		340	320	
AQ1265				460			460		480	460	
AQ1465				460			460			460	
AQ1665							460			460	



Very good accessibility, even with short tools

More space for workpieces and fixtures



530

520


51x

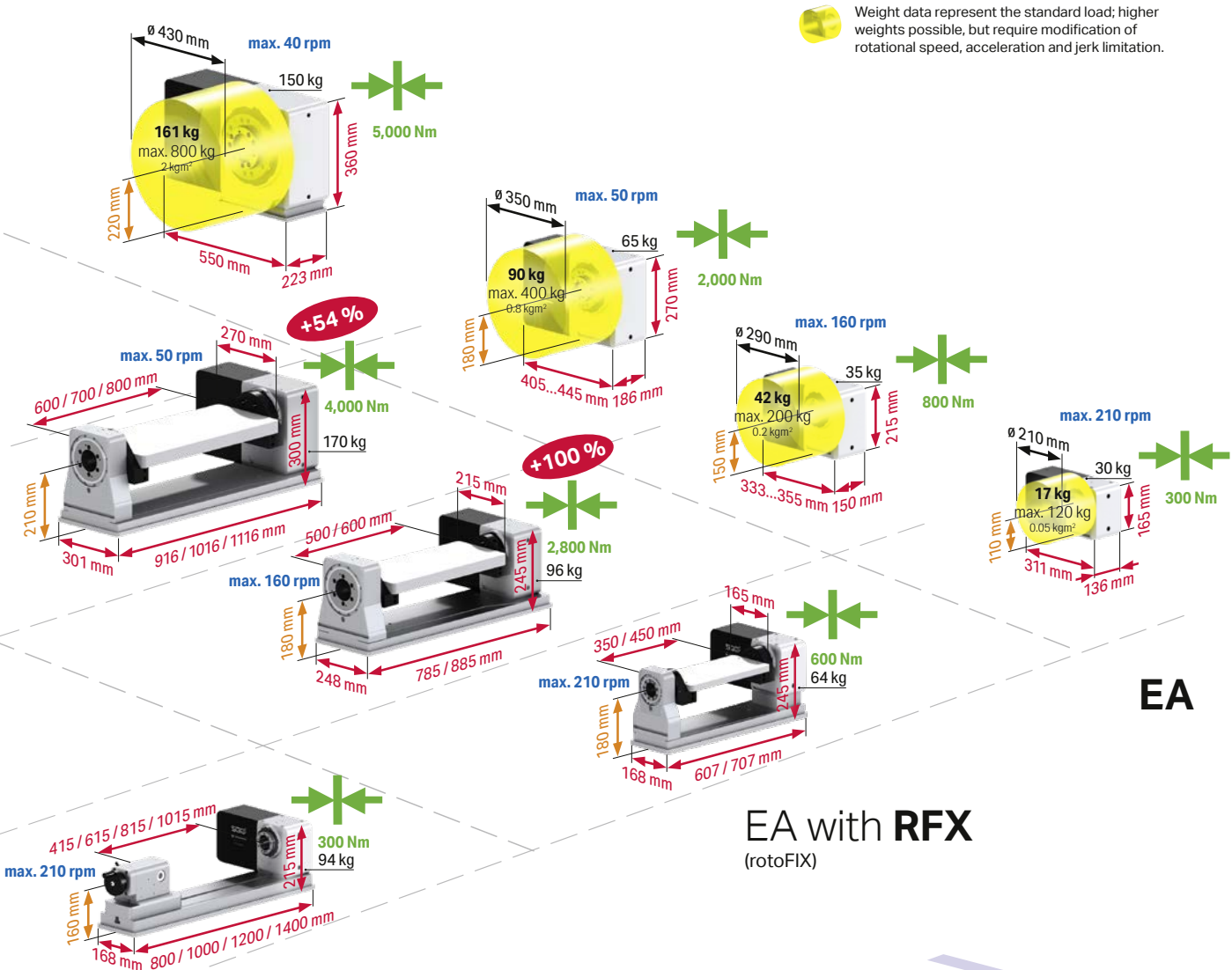
50x

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.



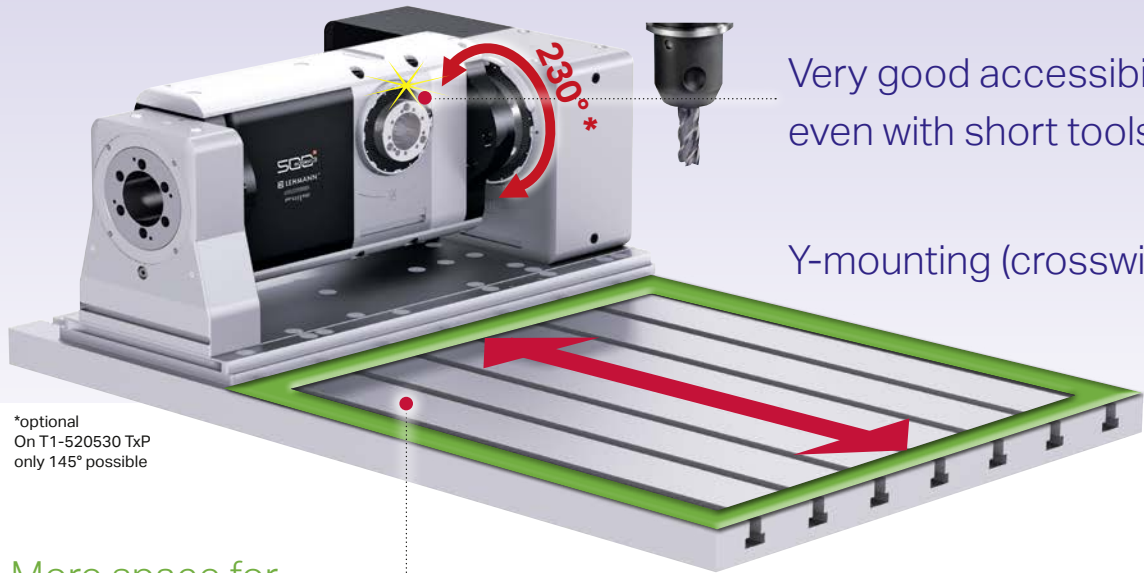
EA

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

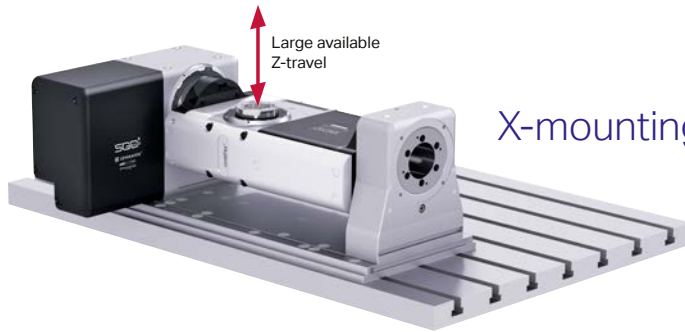


Very good accessibility, even with short tools

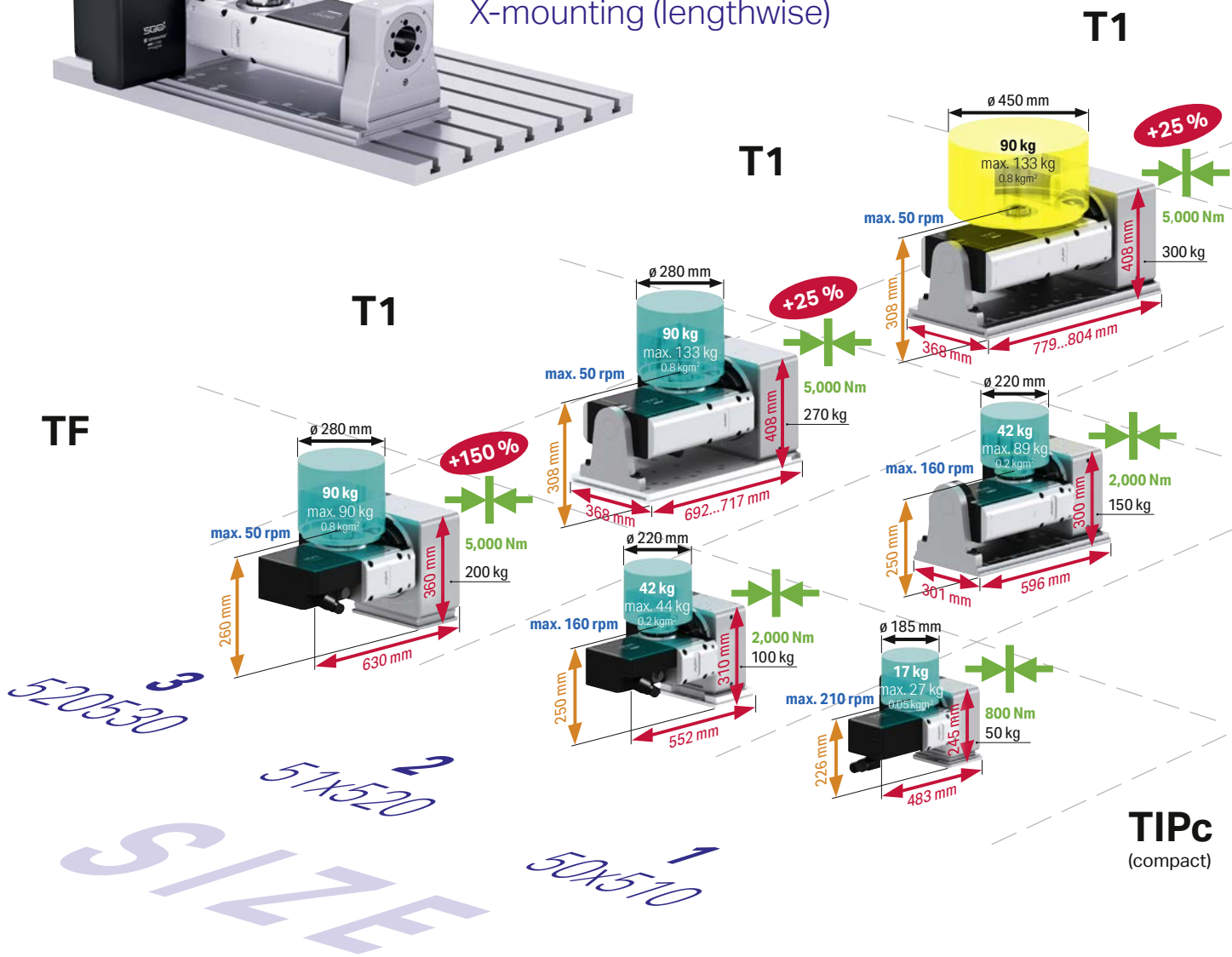
Y-mounting (crosswise)

*optional
On T1-520530 TxP
only 145° possible

More space for workpiece and fixtures

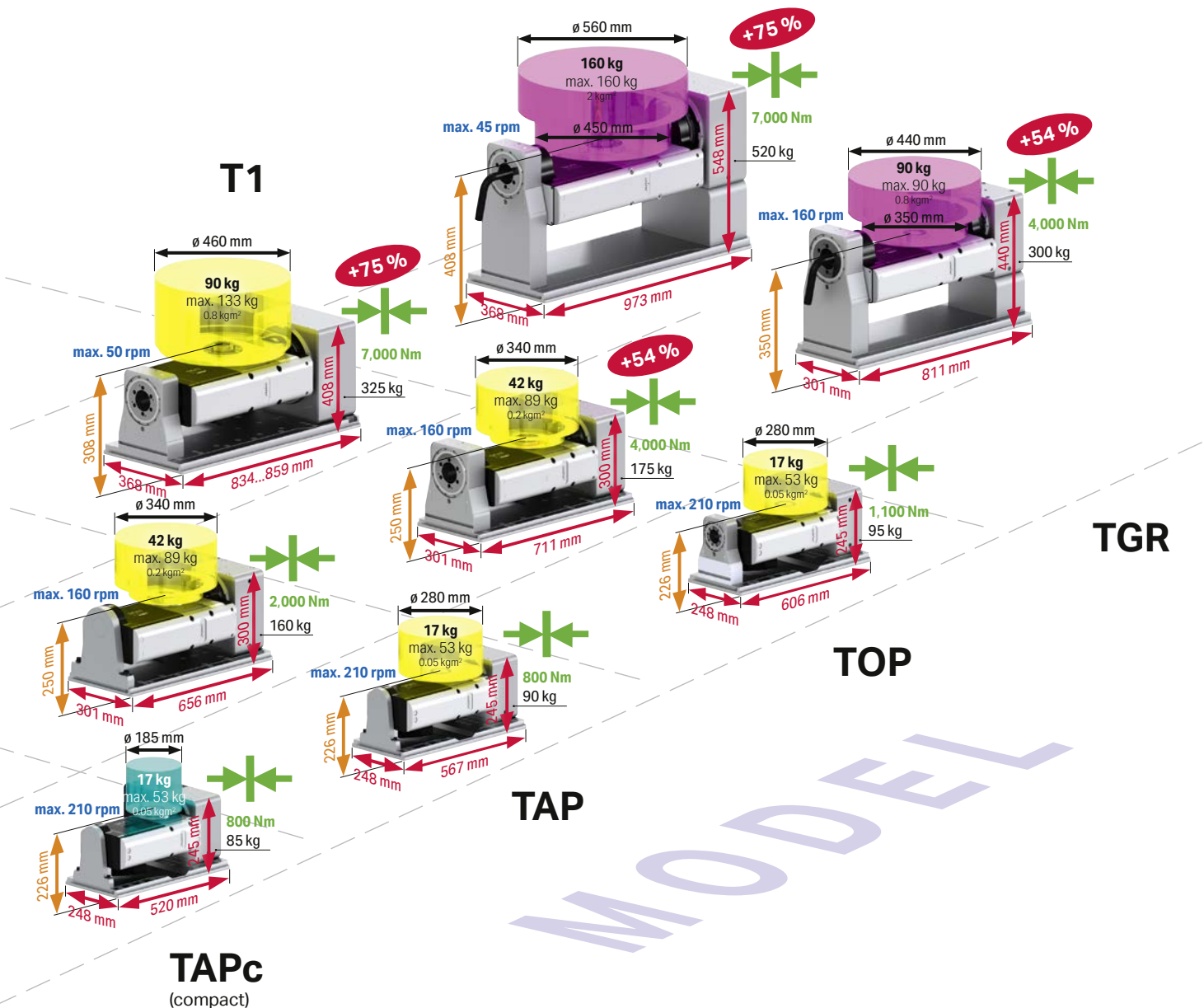


X-mounting (lengthwise)



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.

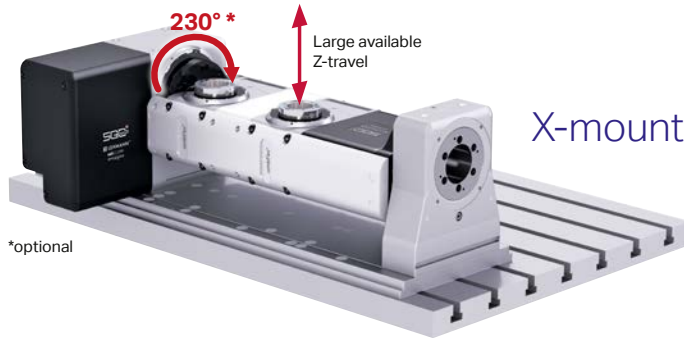
- 50x510 508510 (standard) or 508510 (high speed)
- 51x520 510520 (standard) or 511520 (high speed)
- TIPc Two-axis rotary table, no counter bearing, compact
- TAPc Two-axis rotary table, with supporting bearing, compact
- TAP Two-axis rotary table, with supporting bearing
- TOP Two-axis rotary table,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



Very good accessibility, even with short tools

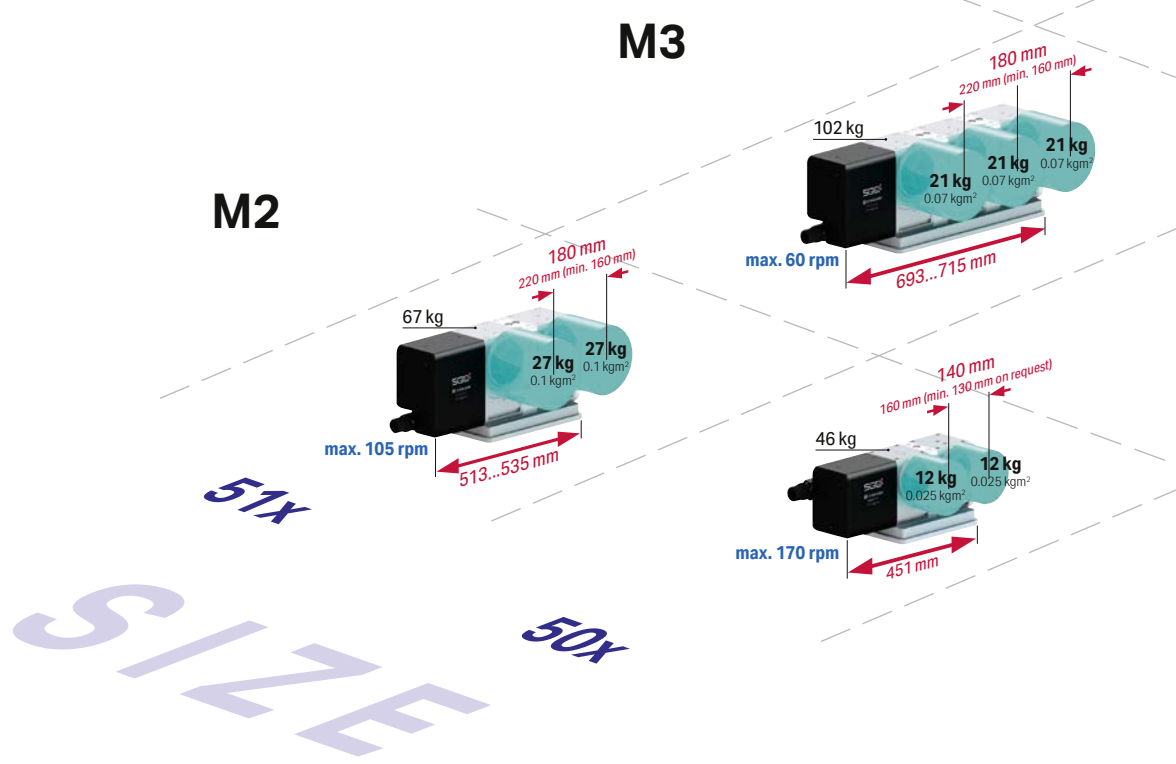
Y-mounting (crosswise)

More space for workpiece and fixtures



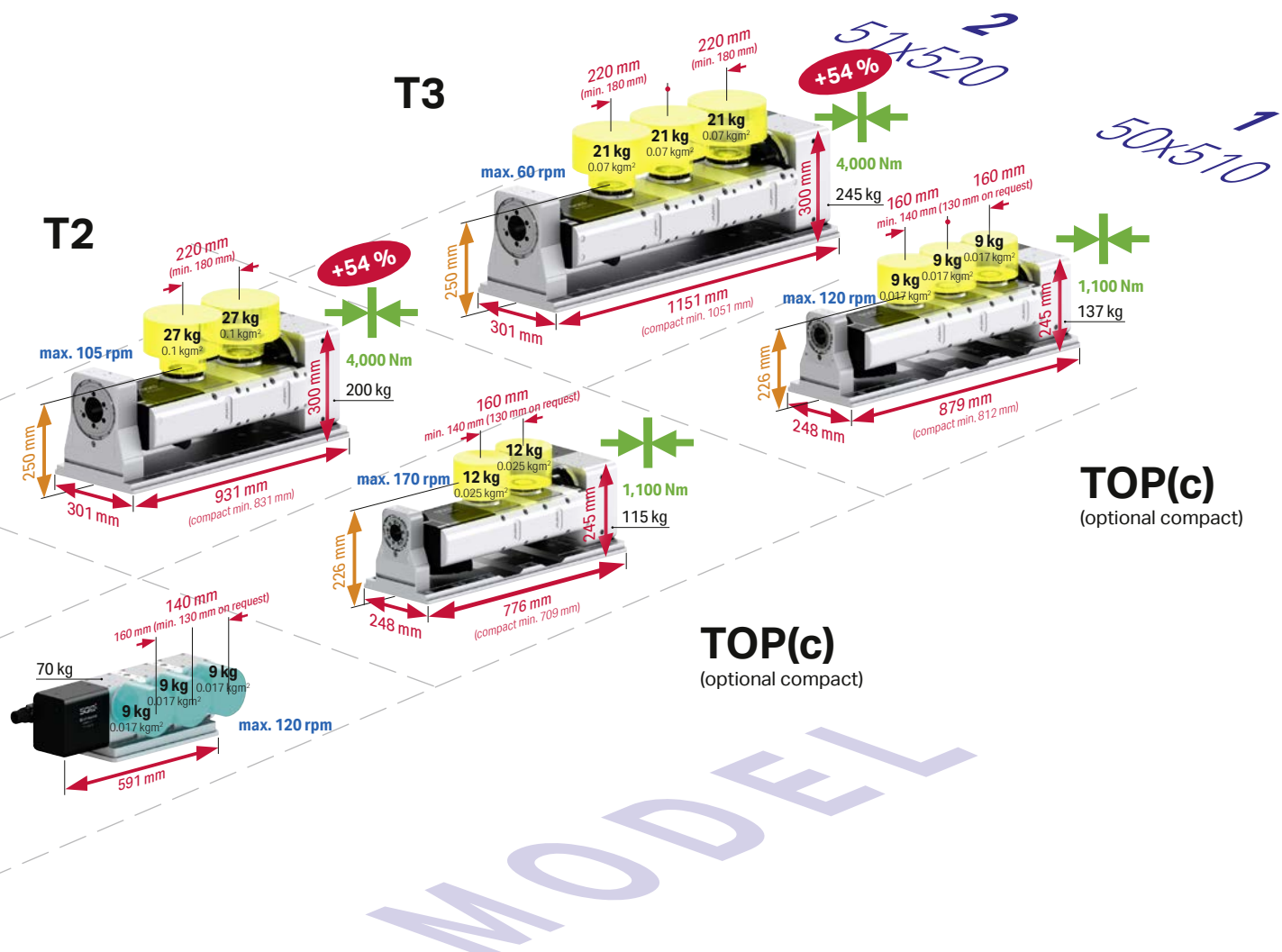
X-mounting (lengthwise)

*optional



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)

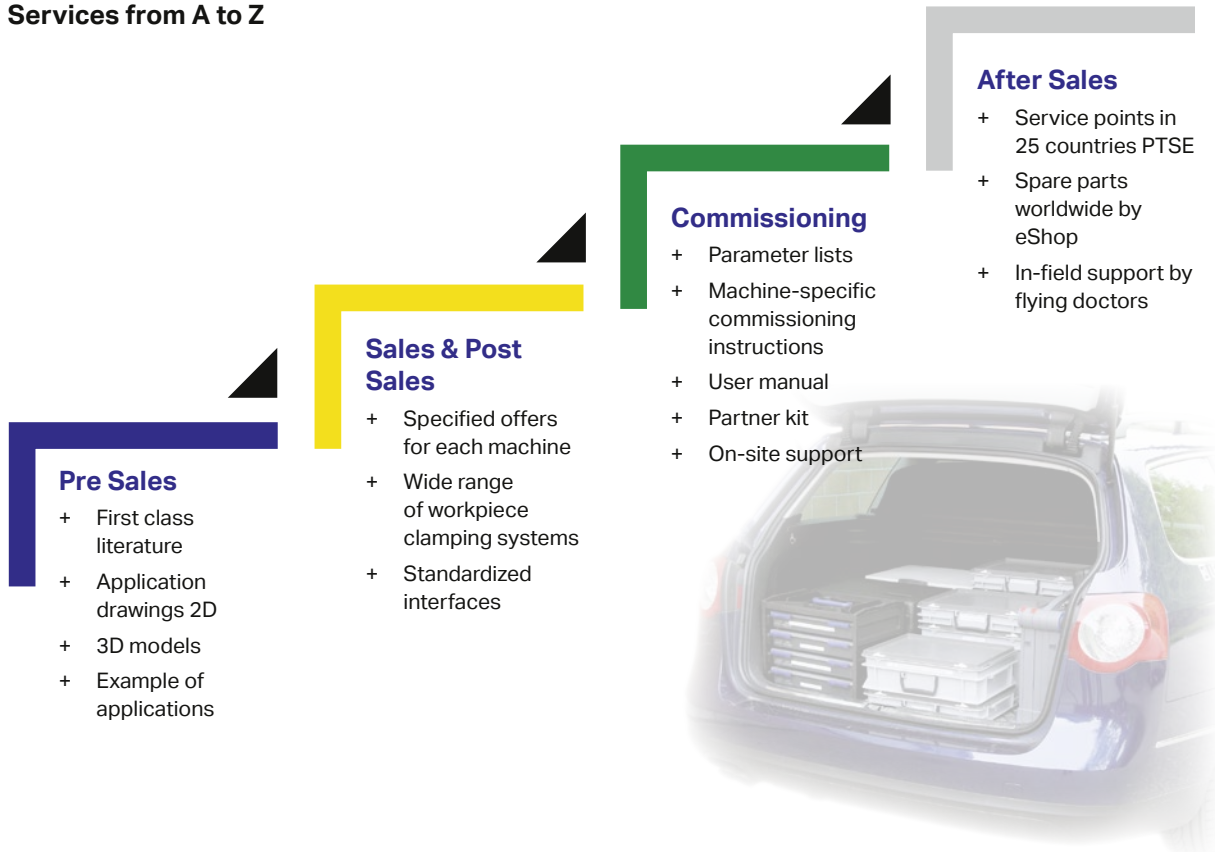


EA-507 with CAPTO retrofit kit

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

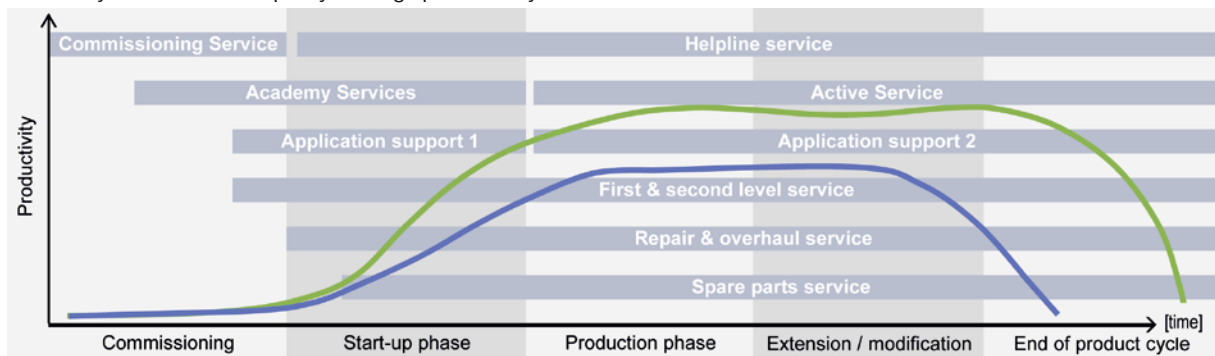


Services from A to Z



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

America

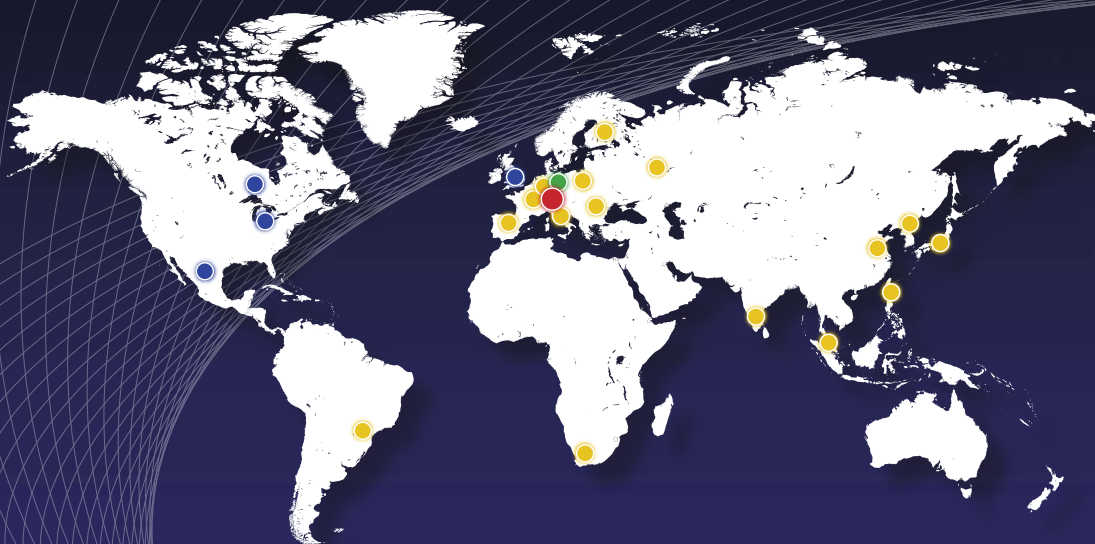
- Brazil
- Canada
- Mexico
- USA

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