

Selection Guide for CNC Rotary Tables ...



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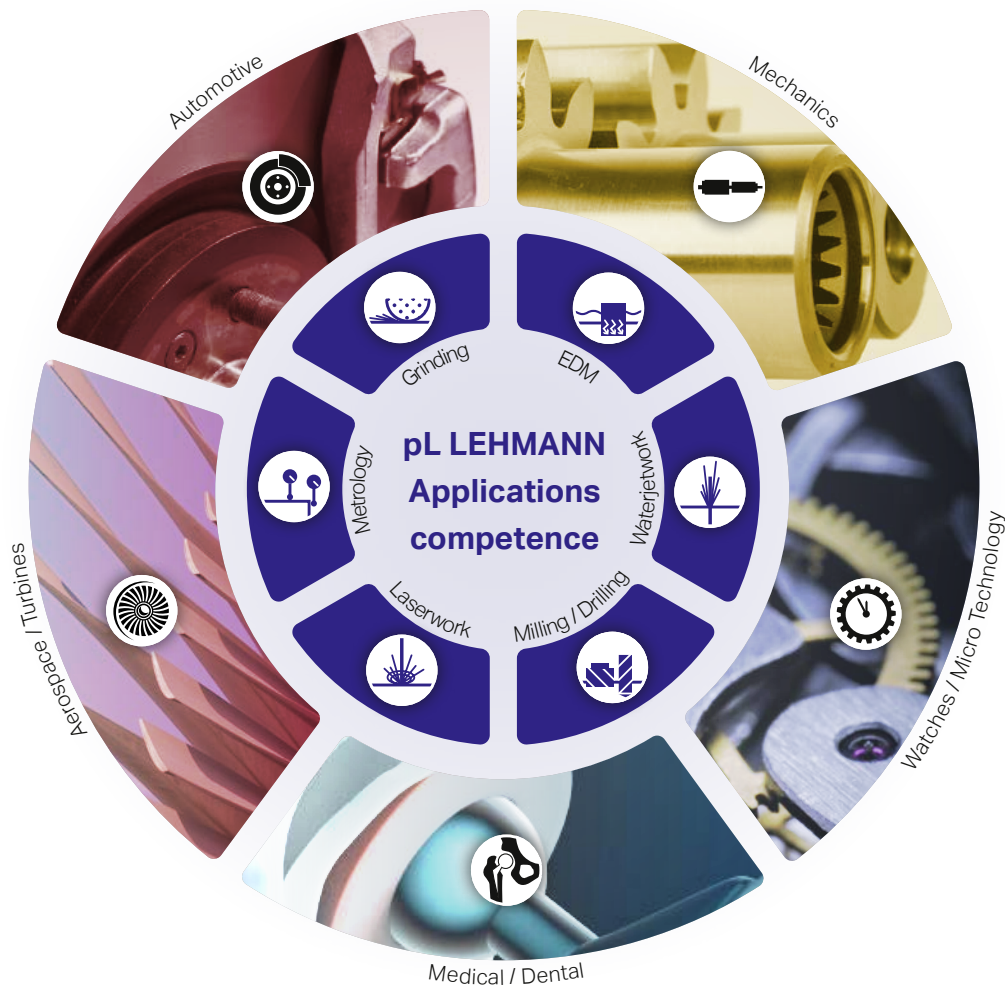
DMG MORI

10/2018 | EN



... for CMX V-, DMC V-, DMF-, Milltap-, NV-, NVD-, NVX- and Lastertech-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

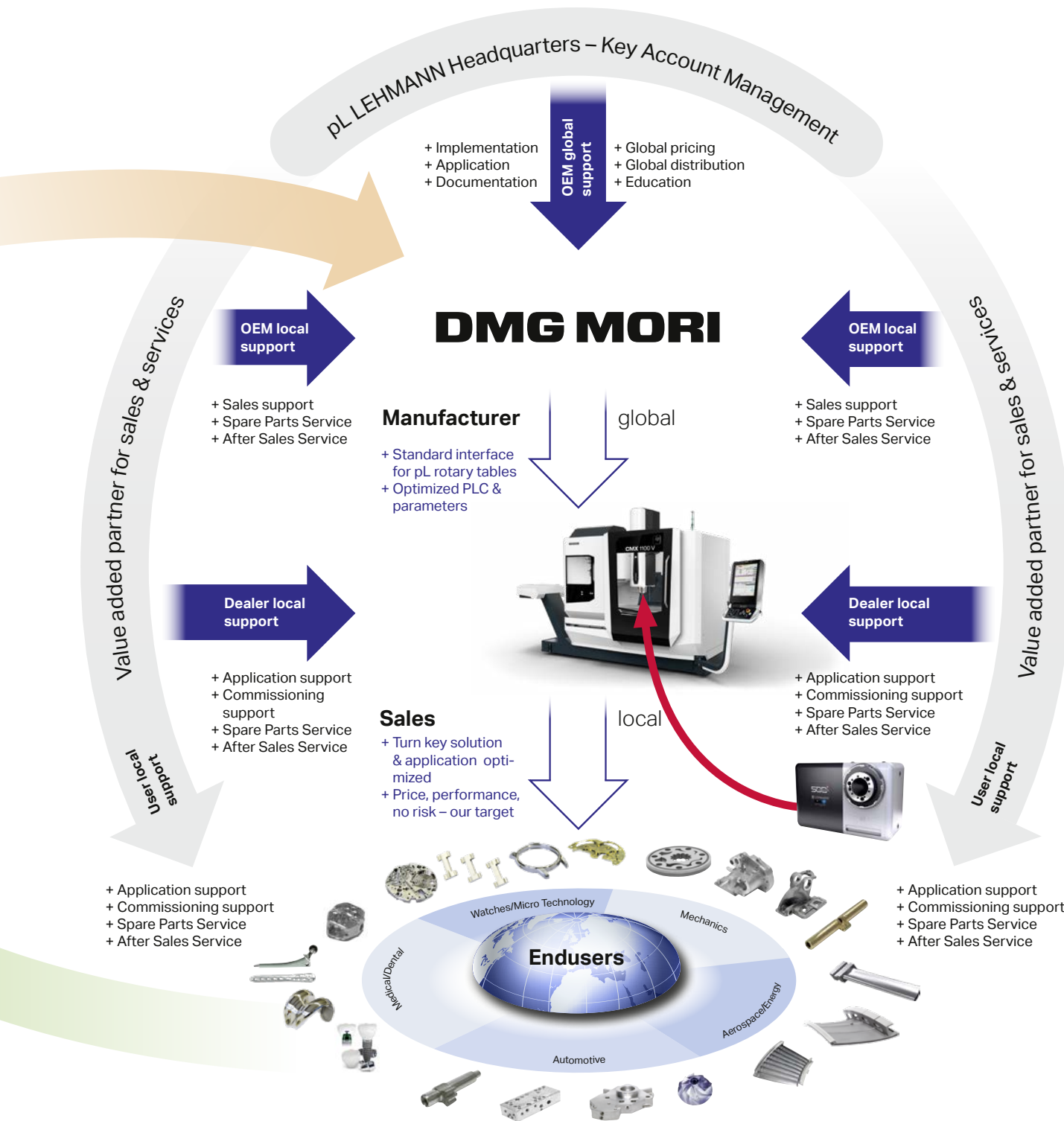
pL LEHMANN is **DM(QP)**-Partner

DMG MORI Qualified Products

- Perfectly matched peripherals and accessories from a single source
- + **All from a single source** – Machine, peripherals and service
- + **Perfectly matched** – Connectivity of all DMQP products tested and guaranteed
- + **Certified quality** – Selected DMQP partners with the highest technological competence

Customer Benefits

- + **Everything from a single source** – machine, accessories & service
- + **Perfect match** – connectivity of all DMQP products tested and guaranteed
- + **Certified quality** and standardized interfaces
- + All DMQP products at **market price**
- + **Recommended product packages** for special customer applications
- + **Identical warranty conditions** to those of new DMG MORI machines
- + DMQP partners must meet the **highest innovation, competence and quality requirements**



NEW
up to +30 %

Up to 210 rpm
up to 0.21 sec / 90°

High speed

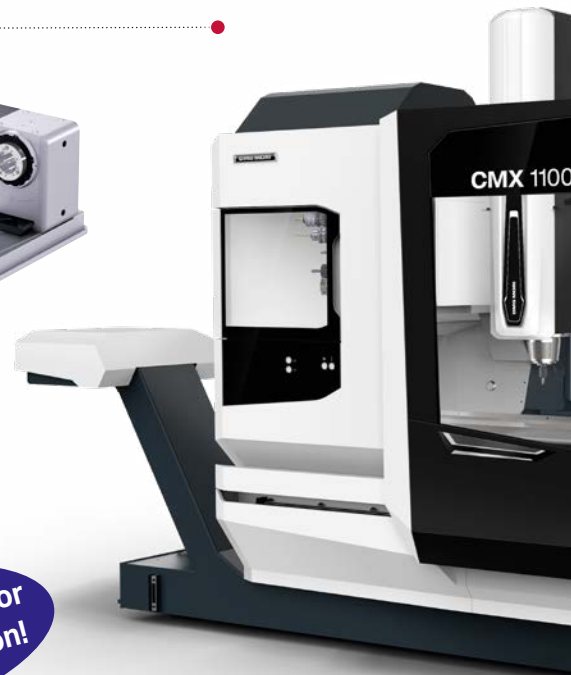
Extended travel in
Z- and X-direction

More space

High spindle load,
heavy-duty bearing

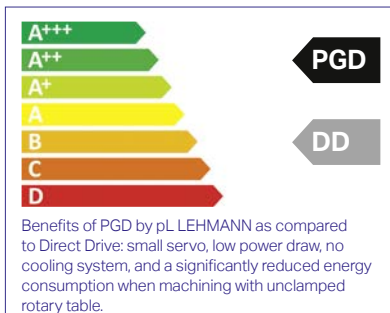
Heavy duty

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

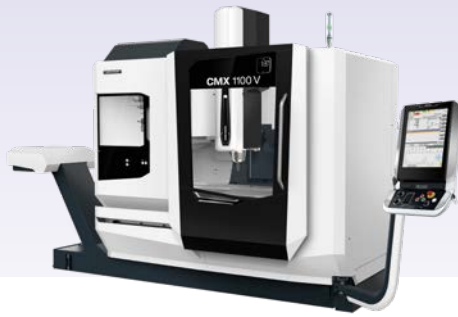
Wireless monitoring,
for operation & service

No adjust

Load change without
parameter adjustment

Less cost

No cooling system,
no hydraulics



CMX 1100V



DMC 650V



DMF 180

A word from DMG MORI:

«First Quality – without compromise

Successful together to benefit our customers. DMG MORI brings German and Japanese tradition together – precision and technological leadership in machine tool building. The combination of high-end technology and a strong sales and service network creates efficiency advantages for everyone.»



i 30 V



Milltap 700



NVX 5100



Lasertec

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

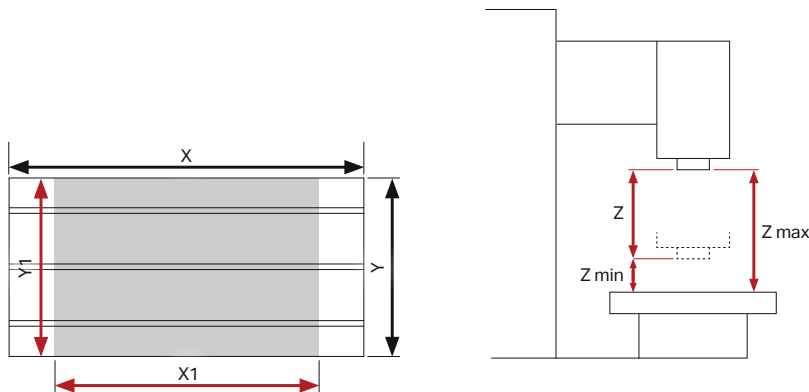


	Table diameter [mm]		Permissible overhang *	Traverse stroke [mm]					Table load ** max [kg]
	X	Y		X1	Y1	Z	Zmin	Zmax	
CMX 600V	900	560	10%	600	560	510	120	630	600
CMX 800V	1'100	560	10%	800	560	510	120	630	800
CMX 1100V	1'400	560	10%	1'100	560	510	120	630	1'000
DMC 650V	960	570	10%	650	520	475	150	625	800
DMC 850V	1'160	570	10%	850	520	475	150	625	1'000
DMC 1150V	1'460	750	10%	1'150	700	550	150	700	1'500
DMC 1450V	1'760	750	10%	1'450	700	550	150	700	2'000
DMF 180	2'100	700	10%	1'800	700	700	15	715	1'500
DMF 260	2'900	700	10%	2'600	700	700	15	715	2'150
i 30 V	600	300	40%	400	270	280	240	520	150
Lasertec 45 Shape	840	420	10%	700	420	485	100	585	400
Milltap 700	840	420	50%	700	420	380	200	580	400
NV 4000 DCG	750	450	10%	600	400	400	100	500	350
NVD 4000 DCG	700	450	10%	600	400	400	100	500	350
NVD 5000 a1A	1'100	600	10%	800	510	510	150	660	1'000
NVD 5000 a1B	1'320	600	10%	1'020	510	510	150	660	1'200
NVD 6000 DCG	1'000	600	10%	900	600	450	200	650	800
NVX 5060 2. Gen.	900	600	10%	600	530	510	150	660	800
NVX 5080 2. Gen.	1'100	600	10%	800	530	510	150	660	1'000
NVX 5100 2. Gen.	1'350	600	10%	1'050	530	510	150	660	1'200
NVX 7000	1'700	760	10%	1'540	760	660	200	860	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

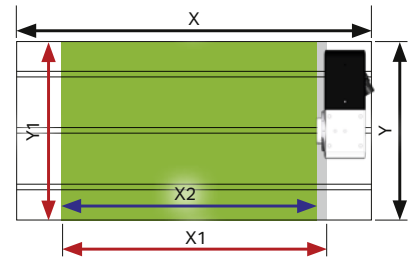
	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
DMC 1150V			1'096	1'067

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

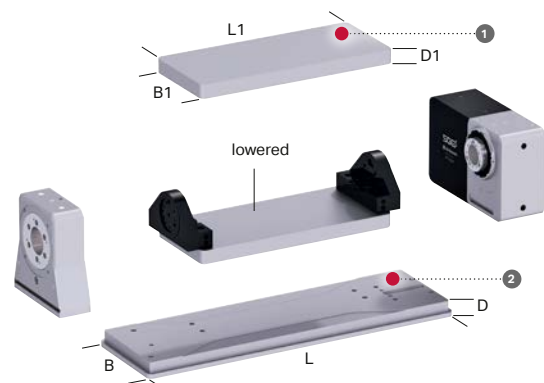


	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
CMX 600V	583	567	541	512
CMX 800V	783	767	741	712
CMX 1100V	1'083	1'067	1'041	1'012
DMC 650V	638	622	596	567
DMC 850V	838	822	796	767
DMC 1150V			1'096	1'067
DMC 1450V			1'396	1'367
DMF 180			1'741	1'712
DMF 260			2'541	2'512
i 30 V	333	317	291	
Lasertec 45 Shape	603	587	561	
Milltap 700	603	587	561	532
NV 4000 DCG	508	492	466	
NVD 4000 DCG	483	467	441	
NVD 5000 a1A	783	767	741	712
NVD 5000 a1B	1'003	987	961	932
NVD 6000 DCG	783	767	741	712
NVX 5060 2. Gen.	583	567	541	512
NVX 5080 2. Gen.	783	767	741	712
NVX 5100 2. Gen.	1'033	1'017	991	962
NVX 7000			1'411	1'382



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
	Length L1	[mm]	350 450	500 600	600 700 800
	Width B1	[mm]	165	215	270
	Thickness D1	[mm]	20	35	40
2 Base plates	Length L	[mm]	622 722	785 885	916 1016 1116
	Width B	[mm]	168	248	301
	Thickness D	[mm]	30	30	30
Weights / moments of inertia (without rotary table, without counter bearing)	Weight (Al)	[kg]	10	12	23
	Weight (steel)	[kg]	29	34	66
	Mom. inert. (Al)	[kgm ²]	0.02	0.02	0.06
	Mom. inert. (steel)	[kgm ²]	0.04	0.05	0.17
					0.21
					0.46
					0.50
					0.60
					on request

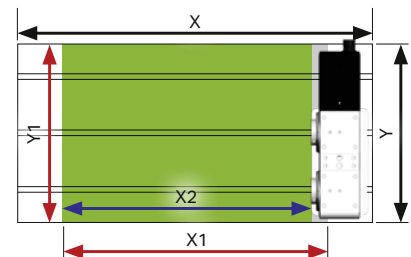
Explanations for pp. 8 to 11

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			
CMX 600V	524	514	524	
CMX 800V	724	714	724	
CMX 1100V	1'024	1'014	1'024	
DMC 650V	579	569	579	
DMC 850V	779	769	779	
DMC 1150V	1'079	1'069	1'079	1'069
DMC 1450V	1'379	1'369	1'379	1'369
DMF 180	1'724	1'714	1'724	1'714
DMF 260	2'524	2'514	2'524	2'514
i 30 V				
Lasertec 45 Shape	544			
Milltap 700	544	534	544	
NV 4000 DCG	449			
NVD 4000 DCG	424			
NVD 5000 a1A	724	714	724	
NVD 5000 a1B	944	934	944	
NVD 6000 DCG	724	714	724	
NVX 5060 2. Gen.	524	514	524	
NVX 5080 2. Gen.	724	714	724	
NVX 5100 2. Gen.	974	964	974	
NVX 7000	1'394	1'384	1'394	1'384

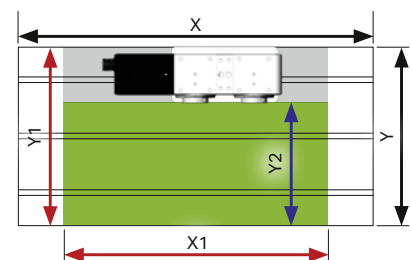
Y-mounting



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

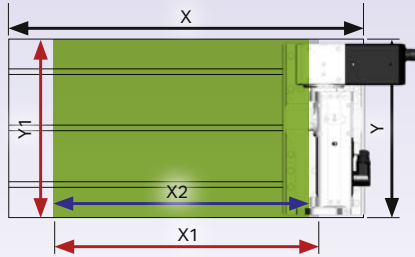
	M2-507	M2-510	M3-507	M3-510
	Y2			
CMX 600V				324
CMX 800V				324
CMX 1100V				
DMC 650V				309
DMC 850V				309
DMC 1150V				
DMC 1450V				
DMF 180				
DMF 260				
i 30 V	59	49	59	
Lasertec 45 Shape		184	194	184
Milltap 700				184
NV 4000 DCG		189	199	189
NVD 4000 DCG		189	199	189
NVD 5000 a1A				319
NVD 5000 a1B				319
NVD 6000 DCG				364
NVX 5060 2. Gen.				329
NVX 5080 2. Gen.				329
NVX 5100 2. Gen.				329
NVX 7000				

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

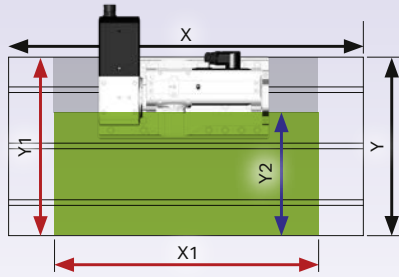


TOP1.2

	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
CMX 600V	620	576		580	560		580			580
CMX 800V	820	776		780	760		780			780
CMX 1100V	1'120	1'076		1'080	1'060		1'080			1'080
DMC 650V	675	631		635	615		635			635
DMC 850V	875	831		835	815		835			835
DMC 1150V	1'175	1'131	1'111	1'135	1'115	1'081	1'135	1'115	1'081	1'135
DMC 1450V	1'475	1'431	1'411	1'435	1'415	1'381	1'435	1'415	1'381	1'435
DMF 180	1'820	1'776	1'756	1'780	1'760	1'726	1'780	1'760		1'780
DMF 260	2'620	2'576	2'556	2'580	2'560	2'526	2'580	2'560		2'580
i 30 V										
Lasertec 45 Shape										
Milltap 700	640	596	576	600	580		600			600
NV 4000 DCG	545									
NVD 4000 DCG	520									
NVD 5000 a1A	820	776	756	780	760		780	760		780
NVD 5000 a1B	1'040	996	976	1'000	980		1'000	980		1'000
NVD 6000 DCG	820	776	756	780	760		780	760		780
NVX 5060 2. Gen.	620	576	556	580	560		580	560		580
NVX 5080 2. Gen.	820	776	756	780	760		780	760		780
NVX 5100 2. Gen.	1'070	1'026	1'006	1'030	1'010		1'030	1'010		1'030
NVX 7000	1'490	1'446	1'426	1'450	1'430	1'396	1'450	1'430	1'396	1'450

	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
CMX 600V											
CMX 800V											
CMX 1100V											
DMC 650V											
DMC 850V											
DMC 1150V	1'115		1'135	1'115		1'135			1'135		
DMC 1450V	1'415		1'435	1'415		1'435			1'435		
DMF 180	1'760		1'780			1'780			1'780		
DMF 260	2'560		2'580			2'580			2'580		
i 30 V											
Lasertec 45 Shape											
Milltap 700											
NV 4000 DCG											
NVD 4000 DCG											
NVD 5000 a1A			780								
NVD 5000 a1B			1'000								
NVD 6000 DCG			780								
NVX 5060 2. Gen.			580								
NVX 5080 2. Gen.			780								
NVX 5100 2. Gen.			1'030								
NVX 7000	1'430	1'396	1'450	1'430		1'450			1'450		

X-mounting



Rotary table installation using hole pattern in base plate



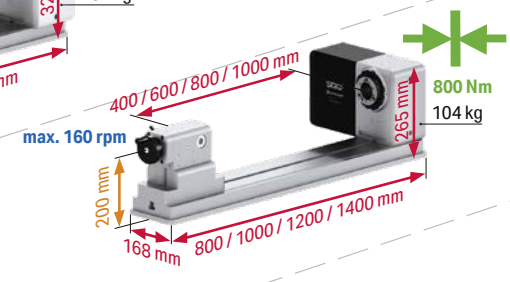
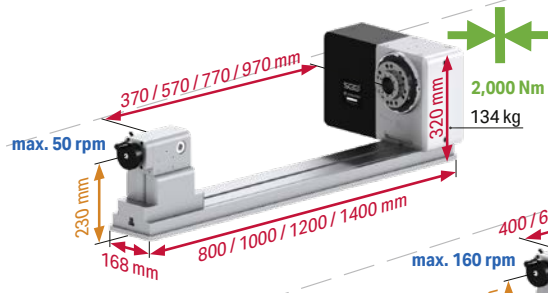
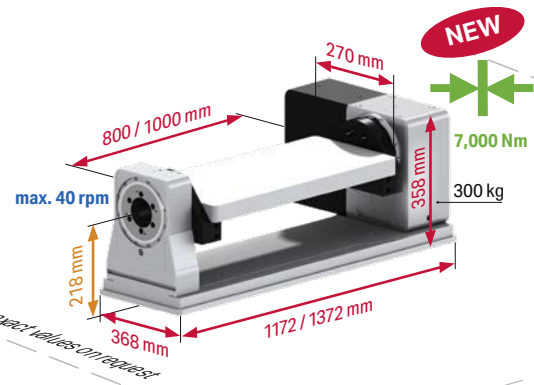
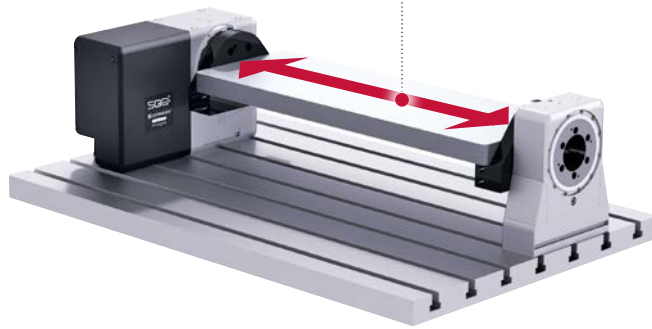
	TIP1c TF-507510 Y2	TIP2c TF-510520 Y2	TIP3c TF-520530 Y2	TAP1c T1-507510 Y2	TAP2c T1-510520 Y2	TAP3c T1-520530 Y2	TAP1 T1-507510 Y2	TAP2 T1-510520 Y2	TAP3 T1-520530 Y2	TOP1 T1-507510 Y2
CMX 600V			366			336		370	336	
CMX 800V			366			336		370	336	
CMX 1100V									336	
DMC 650V			351			321		355	321	
DMC 850V			351			321		355	321	
DMC 1150V										
DMC 1450V										
DMF 180										
DMF 260										
i 30 V	155									
Lasertec 45 Shape	290	246	226	250	230		250	230		250
Milltap 700								230		
NV 4000 DCG		251		255	235		255	235		255
NVD 4000 DCG		251		255	235		255	235		255
NVD 5000 a1A						331			331	
NVD 5000 a1B						331			331	
NVD 6000 DCG						376			376	
NVX 5060 2. Gen.						341			341	
NVX 5080 2. Gen.						341			341	
NVX 5100 2. Gen.						341			341	
NVX 7000										

	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
CMX 600V	370		390	370		390	370		390	370	
CMX 800V	370	336	390	370	336	390	370		390	370	
CMX 1100V	370	336		370	336	390	370	336	390	370	336
DMC 650V	355	321	375	355		375	355		375	355	
DMC 850V	355	321	375	355	321	375	355	321	375	355	
DMC 1150V		501			501		535	501		535	501
DMC 1450V					501			501		535	501
DMF 180					476			476			476
DMF 260											
i 30 V											
Lasertec 45 Shape	230		250	230		250	230		250		
Milltap 700	230		250	230		250	230		250		
NV 4000 DCG	235		255	235		255			255		
NVD 4000 DCG	235		255			255			255		
NVD 5000 a1A	365	331		365	331	385	365		385	365	
NVD 5000 a1B	365	331		365	331	385	365	331	385	365	331
NVD 6000 DCG	410	376		410		430	410		430	410	
NVX 5060 2. Gen.	375	341		375		395	375		395	375	
NVX 5080 2. Gen.	375	341		375	341	395	375		395	375	
NVX 5100 2. Gen.	375	341		375	341	395	375	341	395	375	341
NVX 7000					536		570	536		570	536



Very good accessibility, even with short tools

More space for workpieces and fixtures



530

520


51x

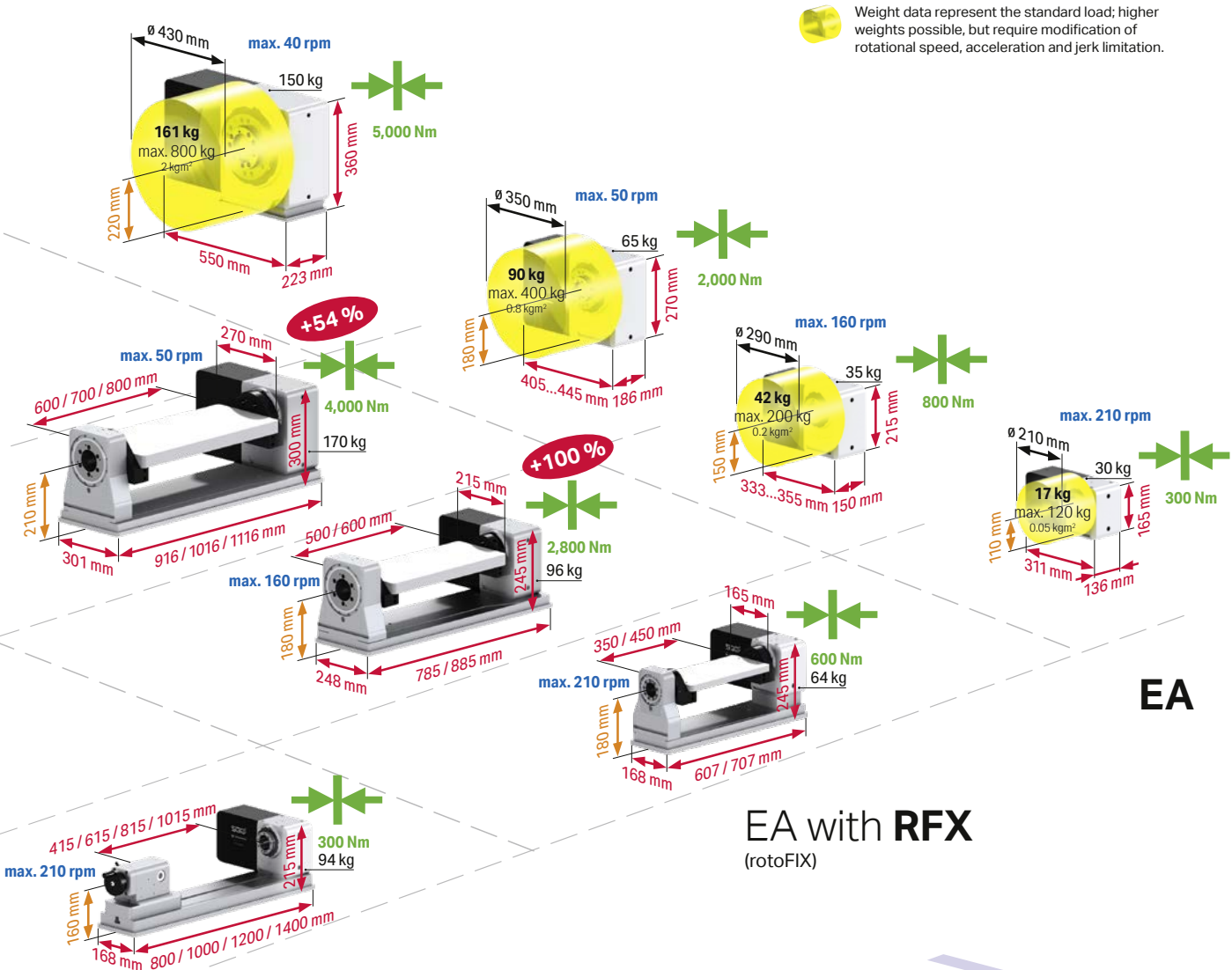
50x

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.



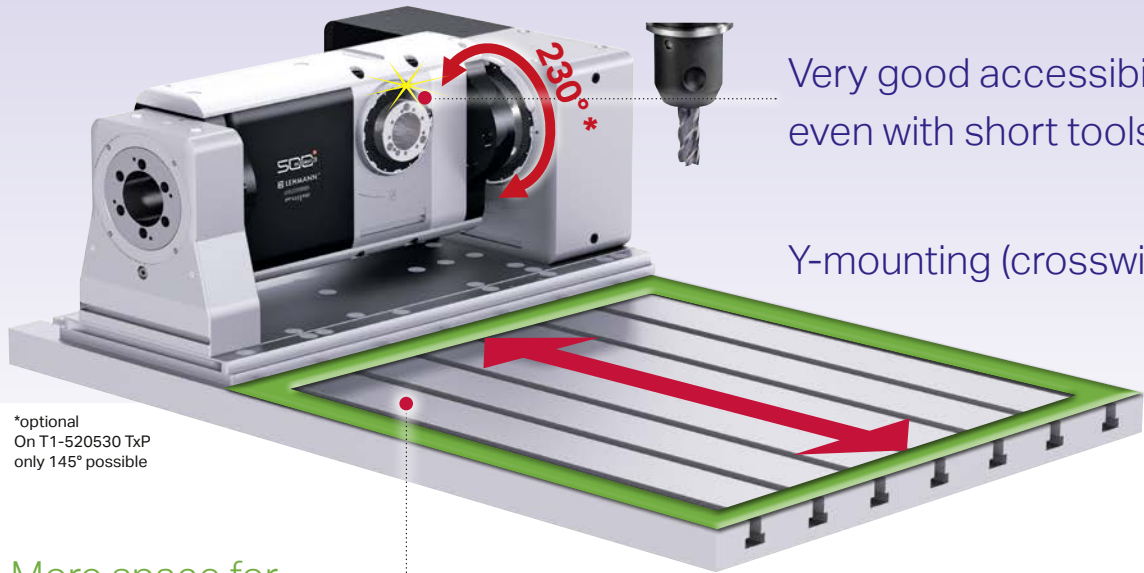
EA

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

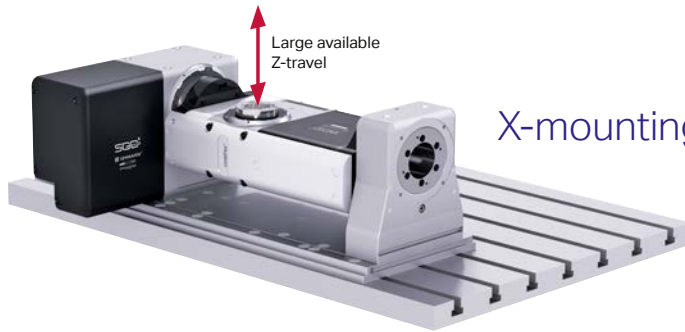


Very good accessibility, even with short tools

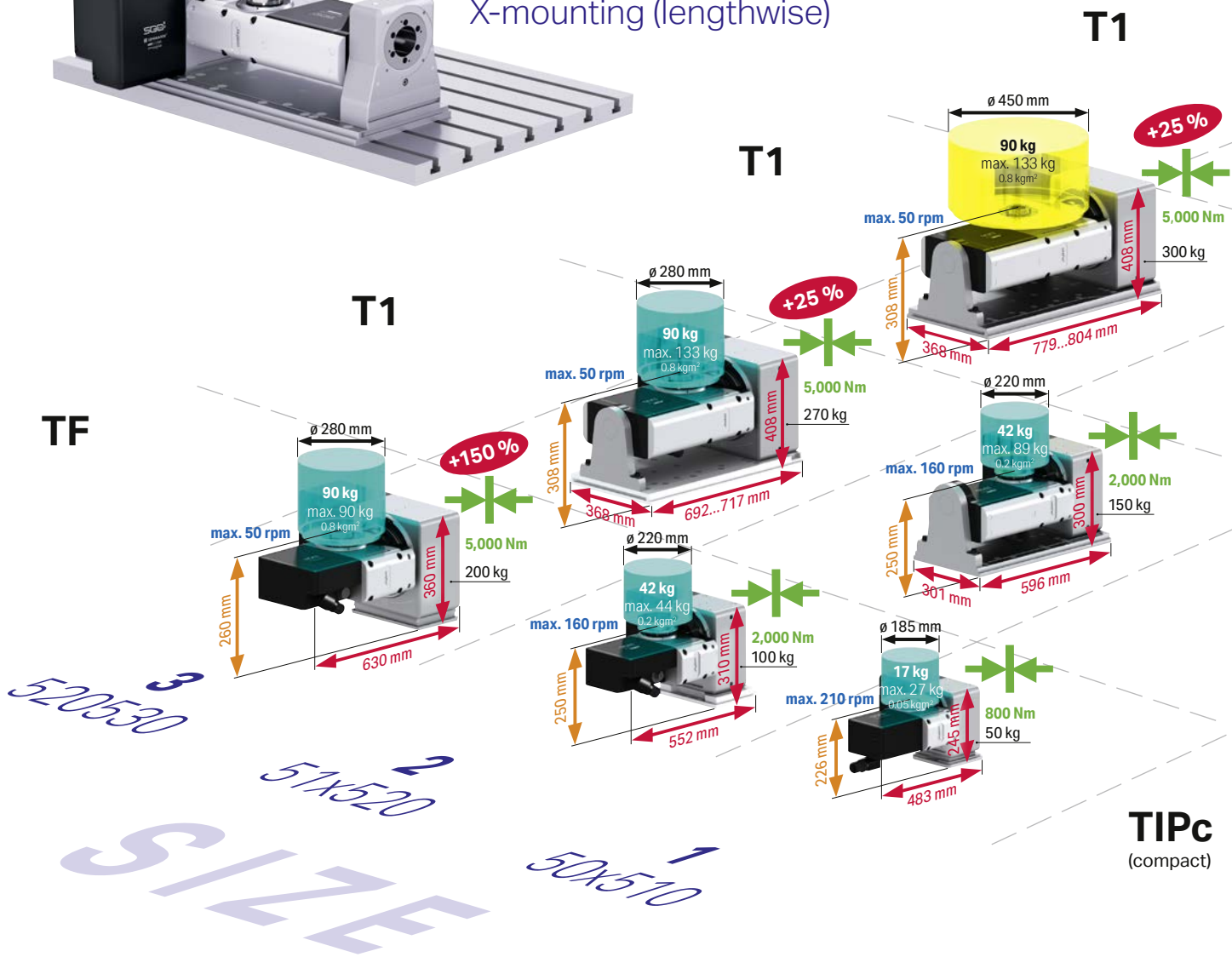
Y-mounting (crosswise)

*optional
On T1-520530 TxP
only 145° possible

More space for workpiece and fixtures

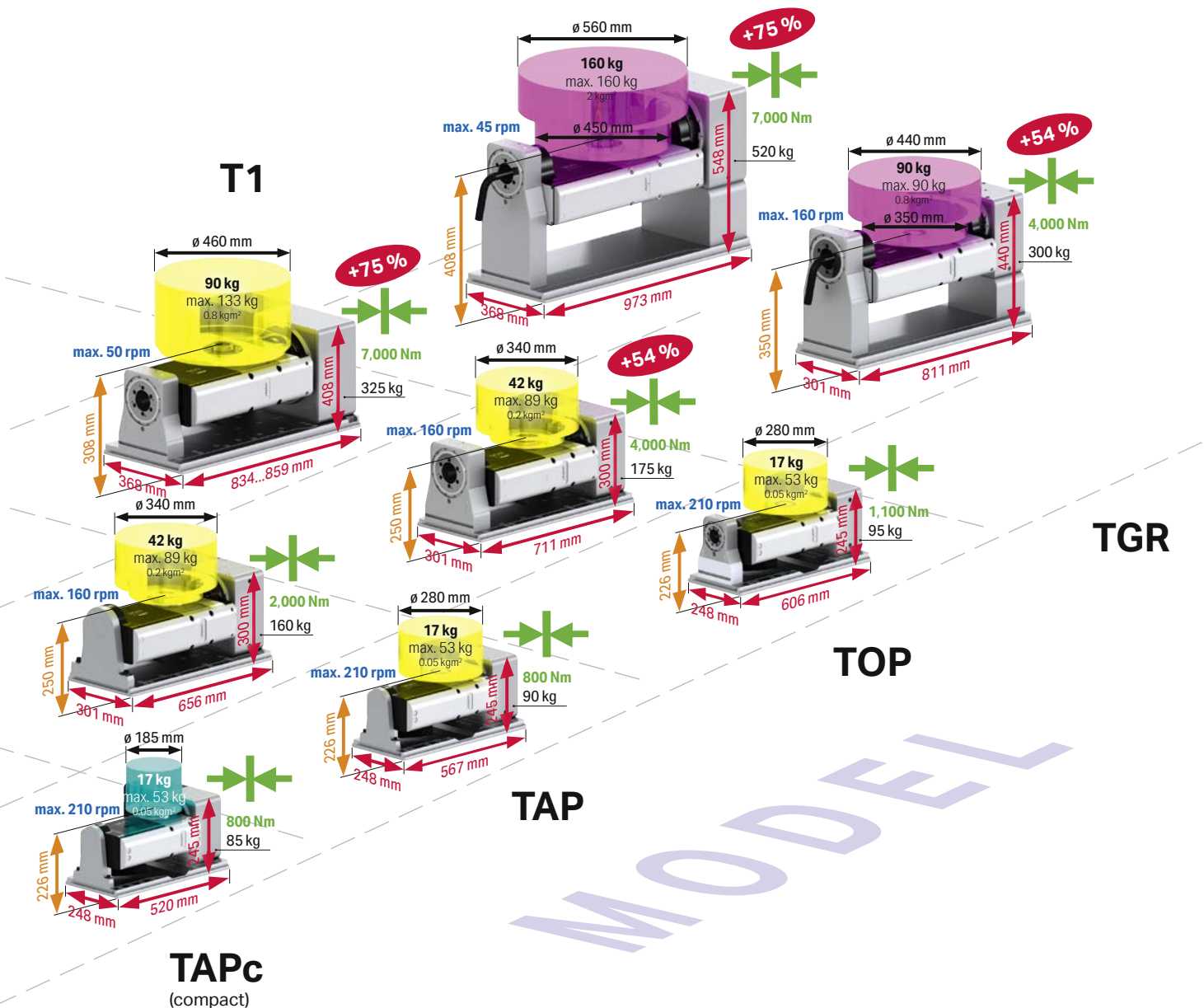


X-mounting (lengthwise)



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

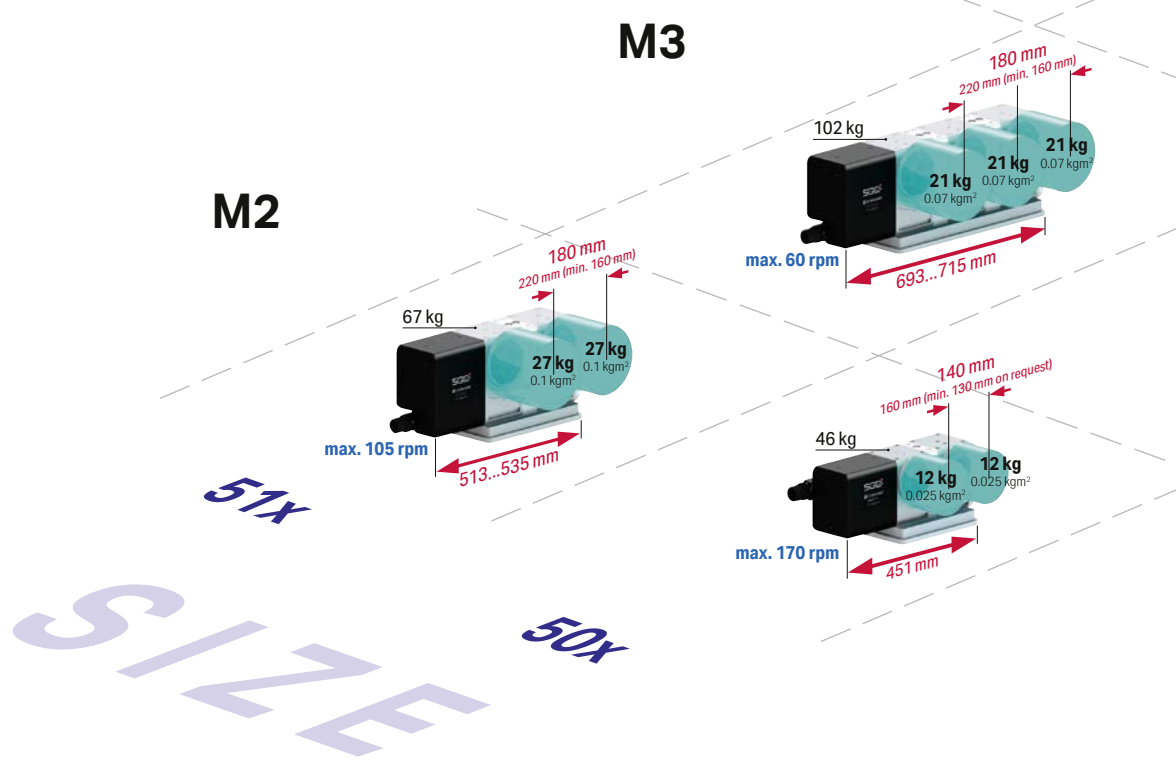


Weight data represent the standard load; higher weights possible, but require modification of rotational speed, acceleration and jerk limitation.

- 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

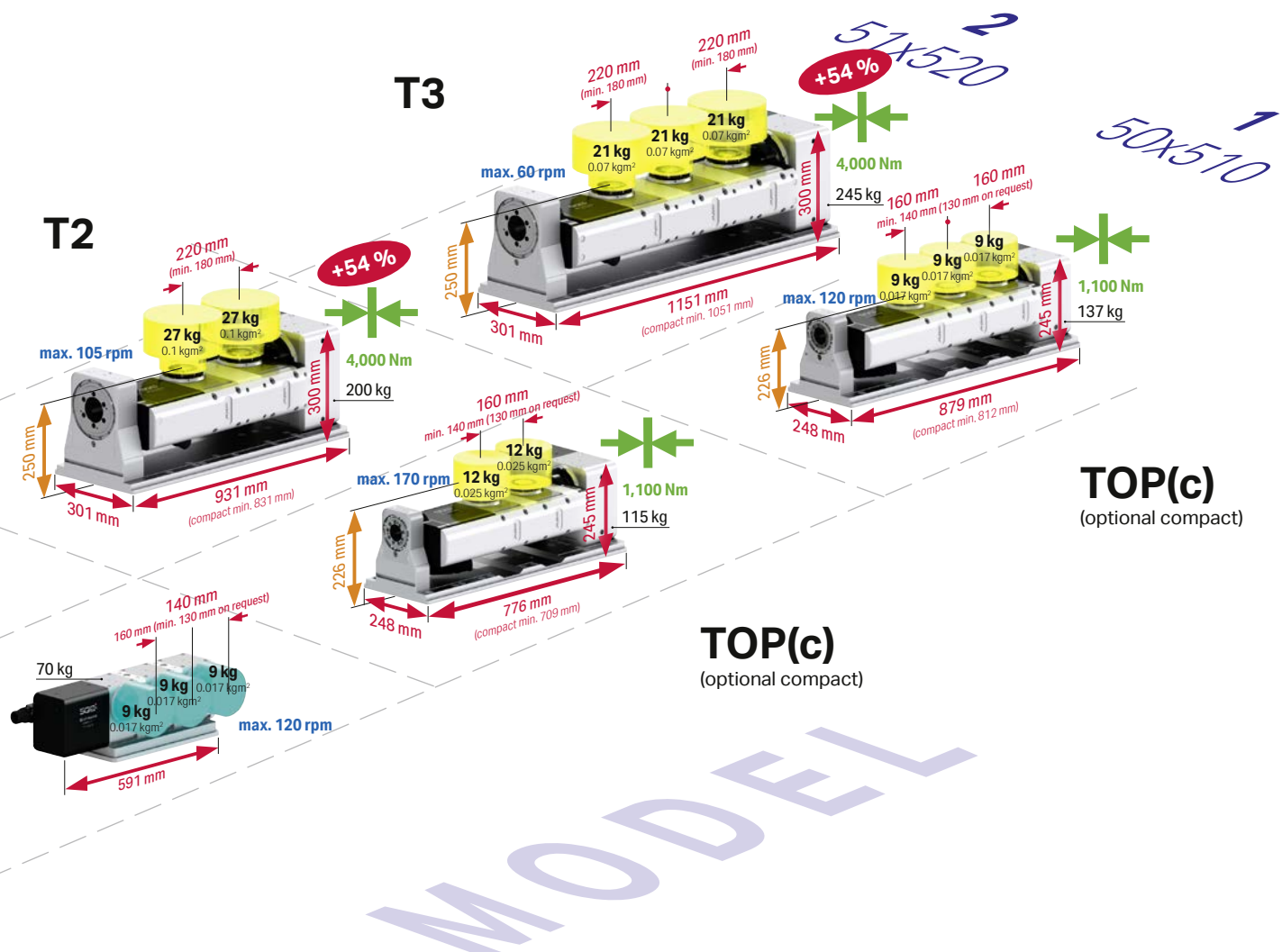


More space for workpiece and fixtures



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)

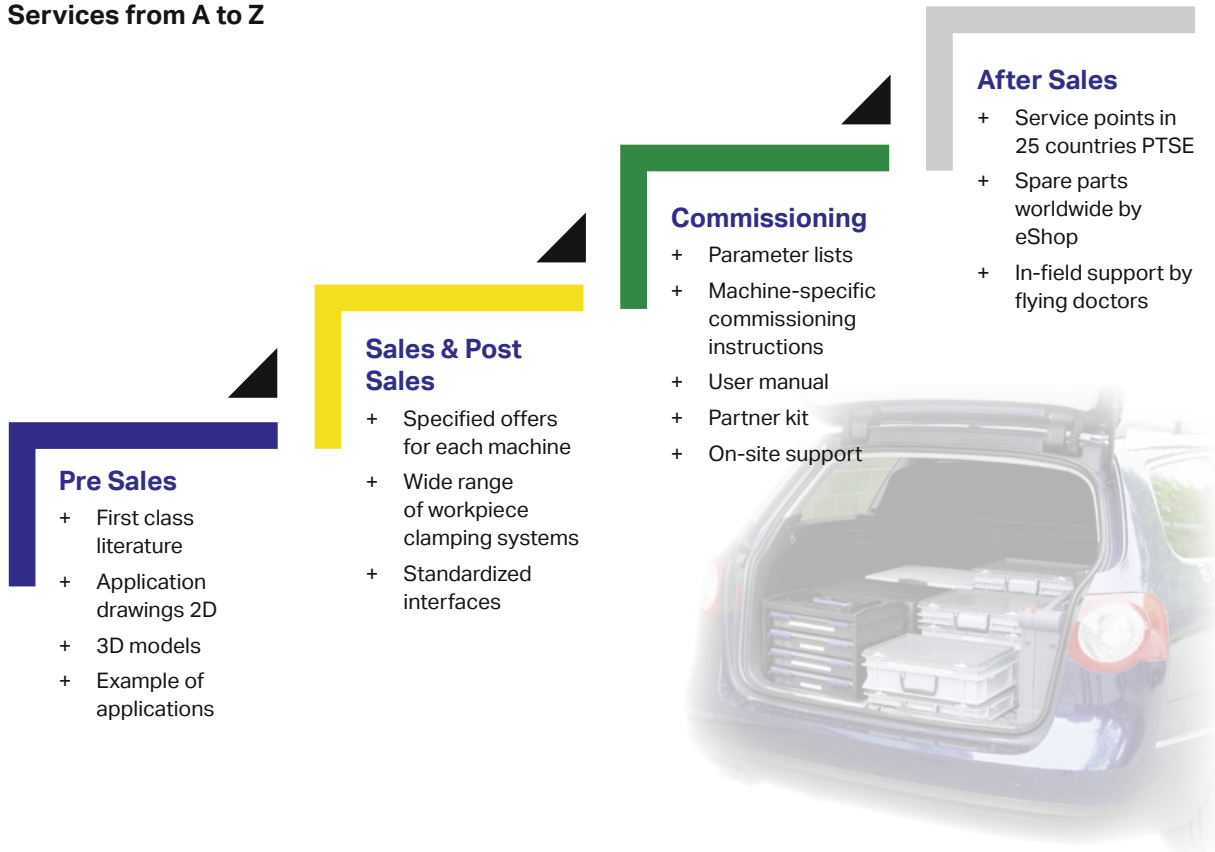


EA-507 with CAPTO retrofit kit

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

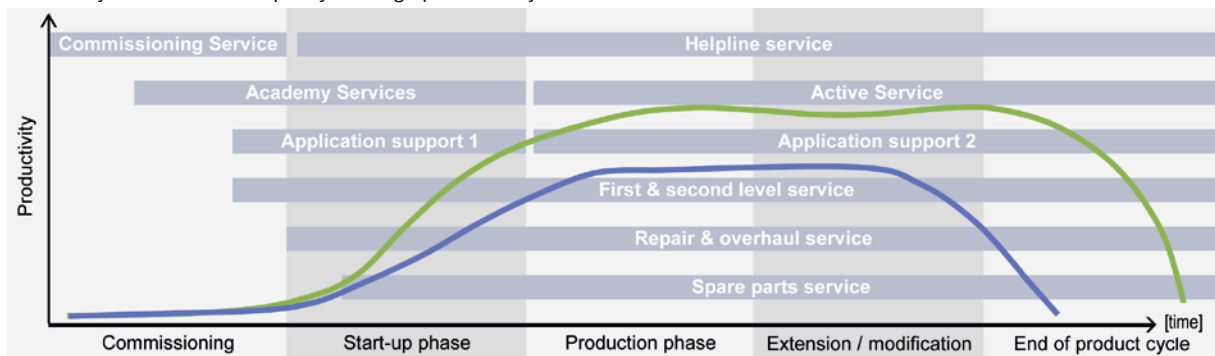


Services from A to Z



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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- Czech Republic (vacant)
- Finland
- France
- Germany
- Hungary (vacant)
- Italy
- Norway
- Poland
- Portugal
- Russia
- Slovenia
- Spain
- Sweden
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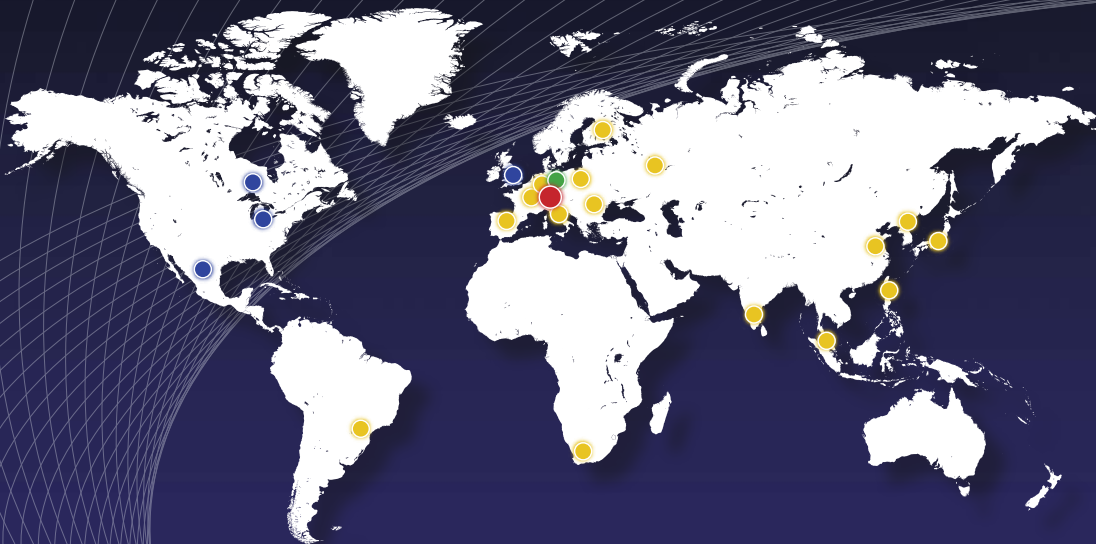
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- Taiwan
- Thailand
- Vietnam

Africa

- South Africa



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

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