

Selection Guide for CNC Rotary Tables ...



pl

LOKUMA

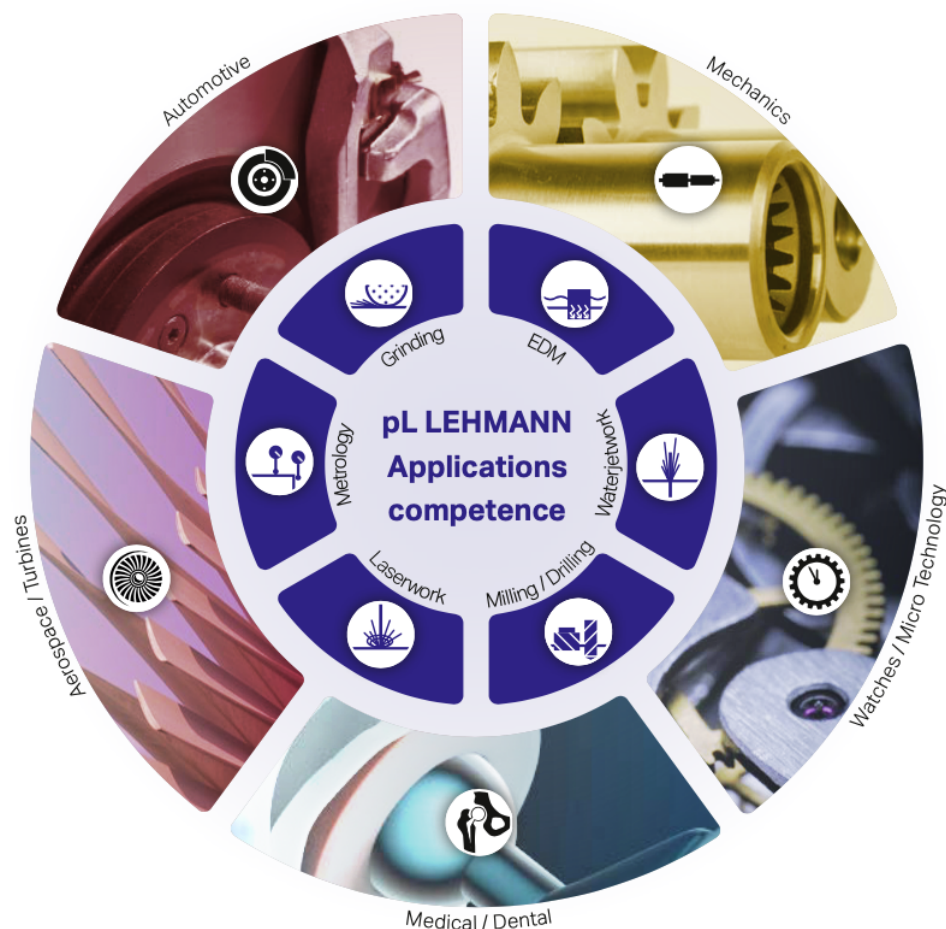
10/2018 | EN



... for GENOS-, MA-, MB-, MF-,
MILLAC- and MP-series

Applications

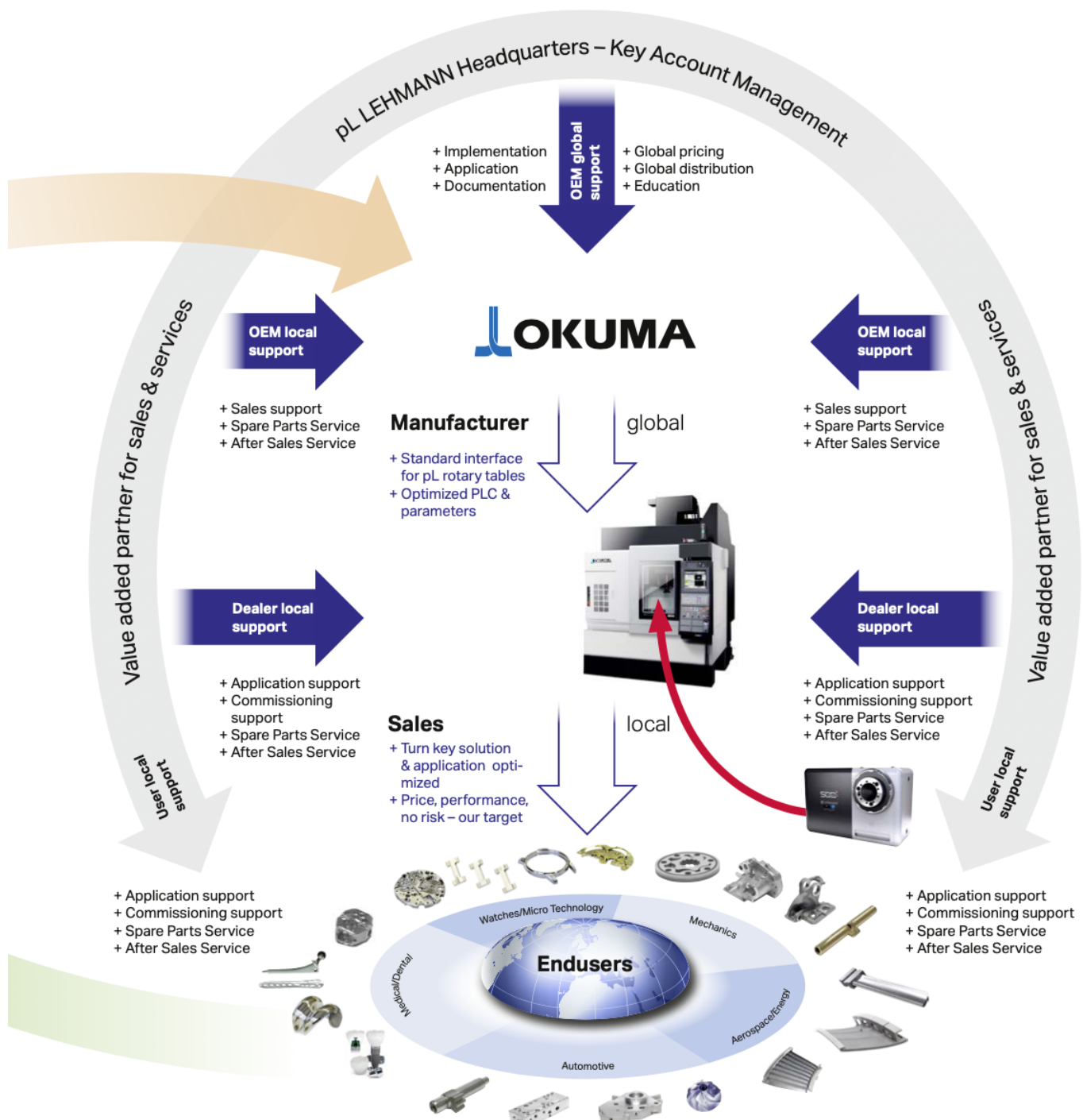
CNC rotary tables for economical manufacturing:
pL LEHMANN has suitable and rational solutions for
nearly every industry



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



Overview and Facts

Up to **210 rpm**
up to **0.21 sec / 90°**

NEW
up to +30 %

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



Benefits of PGD by pL LEHMANN as compared to Direct Drive: small servo, low power draw, no cooling system, and a significantly reduced energy consumption when machining with unclamped rotary table.

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**

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 +30 %

Overview and Facts

Pneum. clamping
up to **7,000 Nm**

High clamp

NEW
up to +150 %

Large parts
up to **ø 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

Machine Overview



GENOS M460-VE



MA-550V



MB-46VA/B



MF-46VA/B



MILLAC 561V II



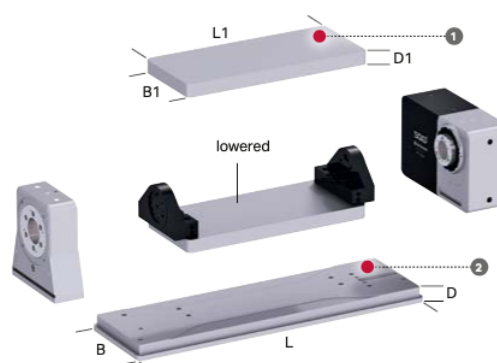
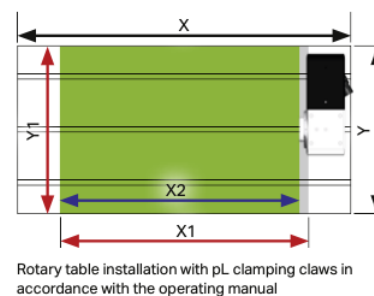
MP-46V

A word from OKUMA:

«Pushing the evolution of manufacturing. That is our mission.

Since our founding, Okuma has delivered machine tools to the world and has played a part in the development of the manufacturing industry. Building on that history, our wish is to always be proactive in expanding the possibilities of a wide variety of manufacturing. We will continue our challenge of providing everyone engaged in manufacturing with the means to perform applications with more freedom and thereby achieve even greater dreams and hopes.»

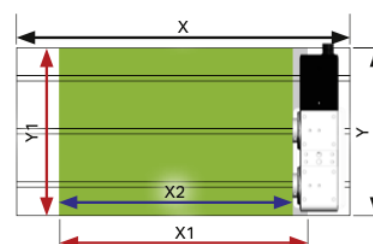
For further details about the rotary tables, see p. 12 and higher or refer to the main catalog

[illegible]

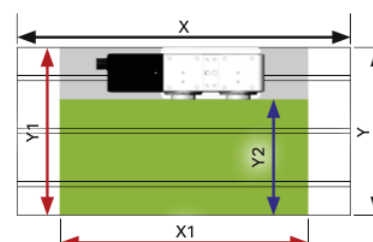
			EA-507		EA-510		EA-520			EA-530	
1 Clamping yokes	Sph	[mm]					210			218	
	Length L1	[mm]					600	700	800	800	1000
	Width B1	[mm]					270			270	
	Thickness D1	[mm]					40			40	
2 Base plates	Length L	[mm]					916	1016	1116	1172	1372
	Width B	[mm]					301			368	
	Thickness D	[mm]					30			38	
Weights / 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)	[kgm ²]					0.16	0.17	0.21		
	Mom. inert. (steel)	[kgm ²]					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.

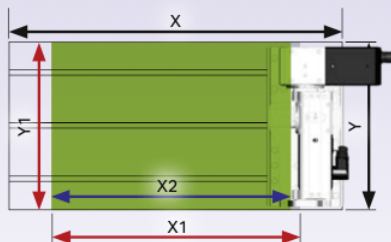
[illegible]

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

[illegible]

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

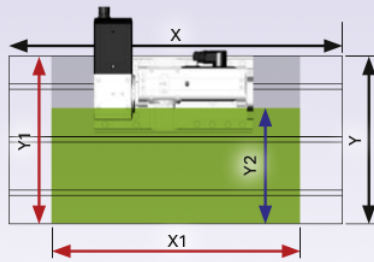


TOP1.2

[illegible][illegible]

Machine combinations with T-type rotary tables

X-mounting



Rotary table installation using hole pattern in base plate



TIP1



TAP1



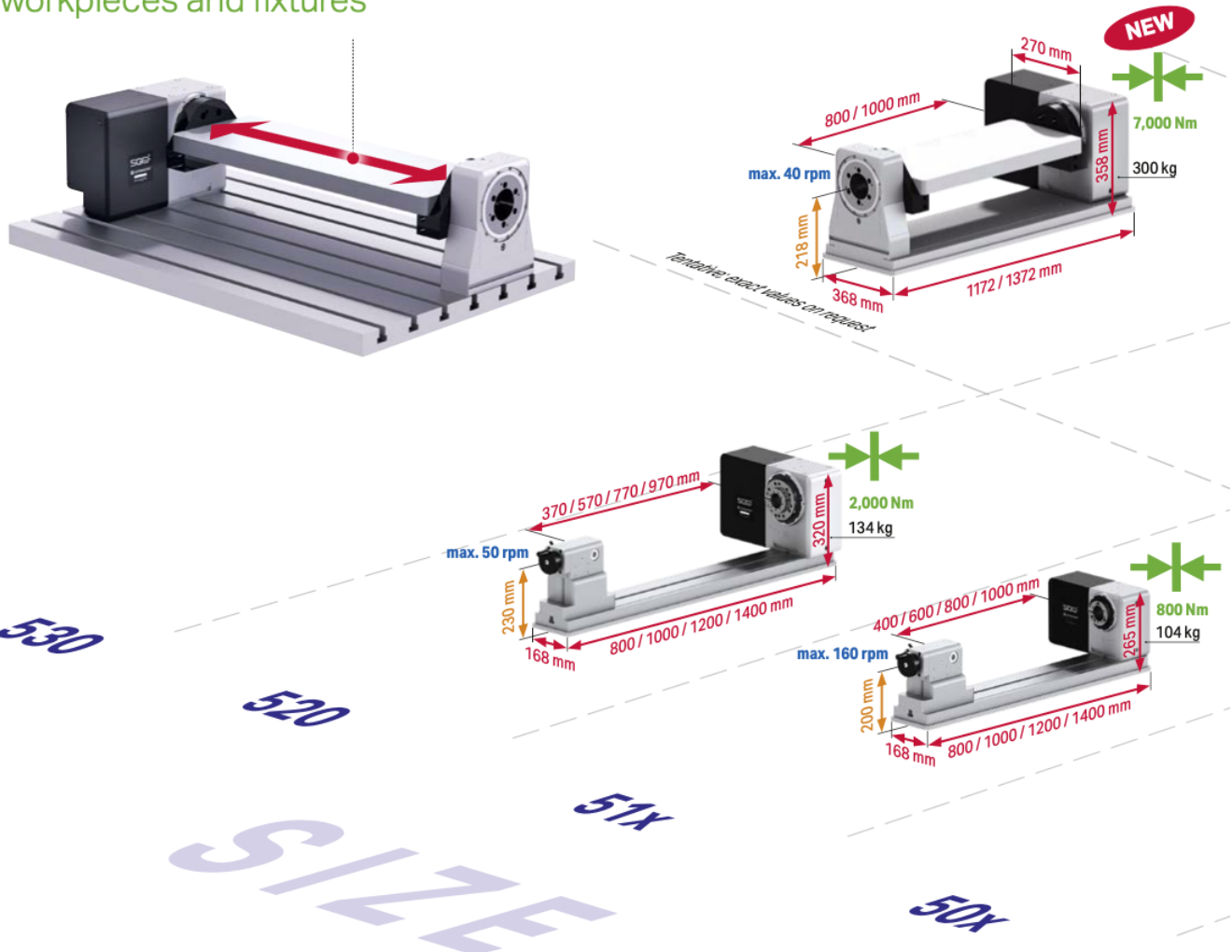
TOP1.2

[illegible][illegible]

Overview of E-Series



More space for workpieces and fixtures



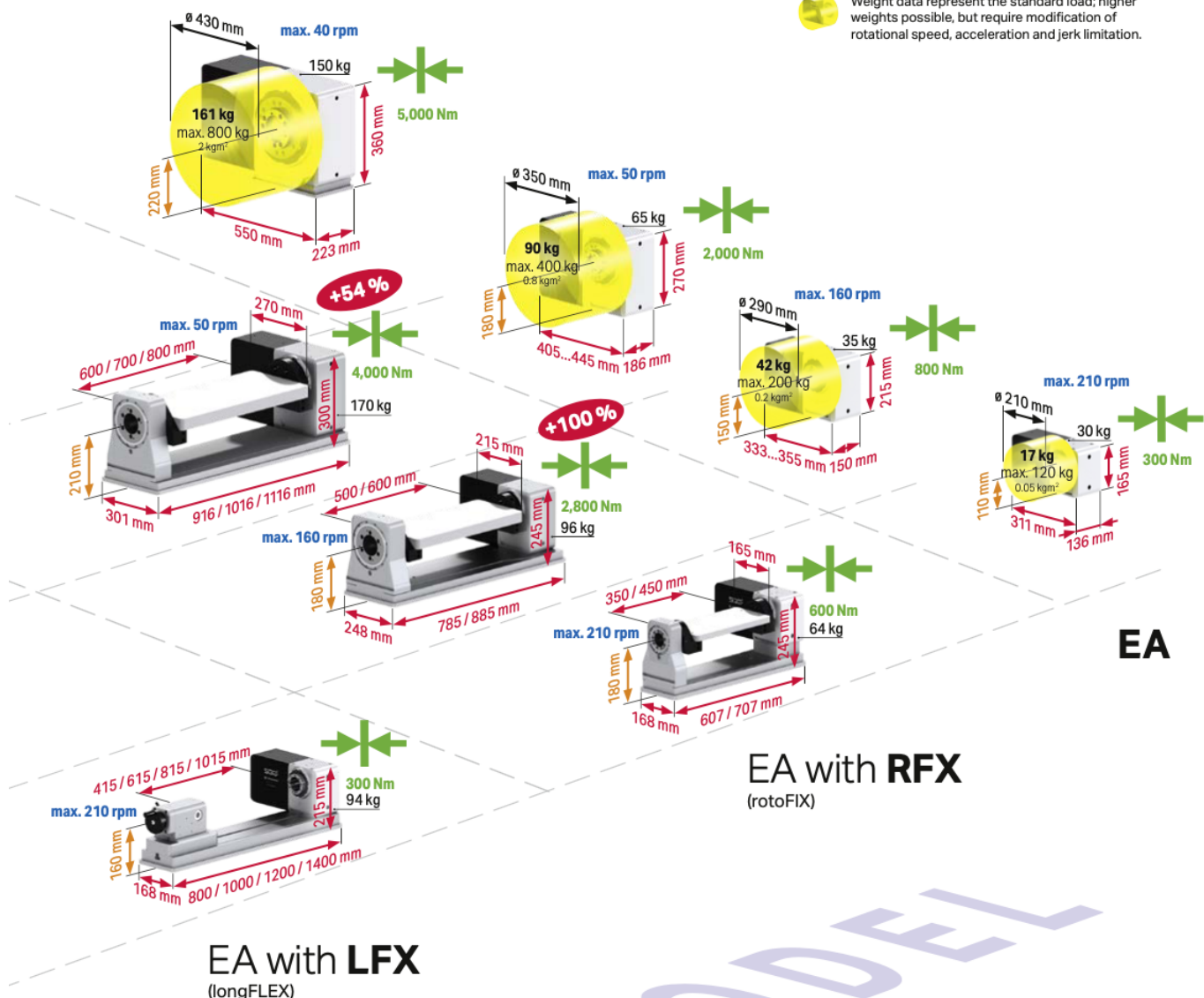
Overview of E-Series

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.

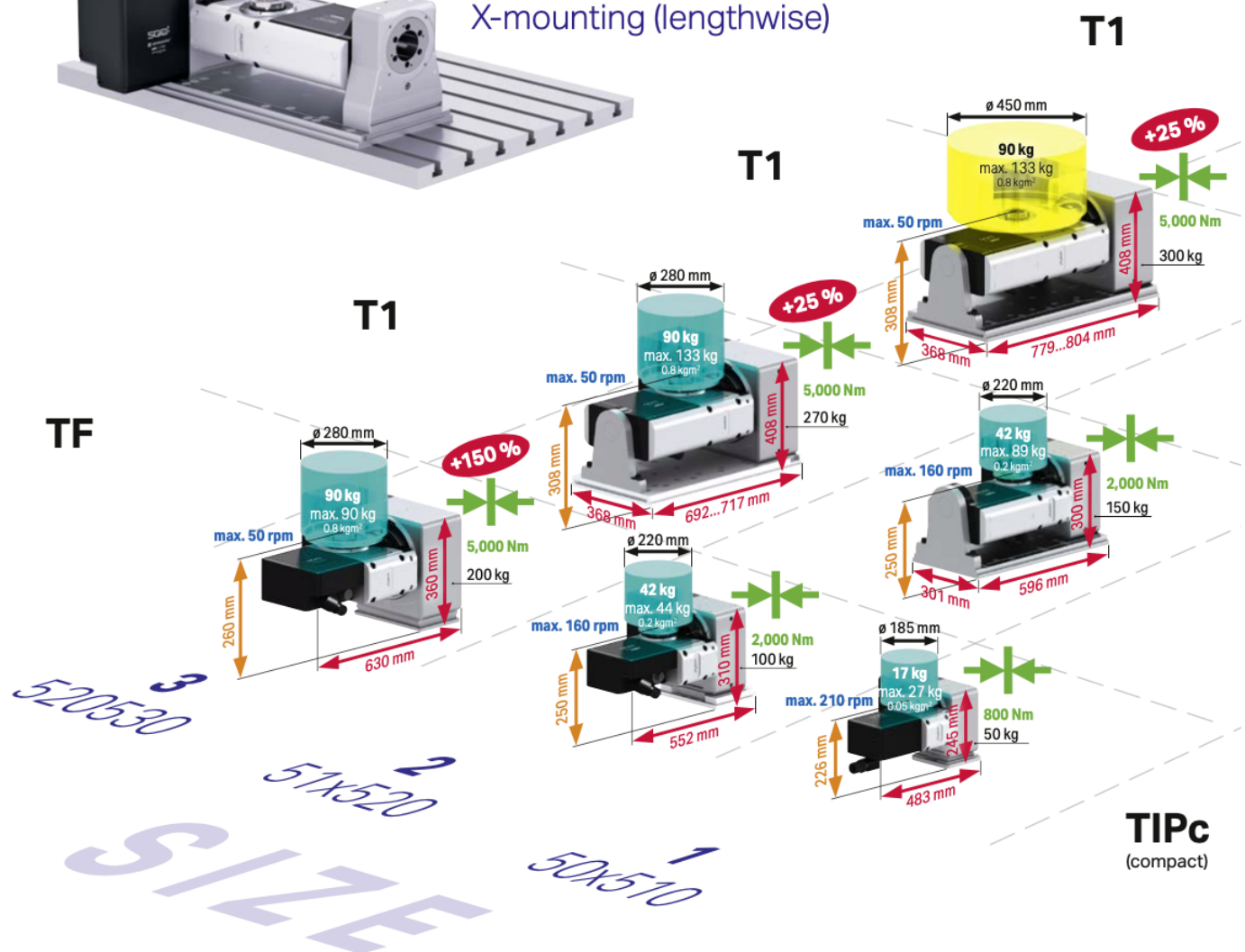


50x	507 (standard) or 508 (high speed)
51x	510 (standard) or 511 (high speed)
EA	single-axis, single-spindle CNC rotary table
rotoFIX	modular clamping yoke system
longFI FX	modular shaft clamping system

Overview of T-Series



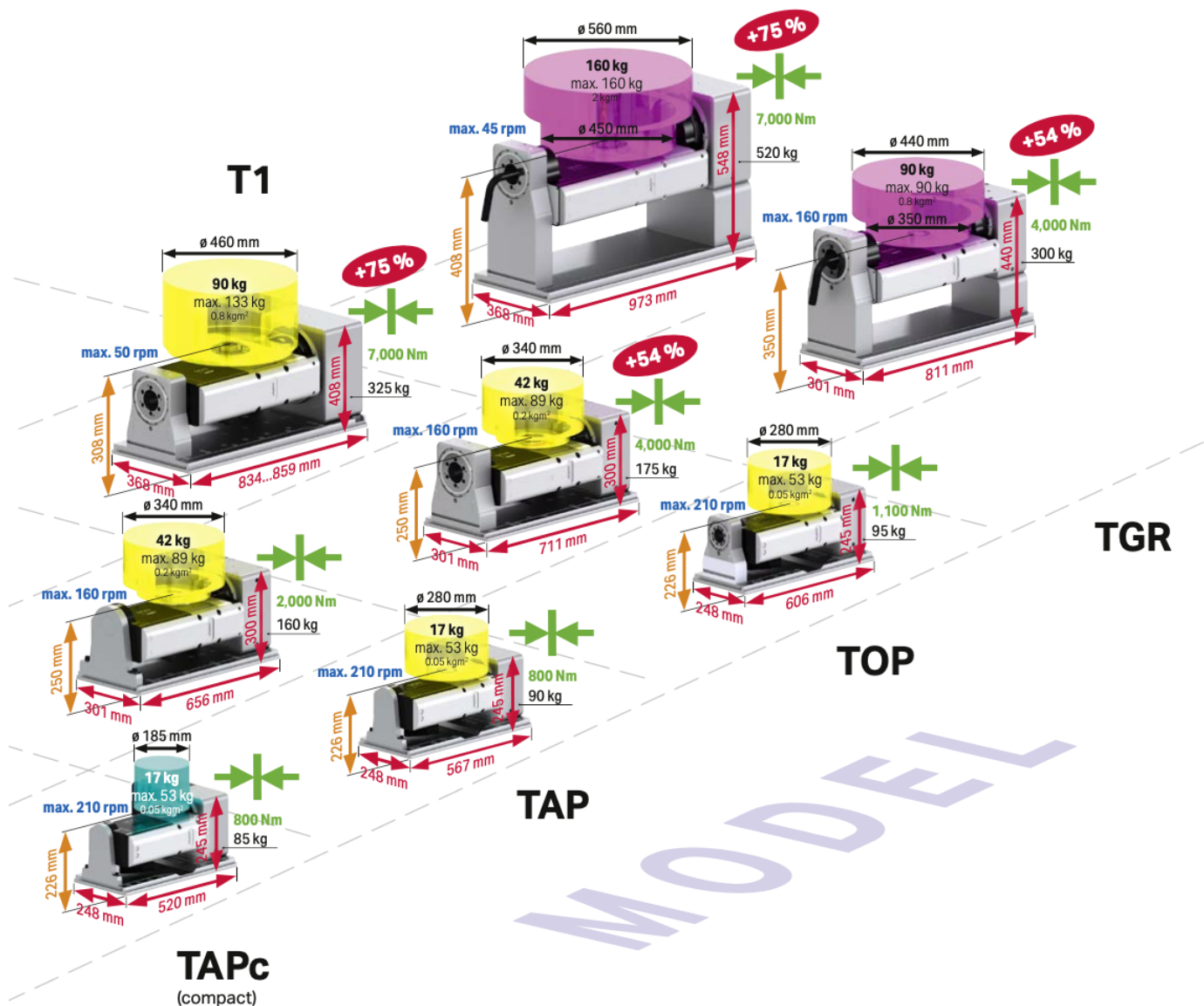
More space for
workpiece and fixtures



Overview of T-Series

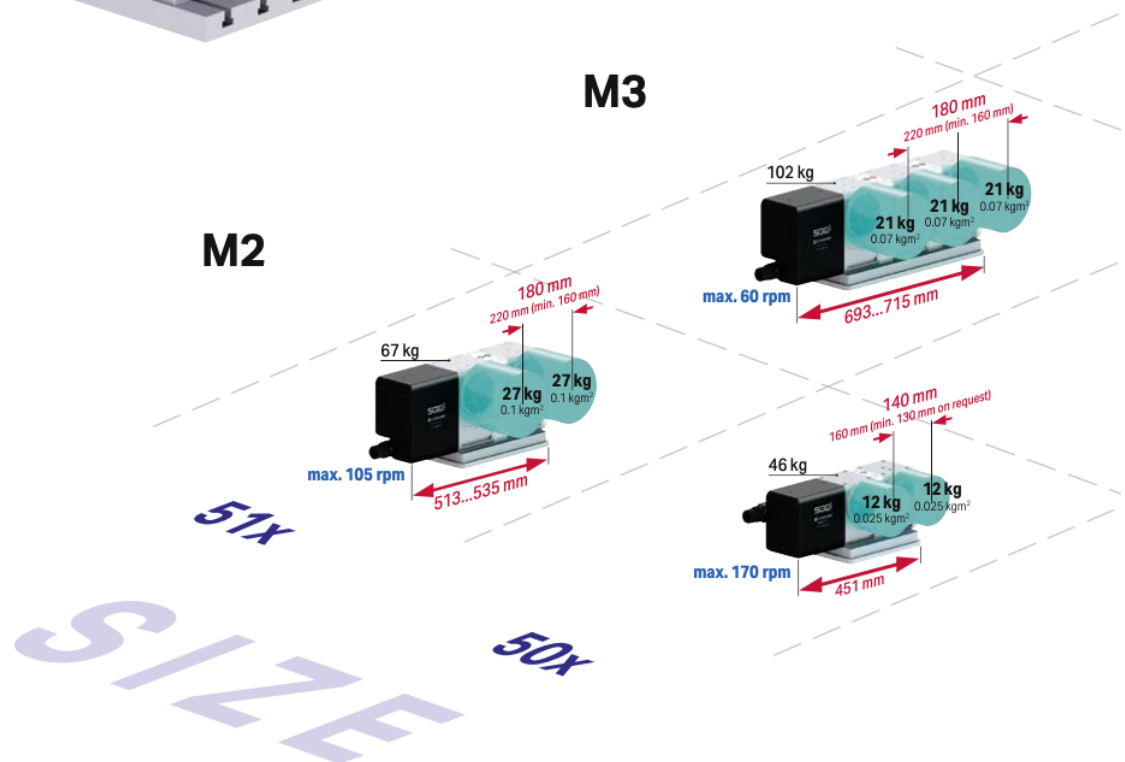
News in brief

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



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

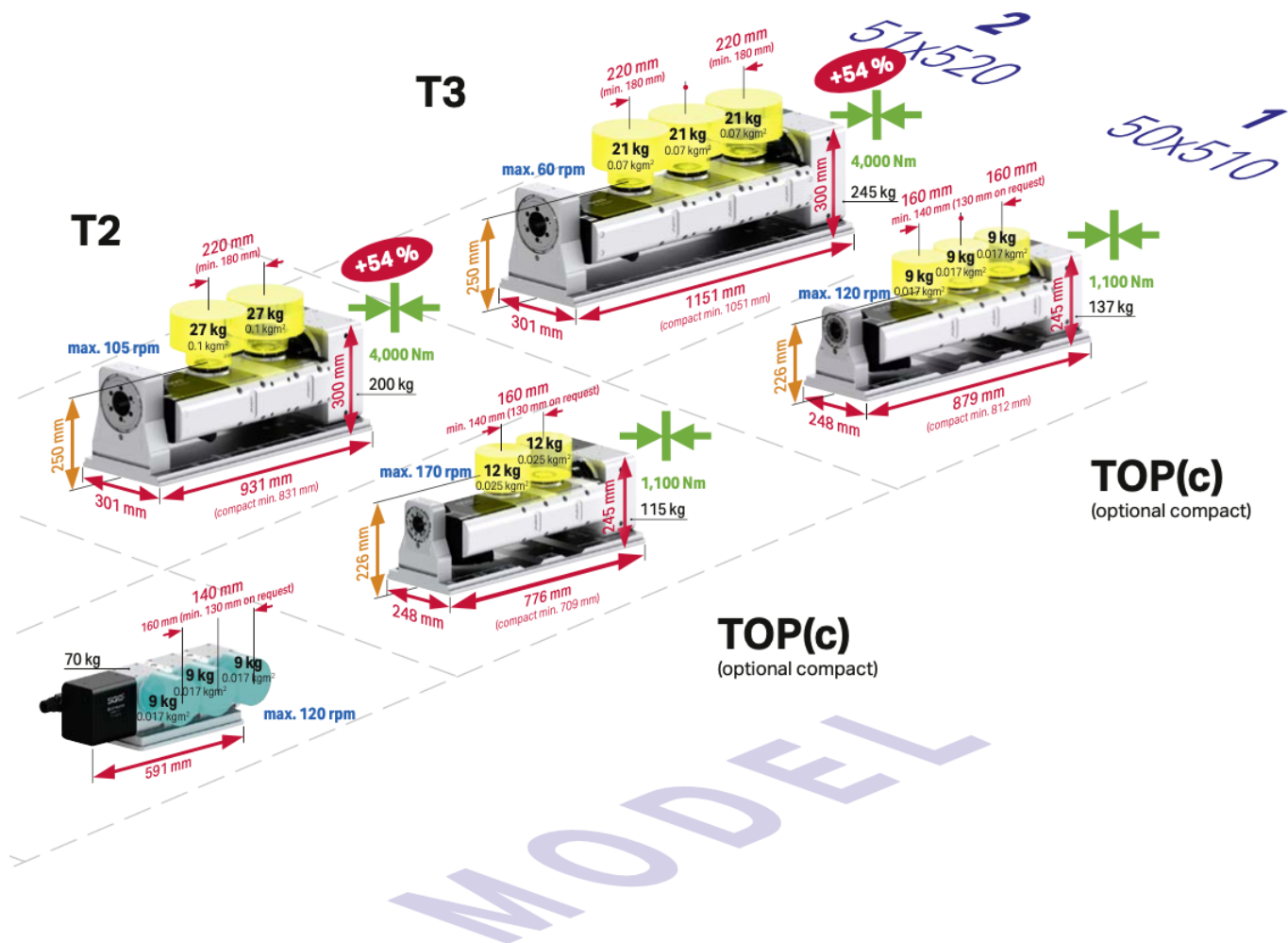
Overview of M-Series



Overview of M-Series

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



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

Spindle System Accessories

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



FA-507 with ripas auto and ripas adapter

CAPTO clamping (on request)



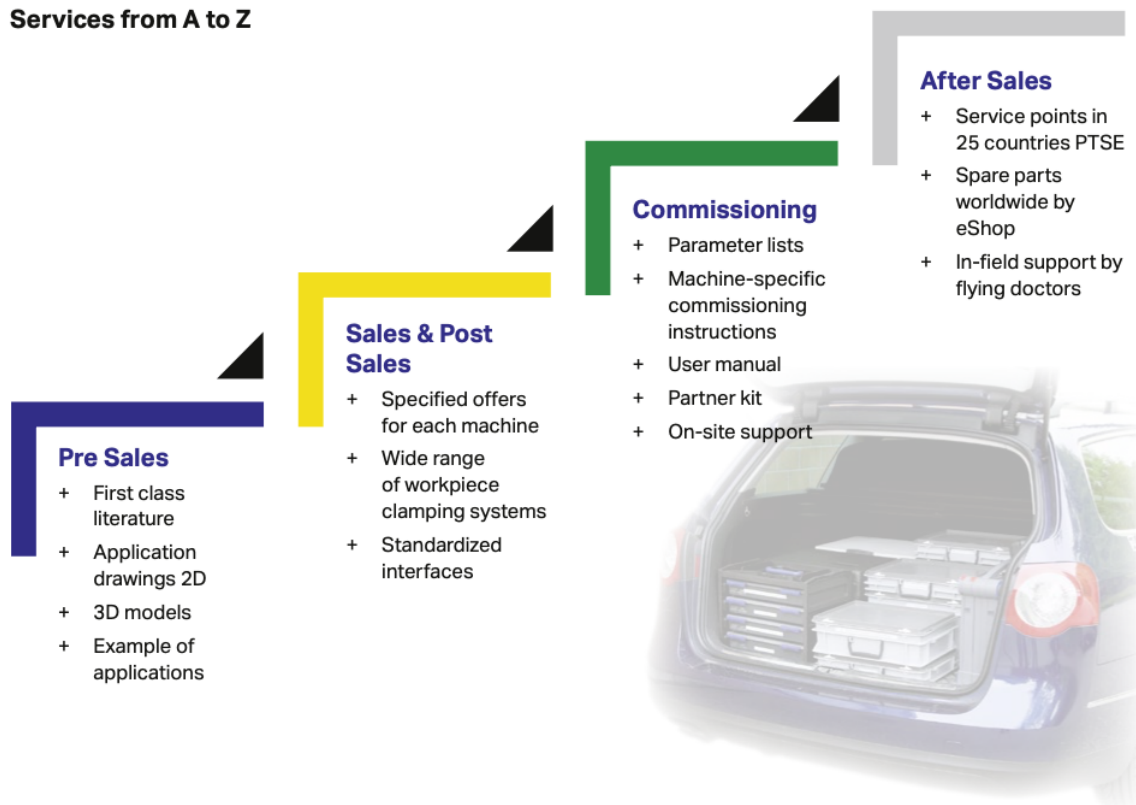
FA-507 with CAPTO retrofit kit

Sales and Service

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

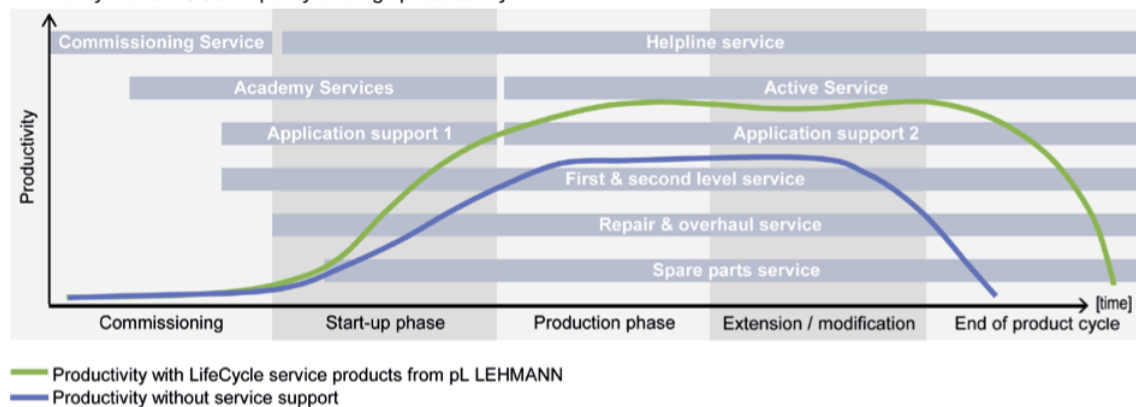


Services from A to Z



Increase productivity – Extend lifecycle

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



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



ROTARY TABLES · PRECISION TECHNOLOGY · SOFTWARE

Headquarters

PETER LEHMANN AG
CH-3552 Bärau
Phone +41 (0)34 409 66 66
Fax +41 (0)34 409 66 00
pls@plehmann.com
www.lehmann-rotary-tables.com

Representatives / Agencies

Europe

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

America

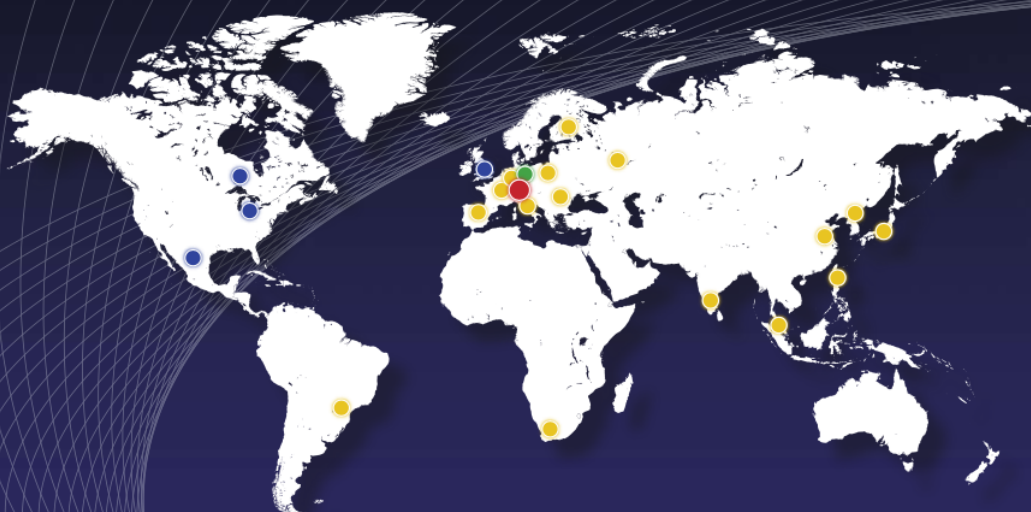
- Brazil
- Canada
- Mexico
- USA

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

Subject to change / Edition: 10/2018