

Selection Guide for CNC Rotary Tables ...



pl

emco

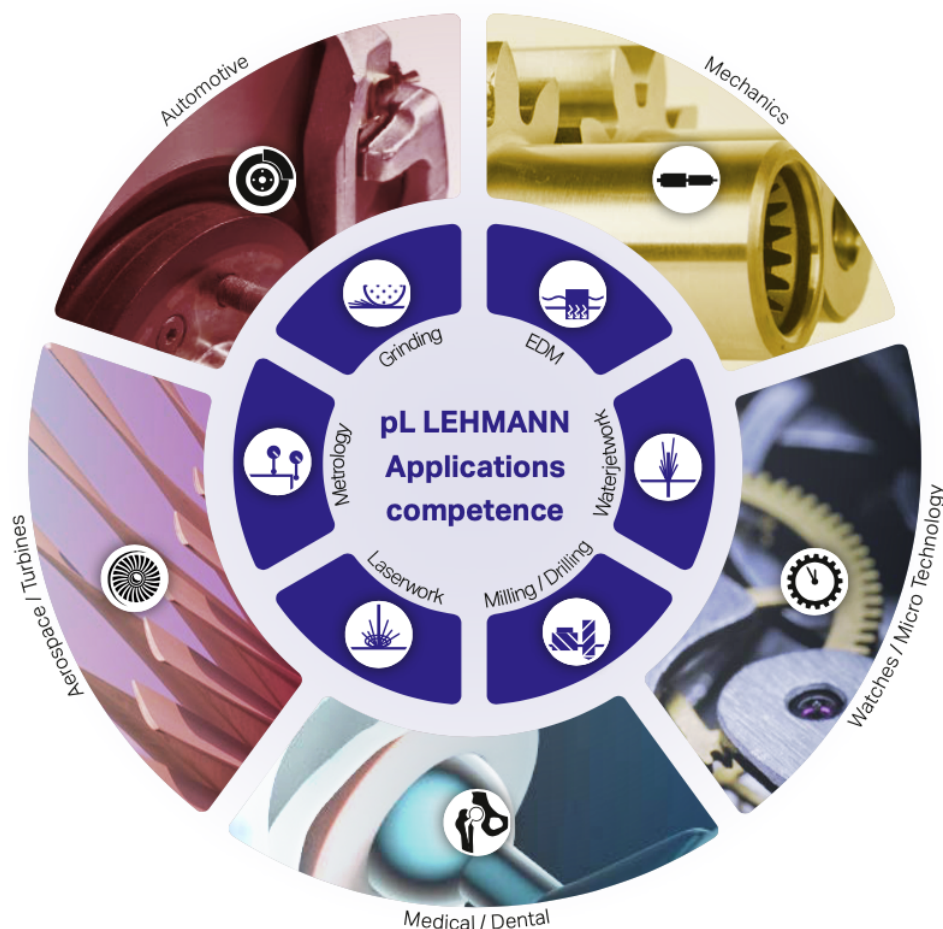
10/2018 | EN



... for E- and MMV-series

Applications

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

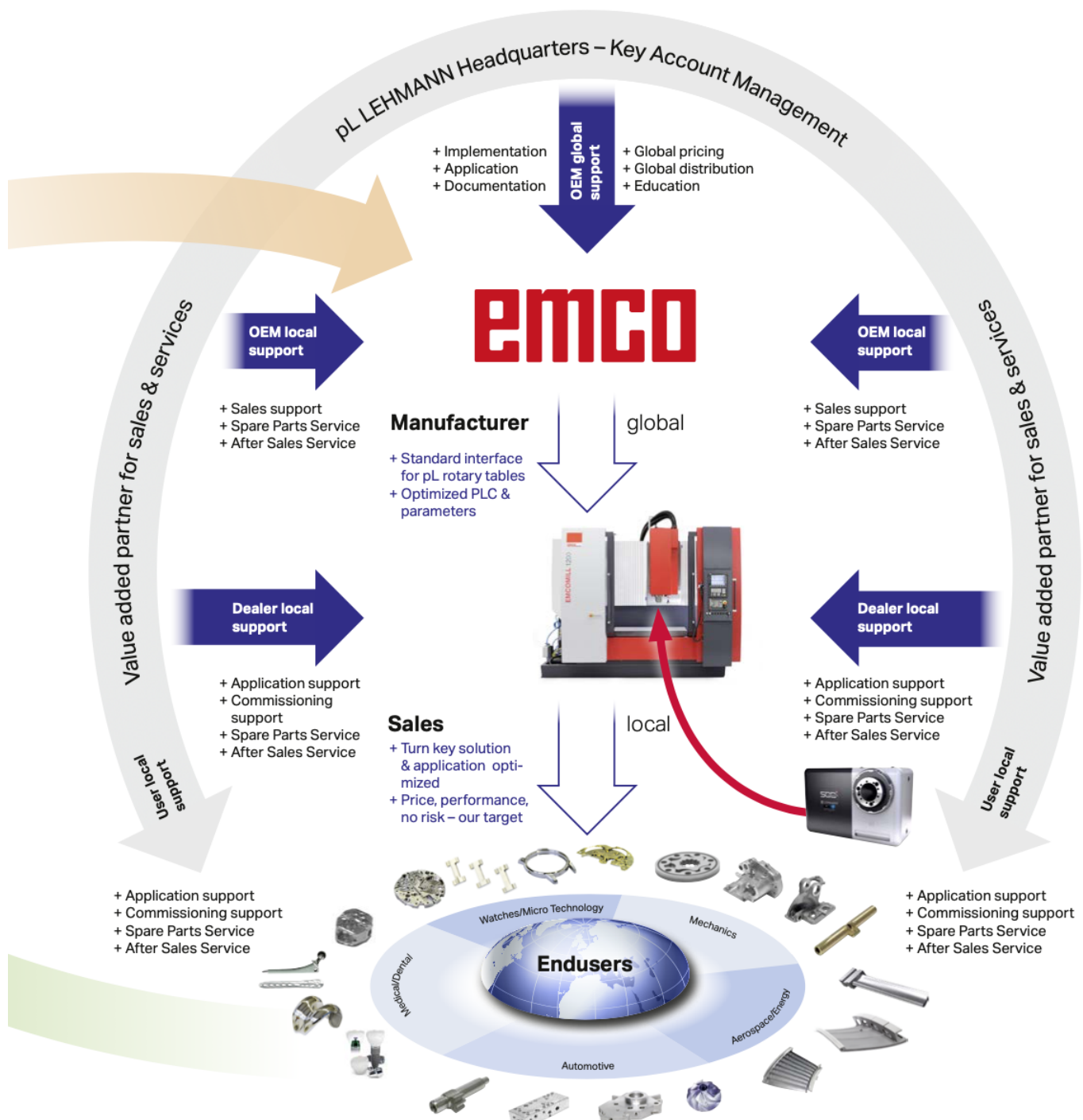


pL rotary tables in use: on over **40** different machine brands
and over **160** different machine models.

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

Organization

Professional products from professional partners:
EMCO 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



EMCO MILL 750



EMCO MILL 1200



MMV 2000

A word from EMCO:

«Mission: precision

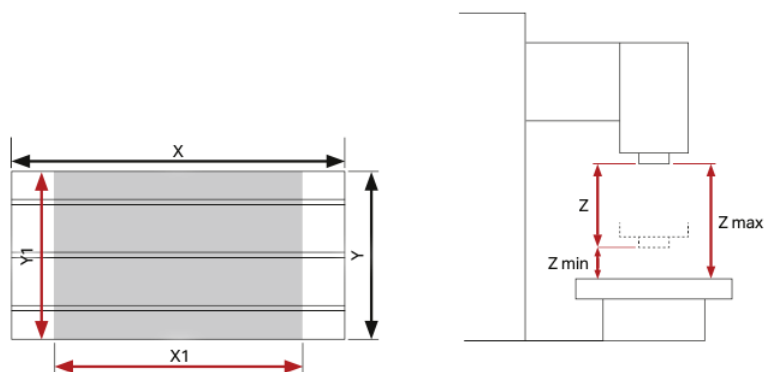
Perfect engineering for all requirements: EMCO Innovative Machine Tools. The EMCO Group develops and produces innovative, high-tech machine tools for the metal-cutting industry. The product range is unique in Europe. From conventional turning and milling machines, through cyclecontrolled machines, universal CNC turning machines, CNC milling and turning centers to high-speed milling and drilling machining centers for economic complete machining: The EMCO Group provides the industry with custom-made, highly efficient solutions for all requirements.»



MMV 3200

Machine data

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

[illegible]

* 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.)

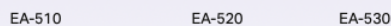
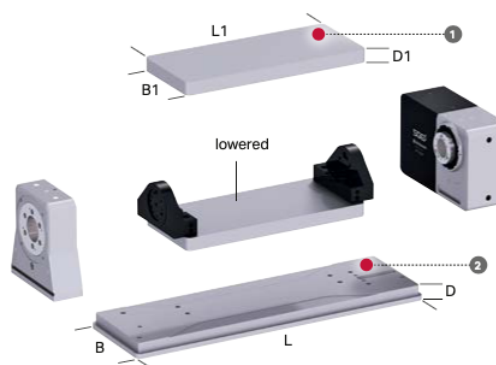
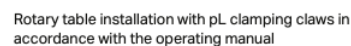
** The recommended rotary tables do not exceed 50 % of the allowed table load.

Table explanation for pp. 8–11

	EA-507 X2	EA-510 X2	EA-520 X2	EA-530 X2
F 350	258			

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

[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		

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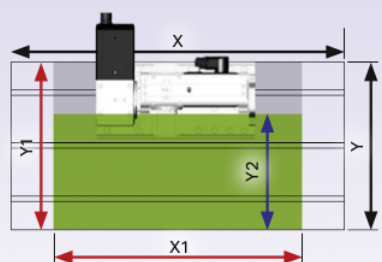
Y-mounting



Rotary table installation using hole pattern in base plate

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X-mounting



Rotary table installation using hole pattern in base plate



TIP1



TAP1



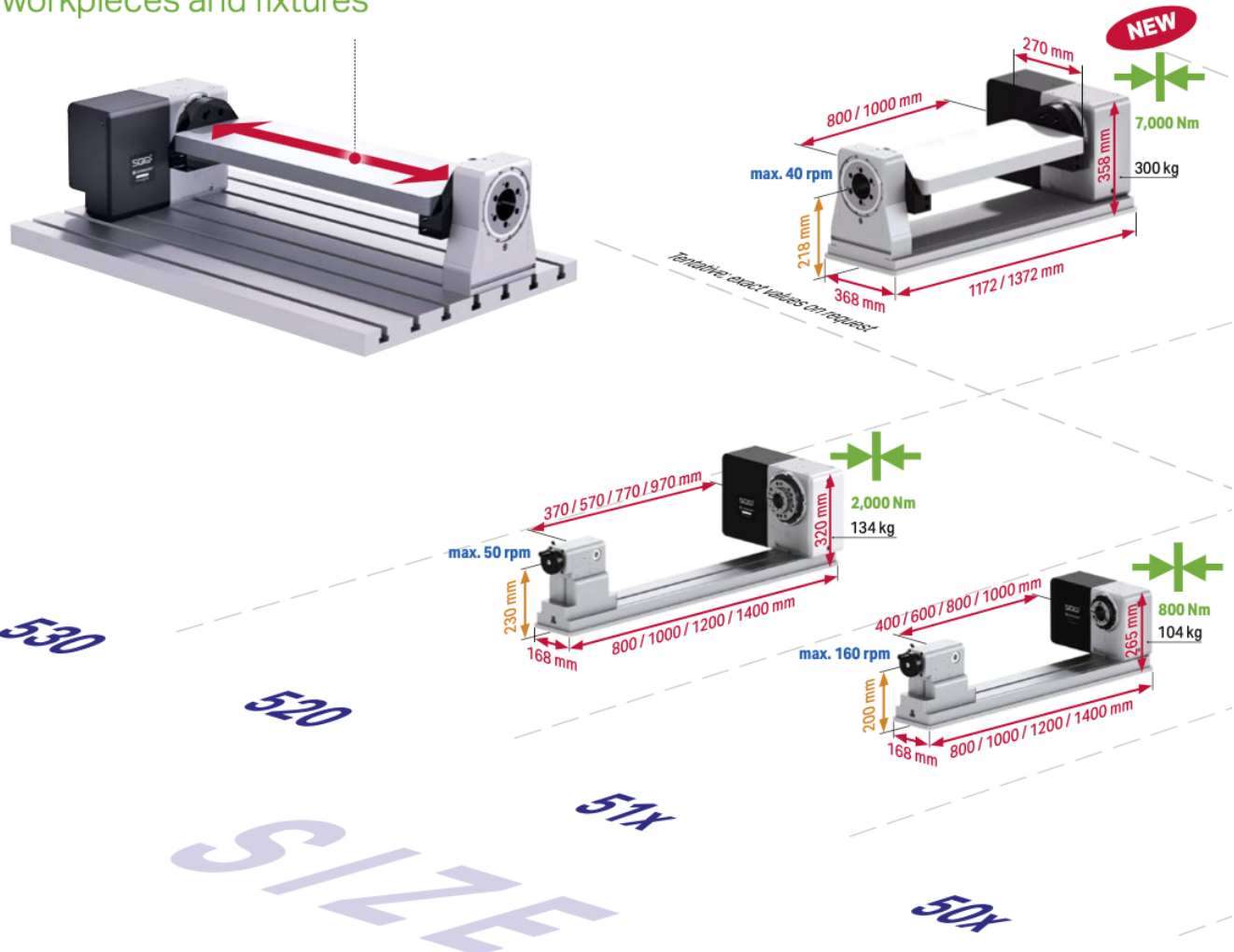
TOP1.2

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Overview of E-Series



More space for workpieces and fixtures



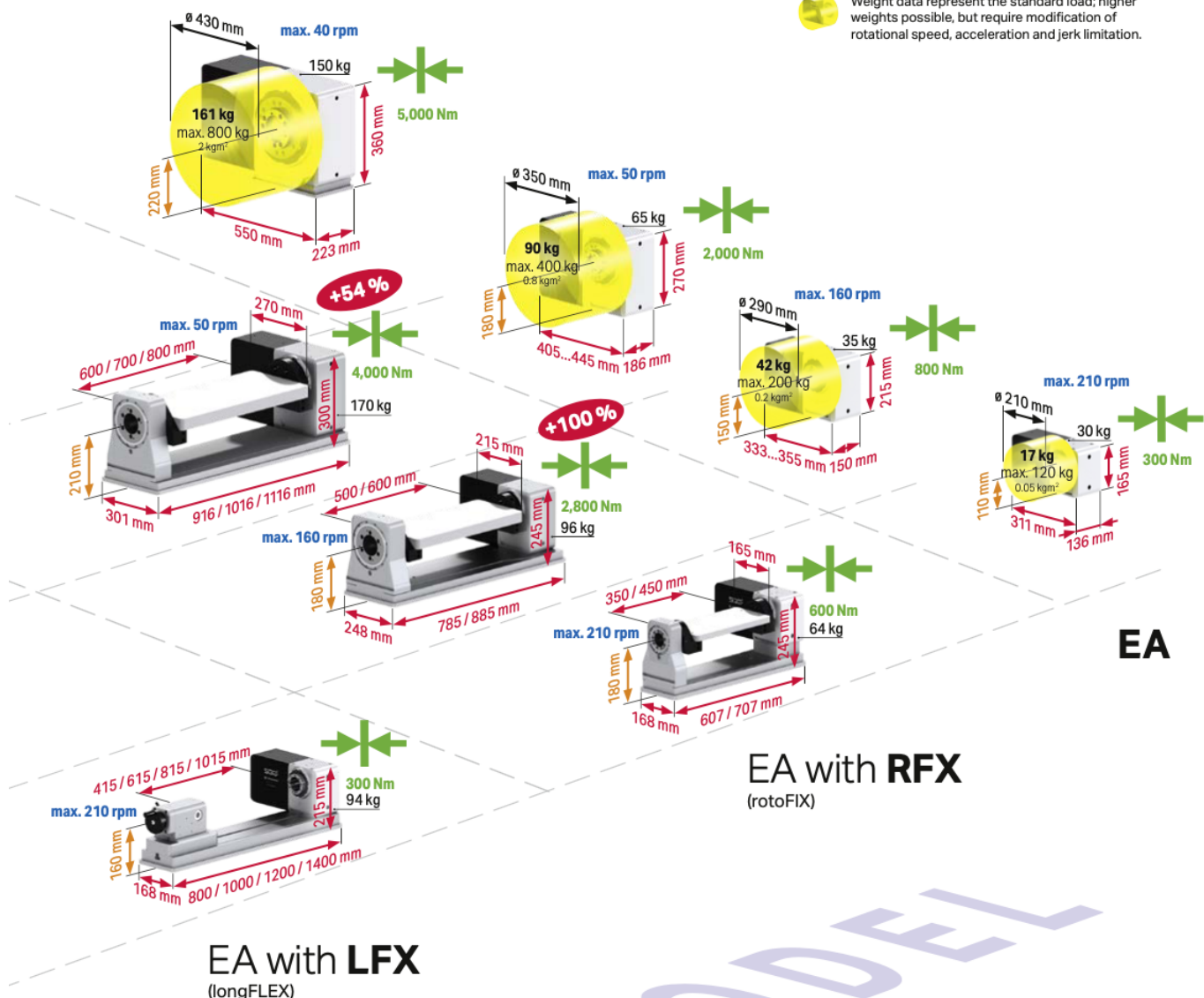
Overview of E-Series

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.

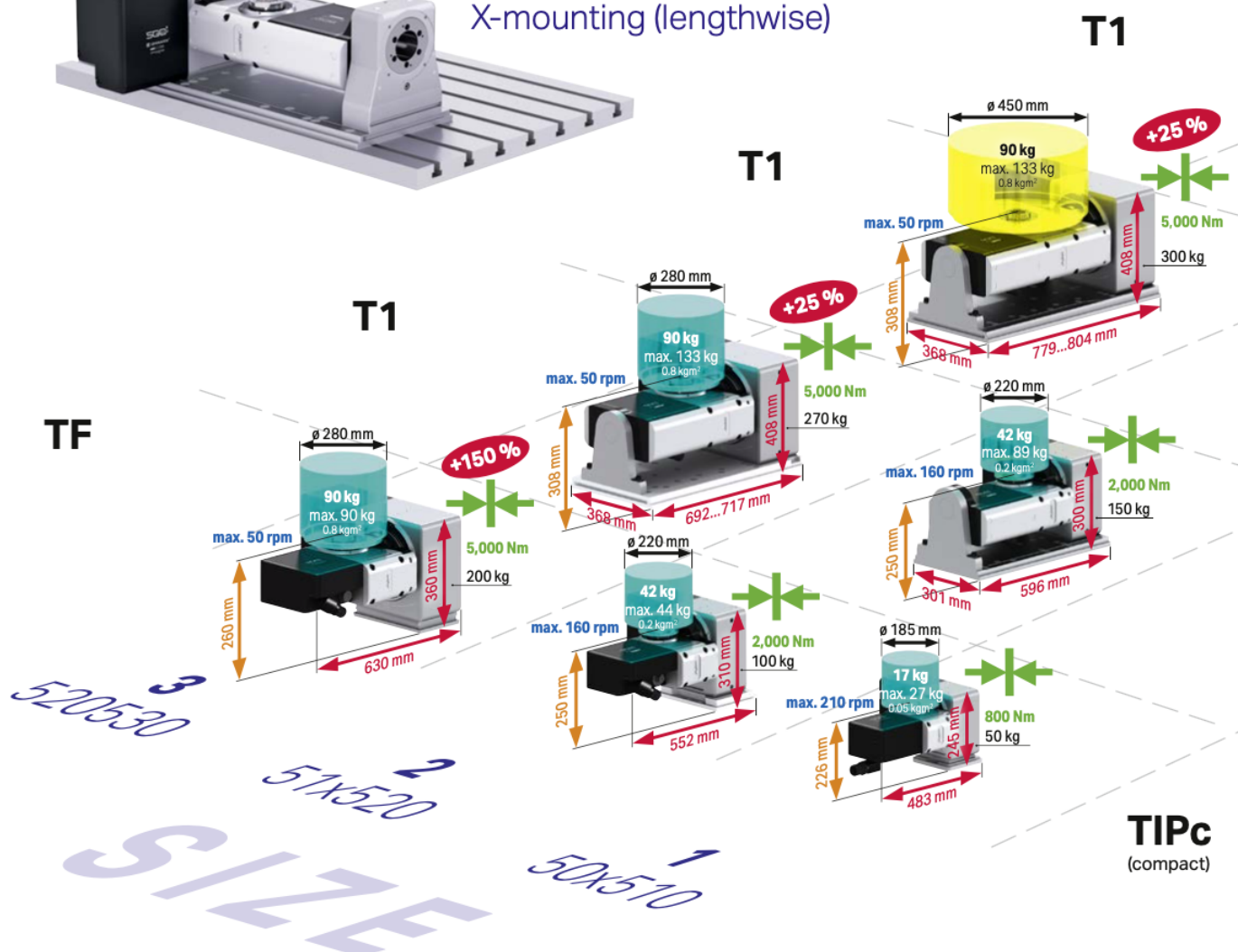


50x	507 (standard) or 508 (high speed)
51x	510 (standard) or 511 (high speed)
EA	single-axis, single-spindle CNC rotary table
rotoFIX	modular clamping yoke system
longFLEX	modular shaft clamping system

Overview of T-Series



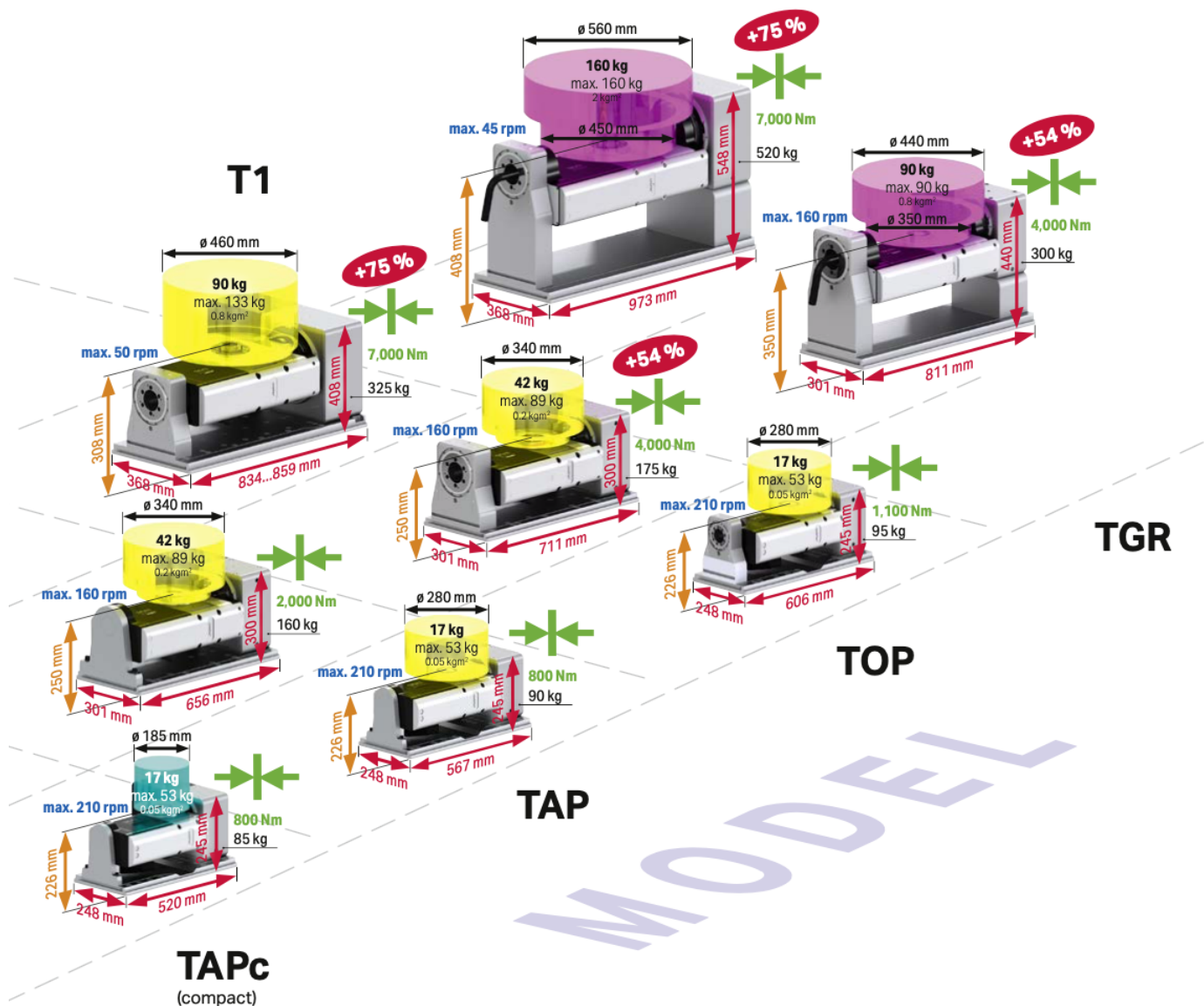
More space for
workpiece and fixtures



Overview of T-Series

News in brief

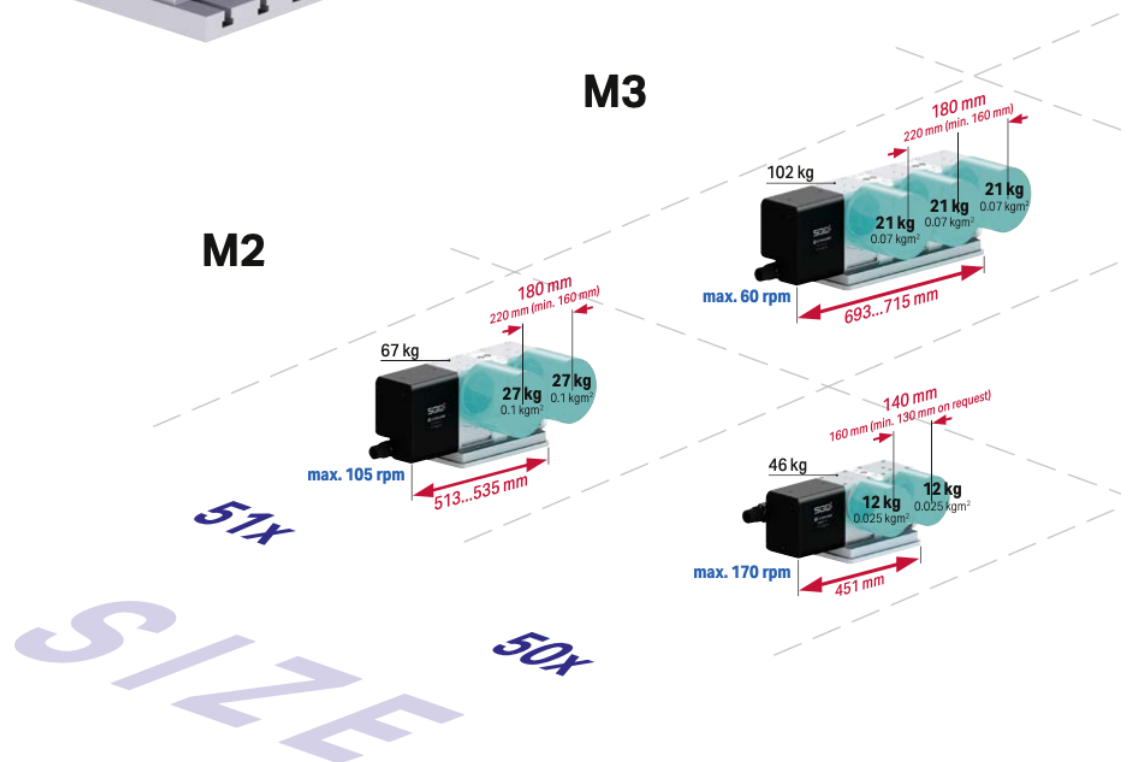
1. Up to **150 %** higher clamping torque in tilting axis
2. Fewer variant – more solution
3. Larger workpiece $\varnothing$ possible
4. Spatially optimized arrangement of the dividing axis



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

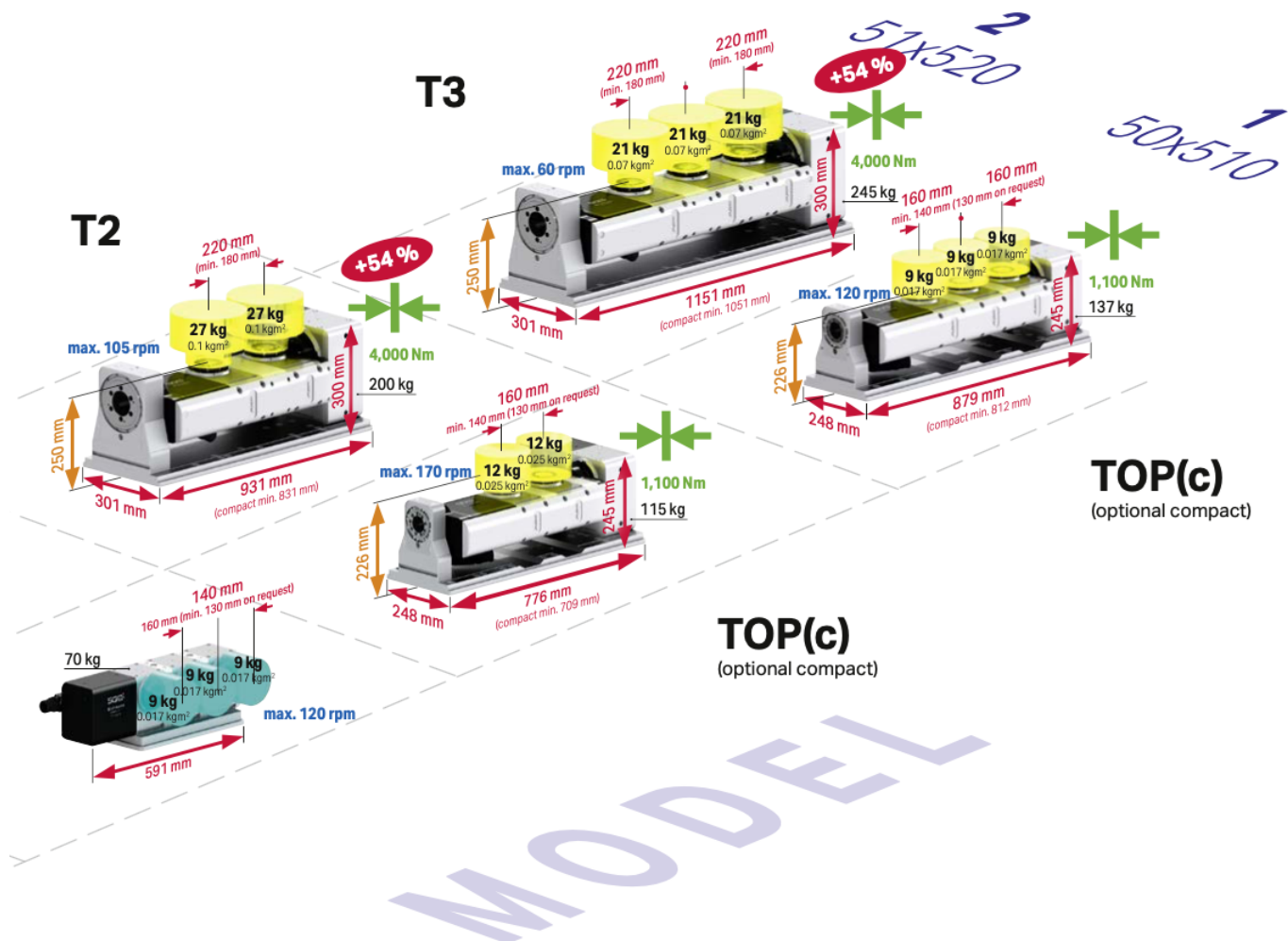
Overview of M-Series



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)



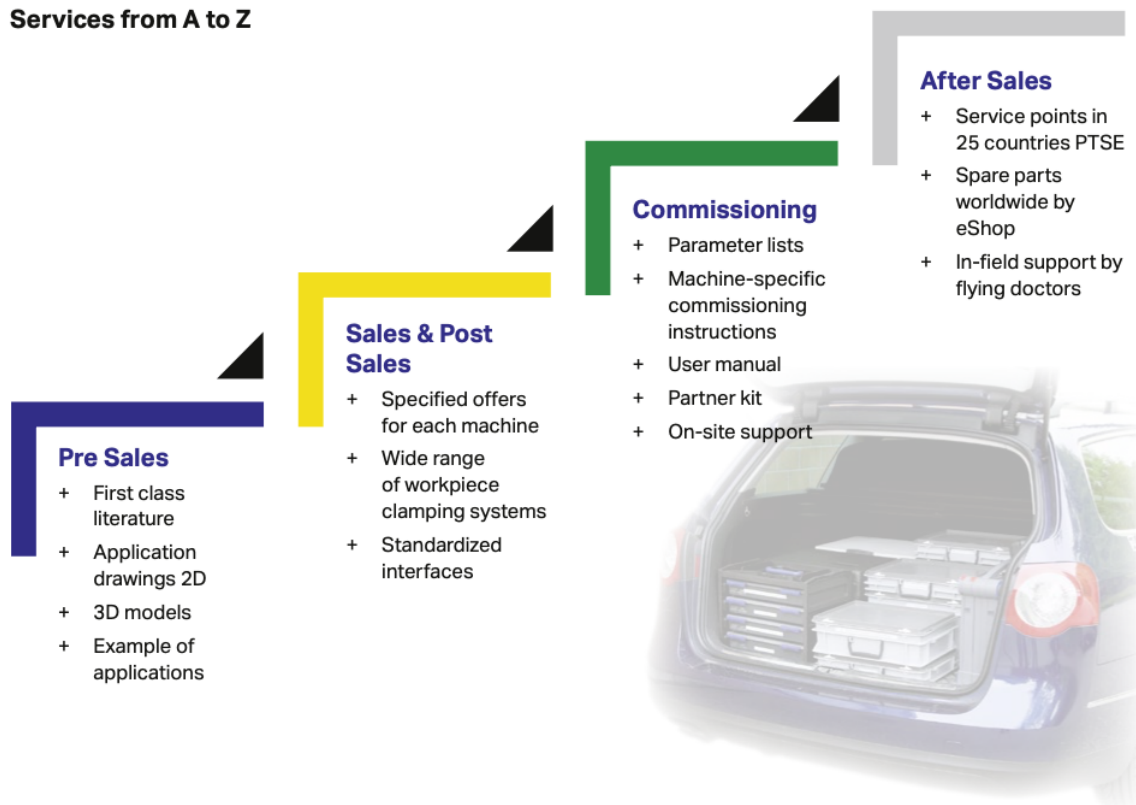
FA-507 with CAPTO retrofit kit

Sales and Service

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

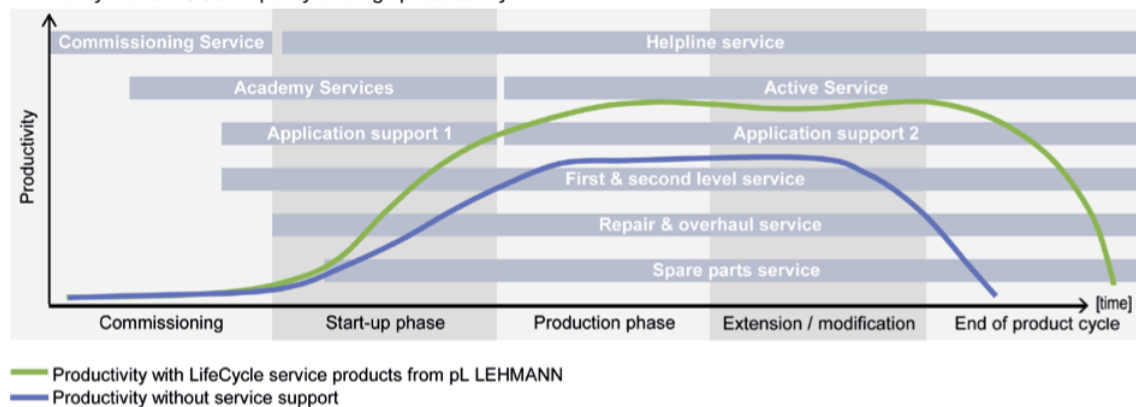


Services from A to Z



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



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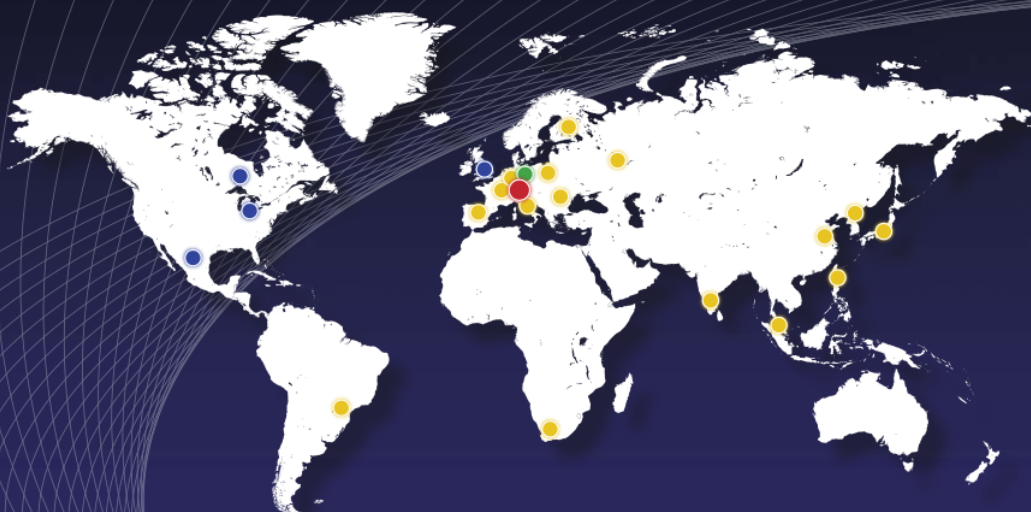
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