

# TURBO MAX-MILL

EPM

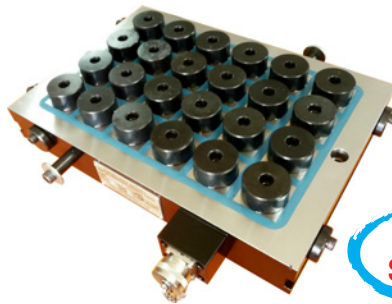
SQUARE POLE ELECTROPERMANENT CHUCK

## FEATURES

- Square pole pattern Electropermanent magnets available in standard construction of 50mm & 75mm squares. Alternative patterns of 47mm, 65mm, 100mm squares also can be constructed to cater to specific requirements.
- Holding force above 80 MT/SqM for the 50mm square pole version and 110 MT/SqM for the 75mm Square pole version.
- Perfect safety in case of power failure. No electricity needed to keep the Magnetic chuck ON.
- Uniform clamping over entire area, no chattering of tools, improves finish and tool life.
- High and uniform magnetic power, with choice to vary and control strength.
- Modular and sturdy construction.
- Easily integrated with pallet changing and FMS systems.
- Unobstructed movement of cutters during machining as all five faces of the job can be machined in the same setting.
- Drastically reduces the loading, unloading and controlling the work pieces.
- Better machining accuracy - as the chattering of tools reduces, the finish and tool life is improved.

## APPLICATIONS

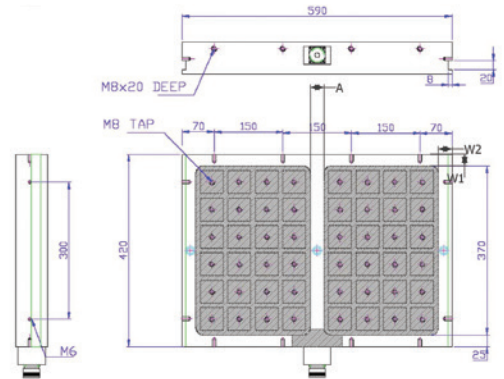
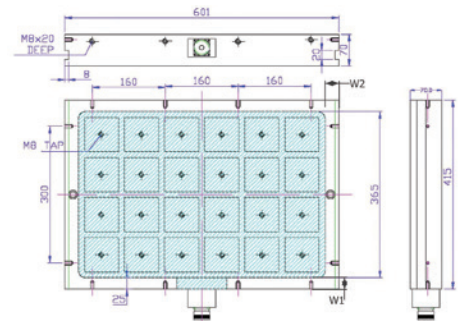
- For heavy duty roughing, milling and finishing applications on large and tall parts from 30mm to 600mm thickness and beyond, choose the 75mm type. For milling and finishing applications on parts from 7mm to 100mm, choose the 50mm type.
- A minimum contact of 4 alternate poles is required for the 75mm type and 8 for the 50mm type. In case of reduced contact, increase coverage by placing parallel bar side supports to simulate wider contact.
- Easily integrated with Pallet changing and FMS Systems.
- AUTOMATIC SHIMMING : Sliding pole extensions allow to clamp and to support uniformly work pieces even with bent surfaces achieving high accuracies of planarity.



EPMM 50 SHD:  
Standard high density  
resin 50mm 400x300



EPMM 75 SHD:  
Standard high density  
resin 75mm 400x300



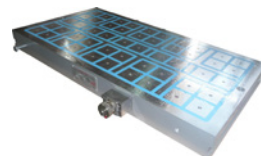
Typical application scenarios



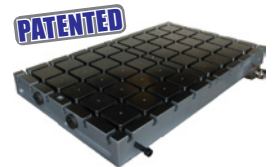
EPMM 50 MHD: Metal high  
density 50mm 400x300



Variation for rotary grinding



EPMM 50 SRD: Standard  
reduced density 50mm 800x400



High density T-slot solid top



EPMM 50 MRD: Metal  
reduced density 50mm 400x300



All dimensions are in mm.

Model No.	'X' = 50MM SQUARE									
Standard Resin (S) or Patented all Solid Metal (M)	L	W	H	N (HD)	N (RD)	W1	W2	V	A	WT (Kgs)
EPMM'X'3020 - YZ	310	240	67	12	10	25	30	220 380 400 415 440		33
EPMM'X'4020 - YZ	430			18	14				46	
EPMM'X'5020 - YZ	500			21	16				58	
EPMM'X'6020 - YZ	590			24	20				30/1	71
EPMM'X'8020 - YZ	750			30	24				30/2	85
EPMM'X'3030 - YZ	310	300		16	12					52
EPMM'X'4030 - YZ	430			24	20					59
EPMM'X'6030 - YZ	590			32	26				30/1	91
EPMM'X'8030 - YZ	750			40	32				30/2	108
EPMM'X'10030 - YZ	990			56	44				30/2	142
EPMM'X'4040 - YZ	430	420	36	28		84				
EPMM'X'5040 - YZ	480		42	34		92				
EPMM'X'6040 - YZ	590		48	38	30/1	129				
EPMM'X'8040 - YZ	750		60	48	30/2	154				
EPMM'X'10040 - YZ	990		80	64	30/2	202				
EPMM'X'5050 - YZ	500	480	49	38		130				
EPMM'X'6050 - YZ	590		56	44	30/1	162				
EPMM'X'8050 - YZ	750		70	56	30/2	193				
EPMM'X'10050 - YZ	990		98	78	30/2	253				
EPMM'X'6060 - YZ	590		600	72	58	30/1	200			
EPMM'X'8060 - YZ	750	90		72	30/2	239				
EPMM'X'10060 - YZ	990	126		100	30/2	313				

All dimensions are in mm.

Model No.	'X' = 75MM SQUARE									
Standard Resin (S) or Patented all Solid Metal (M)	L	W	H	N (HD)	N (RD)	W1	W2	V	A	WT (Kgs)
EPMM'X'3020 - YZ	337	239	67	6	4	25	30	220 380 400 415 440		44
EPMM'X'4020 - YZ	425			8	6				56	
EPMM'X'5020 - YZ	513			10	8				68	
EPMM'X'6020 - YZ	601			12	10				80	
EPMM'X'8020 - YZ	815			16	14				30/1	124
EPMM'X'3030 - YZ	337	327		9	6					62
EPMM'X'4030 - YZ	425			12	10					77
EPMM'X'6030 - YZ	601			18	16					111
EPMM'X'8030 - YZ	815			24	20				30/1	145
EPMM'X'10030 - YZ	1029			30	24				30/2	178
EPMM'X'4040 - YZ	425	415	16	12		99				
EPMM'X'5040 - YZ	513		20	16		120				
EPMM'X'6040 - YZ	601		24	20	30/1	145				
EPMM'X'8040 - YZ	815		32	26	30/2	228				
EPMM'X'10040 - YZ	1029		40	30	30/3	266				
EPMM'X'12040 - YZ	1205		48	36		149				
EPMM'X'5050 - YZ	513	503	25	20		160				
EPMM'X'6050 - YZ	601		30	24	30/1	226				
EPMM'X'8050 - YZ	815		40	30	30/2	278				
EPMM'X'10050 - YZ	1029		50	40	30/3	439				
EPMM'X'15050 - YZ	1469		75	60	30/3	585				
EPMM'X'20050 - YZ	1960	100	80	30/3	585					
EPMM'X'6060 - YZ	601	591	36	30		204				
EPMM'X'8060 - YZ	815		48	36	30/1	266				
EPMM'X'10060 - YZ	1029		60	48	30/2	328				
EPMM'X'15060 - YZ	1469		90	72	30/3	518				
EPMM'X'20060 - YZ	1960		120	96	30/2	691				

**Instructions to select your Model:** Replace X for the Square Pole size. Choices are either 50 or 75mm  
 Replace Y for S (Standard Resin type) or M (Patented all Metal type). Y indicates Construction technique  
 Replace Z for HD (High Density) or RD (Reduced Density). Z indicates Pole density.  
 N : Number of Poles for High Density (HD) model & Reduced density (RD) model.  
 Eg EPMM506040-MHD : Indicates a 50mm 600x400 Solid Metal with High Density,  
 EPMM754030-SRD : Indicates a 75mm Sq 400x300 Standard Model with Reduced Density



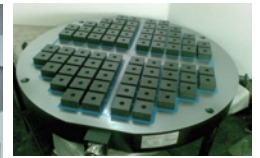


# TURBO MAX-MILL / CONTO

EPM

SQUARE POLE ELECTROPERMANENT CHUCK

## APPLICATION POSSIBILITIES OF TURBO-MAX MILL



# TURBO MAX-TOMB

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SQUARE POLE ELECTROPERMANENT CHUCK

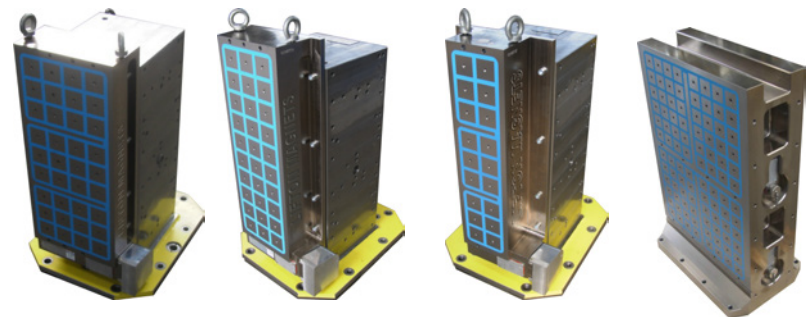
## FEATURES

- Variation of Turbo Max-Mill.
- Unobstructed movement of the cutter during machining, as all five faces of the job can be machined at the same setting.
- Single or multiple work pieces get clamped ergonomically and easily by the operator outside the machining area.
- Standard pole patterns of 75x75 and 50x50.

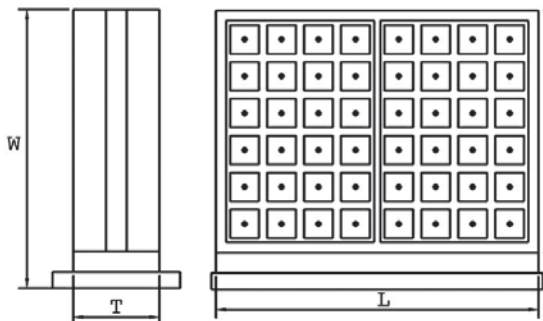
Power connection from detachable bayonet connector, position can be changed.

## APPLICATIONS

- Achievement of total flexibility to clamp work pieces of different shapes and sizes, even larger than those of the clamping area.
- Easily integrated with Pallet clamping and FMS Systems.
- AUTOMATIC SHIMMING : Sliding pole extensions allow to clamp and to support uniformly work pieces even with bent surfaces achieving high accuracies of planarity.



Different designs of the Turbo Max Tomb



Product Code : EPMT

All dimensions are in mm

Model No.	L	W	T	No. of Poles
EPMT-4050	425	475	180	16
EPMT-6050	595	475	200	24
EPMT-7060	665	625	200	42

Due to continuous upgradation in design there could be changes in specification. Other sizes on request. Before ordering, contact Lifton Magnets or your nearest dealer to confirm the suitability of this model for your application.

