

PMK

PRECISION MACHINEKRAFT PVT LTD

SPINDLE CATALOGUE

Precision MachineKraft is a unique organization having more than 5 decades of experience in serving Machine Tool Industry. We are leading manufacturers of

- Precision High Frequency Spindles for Turning, Milling, Drilling and Grinding applications
- Precision Ground and Rolled Ball screw from 8 mm to 140 mm and 6 meter longs as per C2, C3, C5 and C7 class of accuracy
- Precision Planetary roller screw upto 3 meter long.
- NC rotary Tables from 170mm to 5000mm dia with pneumatic and hydraulic clamping
- Indexing Table, Production system, Tilting Rotary Table and Automatic Pallet Changer
- Tail-stock, Tail support with pneumatic and hydraulic clamping.
- Precision Ground Locknuts
- Precision Bearings like Taper Roller, Cross Roller, Double Row Angular contact, Thrust Bearing, Wire Race Bearing and Slewing Ring Bearings
- Special / Customised CNC machines

Other Products

Linear elevation actuators
Outriggers
Mast-Pneumatic
Frangible Mast
Gimble

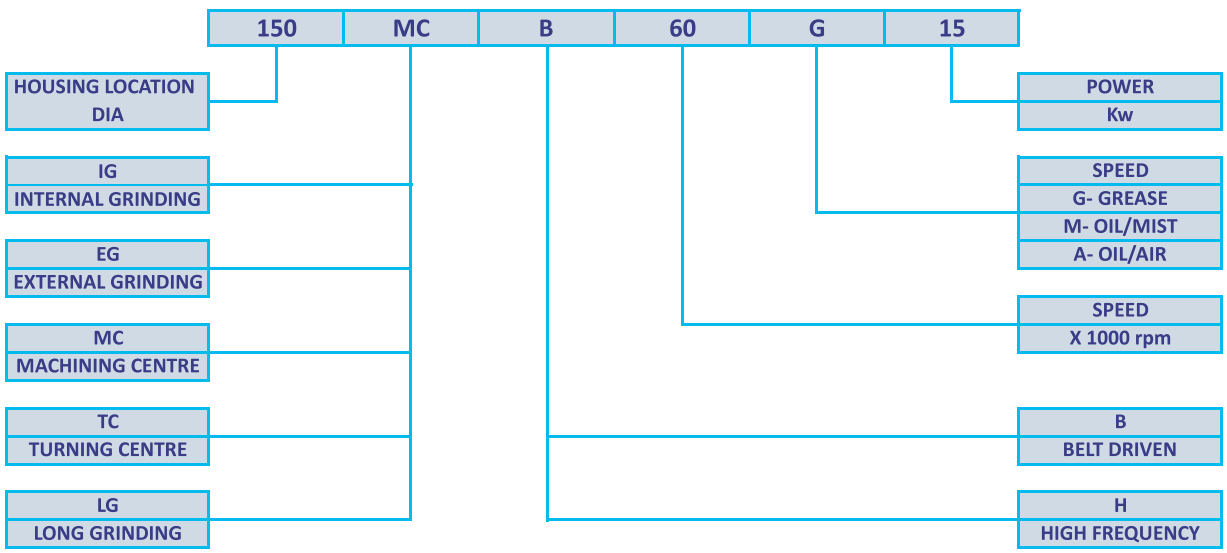
Azimuth
elevation System
Electro-mechanical Mast
Rack Traverser Unit





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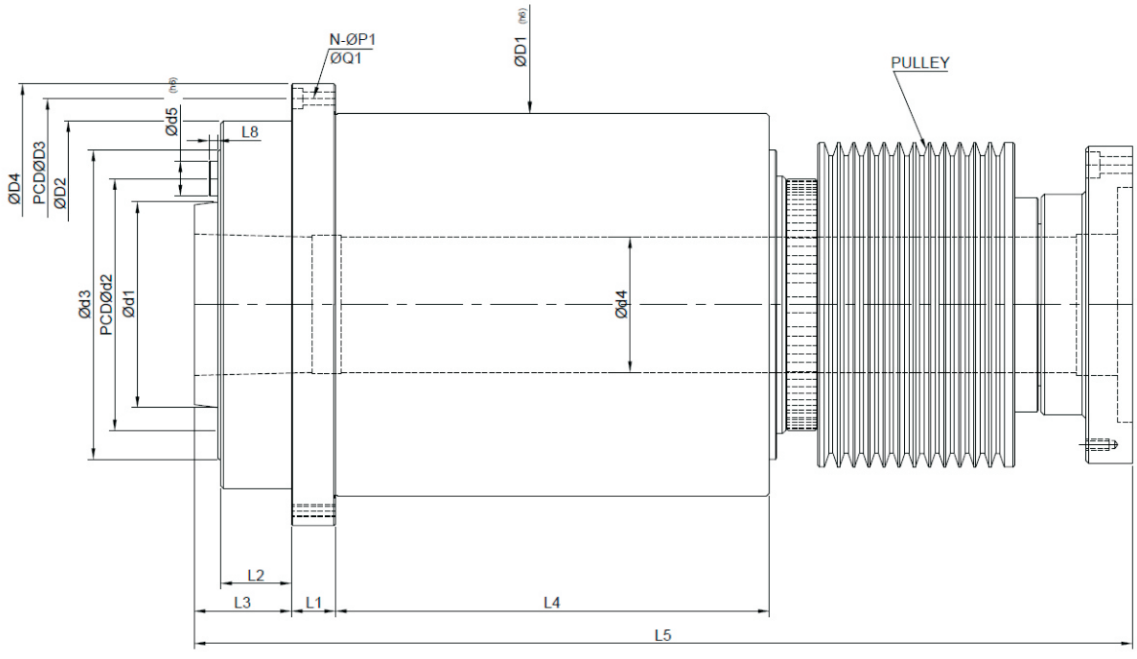
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SPINDLE IDENTIFICATION CODE

TURNING
CENTRE SPINDLE



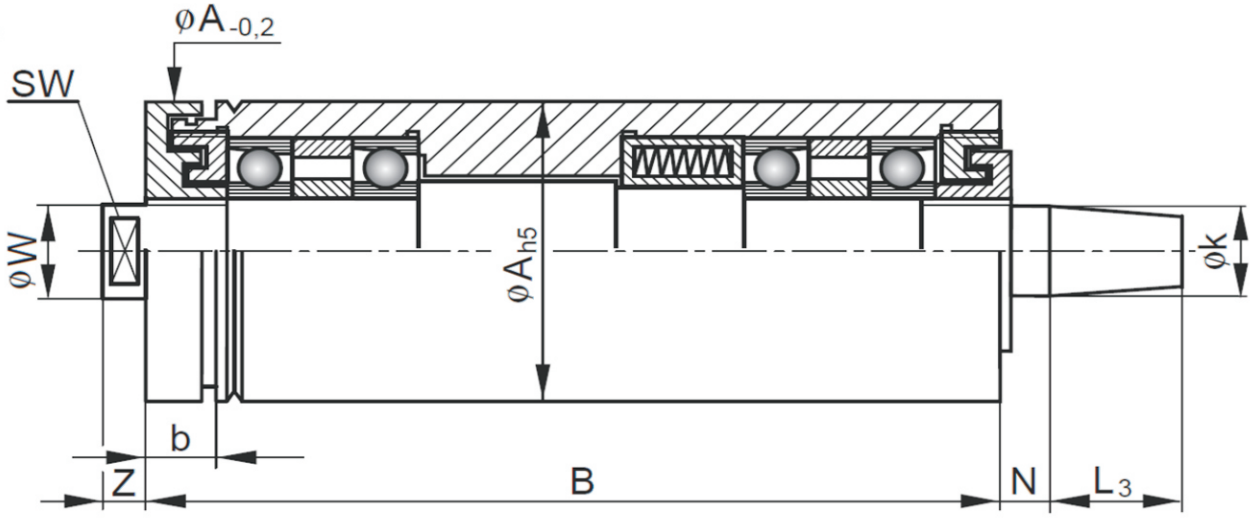


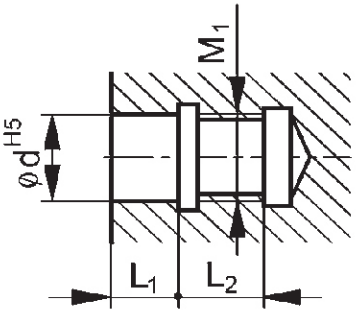
	d0 Ø	d1 Ø	d2 Ø	d3 Ø	d4 Ø	d5 Ø (h8)	D1 Ø	D2 Ø	D3 Ø
140TC24	MT4	63.513	82.6	108	28	14.25	140	140	158
170TC25	MT5	82.563	104.8	133	40	15.9	170	175	190
170TC26	MT6	106.375	133.4	165	56	19.05	170	175	190
230HTC26	MT6	106.375	133.4	165	56	19.05	230	235	255
230TC28	MT80	139.719	171.4	210	70	23.8	230	235	255
260HTC28	MT80	139.719	171.4	210	70	23.8	260	250	280
260TC211	MT100	196.869	235	280	110	28.6	260	250	280
320HTC211	MT100	196.869	235	280	110	28.6	320	320	350

	D4 Ø	L1	L2	L3	L4	L5	N	p1 Ø	Q1 Ø	BEARING	SPEED rpm
140TC24	175	25	32	45	210	400	6	9	15	7014C (2+2)	8000
170TC25	208	30	35	50	290	550	6	9	15	7016C (2+2)	6000
170TC26	208	30	38	50	290	560	6	9	15	7018C (2+2)	4000
230HTC26	275	30	38	54	290	560	6	11	18	NN3020K /100BTR1 0H /NN3018K	3000
230TC28	275	30	48	54	290	640	8	11	18	7022C / 7020C (3+2)	4000
260HTC28	310	30	48	66	300	650	8	14	20	NN3026K /130BTR1 0H /NN3024K	3000
260TC211	310	30	50	70	300	650	8	14	20	7032C /7030C (3+2)	2500
320HTC211	380	30	50	70	350	700	8	17	24	NN3036K /180BTR1 0H /NN3034K	2000

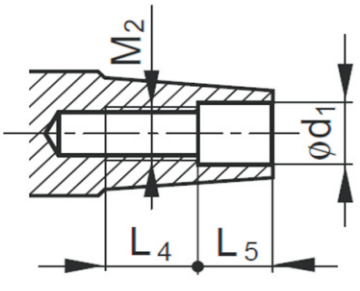
INTERNAL GRINDING SPINDLE







Tool interface



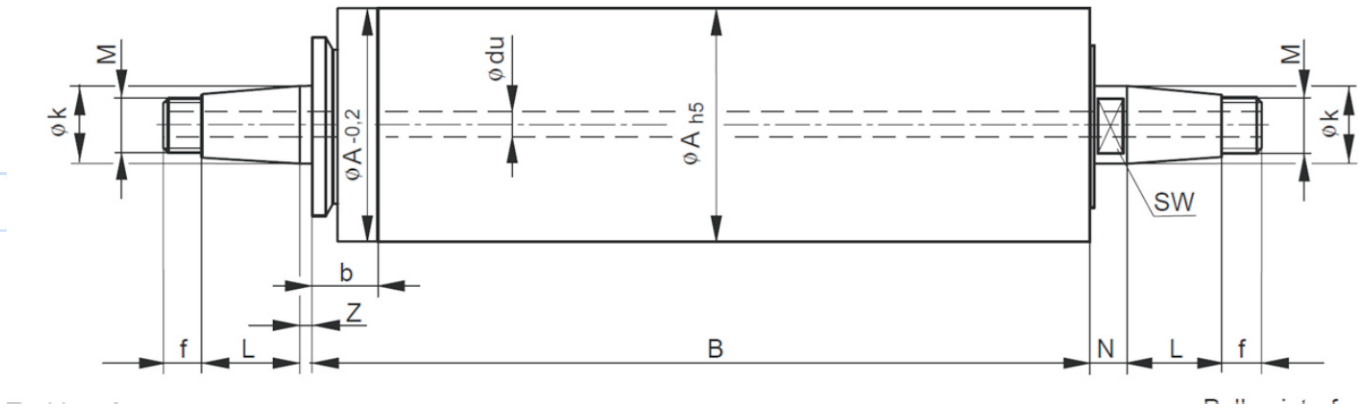
Pulley interface

SPINDLE TYPE	A(h5)	B	d	W	L1	L2	M1	b	Z
50IGB	50	250	10	18	15	19	M10	10	8
60IGB	60	350	14	23	20	19	M14x1.5	11	10
80IGB	80	350	16	33	24	19	M16x1.5	15	11
100IGB	100	350	28	43	42	25	M28x2	16	13
120IGB	120	400	32	53	50	30	M30x2	20	15
150IGB	150	400	45	68	60	35	M40x2	25	18
170IGB	170	400	55	78	70	40	M50x2	30	20

SPINDLE TYPE	SW	N	k	L3	d1	M2	L4	L5	STEEL	HYBRID
50IGB	15	7	18	20	8	M6	12	8	30000	40000
60IGB	19	7	23	25	10	M8	14	10	24000	30000
80IGB	27	8	33	35	12	M10	21	18	18000	25000
100IGB	36	12	43	50	14	M12	25	20	15000	22000
120IGB	45	15	53	60	18	M16	30	25	12000	18000
150IGB	55	18	68	70	22	M20	32	28	10000	15000
170IGB	65	20	78	80	28	M24	35	30	8000	12000

- DIRECTION OF ROTATION TO BE SPECIFIED BY CUSTOMER
- ALL SPINDLES GREASE LUBRICATED FOR LIFE.
- HIGHER SPEED SPINDLES CAN BE MADE WITH OIL MIST LUBRICATION AS PER CUSTOMER REQUIREMENT.
- LENGTH OF SPINDLE CAN BE MADE AS PER CUSTOMER REQUIREMENT.
- ALL DIMENSIONS ARE IN MILLIMETER.

EXTERNAL GRINDING SPINDLE



SPINDLE TYPE	A(h5)	B	k	L	M	f	Z	b	N	SW	du	STEEL RPM	HYBRID RPM
50EGB	50	250	15	20	M12x1	7	3	10.5	8	13	8	10500	15000
60EGB	60	250	20	25	M16x1	10	3	10.5	9	17	10	8500	12000
80EGB	80	315	28	35	M20x1	12	4	14	12	24	14	6500	8000
100EGB	100	355	38	52.5	M30x1	12.5	4	17	15	32	20	5500	6000
120EGB	120	400	52	65	M36x1	17.5	5	28	18	46	25	4500	5000
140EGB	140	630	56	75	M40x1.5	17.5	5	32.5	18	48	30	3500	4000
160EGB	160	630	87	110	M65x1.5	20	6	33.5	21	60	35	2500	3000
200EGB	200	630	87	110	M65x1.5	20	6	35	24	75	40	1500	2000

DIRECTION OF ROTATION TO BE SPECIFIED BY CUSTOMER

ALL SPINDLES GREASE LUBRICATED FOR LIFE.

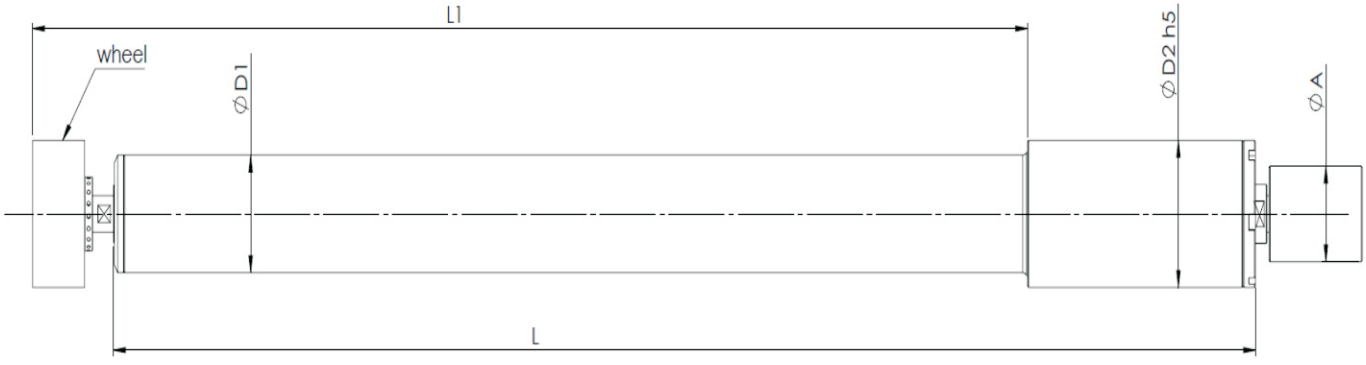
HIGHER SPEED SPINDLES CAN BE MADE WITH OIL MIST LUBRICATION AS PER CUSTOMER REQUIREMENT.

LENGTH OF SPINDLE CAN BE MADE AS PER CUSTOMER REQUIREMENT.

FLANGE MOUNTED SPINDLES CAN BE MADE AS PER CUSTOMER REQUIREMENT

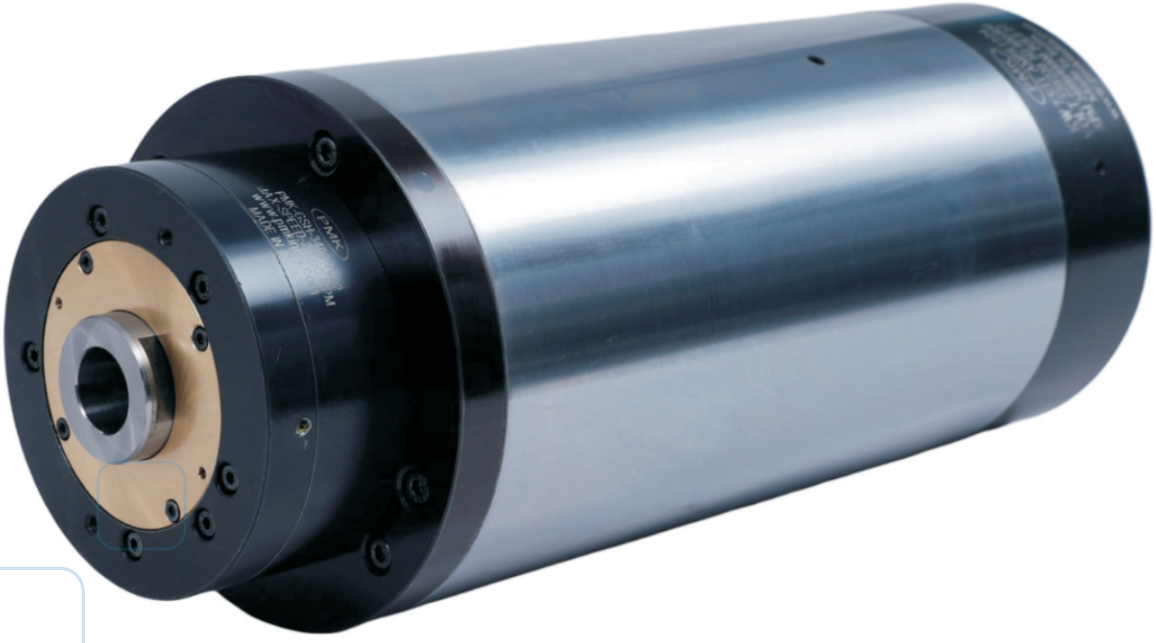
ALL DIMENSIONS ARE IN MILLIMETER

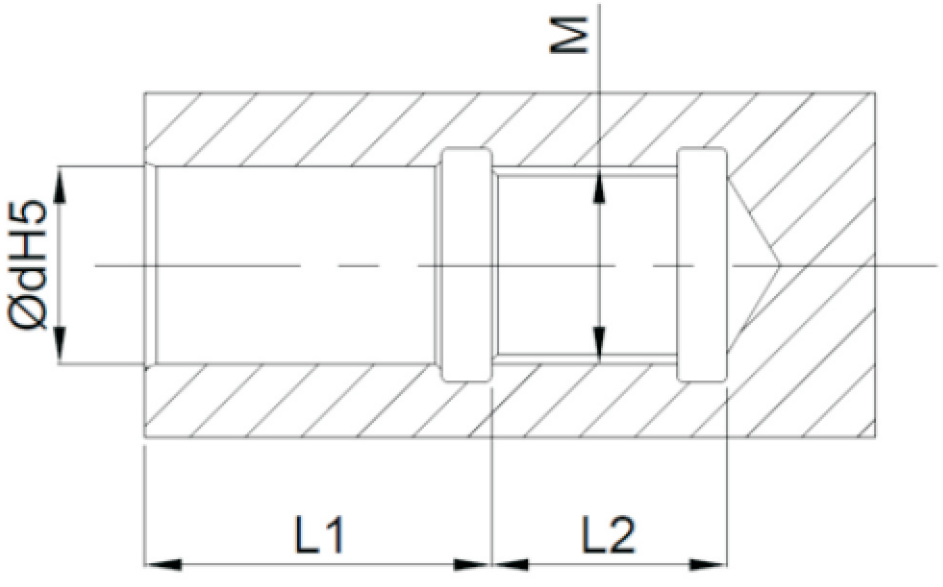
EXTRA LONG GRINDING SPINDLE



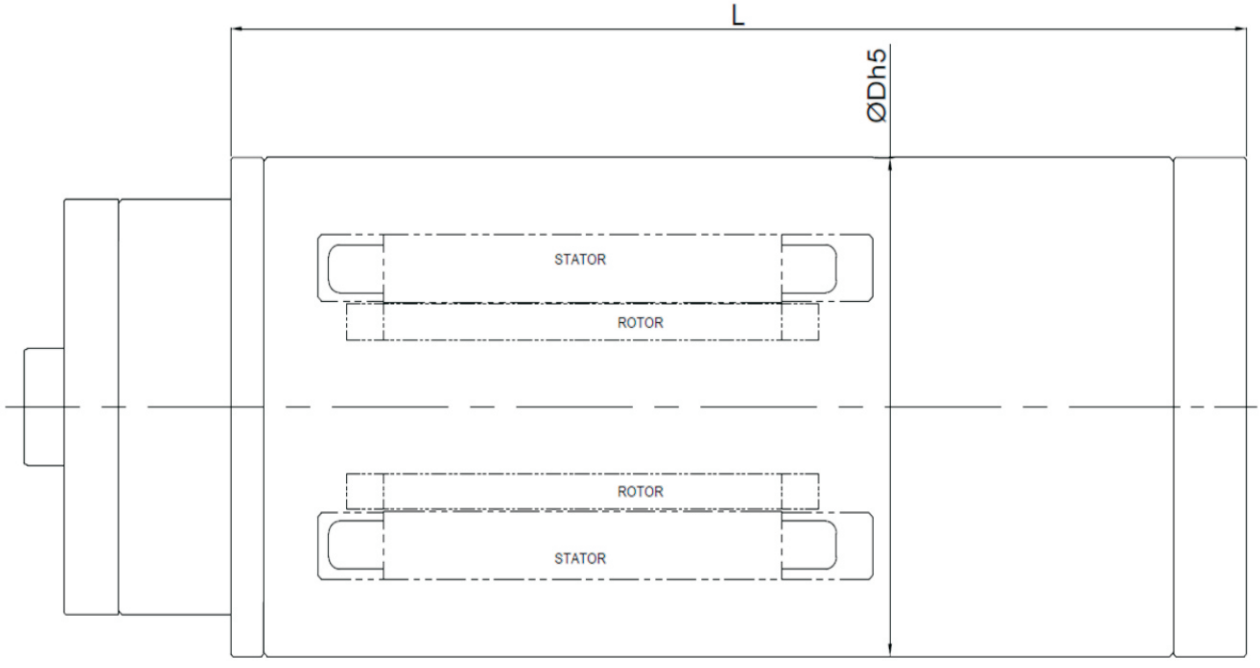
SPINDLE TYPE	D2(h5)	D1	A	L1	L	LUBRICATION	SPEED RPM
50 LGB	70	35	36	240	400	GREASE	17000
60 LGB	80	60	62	250	500	GREASE	10000
80 LGB	100	70	73	300	550	GREASE	8500
100 LGB	100	80	83	350	600	GREASE	7500
	Direction Of Rotation To Be Specified By Customer						
	Higher Speed Spindles Can Be Made With Oil Mist Lubrication As Per Customer Requirement						
	Length Of Spindle Can Be Made As Per Customer Requirement.						
	Flange Mounted Spindles Can Be Made As Per Customer						
	All Dimensions Are In Millimeter.						

HIGH FREQUENCY INTERNAL GRINDING SPINDLE



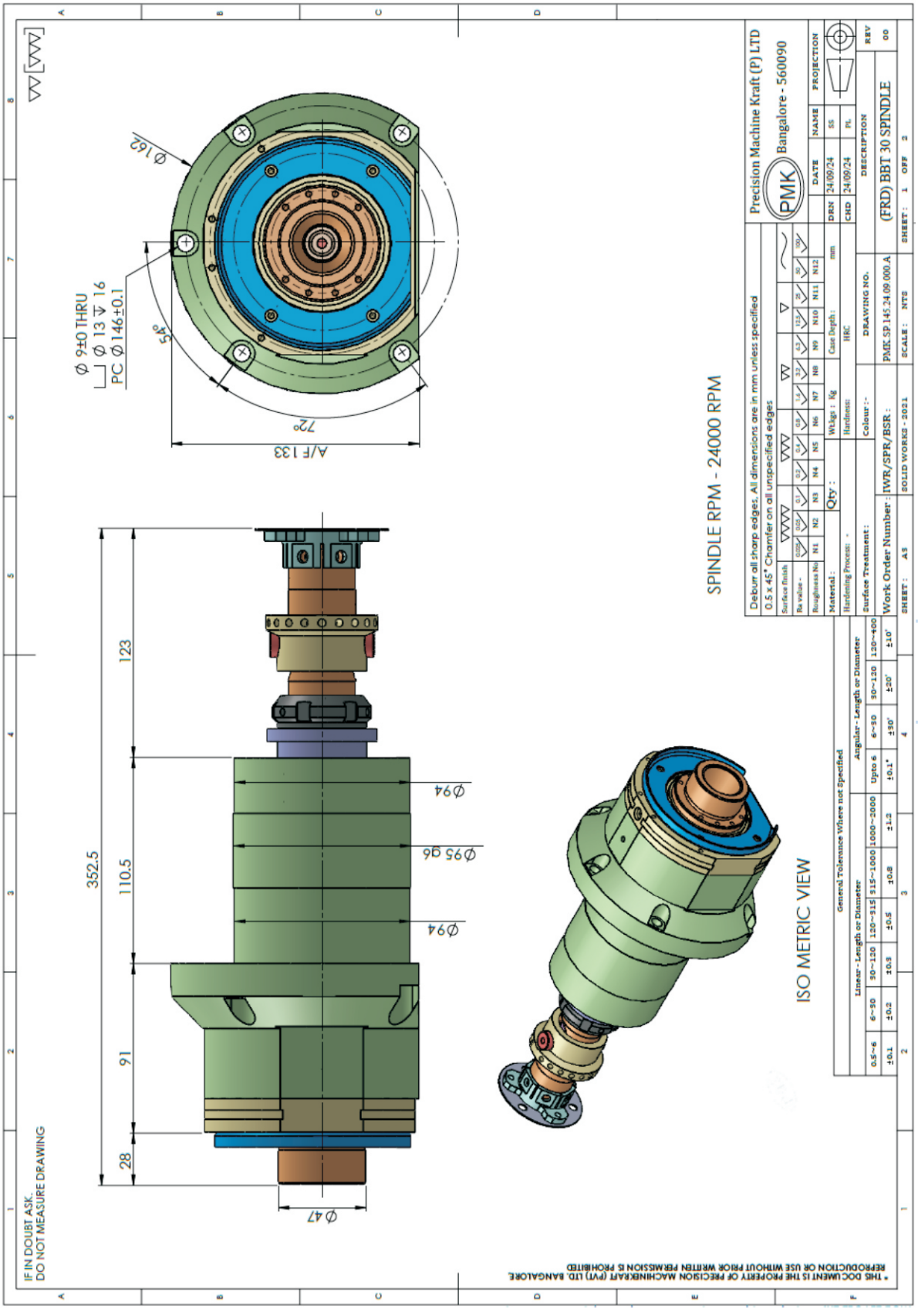


TOOL INTERFACE

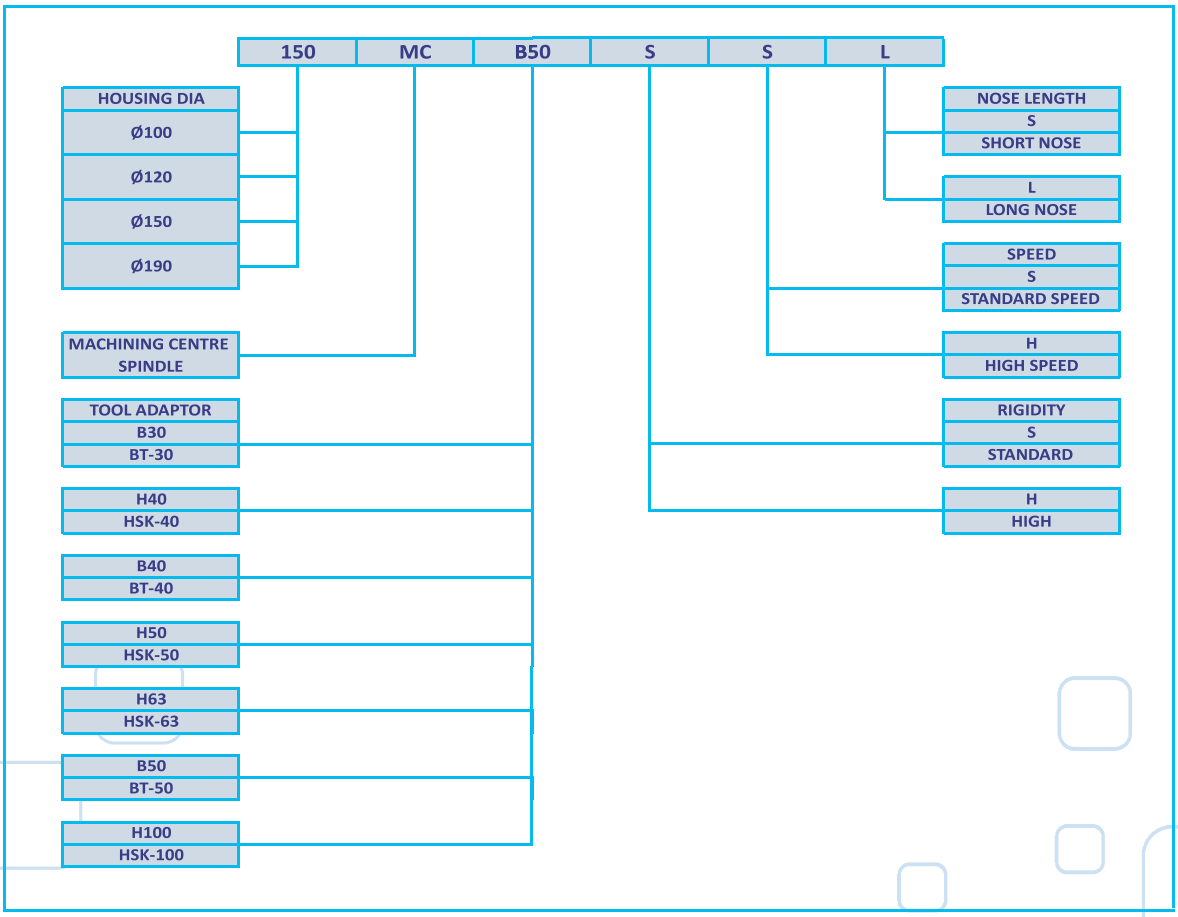


TYPE	MOTOR PARAMETER						D(h5)	L	TOOL INTERFACE				
	POWER	TORQUE	CURRENT	SPEED	FREQUENCY	VOLTAGE			d(H5)	L1	M	L2	FRONT BEARING DIA
	Kw	Nm	A	RPM	Hz	V							
	S6	S6	S6	n	f	V							
	S1	S1	S1										
80IGH90Y2.5	2.5	0.26	10.8	90000	1500	220	80	170	6	11	M6	11	12
	1.5	0.16	6.5										
120IGH75Y3.5	3.5	0.45	9	75000	1250	350	120	190	9	17	M9x1.25	14	17
	2.1	0.27	5.4										
120IGH60Y6	6	0.95	16	60000	1000	350	120	220	10	19	M10x1.5	19	20
	3.6	0.57	10										
120IGH51Y8	8	1.5	20	51000	850	350	120	250	14	23	M12x1.5	19	25
	4.8	0.9	12										
120IGH24Y12	12	4.8	30	24000	800	350	120	315	22	38	M22x2	24	45
	7.2	2.9	18										
150IGH36Y11	11	2.9	30	36000	600	350	150	270	20	34	M20x1.5	20	35
	7	1.85	15.6										
150IGH24Y16	16	6.4	38	24000	800	350	150	320	25	42	M25x2	25	45
	10	4	23										
170IGH24Y22	22	8.75	30.2	24000	800	350	170	305	25	42	M25x2	24	45
	14	5.6	18.9										
170IGH18Y16	16	8.5	35	18000	600	350	170	305	25	42	M25x2	24	45
	10	5.3	21.2										
170IGH15Y20	20	12.7	46.3	15000	500	350	170	320	25	42	M25x2	24	55
	12	7.64	27.8										
	DIRECTION OF ROTATION TO BE SPECIFIED BY CUSTOMER												
	FLANGE MOUNTED SPINDLES CAN BE MADE AS PER CUSTOMER REQUIREMENT												
	ALL DIMENSIONS ARE IN MILLIMETER.												

BBT30 SPINDLE



MACHINING CENTRE SPINDLE



STANDARD FUNCTIONS		
HOUSING	CARTRIDGE WITH FLANGE MOUNTED	
OPERATION POSITION	VERTICAL / HORIZONTAL	
DIRCETION OF ROTATION	CLOCKWISE / COUNTER CLOCKWISE	
MEDIUM CONNECTION	EXTERNAL COOLING x 1	
	SPINDLE COOLING x 2	
	AIR PURGE x 1	
TOOL ADAPTOR	**CLAMPING FORCE**	
BT-30	2800 N	4000 N
	D1=Ø100	D1=Ø120
HSK-40	6800 N	
BT-40	6000 N	8000 N
	D1=Ø120	D1=Ø150
HSK-50	11000 N	
HSK-63	18000 N	
BT-50	15000 N	20000 N
	D1=Ø150	D1=Ø190
HSK-100	45000 N	

MACHINING CENTRE SPINDLE

FIG-1

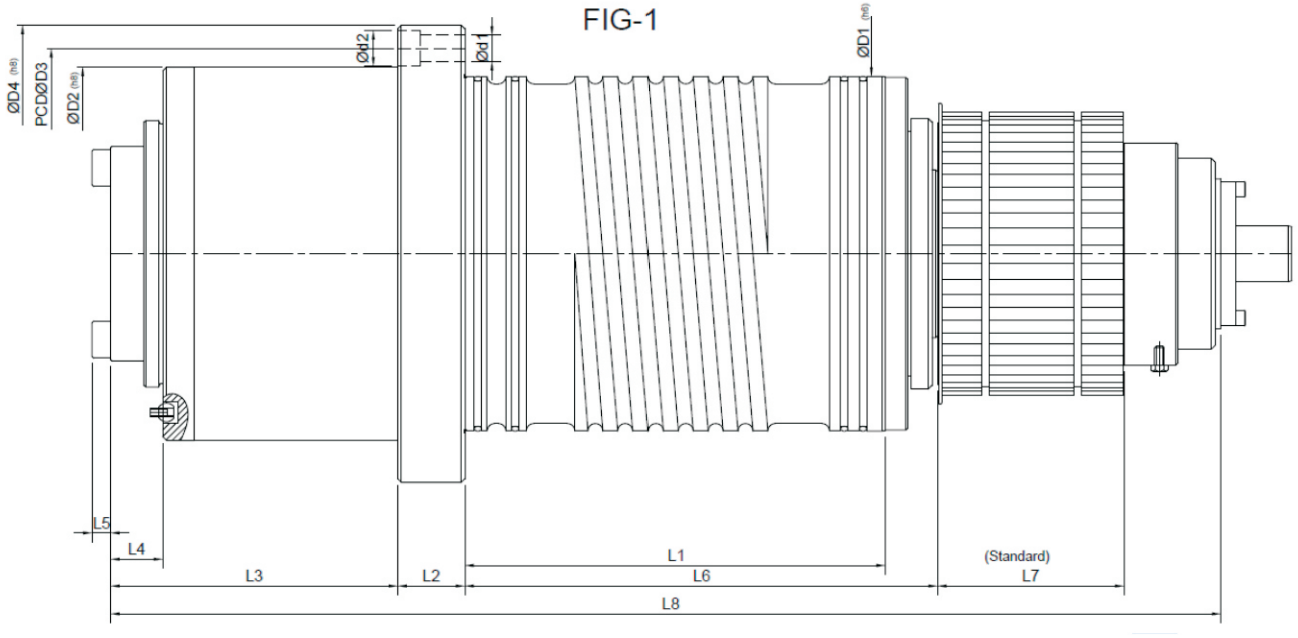
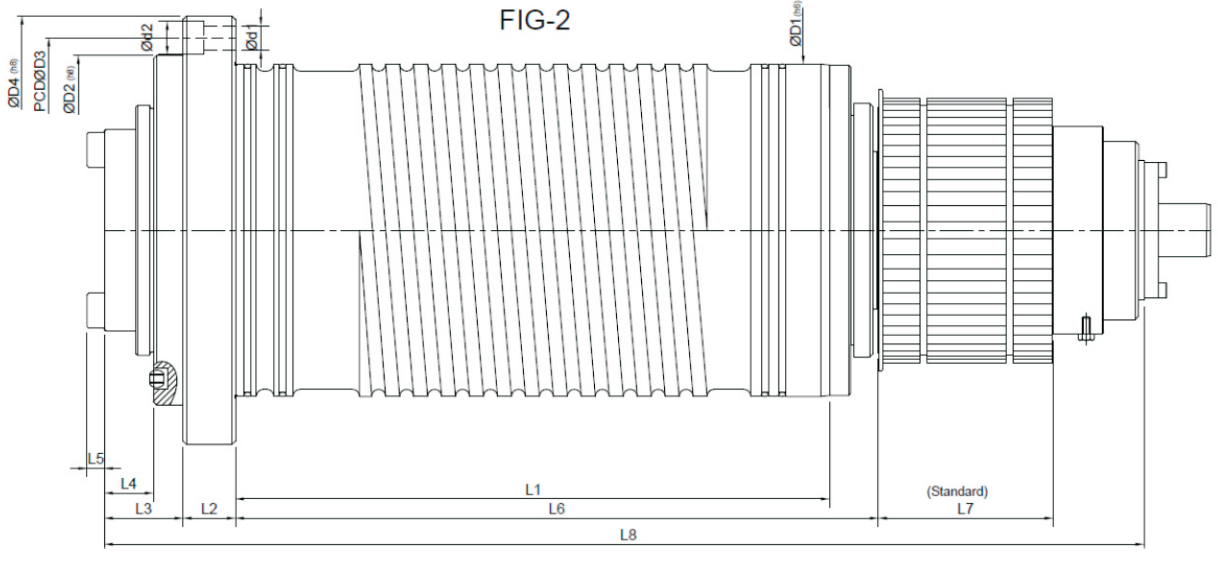


FIG-2

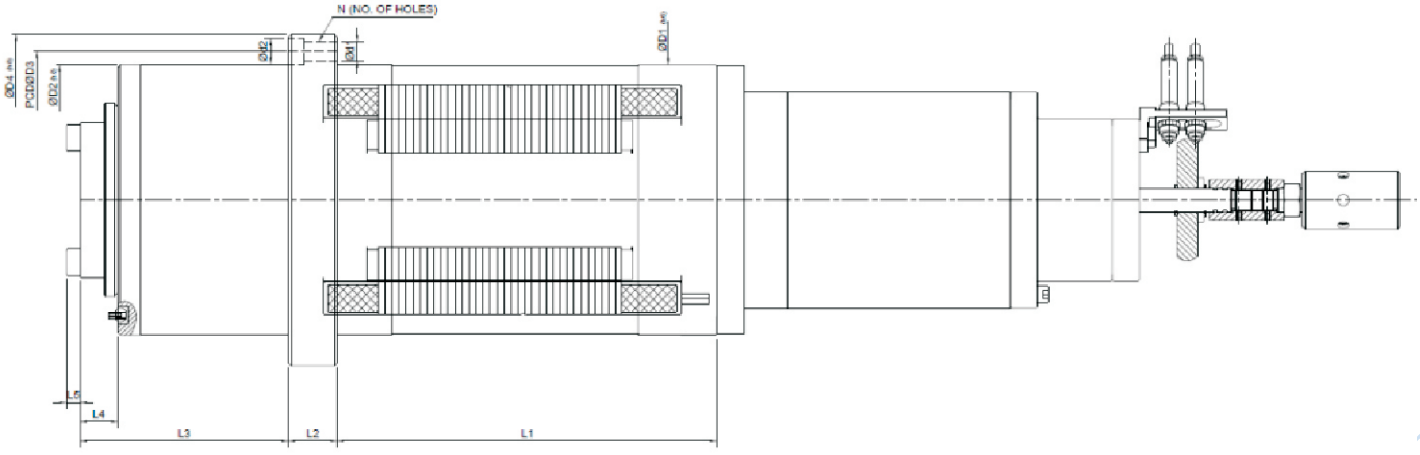


SPINDLE TYPE	SPINDLE NOSE	DRAWING	SPEED UPTO	BEARING LUBRICATION	FRONT BEARING	D1(h6)	D2	D3	D4
			rpm		Ø	Ø	Ø	Ø	Ø
100MCB30SSL	BT30	FIG-1	12000	GREASE	45	100	100	120	140
100MCB30SSS	BT30	FIG-2	12000	GREASE	45	100	100	120	140
120MCB30SSL	BT30	FIG-1	10000	GREASE	60	120	130	146	165
120MCB30SHL			12000	GREASE	60	120	130	146	165
120MCB30HLL	OR		5000	GREASE	60	120	130	146	165
120MCB30SSS		FIG-2	10000	GREASE	60	120	130	146	165
120MCB30SHS	HSK-40		12000	GREASE	60	120	130	146	165
120MCB30HLS			5000	GREASE	60	120	130	146	165
120MCB40SSL	BT40	FIG-1	10000	GREASE	60	120	130	146	165
120MCB40SHL			12000	GREASE	60	120	130	146	165
120MCB40HLL	OR		4000	GREASE	60	120	130	146	165
120MCB40SSS		FIG-2	10000	GREASE	60	120	130	146	165
120MCB40SHS	HSK-50		12000	GREASE	60	120	130	146	165
120MCB40HLS			4000	GREASE	60	120	130	146	165
150MCB40SSL	BT40	FIG-1	10000	GREASE	70	150	155	180	200
150MCB40SHL			12000	GREASE	70	150	155	180	200
150MCB40HLL	OR		4000	GREASE	70	150	155	180	200
150MCB40SSS		FIG-2	10000	GREASE	70	150	155	180	200
150MCB40SHS	HSK-50		12000	GREASE	70	150	155	180	200
150MCB40HLS			4000	GREASE	70	150	155	180	200
150MCB50SSL	BT50	FIG-1	6000	GREASE	80	150	165	185	205
150MCB50SHL			8000	GREASE	80	150	165	185	205
150MCB50HLL	OR		3000	GREASE	80	150	165	185	205
150MCB50SSS		FIG-2	6000	GREASE	80	150	165	185	205
150MCB50SHS	HSK-63		8000	GREASE	80	150	165	185	205
150MCB50HLS			3000	GREASE	80	150	165	185	205
190MCB50SSL	BT50	FIG-1	6000	GREASE	Ø100	190	200	220	245
190MCB50SHL			8000	GREASE	Ø100	190	200	220	245
190MCB50HLL	OR		3000	GREASE	Ø100	190	200	220	245
190MCB50SSS		FIG-2	6000	GREASE	Ø100	190	200	220	245
190MCB50SHS	HSK-100		8000	GREASE	Ø100	190	200	220	245
190MCB50HLS			3000	GREASE	Ø100	190	200	220	245

SPINDLE TYPE	N	d1	d2	L1	L2	L3	L4	L5	L6	L7	L8
		Ø	Ø								
100MCB30SSL	6	9	14	160	20	80	15	8	145	40	344
100MCB30SSS	6	9	14	125	25	25	25	8	145	40	264
120MCB30SSL	6	9	14	160	20	104	18	8	176	60	390
120MCB30SHL	6	9	14	160	20	104	18	8	176	60	390
120MCB30HLL	6	9	14	160	20	104	18	8	176	60	390
120MCB30SSS	6	9	14	125	25	25	25	8	145	40	264
120MCB30SHS	6	9	14	125	25	25	25	8	145	40	264
120MCB30HLS	6	9	14	125	25	25	25	8	145	40	264
120MCB40SSL	8	9	14	160	20	104	18	8	176	60	390
120MCB40SHL	8	9	14	160	20	104	18	8	176	60	390
120MCB40HLL	8	9	14	160	20	104	18	8	176	60	390
120MCB40SSS	8	9	14	192	30	25	12	8	222	68	390
120MCB40SHS	8	9	14	192	30	25	12	8	222	68	390
120MCB40HLS	8	9	14	192	30	25	12	8	222	68	390
150MCB40SSL	8	11	18	192	30	110	18	8	222	68	480
150MCB40SHL	8	11	18	192	30	110	18	8	222	68	480
150MCB40HLL	8	11	18	192	30	110	18	8	222	68	480
150MCB40SSS	8	11	18	190	35	40	15	8	215	70	410
150MCB40SHS	8	11	18	190	35	40	15	8	215	70	410
150MCB40HLS	8	11	18	190	35	40	15	8	215	70	410
150MCB50SSL	8	11	18	190	35	140	25	12.5	215	70	520
150MCB50SHL	8	11	18	190	35	140	25	12.5	215	70	520
150MCB50HLL	8	11	18	190	35	140	25	12.5	215	70	520
150MCB50SSS	8	11	18	225	36	54	13	12.5	253	100	500
150MCB50SHS	8	11	18	225	36	54	13	12.5	253	100	500
150MCB50HLS	8	11	18	225	36	54	13	12.5	253	100	500
190MCB50SSL	8	14	20	225	36	154	28	12.5	253	100	595
190MCB50SHL	8	14	20	225	36	154	28	12.5	253	100	595
190MCB50HLL	8	14	20	225	36	154	28	12.5	253	100	595
190MCB50SSS	8	14	20	340	30	45	28	12.5	368	100	595
190MCB50SHS	8	14	20	340	30	45	28	12.5	368	100	595
190MCB50HLS	8	14	20	340	30	45	28	12.5	368	100	595

ALL DIMENSIONS ARE IN MILLIMETER.

HIGH FREQUENCY MACHINING CENTRE SPINDLE

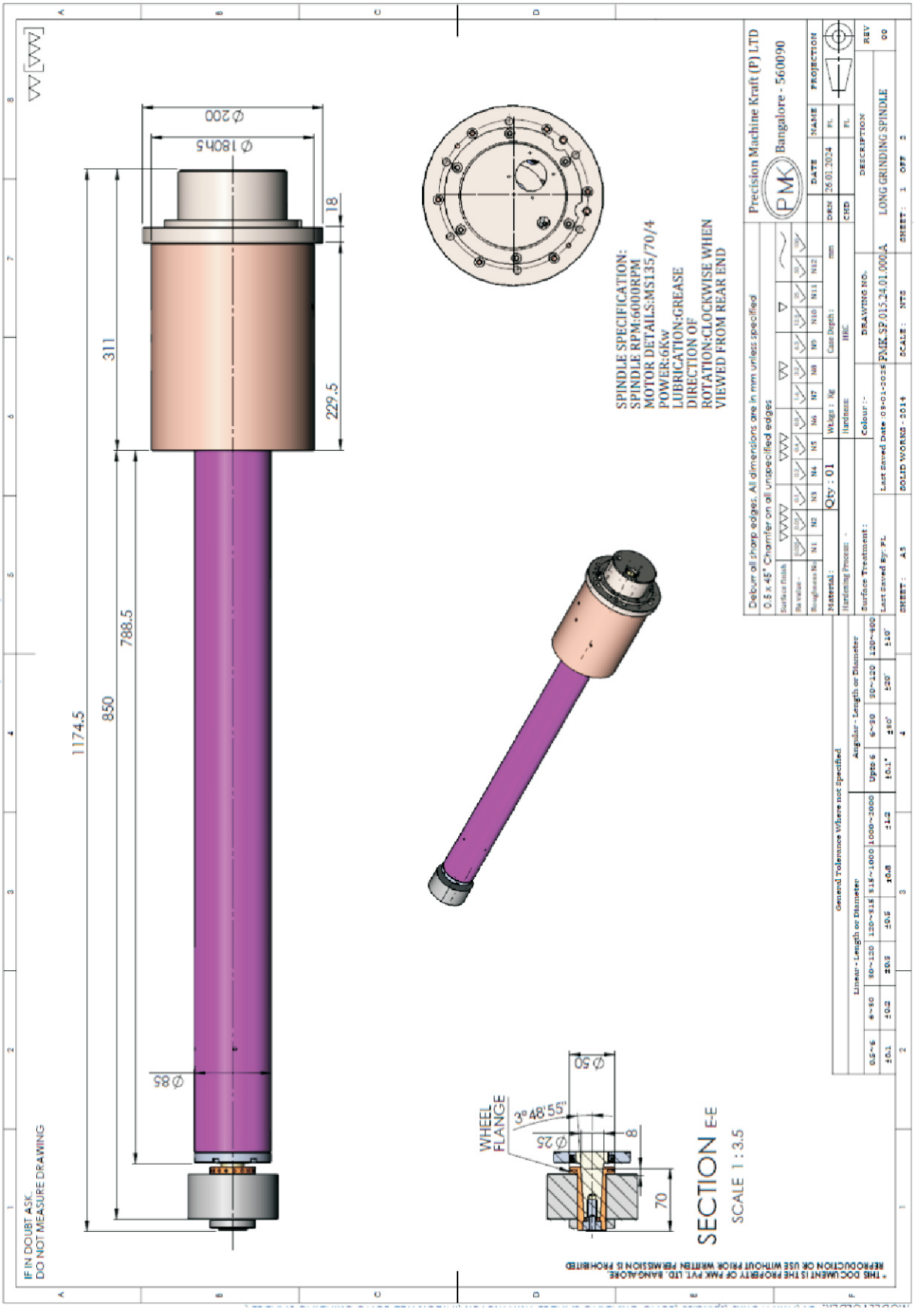


SPINDLE TYPE	SPINDLE NOSE	SPEED UPTO	BEARING LUBRICATION	POWER	FRONT BEARING	D1(h6)	D2	D3	D4
		rpm		kW	Ø	Ø	Ø	Ø	Ø
120MCHB30	BT30	18000	GREASE	10	45	120	115	135	155
150MCHB40	BT40	15000	GREASE	14	60	150	155	180	200
150MCHH50	HSK-50	15000	GREASE	14	60	150	155	180	200
240MCHB50	BT50	12000	GREASE	22	Ø80	240	220	280	310
240MCHH63	HSK-63	12000	GREASE	22	Ø80	240	220	280	310
150MCHH63	HSK-63	18000	GREASE	29	Ø70	150	155	180	200

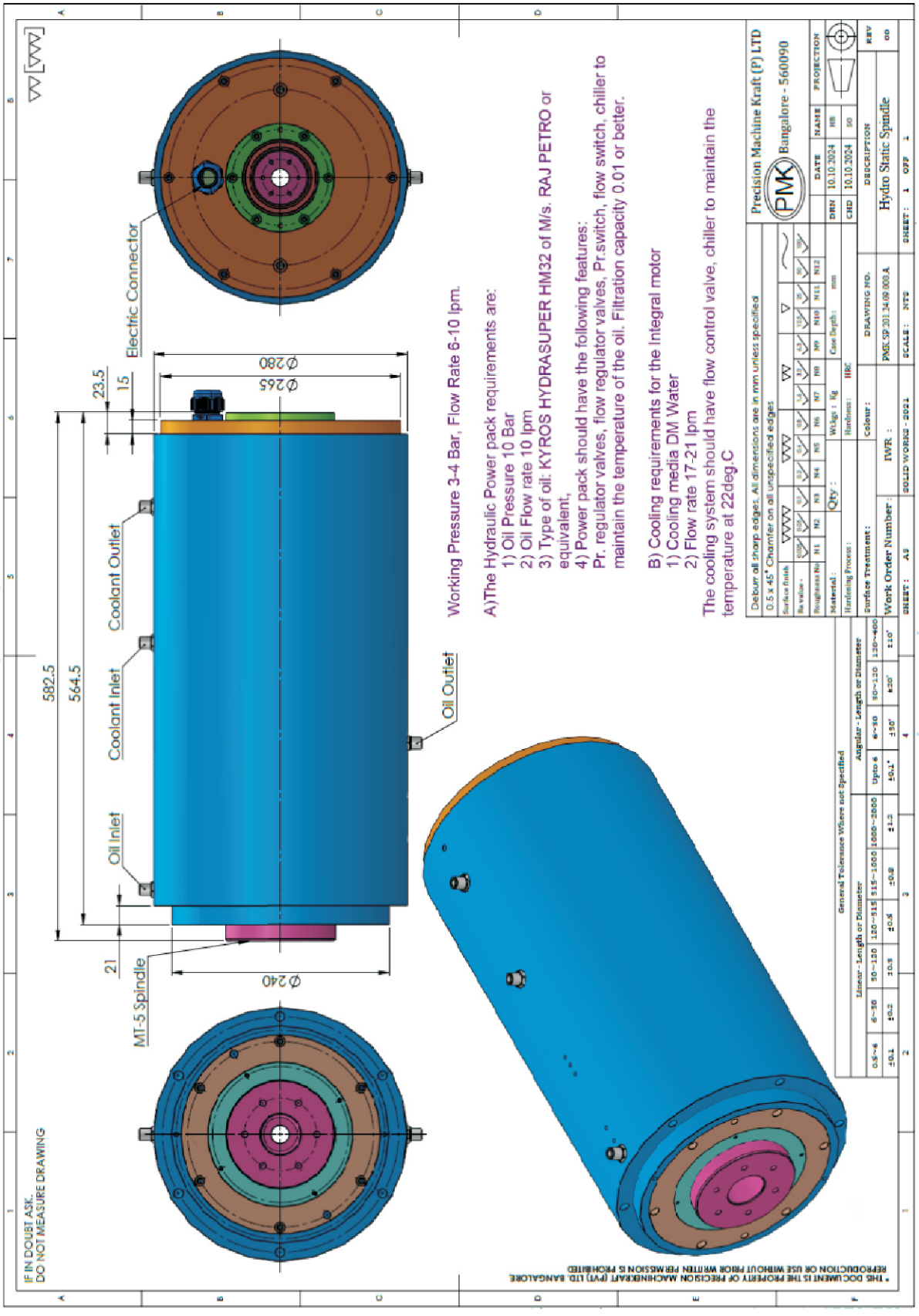
SPINDLE TYPE	N	d1	d2	L1	L2	L3	L4	L5
		Ø	Ø					
120MCHB30	6	9	14	164	22	71	11	8
150MCHB40	8	11	18	180	30	110	18	8
150MCHH50	8	11	18	200	30	110	18	NA
240MCHB50	8	14	20	225	36	154	28	12.5
240MCHH63	8	14	20	240	36	154	28	NA
150MCHH63	8	14	20	225	30	71	28	NA

ALL DIMENSIONS ARE IN MILLIMETER.

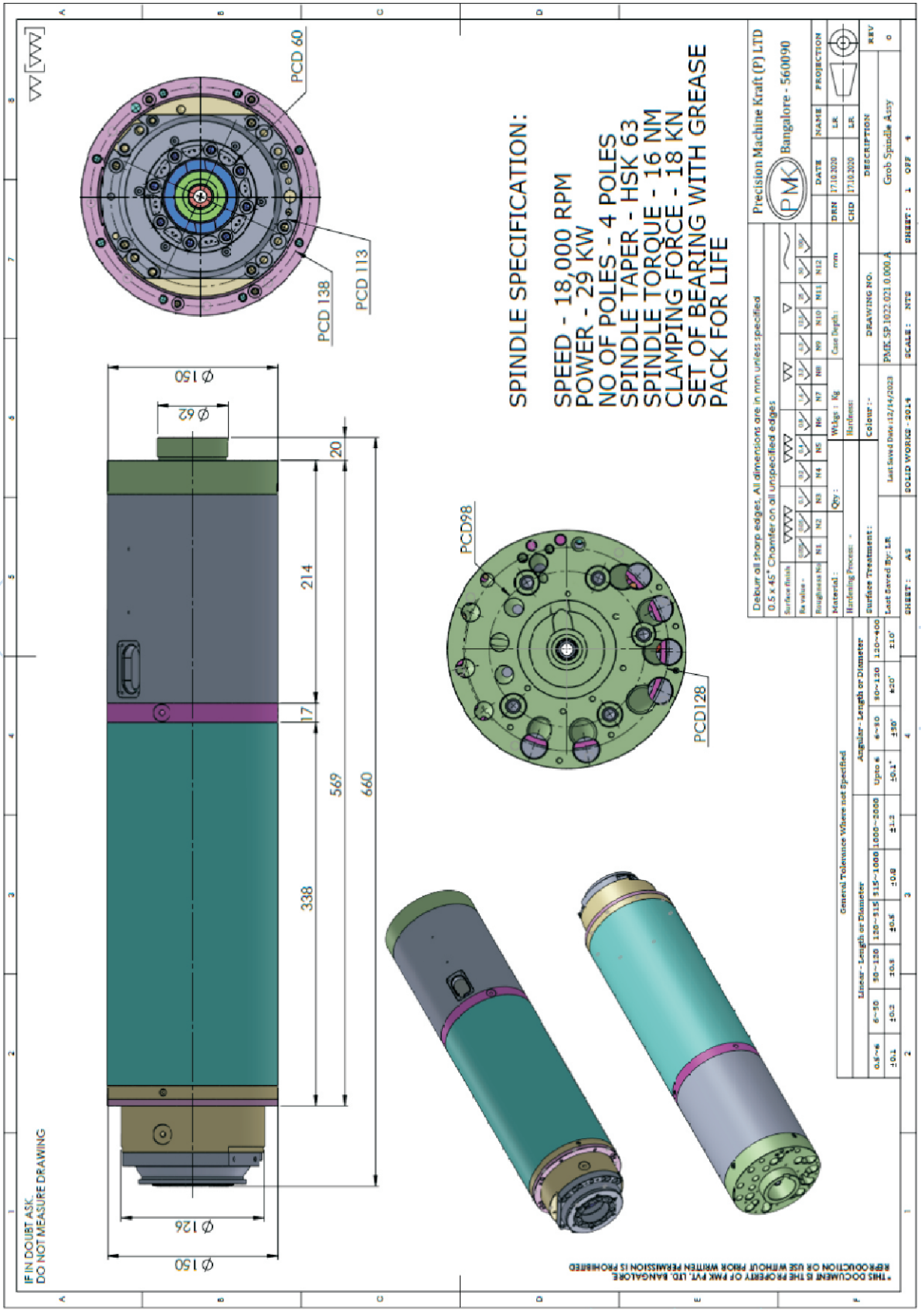
HIGH FREQUENCY EXTRA LONG SPINDLE



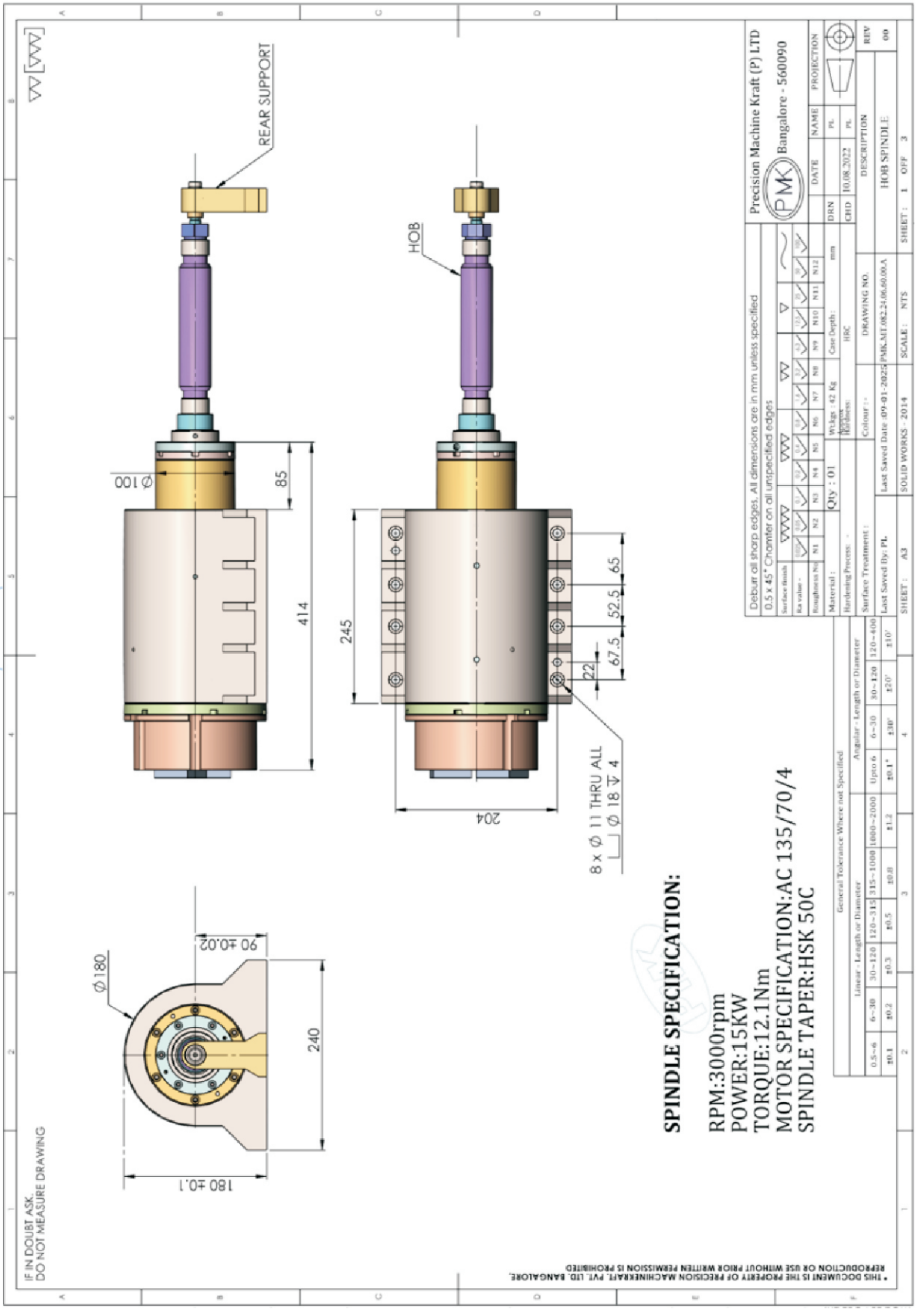
HYDROSTATIC SPINDLE FOR TURNING & GRINDING APPLICATION



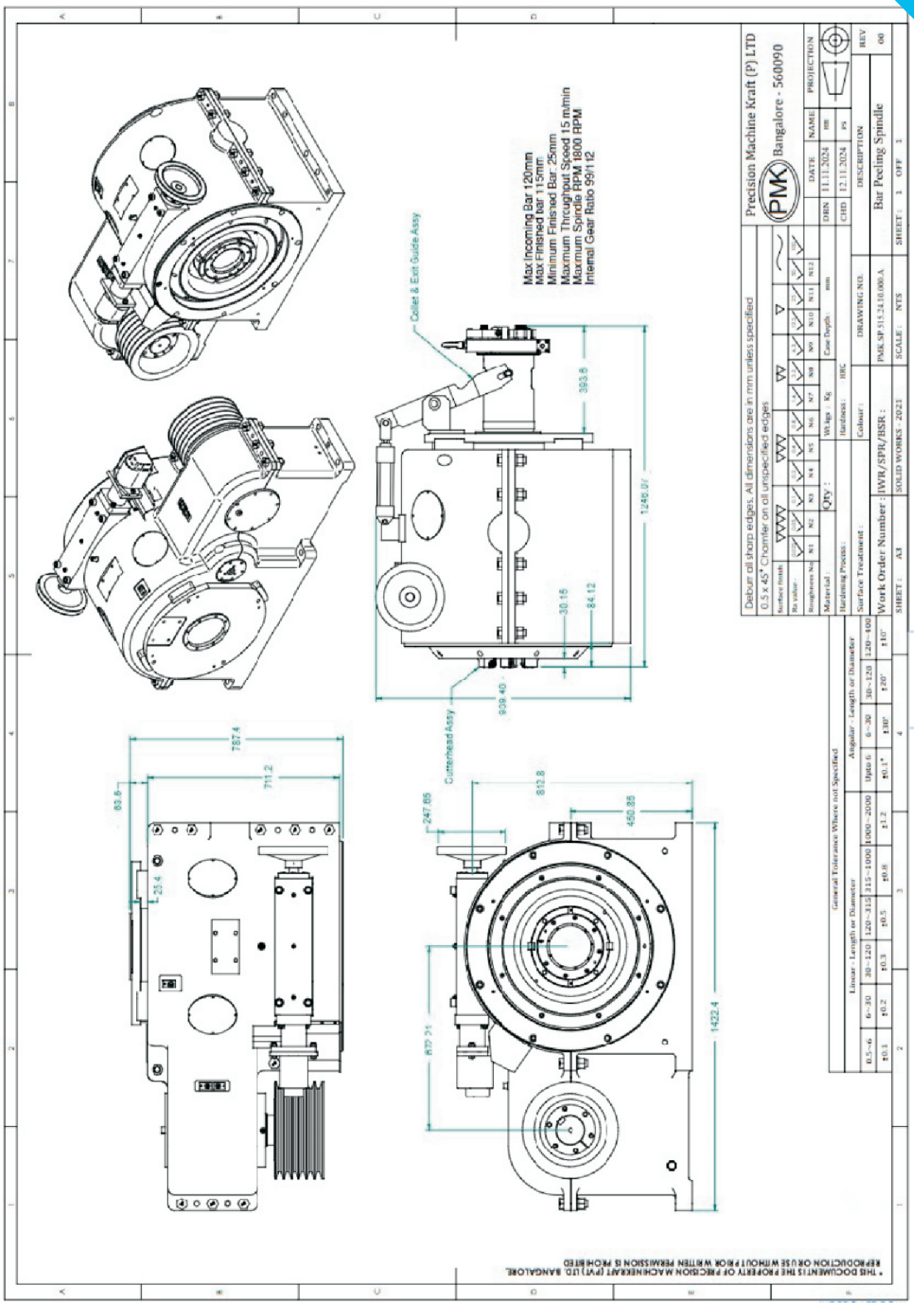
HF HSK-63 SPINDLE



HF HSK-50 HOB SPINDLE



BAR PEELING SPINDLE



ENQUIRY FORM

SPINDLE APPLICATION	DETAILS	REFERENCE	NOTES-
BELT DRIVEN TURNING CENTRE	FRONT NOSE-		
	HOUSING DIA-	mm	
	BELT TYPE-		
	SPEED-	rpm	
	LOAD -	YES/NO	
	INTERNAL BORE-		
	ENCODER-	YES/NO	
	BRAKE	YES/NO	
HIGH FREQUENCY TURNING CENTRE	FRONT NOSE-		
	HOUSING DIA-	mm	
	POWER-	kW	
	SPEED-	rpm	
	TORQUE-	Nm	
	ENCODER-	YES/NO	
BELT DRIVEN INTERNAL GRINDING	HOUSING DIA-	mm	
	SPEED-	rpm	
	Length-	NN	
	WHEEL DIA-	mm	
HIGH FREQUENCY INTERNAL GRINDING	POWER-	kW	
	SPEED-	rpm	
	TORQUE-	Nm	
	HOUSING DIA-	mm	
	WHEEL DIA-	mm	
BELT DRIVEN EXTERNAL GRINDING	HOUSING DIA-	mm	
	SPEED-	rpm	
	Length-	NN	
	WHEEL DIA-	mm	
HIGH FREQUENCY EXTERNAL GRINDING	POWER-	kW	
	SPEED-	rpm	
	TORQUE-	Nm	
	HOUSING DIA-	mm	
	WHEEL DIA-	mm	
BELT DRIVEN MACHINING CENTRE	FRONT NOSE-		
	HOUSING DIA-	mm	
	BELT TYPE-		
	SPEED-	rpm	
	LOAD -	YES/NO	
	NOSE DIST.-	LONG /SHORT	
	ENCODER-	Yes/No	
HIGH FREQUENCY MACHINING CENTRE	FRONT NOSE-		
	HOUSING DIA-	mm	
	POWER-	kW	
	SPEED-	rpm	
	TORQUE-	Nm	
	NOSE DIST.-	LONG /SHORT	
	ENCODER-	Yes/No	

OTHER PRODUCTS

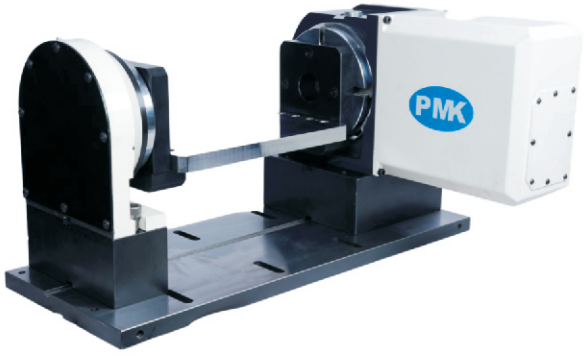
BALL SCREW



Planetary Roller screw



ROTARY TABLE WITH PRODUCTION SYSTEM



CUSTIMISED BEARINGS



LINEAR ACTUATOR



LINEAR ROLLER BEARING

