LIST
of the products manufactured by Planar Concern
with the use of new and high technologies included into
the state register of high-tech enterprises.

No	Item description and specifications	Unit of measure	Specifications of the items and those of foreign analogues	
			of its own production	foreign analogues
1	Micro-200 Microscopes		Micro-200T	LEICA INM (Germany)
1.1	Magnification	x	50……3000	50……3000
1.2	Object stage travel limits along X,Y	mm	202x202	202x202
1.3	Observation mode:			
	- bright field by reflected light		available	available
	- dark field by reflected light		available	available
	- polarization contrast		available	available
	- transmitted light		available	available
	- differential interference contrast		available	available

2	EM-2040 Wafer Grinder		EM-2040	DFG 841 (Disco, Japan)	
2.1	Diameter of wafers to be processed	mm	200	200	
2.2	Roughness of the processed surface	micron	0.25	0.25	
2.3	Throughput	wafers/h	40	40	
3	EM-2075 Dicing Saw		EM-2075	DED 660 Disco Japan, 7500K&S	
3.1	Dicing width with blade thickness of 30 microns and blade height of 700 microns	micron	40-45	40-45	40-45
3.2	Diameter of semiconductor wafers to be processed	mm	200	300	200
3.3	Throughput with a die of 5x5 mm and dicing velocity of 70 mm/s	wafers/h	7	7	6

4	EM-4260 Wire Bonder		EM-4260	1488 K&S (USA)	m. 3006 ESEC (Switzerland)
4.1	Bonding time	s	0.125	0.125	0.125
4.2	Working area	mm	40x50	50x50	25x25
4.3	Bonding accuracy	micron	±5	±5	±5
5	EM-4025AM Die Bonder		EM-4025AM	K&S 6495/6 (USA)	
5.1	Throughput	die/h	2000	2000	
5.2	Die size	mm	0.4x0.4….. 20x20	0.4x0.4……. 25x25	
5.3	Semiconductor wafer diameter	mm	150	200	
5.4	Stage travel area	mm	400x200	300x300	
6	EM-5084 AM-1 Stepper		EM-5084 AM-1	Pas 5500/22 ASML (USA-Holland)	
6.1	Minimum feature size	micron	0.8	0.8	

6.2	Maximum working field	mm	16x16	15x15
6.3	Throughput (wafer diameter 150 mm)	wafer/h	45	50
7	EM-5009 BM Laser Pattern Generator		EM-5009BM	LR5 200 (Sweden)
7.1	Throughput	exposure/ h	1.5 • 10	1.5 • 10
7.2	Stage positioning accuracy	micron	±0. 4	±0. 3
7.3	Aperture size range	micron	4 – 300	min 1. 5
8	EM-5026A Mask Aligner		EM-5026A	MJB-3 Karl Zuss (Germany)
8.1	Throughput	wafers/h	20	20
8.2	Resolution limit	micron	0. 3…. 1	0. 3….. 0. 6
8.3	Alignment accuracy	micron	±0. 1	±0. 1
8.4	Exposure mode:			

	- contact exposure		available	available
	- gap exposure		available	available
9	EM-6110 Prober		EM-6110	4090 Electroglas (USA)
9.1	Accuracy	micron	±8	±4
9.2	Semiconductor wafer diameter	mm	200	200
9.3	Speed: X	mm/s	270	250
	Y	mm/s	200	250

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