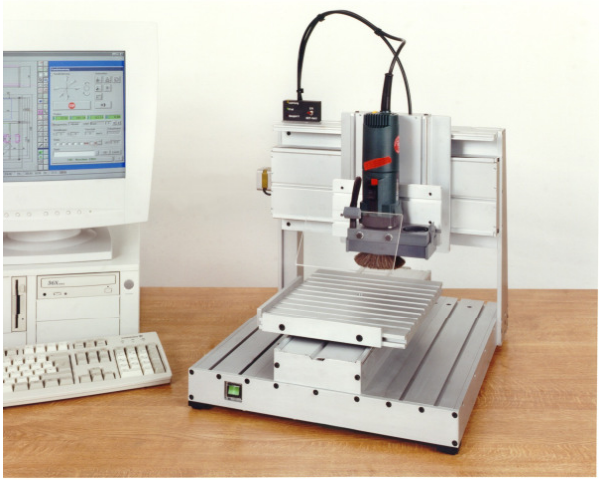

KOSY2-MCS CNC machine standard for **normal requirements**

KOSY2-MCS CNC machine standard for **enhanced requirements**

The CNC maschine standard for normal and enhanced requirements

Properties	**normale version**	**enhanced version**
Coordinate-table machine body		
- ALU-profiles, worked anodized	tightly screwed	tightly screwed
- surface	T-slot profiles	T-slot profiles
- dimensions of the T-slots (w x h; distance)	11 x 4 ; 52 (mm)	11 x 4 ; 52 (mm)
- dimensions of the base frame **A4** version (w x l x h)	approx. 432 x 508 x 50 (mm)	approx. 432 x 508 x 60 (mm)
- dimensions of the base frame **A3** version (w x l x h)	approx. 432 x 708 x 50 (mm)	approx. 432 x 708 x 60 (mm)
- dimensions of the base frame **A3long** version (wxlxh)	Not available	approx. 432 x 1233 x 70 (mm)
- dimensions of the base frame **A1** version (w x l x h)	Not available	approx. 760 x 1233 x 70 (mm)
- height, all included, both versions	approx. 460 mm	approx. 500 mm
Linear system		
- enclosed version		
- roller-tracks with 2 hardened guide rails	supported by special profile	supported by special profile
- distance between the guide rails	approx. 140 mm	approx. 140 mm
- 4 rollers on each side	dust-protected	dust-protected, rollers-cover
- linear movements with ball screws	12 x 4 (mm), bothside ball bearing	12 x 4 (mm), bothside ball bearing
- precisision of the spindle	< 0,01 mm	< 0,01 mm
- movement X - Y - direction , **A4** version	> DIN A4, approx. 250 x 320 (mm)	> DIN A4, approx. 250 x 320 (mm)

- movement X - Y - direction , **A3** version	> DIN A3 , approx. 306 x 508 (mm)	> DIN A3 , approx. 306 x 508 (mm)
- movement X - Y - direction , **A3long** version	unavailable	> DIN A3 , approx. 306 x 810 (mm)
- movement X - Y - direction , **A1** version	unavailable	> DIN A1 , approx. 610 x 810 (mm)
- movement Z - direction , all versions	approx. 108 mm	approx. 108 mm
- each axis with 1 two-phase-step-motors	2,0 Ampere	2,0 Ampere
- holding torque of the step-motors	approx. 50 Ncm	approx. 50 Ncm
- switch for HOME-position	Software-support	Software-support
machining data		
- resolution (1 step of the step motor)	1,25 µm	1,25 µm
- accuracy of repetition (100 repetitions)	< 0,05 mm	< 0,05 mm
- accuracy of positioning of each axis	< 0,05 mm	< 0,05 mm
- working area (Y-table), **A4** version	approx. 245 x300 (mm)	approx. 245 x300 (mm)
- working area (Y-table), **A3** version	approx. 300 x 500 (mm)	approx. 300 x 500 (mm)
- working area (Y-table), **A3long** version	unavailable	approx. 300 x 800 (mm)
- working area (Y-table), **A1** version	unavailable	approx. 600 x 800 (mm)
- surface accuracy, Y-table	< +- 0,1 mm, surface plane millied	< +- 0,1 mm, surface plan milled
- max. workpiece dimension **A4**, **A3**, **A3long** (w x h)	approx. 400 x 55 (mm)	approx. 400 x 100 (mm)
- max. workpiece dimension **A1** (w x h)	unavailable	approx. 720 x 100 (mm)
- max. depth of steps wood / PVC	4 mm / 2 mm	5 mm / 3 mm
- max. depth of steps, Aluminium (AlMgSi05)	0,8 mm	0,8 mm
- max. depth of steps, brass	0,5 mm	0,5 mm
- max. tooldiameter	mill 3,175 mm, drill 6 mm	mill 6 mm, drill 6 mm
- max. feed X-, Y-direction (in fast mode)	80 mm/sec	80 mm/sec
- max. feed X-, Y-direction (in working mode)	40 mm/sec	40 mm/sec
- max. feed Z-direction (in working mode)	20 mm/sec	20 mm/sec
- max. load Z-table	3 kg	5 kg, weight compensation possible if necessary
- machining force X/Y/Z ati 10mm/s feed	> 100 N (ca. 10,2 kp)	> 200 N (ca. 20,4 kp)
- machining force X/Y in fast mode	> 40 N	> 75 N
- machining force Z in fast mode	> 75 N	> 100 N
Interface and power-supply general information		
- Interface and power-supply	integrated in the base frame	Integrated in the base frame
- own intelligence with linear and circular interpolation	Microcontroller	Microcontroller

- RAM as Spooler in the Microcontroller	included	included
- voltage supply	230 Volt / ca. 100 Watt	230 Volt / ca. 100 Watt
- controlling connection	Serial port RS232, 9 pol. D-sub	Serial port RS232, 9 pol. D-sub
- connecting cable to PC	cabel included	cable included
- system extension	free connections for accessories and options	free connections for accessories and options
- connections for switches of linear drives	Software-support	Software-support
- blocking the machining	by entire keyboard and key „Sperren"	by entire keyboard and key „Sperren"
step motor regulation		
- Multi-Controller-Steuerung MCS	Version 6.0	Version 6.0
- max. phase current of output stage	limited to 2,0 Ampere	limited to 2,5 Ampere
- current regulation	Pulse width modulation	Pulse width modulation
- current reduction at standstill	to approx. 30% of rated current	to approx. 30% of rated current
- frequency generating and current regulation	by integrated micro controller	by integrated micro controller
- clock frequency	independent from PC clock frequency	independent from PC clock frequency
Elements for automation		
- 1 IEC socket, on/off programmable	230 Volt / 750 Watt	230 Volt / 750 Watt
- 1 small voltage, on/off and level programmable	approx. 2....24 Volt / 0,1 A	approx. 2....24 Volt / 0,1 A und 0,5 ... 10 Volt / 0,1 A
- 4 free availible relay on/off programmable	conducting capacity 1 A, changer	conducting capacity 1 A, changer
- 1 small voltage	fixed 24 Volt / 1 Ampere	fixed 24 Volt / 1 Ampere
- 5 digital inputs for external switches	Optokoupler, Software-support	Optokoupler, Software-sopport
- 1 analog input	0 ... 24 Volt, Software-support	0 ... 24 Volt, Software-support
General data		
- application conditon	5 to 40°C (Class 3K3), max. 60 % humidity	5 to 40°C (Class 3K3), max. 60 % humidity
- rang of users	persons over 14 years	persons over 14 years
- weight of coordinate table, IF and power supply	approx. 28 kg (**A4** version) approx. 37 kg (**A3** version)	approx. 30 kg (**A4** version), approx. 40 kg (**A3** version) approx. 65 kg (**A3long** version) approx. 92 kg (**A1** version)
- maintenance interval, first maintenance/subsequently	after 50 working hours / as requierd	after 50 working hours / as requierd
- proved security	VDE and CE after EU-guidelines	VDE and CE after EU-guidelines