

Quotation for:

First name, Last name
School/Company name
Street Address
Phone #
Fax #
E-mail address

Double click here to change text

Concept Turn 155

PC-controlled CNC - lathe
with interchangeable control

**Control Systems**

SIEMENS 810D/840D
SIEMENS 810/820
GE FANUC Series 21
GE FANUC Series 0
EMCOTRONIC TM02
WinCAM

Basic Machine

QTY	Part Number	Description	Price	Extended Price
	A8F P01	Concept Turn 155 - TC 8 MT	\$51,900.00	\$0.00



PC-controlled 2 axis CNC-lathe with interchangeable control:

- 8-station tool turret
- Manual tailstock
- Power 2,8 kW
- Spindle speed range 150-4000 rpm
- Travel X: 100 mm
- Travel Z: 300 mm
- Machine lamp
- Central lubrication
- 8 pcs. tool holding fixtures ø16 mm for internal cutting tools
- Fully enclosed including chip tray
- Integrated PC
- 12" flat display
- Safety devices according to CE

	A8F P04	Concept Turn 155 - TC 8 PT	\$53,000.00	\$0.00
--	---------	----------------------------	-------------	--------



PC-controlled 2 axis CNC-lathe with interchangeable control:




- 8-station tool turret
- Pneumatic tailstock including pneumatic basic module
- Power 2,8 kW
- Spindle speed range 150-4000 rpm
- Travel X: 100 mm
- Travel Z: 300 mm
- Machine lamp
- Central lubrication
- 8 pcs. tool holding fixtures ø16 mm for internal cutting tools
- Fully enclosed including chip tray
- Integrated PC
- 12" flat display
- Safety devices according to CE

	A8F P02	Concept Turn 155 - TC 12 MT	\$56,700.00	\$0.00
--	---------	-----------------------------	-------------	--------



PC-controlled 2 axis CNC-lathe with interchangeable control:

- 12-station tool turret VDI 16 with directional logic
- Manual tailstock
- Power 2,8 kW
- Spindle speed range 150-4000 rpm
- Travel X: 100 mm
- Travel Z: 300 mm
- Machine lamp
- Central lubrication
- Fully enclosed including chip tray
- Integrated PC
- 12" flat display
- Safety devices according to CE

A8F P05	Concept Turn 155 - TC 12 PT	\$58,100.00	\$0.00
 <p>PC-controlled 2 axis CNC-lathe with interchangeable control:</p> <ul style="list-style-type: none"> • 12-station tool turret VDI 16 with directional logic • Pneumatic tailstock including pneumatic basic module • Power 2,8 kW • Spindle speed range 150-4000 rpm • Travel X: 100 mm • Travel Z: 300 mm • Machine lamp • Central lubrication • Fully enclosed including chip tray • Integrated PC • 12" flat display • Safety devices according to CE 			
A8F P03	Concept Turn 155 - TCM 12 MT	\$71,800.00	\$0.00
 <p>PC-controlled 2 axis CNC-lathe with interchangeable control:</p> <ul style="list-style-type: none"> • 12-station tool turret VDI 16 with directional logic • Driven tools (max. 6) • C-axis for main spindle • Manual tailstock • Power 2,8 kW • Speed range main drive 150-4000 rpm • Speed range driven tools 200-6000 rpm • Travel X: 100 mm • Travel Z: 300 mm • Machine lamp • Central lubrication • Fully enclosed including chip tray • Integrated PC • 12" flat display • Safety devices according to CE • Including pneumatic basic module 			
A8F P06	Concept Turn 155 - TCM 12 PT	\$73,100.00	\$0.00
 <p>PC-controlled 2 axis CNC-lathe with interchangeable control:</p> <ul style="list-style-type: none"> • 12-station tool turret VDI 16 with directional logic • Driven tools (max. 6) • C-axis for main spindle • Pneumatic tailstock including pneumatic basic module • Power 2,8 kW • Speed range main drive 150-4000 rpm • Speed range driven tools 200-6000 rpm • Travel X: 100 mm • Travel Z: 300 mm • Machine lamp • Central lubrication • Fully enclosed including chip tray • Integrated PC • 12" flat display • Safety devices according to CE 			

Control Software

QTY	Part Number	Description	Price	Extended Price
	X5A C00	SIEMENS 810/820 (32-bit)	\$2,813.00	\$0.00
	X3Y 200	SIEMENS 810D/840D (32-bit)	\$2,813.00	\$0.00
	X5A C50	GE FANUC Series 0 (32-bit)	\$2,813.00	\$0.00
	X3Y 300	GE FANUC Series 21(32-bit)	\$2,813.00	\$0.00
	X5A E00	EMCOTRONIC M02 (32-bit)	\$2,813.00	\$0.00
		WinNC - Control software, machine license		
		Indicate type of control needed when ordering:		
	X5A 250	EMCO Win 3D-View, Turning	\$682.00	\$0.00
		3D-graphic simulation Option for WinNC		
		EMCO Win 3D-View, turning, Machine / single license		

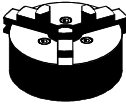
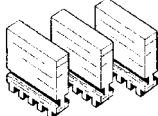
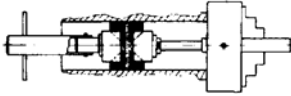
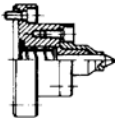

Control Keypads

QTY	Part Number	Description	Price	Extended Price
	X9Z 010N	SIEMENS 810 Keypad	\$437.00	\$0.00
	X9Z 020N	SIEMENS 820 Keypad	\$437.00	\$0.00
	X9Z 040N	SIEMENS 810D/840D Keypad	\$437.00	\$0.00
	X9Z 110N	GE FANUC Series 0 Keypad	\$437.00	\$0.00
	X9Z 130N	GE FANUC Series 21 Keypad	\$437.00	\$0.00
	X9Z 210N	EMCOTRONIC TM02 Keypad	\$437.00	\$0.00



Please select the corresponding keypad with type
of WinNC control software selected

Clamping devices

QTY	Part Number	Description	Price	Extended Price
	A8Z 060	3-jaw lathe chuck	\$823.00	\$0.00
		Manual Röhmschuck ø100 mm incl. 1 set of hardened external and internal graduated jaws		
	A8Z 065	Soft jaws	\$116.00	\$0.00
		1 set of 3 soft toothed jaws for chuck # A8Z 060		
	271 015	Hollow spindle stopper	\$242.00	\$0.00
		Consisting of collet holder, union nut and two dowel pins For collets type ESX 25 Clamping range 1,5-16 mm		
	A7Z 390	Face Driver	\$222.00	\$0.00
				
	152 700	Set of 12 ESX 16 collets	\$568.00	\$0.00
		Set of 12 collets Type of collet ESX 16 Diameter 1-10 mm		
	152 710	ø 1 mm	\$57.00	\$0.00
	152 715	ø 1,5 mm	\$57.00	\$0.00
	152 720	ø 2 mm	\$57.00	\$0.00
	152 725	ø 2,5 mm	\$57.00	\$0.00
	152 730	ø 3 mm	\$44.00	\$0.00
	152 740	ø 4 mm	\$44.00	\$0.00
	152 750	ø 5 mm	\$44.00	\$0.00
	152 760	ø 6 mm	\$44.00	\$0.00
	152 770	ø 7 mm	\$44.00	\$0.00
	152 780	ø 8 mm	\$44.00	\$0.00
	152 790	ø 9 mm	\$44.00	\$0.00
	152 800	ø 10 mm	\$44.00	\$0.00



Individual Collets
Type ESX 16

Tool Holders for CT 155 TC 8 (MT+PT)

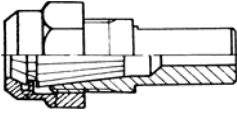
QTY	Part Number	Description	Price	Extended Price
-----	-------------	-------------	-------	----------------

A7Z 760

Collet toolholder

\$38.00

\$0.00



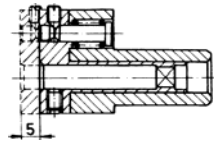
Triple-bearing live center for supporting long work-pieces.

A7Z 280

Tap holder

\$471.00

\$0.00



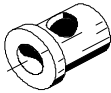
Capacity $\varnothing 1 - 8$ mm, mounting thread M14x1 mm, and chuck key

A7Z 270

Reduction sleeves

\$176.00

\$0.00



With M14x1 mounting thread for mounting drill chuck to tailstock

A7Z 700

Die holder - 16mm

\$91.00

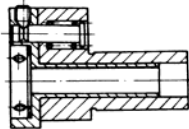
\$0.00

A7Z 710

Die holder - 20mm

\$243.00

\$0.00

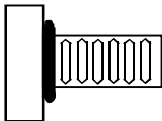


Diameter 16mm, for threads M2 - M2,5

Diameter 20mm, for threads M3 - M6

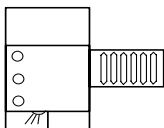
Tool Holders VDI-16 for CT 155 TC 12 / TCM 12 (MT+PT)

QTY	Part Number	Description	Price	Extended Price
	A8Z 690	Bore plug VDI 16	\$33.00	\$0.00



For covering of not-used tool stations.

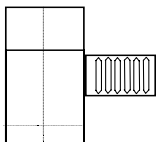
	A8Z 260	Radial tool holder VDI 16, M4 right	\$190.00	\$0.00
--	---------	-------------------------------------	----------	--------



Useable for all external tools.

Coolant supply through tool turret with adjustable ball nozzle.
Clamping plate for exact and care tool clamping.

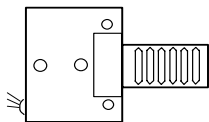
	A8Z 250	Radial tool holder VDI 16, M3 right	\$190.00	\$0.00
--	---------	-------------------------------------	----------	--------



Useable specially for threading tool (# 271 110)

Coolant supply through tool turret with adjustable ball nozzle.
Clamping plate for exact and care tool clamping.

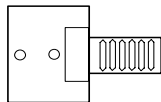
	A8Z 410	Support bore diameter 6 mm:	\$200.00	\$0.00
	A8Z 420	Support bore diameter 8 mm:	\$200.00	\$0.00
	A8Z 360	Support bore diameter 10 mm:	\$200.00	\$0.00
	A8Z 430	Support bore diameter 12 mm:	\$200.00	\$0.00
	A8Z 370	Support bore diameter 16 mm:	\$200.00	\$0.00



Useable for all internal tools.

Coolant supply through tool turret with adjustable ball nozzle.

	A8Z 380	Boring holder VDI 16	\$240.00	\$0.00
--	---------	----------------------	----------	--------

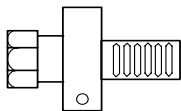


Useable specially for EcoCut-tool holder
(# 271 150)

Coolant supply through the tool.

Support bore diameter 16 mm.

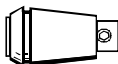
	A8Z 390	Collet holder VDI 16	\$320.00	\$0.00
--	---------	----------------------	----------	--------



Useable with ESX 16 collets and ET1-16 tapping collets.

Coolant supply through the tool with copper tube lengthening.

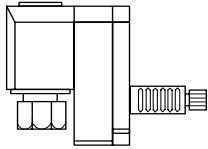
	153 810	Tapping collet M2 (shaft ø2,8 mm)	\$160.00	\$0.00
	153 820	Tapping collet M3 (shaft ø3,5 mm)	\$160.00	\$0.00
	153 830	Tapping collet M4 (shaft ø4,5 mm)	\$160.00	\$0.00
	153 840	Tapping collet M5 - M8 (shaft ø6 mm)	\$160.00	\$0.00



Useable with collet holder (# A8Z 390, #A8Z 470 and #A8Z 480)
for the support of screw taps.

Driven Tool Holders VDI-16 for CT 155 TCM 12 (MT+PT)

QTY	Part Number	Description	Price	Extended Price
	A8Z 480	Radial milling holder VDI 16	\$3,260.00	\$0.00

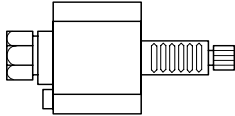


For milling and drilling in X-direction.

Useable with ESX 16 collets (max. ø 7mm) and tapping collets ET 1-16 (max. M6).

Coolant supply through tool turret with adjustable ball nozzle.

	A8Z 470	Axial milling holder VDI 16 straight	\$1,490.00	\$0.00
--	---------	--------------------------------------	------------	--------

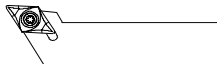
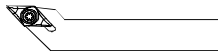







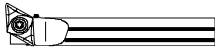
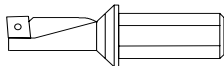


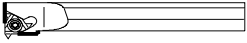

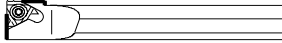
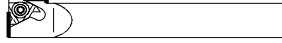



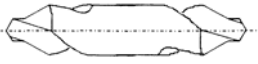
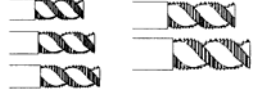

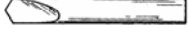
For milling and drilling in Z-direction.


Useable with ESX 16 collets (max. ø 7mm) and tapping collets ET 1-16 (max. M6).

Coolant supply through tool turret with adjustable ball nozzle.

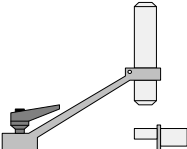
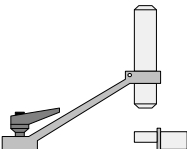
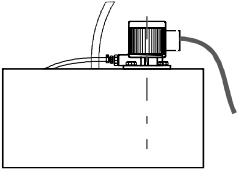


Cutting Tools

QTY	Part Number	Description	Price	Extended Price
	271 040	Roughing Tool Left (80°)	\$109.00	\$0.00
		No. PCLNC K12 T		
	271 050	Copying tool left (55°)	\$109.00	\$0.00
		No. SDJCL 1212 D07		
	271 070	Copying tool right (55°)	\$109.00	\$0.00
		No. SDJCR 1212 D07		
	271 060	Rough / Finish Tool Neutral	\$109.00	\$0.00
		No. SDNCN 1212 D07		
	271 100	OD-Thread tool left	\$214.00	\$0.00
		No. NL 12-3 LH		
	271 110	OD-Thread tool right	\$214.00	\$0.00
		No. NL 12-3 RH		
	271 080	Parting off tool (3mm)	\$270.00	\$0.00
		No. L150.15.15.1212-3/M0		
	271 120	ø16,0 mm Roughing bore bar (80°)	\$168.00	\$0.00
		No. S16H SCLCL 09 ø16 x 100 mm		
	271 130	ø16,0 mm Boring bar (55°)	\$168.00	\$0.00
		No. S16H SDUCL 07 ø16 x 100 mm		
	271 140	ø10,0 mm Boring bar (55°)	\$152.00	\$0.00
		No. S10D SDUCL 07 ø10 x 60 mm		
	271 150	EcoCut Left	\$460.00	\$0.00
		ø16 x 31,5 mm For internal turning without drilling first.		

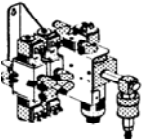
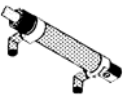
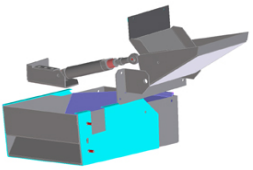

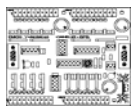


260 627	ø10,0 mm ID-Thread tool right	\$254.00	\$0.00
	No. NVR 10-2 RH ø10 x 60 mm for inside threads 0,5-1,5 mm		
271 180	ø16,0 mm ID-Thread tool right	\$254.00	\$0.00
	Nr. NVR 16-3 RH ø16 x 100 mm for inside threads 1,75-3 mm		
271 170	ID-thread tool left	\$249.00	\$0.00
	No. NVR 10-2 LH ø10 x 60 mm for inside threads 0,5 - 1,5 mm		
271 190	ID-thread tool left	\$262.00	\$0.00
	No. NVR 16-3 LH ø16 x 100 mm for inside threads 1,75 - 3 mm		
781 280	Drills, HSS - 25	\$103.00	\$0.00
260 628	Drills, HSS - 9	\$52.00	\$0.00
	25 twist drills ø1-13mm (0.5 mm graduated) 9 twist drills ø2-10 mm (1 mm graduated)		
771 120	Twist drills for core holes, HSS	\$19.00	\$0.00
271 230	Twist drills for core holes, HSS	\$25.00	\$0.00
	5 core hole drills ø2.5, 3.3, 4.2, 5.0, 6.8 mm 6 core hole drills ø2.5 - 8.5 mm		
271 200	Twist drills, HSS - 12mm	\$20.00	\$0.00
271 210	Twist drills, HSS - 16mm	\$39.00	
	ø12 mm, extra short accord. DIN 1897 ø16 mm, extra short accord. DIN 1897		
573 770	Centre drill, HSS	\$16.00	\$0.00
271 220	Centre drill, HSS	\$19.00	
	ø6,8 mm A8, DIN 333		
781 310	6 screw taps M3 - M10 in box	\$206.00	\$0.00
781 301	Screw tap M3 (shank ø 3,5 mm)	\$25.00	\$0.00
781 302	Screw tap M4 (shank ø 4,5 mm)	\$25.00	\$0.00
781 303	Screw tap M5 (shank ø 6 mm)	\$27.00	\$0.00
781 304	Screw tap M6 (shank ø 6 mm)	\$27.00	\$0.00
781 305	Screw tap M8 (shank ø 6 mm)	\$30.00	\$0.00
781 306	Screw tap M10 (shank ø 7 mm)	\$38.00	\$0.00
	Screw taps, HSS DIN 352		
764 301	Cutting- ø3 mm / shank- ø6 mm	\$14.00	\$0.00
764 302	Cutting- ø4 mm / shank- ø6 mm	\$14.00	\$0.00
764 303	Cutting- ø5 mm / shank- ø6 mm	\$14.00	\$0.00
764 304	Cutting- ø6 mm / shank- ø6 mm	\$14.00	\$0.00
	According to DIN 327, form B		
771 005	NC Start Drill, HSS	\$16.00	\$0.00
	Shank ø 6 mm, acute angle 120°		

212 320	Indexable inserts for steel (80°)	\$171.00	\$0.00
	No. CCMT 09T304 EN Gm43 for: 271 040, 271 120 (10pcs.)		
271 046	Indexable inserts for aluminium (80°)	\$254.00	\$0.00
	No. CCGT 09T304 - 27 H10T for: 271 040, 271 120 (10pcs.)		
271 055	Indexable inserts for steel (55°)	\$133.00	\$0.00
	No. DCMT 070204 EN Gm25 for: 271 050, 271 060, 271 070, 271 130, 271 140 (10pcs.)		
271 056	Indexable inserts for aluminium (55°)	\$230.00	\$0.00
	No. DCGT 070204-27 H10T for: 271 050, 271 060, 271 070, 271 130, 271 140 (10pcs.)		
271 155	Indexable inserts for Ecocut tool		\$0.00
	Quantity: 10 pcs. Useable for # 271 150		
271 085	Indexable inserts for parting off tool, 3mm	\$125.00	\$0.00
	FX 3.1N0.15-M1 Sr127 for: 271 080 (5pcs.)		
271 105	Indexable inserts for OD-thread tool left 0,5 - 1,5 mm	\$179.00	\$0.00
	pitch 0,5 - 1,5 mm No. 16EL T A60° S36T for: 271 100 (5pcs.)		
271 106	Indexable inserts for OD-thread tool left 1,75 - 3 mm	\$179.00	\$0.00
	pitch 1,75 - 3 mm No. 16EL T A60° S36T for: 271 100 (5pcs.)		
271 115	Indexable inserts for OD-thread tool right 0,5 - 1,5 mm	\$149.00	\$0.00
	pitch 0,5 - 1,5 mm No. 16ER T A60° S36T for: 271 110 (5pcs.)		
271 116	Indexable inserts for OD-thread tool right 1,75 - 3 mm	\$149.00	\$0.00
	pitch 1,75 - 3 mm No. 16ER T A60° S36T for: 271 110 (5pcs.)		
260 626	Indexable inserts for ID-thread tool right 0,5 - 1,5 mm	\$155.00	\$0.00
	pitch 0,5 - 1,5 mm No. 11IR T A60° S36T for: 260 627 (5pcs.)		
271 185	Indexable inserts for ID-thread tool right 1,75 - 3 mm	\$149.00	\$0.00
	pitch 1,75 - 3 mm No. 16IR T A60° S36T for: 271 180 (5pcs.)		
271 175	Indexable inserts for ID-thread tool left 0,5 - 1,5 mm	\$179.00	\$0.00
	pitch 0,5 - 1,5 mm No. 11IL T A60° S36T for: 271 170 (5pcs.)		
271 195	Indexable inserts for ID-thread tool left 1,75 - 3 mm	\$166.00	\$0.00
	pitch 1,75 - 3 mm No. 16IL T A60° S36T for: 271 190 (5pcs.)		

Accessories

QTY	Part Number	Description	Price	Extended Price
	A8Z 610	Optical tool presetting device for CT 155 – TC 8 MT+PT Including adjusting gauge. For registering the tool data in X- and Z-direction.	\$557.00	\$0.00
				
	A8Z 620	Optical tool presetting device for CT 155 – TC 12 / TCM 12 MT+PT Including adjusting gauge VDI-16. For registering the tool data in X- and Z-direction.	\$557.00	\$0.00
				
	VDI			
	A8Z 050	Coolant equipment Coolant equipment including pump and tray for 140l tank volume and a pump capacity of 20 l/min. Factory installed only !!	\$1,620.00	\$0.00
				
	881 500	Leveling element 1 piece, 4 pieces required	\$220.00	\$0.00
				
	Q1Z 340	Electronical Handwheel For moving the machine's axis manually to proceed zero point and tool offsets	\$0.00	\$0.00
				
	ZME 280 720	FI-Protection switch For moving the machine's axis manually to proceed zero point and tool offsets	\$1,325.00	\$0.00

Automation

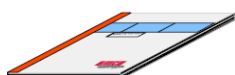
QTY	Part Number	Description	Price	Extended Price
	A8Z 550	Pneumatic unit	\$695.00	\$0.00
		Prepared for connection of automatic door, pneumatic chuck, pneumatic tailstock and blow out unit for pneumatic chuck. Factory installed only !!		
	A8Z 040	Automatic door (Pneumatic)	\$1,270.00	\$0.00
		Includes stroke control Pneumatic unit necessary! Factory installed only!		
	A8Z 710	Automatic parts catcher	\$1,242.00	\$0.00
		For workpieces max. ø 85 x 150 mm, programmable, pneumatic, including parts drawer. Pneumatic unit necessary !! Factory installed only !!		
	A8Z 160	Pneumatic chuck diam. 95/3	\$2,646.00	\$0.00
		Röhm clamping chuck KFD 95/3, without bore, Including 1 set of basic and soft top jaws. Requires ref.no. A8Z 550 and A8Z 180		
	A8Z 170	Soft jaws for pneumatic chuck	\$226.00	\$0.00
		Soft top jaws for pneumatic chuck # A8Z 160		
	271 240R	Pneumatic clamping device	\$2,700.00	\$0.00
		For collets 140 E, 22 DIN 6343, with 1 set of collets (diam. 6,8,10,12,14,15,16 mm) and draw bar for partial hollow clamping (max. 200 mm) Requires for ref.no. A8Z 550 and A8Z 180		
	A8Z 180	Solid clamping cylinder	\$3,620.00	\$0.00
		Air – solid clamping cylinder Röhm LVS 85 including chip blow out unit Pneumatic unit necessary !! Factory installed only !!		
	A8Z 530	Robotic-Interface Hardware	\$540.00	\$0.00
		Is required for the FMS/CIM – operation. (X1A 000 required) Retrofit able by EMCO technician !!		
	X1A 000	Robotic-Interface Software	\$302.00	\$0.00
		Necessary for the FMS/CIM - operation (A6Z 640 necessary)		
	X5A 050	DNC-Interface software	\$2,599.00	\$0.00
		Enables the remote control of WinNC via a software-protocol. The communication is done via the RS 232 interface Not available for Heidenhain TNC426/430		

Manuals

QTY	Part Number	Description	Price	Extended Price
	EN 1155	Machine description manual Concept Turn 155	\$92.00	\$0.00
		One included with machine purchase		
	EN 1804	Operating manual WinNC SIEMENS 810/820 T	\$69.00	\$0.00
	EN 1815	Operating manual WinNC SIEMENS 810D/840D-T	\$137.00	\$0.00
	EN 1802	Operating manual WinNC GE FANUC Series 0-T	\$69.00	\$0.00
	EN 1902	Operating manual WinNC GE FANUC Series 21-T	\$69.00	\$0.00
	EN 1805	Operating manual WinNC EMCOTRONIC TM02	\$69.00	\$0.00
	EN 1827	Operating manual Win3D-View	\$21.00	\$0.00

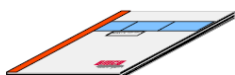
Courseware

QTY	Part Number	Description	Price	Extended Price
	EN 9980	CNC program package - metric	\$315.00	\$0.00
	US 9980	CNC program package - inch	\$315.00	\$0.00



Contents teacher guide:
Examples incl. the drawings of the work pieces, adjustment sheets, working plan, NC-programs, colored overhead slides, working sheets for students.
Sinumerik 810M/820M, 810D/840D-M, Fanuc 0M/21M.

	EN 9902	SIEMENS 810/820M	\$273.00	\$0.00
	US 9902	Teachers's Guide Siemens	\$273.00	\$0.00
	EN 9906	GE FANUC Series 0-M	\$273.00	\$0.00
	US 9906	Teachers's Guide GE Fanuc	\$273.00	\$0.00



On the basis of a practical example the user will be informed step by step about the operation with the machine and the control surface.

(Train Concept CD's)

	X2Y 300	Single license - train concept	\$1,290.00	\$0.00
	X2Y 310	Multiple license (20 users)	\$2,856.00	\$0.00
	X2Y 320	Intranet license 50 (50 users)	\$3,132.00	\$0.00
	X2Y 330	Intranet license 100 (100 users)	\$5,435.00	\$0.00



Modular e-learning solution for metal cutting technology (DE, EN, SP, FR)

(Updates for WinTrain to Train Concept CD's)

	X2Y 800	Single license - update	\$516.00	\$0.00
	X2Y 810	Multiple license (20 users)	\$1,143.00	\$0.00
	X2Y 820	Intranet license 50 (50 users)	\$1,253.00	\$0.00
	X2Y 830	Intranet license 100 (100 users)	\$2,174.00	\$0.00

(WinTutorial CD's)

	X2Y 130	Sinumerik 810/840 D T/M 155	\$849.00	\$0.00
	X2Y 110	GE Fanuc 21 T/M 155	\$849.00	\$0.00



Project single-cylinder 4-cycle engine. 5 turning and 5 milling workpieces, completely documents, videos of production, CNC- programs.
Complete drawing set of the engine.
Operating- and programming manuals of the respective control integrated, with animation.
5 languages: German, English, French, Spanish,
Print function for all contents integrated.
WinTutorials are adapted to the EMCO machine types, but also be ideal CNC theory and practice instruction.

(Vision CD's)

	X5Y 070	SIEMENS 840D – Turning, Milling	\$647.00	\$0.00
	X5Y 080	SIEMENS 810/820 – Turning, Milling	\$647.00	\$0.00
	X5Y 090	GE Fanuc 0/21 – Turning, Milling	\$647.00	\$0.00



Colored overhead slides, for control specific theoretical training (on CD-Rom), polyglot

Sub Total	\$0.00
Discount %	0%
Discount \$	\$0.00
Training/Install	\$0.00
Shipping & Handling	\$0.00
Total	\$0.00

TERMS:

20% down payment with purchase order
Balance net 30 days after invoice
1 year warranty
Delivery ; stock ; subject to prior sales
F.O.B. Columbus, Ohio
Offer valid for 30 days
EMCO Maier Corporation terms and conditions of sale apply

**EMCO MAIER CORPORATION
TERMS & CONDITIONS OF SALE**General

Products and service furnished by us are sold only on the terms and conditions stated herein. Notwithstanding any terms or conditions on Customer's orders, our performance of any contract is expressly made conditional on Customer's agreement to these terms and conditions of sale. All contracts for the sale of products shall be construed under and governed by the law of the location from which our products are shipped. All orders shall be subject to our acceptance.

Prices

All published prices are subject to change without notice. Unless otherwise specified in writing, all quotations are firm and expire thirty days after date thereof. Unless otherwise stated, all prices, published or quoted, shall be exclusive of transportation, insurance and taxes.

Transportation & Acceptance We reserve the right to select the means of transportation and routing when Customer's instructions are deemed unsuitable. Risk of loss and/or damage shall pass to Customer upon delivery of the products to the transportation company at the FOB point. Title shall pass to the Customer when products are delivered to the transportation company at the FOB point. All products must be inspected upon receipt and claims should be filed with the transportation company when there is evidence of shipping damage, either concealed or external. The furnishing of a product to the Customer shall constitute acceptance of that product by Customer unless notice of defect or nonconformity is received by us within ten days of receipt of the product at Customer's designated receiving address. We may repair or, at our option, replace defective or nonconforming parts after receipt of notice of defect or nonconformity.

Performance

We shall not be liable in any way because of any delay in performance hereunder due to unforeseen circumstance or to causes beyond our control such as, but not limited to, strike, lockout, riot, war, fire, act of God, accident, subcontractor or supplier delays. We reserve the right to substitute suitable products, when in our opinion such substitution is necessary due to such circumstance or causes. No order may be terminated by Customer except by mutual agreement in writing.

Warranty & Liability for Machine Sales

Our machines, including accessories and spare parts purchased and/or included with the machine sale, are guaranteed to be free from defects in workmanship for twelve months after date of purchase, unless specified otherwise. This warranty is effective only if the necessary information is provided, serial number of machine and nature of defect, and any part claimed defective is returned prepaid to us. No such return will be accepted unless we are first notified of the part to be returned. Upon its proper return to us, we shall repair or replace, at our option, the defective part. This warranty applies only if the products have been operated in accordance with normal procedure, and if no unauthorized repairs have been attempted. This warranty is expressly in lieu of and excludes all other express or implied warranties including, but not limited to, warranties of merchantability and fitness for particular purpose, use or application and all other obligations or liabilities on our part. The remedy of repair or replacement, as provided herein, shall be the buyer's exclusive remedy and will satisfy all our liabilities whether based upon contract, negligence, or otherwise. In no event shall we be liable for incidental, consequential or special damages. Liability to third parties for bodily injury including death relating to our performance or products delivered hereunder shall be determined in accordance with applicable law and shall not exceed the payment, if any, received by us for the product or service furnished.

Warranty & Liability for Accessory & Spare Part Sales

Accessories and spare parts purchased after a machine sale and/or out of the machine warranty period are guaranteed to be free from defects in workmanship for 90 days after date of purchase, unless specified otherwise. This warranty is effective only if the necessary information is provided, original date of purchase and nature of defect, and any part claimed defective is returned prepaid to us. No such return will be accepted unless we are first notified of the part to be returned. Upon its proper return to us, we shall repair or replace, at our option, the defective part. This warranty applies only if the products have been operated in accordance with normal procedure, and if no unauthorized repairs have been attempted. This warranty is expressly in lieu of and excludes all other express or implied warranties including, but not limited to, warranties of merchantability and fitness for particular purpose, use or application and all other obligations or liabilities on our part. The remedy of repair or replacement, as provided herein, shall be the buyer's exclusive remedy and will satisfy all our liabilities whether based upon contract, negligence, or otherwise. In no event shall we be liable for incidental, consequential or special damages. Liability to third parties for bodily injury including death relating to our performance or products delivered hereunder shall be determined in accordance with applicable law and shall not exceed the payment, if any, received by us for the product or service furnished.

Terms of Payment

All payments for products released and shipped on approved credit accounts shall be due in full thirty days from date of invoice therefor. Past Due balances shall be subject to a service charge of 1 1/-2% per month. Partial shipments will be billed as made and payments therefor are subject to the above terms. We may cancel or delay delivery of products in the event Customer fails to make prompt payment therefor or in the event of arrearage in Customer's account with us.

Disputes

All disputes under any contract concerning products not otherwise resolved between Customer and us shall be resolved in a court of competent jurisdiction for the location from which shipment was made and in no other place.

Technical Specifications for Concept Turn 155

Working area		
Center height	[mm]	125
Distance between centers (spindle – live center)	[mm]	405
Swing over bed	[mm]	ø 250
Swing over cross slide	[mm]	ø 85
Max. workpiece size for chuck parts with tailstock	[mm]	ø 85 x 245
Travel		
Travel in X	[mm]	100
Travel in Z	[mm]	300
Main spindle		
Speed range (stepless)	[rpm]	150 - 4000
Max. torque (60% duty cycle)	[Nm]	19
Spindle nose according to factory standard		
Bearing, front bearing diameter		taper roller bearing, ø 45
Spindle bore	[mm]	ø 20,5
Bore through manual chuck	[mm]	ø 17
Main drive		
AC motor, power	[kW]	2,8
Tool system (Concept TURN 155 – TC 8)		
Tool turret without directional logic		
Number of tools alternatively inside/outside		8
Tool holding fixture		EMCO
Shaft height and width for external tools	[mm]	12 x 12
Bore for internal tools	[mm]	ø 16
Switch time (T1/T2/T3 = 45°/180°/315°)	[s]	1,4/3,5/5,5
Tool system (Concept TURN 155 – TC 12)		
Tool turret with directional logic		
Number of tools alternatively inside/outside		12
Tool holding fixture		VDI 16
Shaft height and width for external tools	[mm]	12 x 12
Shaft diameter for boring bars	[mm]	ø 16
Switch time T1 180°	[s]	2,8
Switch time T2 30°	[s]	1,0
Tool system (Concept TURN 155 – TCM 12)		
Tool turret with directional logic		
Number of tools alternatively inside/outside		12
Tool holding fixture		VDI 16
Shaft height and width for external tools	[mm]	12 x 12
Shaft diameter for boring bars	[mm]	ø 16
Switch time T1 180°	[s]	2,8
Switch time T2 30°	[s]	1,0
Driven tools (Concept TURN 155 – TCM 12)		
Speed range	[rpm]	200 - 6000
Torque	[Nm]	4
Power	[kW]	1,2
Number of driven stations		6
C-axis (Concept TURN 155 – TCM 12)		
Resolution of round axis	[°]	0,01°
Rapid traverse	[rpm]	100
Max. torque	[Nm]	25

Feed drives		
3 phases step motor with a resolution of	[mm]	0,00125
Rapid traverse in X / Z	[m/min]	7,5
Feed in X/Z (stepless)	[m/min]	0-4
Max. feed force	[N]	2500
Position variation P _s according VDI 3441 in X/Z	[mm]	0,004/0,004
Tailstock (integrated live center)		
Quill stroke	[mm]	120
Quill diameter	[mm]	ø 35
Travel	[mm]	200
Coolant equipment (option)		
Tank volume	[l]	140
Max. coolant velocity	[l/min]	20
Max. pressure	[bar]	0,75
Pneumatic unit (option)		
Basic pneumatic for the automation accessories. Automatic door, pneumatic chuck and parts catcher		
Supply pressure	[bar]	6
Connection unit	[mm]	ø 10
Lubrication system		
Guideways and feed spindle nuts	Automatic central oil lubrication	
Main spindle bearing	Lifetime grease lubrication	
Automatic clamping device (option)		
Solid clamping cylinder with pneumatic 3-jaw chuck incl. stroke control and blow-out unit		
Spindle bore	[mm]	ø 20,5
Chuck diameter	[mm]	95
Automatic door (option)		
Automatic door (pneumatic), incl. stroke control		
Parts catcher (option)		
Pneumatic parts catcher		
Painting		
Lightgrey	similar RAL 7040	
Red	similar RAL 3002	
Black	similar RAL 7021	
Electrical connection		
Voltage supply	[V]	400 ~3/N/PE
Admissible voltage fluctuation	[%]	-0.666666667
Frequency	[Hz]	50/60
Connection value	[kVA]	5
Main fuse	[A]	20
Dimensions/weight		
Height of rotation axis above floor	[mm]	1120
Total height	[mm]	1750
Total length and total depth	[mm]	1628 x 1174
Total weight of the machine	[kg]	700
Machine acceptance		
Acc. Din 8615, part 1		
Sound pressure level		
Average level of sound pressure	[db(A)]	69
At following conditions:		
Measuring method: Envelope surface measuring method acc. DIN 45 635		
Operating status: Max. spindle speed at idle running		
Safety rules		
According to EEC-/ CE EN292 part 1/2, EN60204 part 1 EEC machine guiding rules appendix 1		

Technical Data of PC-Control

Control by PC or control keyboard (option)

Interchangeable control-specific key module (X9B 000)(not included in scope of supply of basic machine)
Separate PC with 14" VGA colour monitor (not included in scope of supply of basic machine)

PC-Minimum configuration

IBM-compatible _____ Celeron 700 MHz
Hard disk _____ 4 GB
Drive _____ 3 1/2" floppy disk drive
_____ CD-ROM
Operating system _____ minimum Windows 98
RAM _____ 128 MB
Graphic card _____ 8 MB VGA
Color monitor _____ 14" VGA
Networkcard _____ with the ability for a TCP/IP protocol
1 free USB connection _____ for optional control keyboard