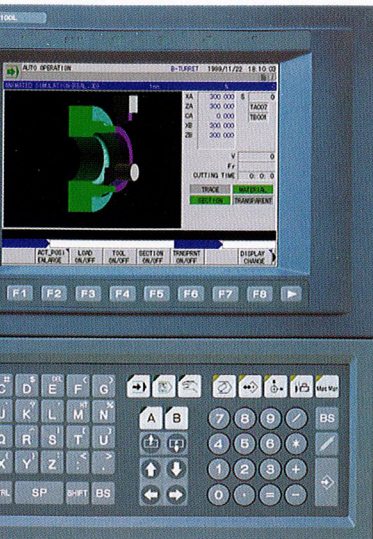


P-E100L

The OSP-E Series intuitive CNC, which forms the nucleus of IT Plaza, guides the operator who uses the ideal means to the best overall machining methods selected from among the processes necessary to make each product by offering suggestions to the operator. The OSP-E series places high value on people's senses, absorbing their machining knowhow and wisdom quickly, and thus continuing to advance every day.



The OSP Browser gives instant access to information

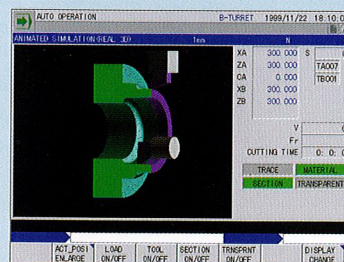
Optimum machining starts from knowing the optimum machining plan, work procedure, tools and cutting conditions. The OSP Browser is full of hints for optimization.

L1000M		L1000M		M1000V		M1000	
Project Select(Machine)							
				L1000M		M1000	
NL	Order NL	Parts NL	Priority	Process Info.		St Date	Prio
	Order Name	Parts Name	Progress	Previous	Current/Next	Due Date	Chg
1.	99051809-016	C123-000	High	Jim	Satish Satish	99/11/29	A.
	00R-1856	Spindle	Not Start	9/7/9	1/2/9 1/2/9	99/12/04	
2.	99051809-015	B123-000	Normal	Julie	Bobby	99/11/29	B.
	00R-1865	Joint	Not Start	M10/28 9/3/9	1/2/9 1/2/9	99/12/04	
3.	99051809-011	E123-000	Normal	Julie	Satish	99/11/29	C.
	00R-1861	Flange	Not Start	9/7/9	M10/28 1/2/9	99/12/04	
Operator	Machine	Change	Extend	Previous Page	Next Page	-----	Menu



Real 3-D simulation lets you experience the cutting process without making a single chip

To carry out efficient machining, it is essential to have the feeling of an actual machining situation on a real time basis. Real 3-D simulation allows you to feel every internal corner when machining, which the naked eye can never see.



OSP-WinX manipulates machines

OSP-WinX can help you to reduce setup and operating time by using WinX to instantly pop-up whatever screen you want to with one simple keystroke.

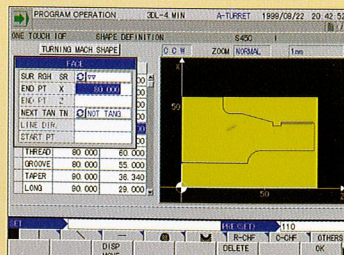
PROGRAM OPERATION				SOL-4 MIN		A-TURRET		1999/09/22 20:42	
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One touch IGF-XL enhances machining

To carry out machining efficiently, it is essential to have an optimum machining program. One touch IGF-XL allows you to work out an optimum machining program that can make the best use of your machine's capabilities.

One touch IGF-XL, which has an automatic decision function and list editing function, can create the most suitable machining program to demonstrate the capabilities of your machine to the greatest advantage.



OSP-E100L CNC

Standard specifications

Features	Axis control	X, Z simultaneous 2-axis (+ 2-axis) turning, X, Y, Z, C simultaneous 4-axis (+ 3-axis) multi-processing
	Position feedback	Full range absolute positioning (zero point return is not required)
	Tape format	N4, G3, X+53, Y+5.3, Z+53, I+53, K+53, F+53, S4, T6, M3
	RS232C interface	RS232C interface 1CH
	Floppy disk interface	3.5" floppy disk drive (Built-in type)
		Input/output a program via OSP or MS-DOS formats Accepts long file names, Auto ISO/EIA code recognition
	Programming	Auto ISO/EIA code recognition; absolute, incremental, or both
	Min command units	X-axis: 1 μm (0.00004 in.) [dia], Z-axis: 1 μm (0.00004 in.), C-axis: 0.001-degree
	Max command units	8-digit decimal, ±99999.999 mm
	Programmable units	1 μm (0.00004 in.), 10 μm (0.0004 in.), 1mm (0.04 in.) (Freely selectable)
	Decimal point data	1 μm (0.00004 in.), 10 μm (0.0004 in.), 1 mm (0.04 in.) increments
	Feedrates	Feedrates are listed in the machine specs, override: 0 to 200%, dwell: 0.01 to 99999.99 sec.
	Tooling	Tool selection: 12 sets, tool offset(compensation): 32 sets Max. Compensation value: ±99999.999 mm, Auto tool compensation: calculated from manually input wear and tear measurement values
	Spindle VAC motor operation	Direct spindle speed commands (S4), fixed cutting speed, Spindle speed override (50 to 200%), optimum turning speed designation
	M-spindle VAC motor operation (multi-machining)	Direct motor speed input
	Display *	10.4" color TFT, six LED for display of operation conditions
	Manual operation	Spindle (inching; clockwise or counter-clockwise turning), tool rotation, pulse handle, X, Y, Z-axis manual feed
	Multitasking	Program writing, editing during cutting
Operation	Self-diagnostics	Automatic diagnostics and display of program, operation, machine, and NC system problems
	Door interlock	Safety function to interlock machine movement when the door is opened or closed
	NC torque limiter	Instant detection of machine collision to reduce machine damage
	Hi-G control	Calculation of the speed-control and torque properties of a motor for high-speed, high-stability positioning
	MacMan	Machining progress is calculated and displayed for each main program, Machine working time (power supply time, cutting time) is calculated and displayed, Machine working time is calculated and displayed in time chart, Machining results, working results, working records, and trouble information are output to a floppy disk
		Comfortable window operation, Pop-up function display, One touch window close function
		Advance to an appointed sequence number in a selected program
		Displays a load meter for feeding axis and spindle, with peak value indication
	Sequence restart	Restart from an interrupted sequence
	Manual interrupt/auto return	Manual operation during automatic operation; return to interrupt point
	Threading slide hold	Slide hold during threading (optional for G34/G35 non-fixed cycles)
	Programming	Two programs can be edited simultaneously on one screen, and programs can be edited during operation
	Program capacity	Program capacity: 128 KB [320 m (1050 ft)], Program storage capacity128 KB [320 m (1050 ft)]
	Pocket manual function	Alarm help, G/M code help, system variable help, operation help, diagram display
	PLC monitor	Displays PLC ladder drawings and PLC data
	Data input/output function	Output tool offset, zero offset, and measurement data to floppy disk
	Others	Nose R compensation (2B) Automatic compensation for nose radius dimension errors including arbitrary shapes and arcs
		Arc radius designation Circular interpolation by defining the radius L and end points X and Z
		Arbitrary angle chamfering Simple programming of arbitrary angle chamfers (C, R)
		Taper angle designation Taper interpolation by designating either the X or Z-axis and the starting point angle
		mm/min (ipm) programming Both mm/rev (ipr) and mm/min (ipm) feedrate units can be used
		Program schedule Non-stop operation possible by setting the sequence order of several work programs
		Zero offsets via G-codes Program zero point offsets are possible
		Threading Thread lead: 0.001-1000.000 mm (0.00004-39.37 in.)threading lead pitch can be set Changeable lead threading available, chamfering ON/OFF, fixed cycle threading, non-fixed threading cycle (the thread lead indicates the CNC limit value, the max. thread lead differs for each machine)
		Custom fixed cycle Threading cycle, grooving cycle, drilling cycle
		Fixed drilling cycle (multi-machining) Drilling, deep-hole drilling, boring, tapping (synchronized tapping)
		User Task 1 GOTO, IF statements, arithmetic, common variable 200 sets, local variable, system operation variables
		Control In/Out Comments can be added to programs

OSP-E100L CNC

Optional specifications

Kit specifications										Kit specifications															
NML	3D	One-Touch IGF	One-Touch IGF-M	N	K						NML	3D	One-Touch IGF	One-Touch IGF-M	N	K									
E	D	E	D	E	D	E	D	E	D	NK: Non-kit specs										E	D	E	D	E	D
Interactive function										External I/O, networking function															
One Touch IGF-XL (including LAP4 and Real 3D)										IT Plaza set (requires additional system linking and cable connection)		OSP Browser													
One Touch IGF-XL for multi functional machine (including LAP4 and Real 3D)												IT Plaza network * (DNC-T3 function)													
Programming																									
Automatic programming (LAP4)										●●●●●●●●		RS232C channel addition [1CH, 2CH]													
Arc threading										●●●●●●●●		(1 channel is provided in standard specification)													
User Task 2		Sub-programming, function operations, logic operations								●●●●●●●●		RS232C connecting cable		Maker _____											
		I/O variables eight each (including the above)								●●●●●●●●		Type _____													
Tool offset function (Standard: 32 sets)		Tool offset 96 sets								●●●●●●●●		RS232C connecting cable		Maker _____											
Tool wear compensation										●●●●●●●●				Type _____											
Common variables 1000 (Standard: 200)												DNC linkage (requires additional system linking and cable connection)		DNC-B (including dedicated channel)*											
Interactive threading (Separately select spindle orientation)														DNC-C1 (including dedicated channel)*											
Halt during threading (G34, G35)														DNC-C2 (including dedicated channel)*											
Multi functional machine pecifications		Coordinate conversion								▲▲▲▲▲●●●				DNC-C3 (including dedicated channel)*											
		Profile generation								▲▲▲▲▲●●●				DNC-RT *											
		Flat turning function																							
Programming capacity										Automated unattended operation															
Operation backup capacity		512 KB (1280 m) (4200 ft)								●●●●●●●●		Spindle orientation Electric		●●●●●●●●											
Standard: 128 KB (320 m)		1024 KB (2560 m) (8400 ft)								●●●●●●●●		Auto power shut-off M02, alarm													
		4096 KB (10240 m) (33600 ft)										Warming up function (by calendar timer)													
Operation backup capacity		512 KB (1280 m) (4200 ft)										Tool retract cycle													
Standard: 128 KB (320 m)												External program selection		A (pushbutton type) 8 pushbuttons											
												B (rotary switch type) 8 stages													
												C1 (digital switch type) BCD 2digits													
												C2 (external input type) BCD 4 digits													
Monitoring										Okuma's loader (OGL) interface															
Real 3D simulation function										●●●●●●●●				Included in loader specifications											
Cycle time over check										●●●●●●●●															
Load monitor (spindle, feeding axis)										●●●●●●●●		Third party robot and loader interface *		TYPE B (main machine)											
Tool life management										●●●●●●●●				TYPE C (robot and loader)											
Work completion buzzer														TYPE D											
Chucking failure detection										Included in machine specifications				TYPE E											
Work counter		Count only pieces ()										Bar feeder		Body		Included in machine specifications									
		Cycle stop pieces ()												Interface only											
		Start disabled pieces ()												Maker _____											
Hour meter		Power ON												Type _____											
		Spindle turning										Cycle time reduction *		Cycle time reduction		●●●●●●●●●●									
		NC operating												Chuck open/close during spindle rotation											
NC operation monitor (including counter and monitoring function)										●●●●●●●●				Auto turret thrust during spindle rotation											
NC work counter (stops at full count with alarm)														High-speed/high-accuracy function											
Operation end lamp (yellow)														ABSOSCALE (XA,ZA,XB,ZB) *											
Alarm lamp (red)														1/10 μm control *											
Status display with 3-color signal tower Type C [Type A, Type B]										●●●●●●●●				Pitch error compensation (XA,ZA,XB,ZB)											
Gauging										Others															
Integral measuring system										Included in machine specifications				Electric leakage shut-off											
Z-axis automatic zero point offset by touch sensor														External M signals [2 sets, 4 sets, 8 sets]											
C-axis automatic zero point offset by touch sensor																									
Gauging data output		RS232C type		Using standard channel																					
				Channel addition																					
External measuring system		Regular offset type (5-stage, 7-stage)																							
		BCD method																							
		CEJ MATIC (Export specification)																							
		RS232C method (including dedicated channel)																							
Touch setter [M, A]										Included in machine specifications															
Size catcher		A (not including caliper)																							
		B (including 150 mm caliper)																							