



SGCAM TECHNOLOGY CO., LTD.



CNC Milling Machine
Two-Five-axis machining
CAM software

CNC Turning-Milling CAD/CAM
Software

CNC Lathe CAD/CAM Software

CNC program transmission management
software

CNC machine project development
industry CAD / CAM software

CNC Five-axis machining CAD/CAM software

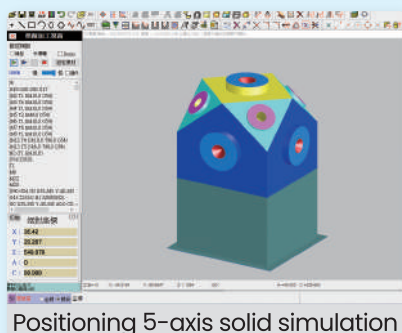
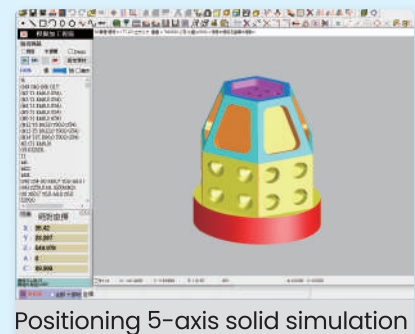
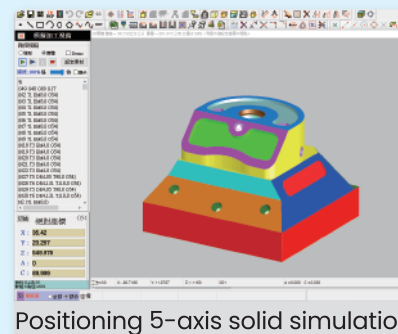
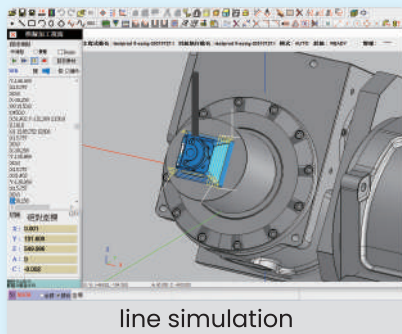
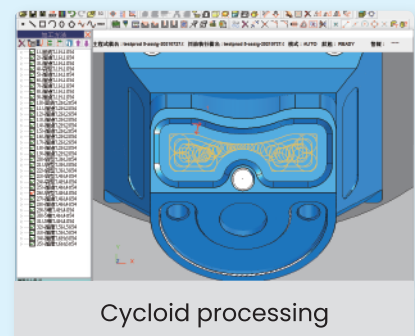
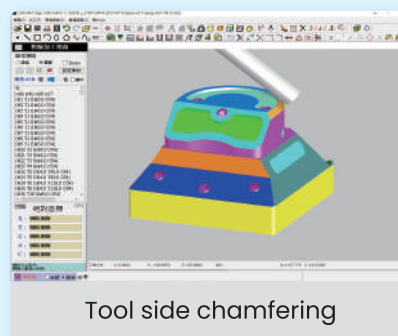
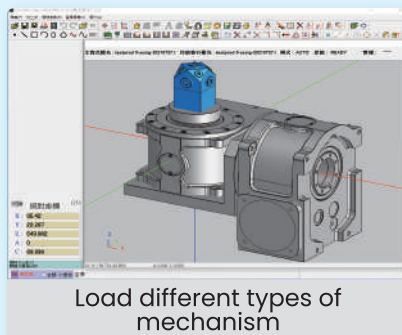
Main features

- ◎ Easy to learn, easy to understand, and easy to use. This is the most suitable machining software for machining industry. There is no need to memorize instructions while using the software.
- ◎ Parametric processing data setting, only takes four steps to make CAM :
 1. Load STEP file
 2. Specifies the plane to be machined
 3. Set processing parameters
 4. Transfer out processing NC code
- ◎ Complete processing method Cycloid、Face Milling、Pocket、Contour、Drill、Tap、Reaming、Milling.
- ◎ Positioning five-axis software help programmers generate NC programs quickly and easily and shorten processing time with five-sided machining.
- ◎ Provides toolpath simulation、entity simulation、remnant display, calculate processing time.

- ◎ Record tool number for each processed product so that the operator of the machine can accurately use the corresponding tool.

Smart Function

- ◎ When drilling, it can automatically capture the characteristics of the solid hole, including the hole diameter, upper Z value and lower Z value, without setting each hole separately.
- ◎ Automatic corner clearing can automatically clear the corner residue left by the previous tool.
- ◎ The edge chamfering method of the tool can be used to produce boundary chamfers that are not constructed on the STEP entity.
- ◎ Intelligent tool lifting method. Automatically lifting the tool according to the height of each working plane to reduce inefficient running and achieve the best processing efficiency.





Combination of software and controller

- ◎ The functions of the controller can be used in the software :
 1. The machine and the software can be simulated synchronously
 2. Find the workpiece origin function
 3. Set Work Coordinate System
 4. Automatic tool measurement function
- ◎ The software operation interface can be customized according to the needs of the machinery work.

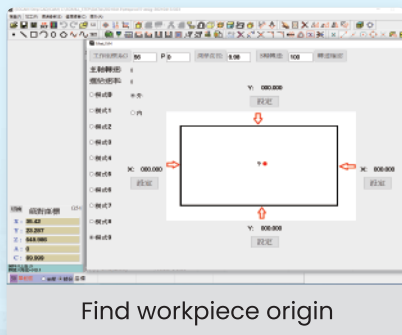
Positioning five-axis machining features

- ◎ The two rotating axes. Fix the workpiece at a position perpendicular to the tool axis first, and worked by X, Y, and Z axis.

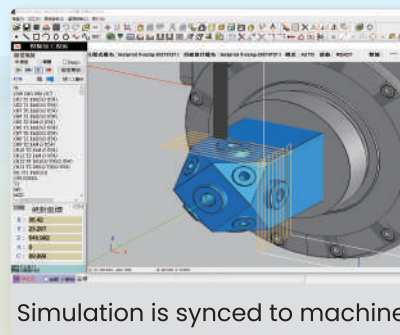
- ◎ Using shorter tools effectively, less tool stick-out, faster cutting, longer tool life, improving machining accuracy and surface accuracy can be achieved by creating a positioning machining plane. In addition, fewer processing steps are required for positioning five-axis machining, which can save time, reduce the error rate of tool machining, and improve the utilization rate of machine tools.

- ◎ Click the plane to be processed to set the plane for multi-face machining. The movement and tilted plane could process from different angles without changing the fixture. The direction of machining corresponds to the orientation of the tool. With the function of moving or tilting the plane, the programming time can be reduced.

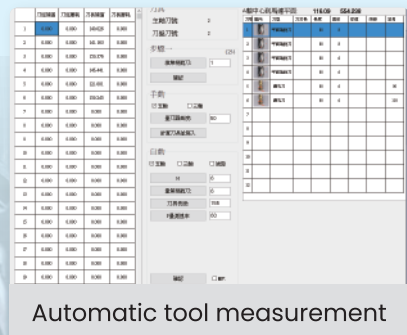
- ◎ Complicated part processing could be completed at one time, saving the cost of special fixtures, reducing the processing procedure and cost, and increasing production capacity.



Find workpiece origin



Simulation is synced to machine



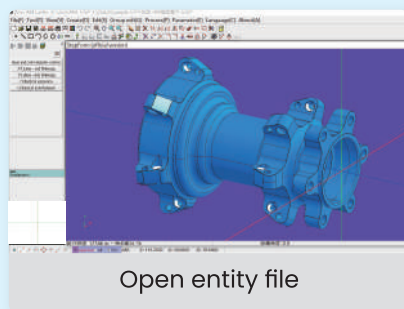
Automatic tool measurement

CNC Turning-Milling CAD/CAM Software

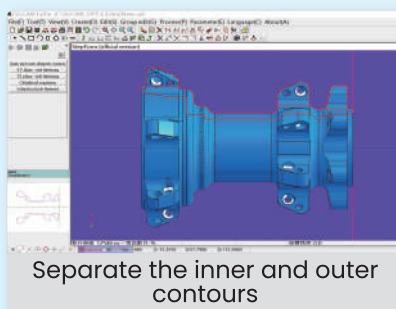
Highly respected and trusted Turning-Milling Machining Software with Artificial Intelligence

Main features

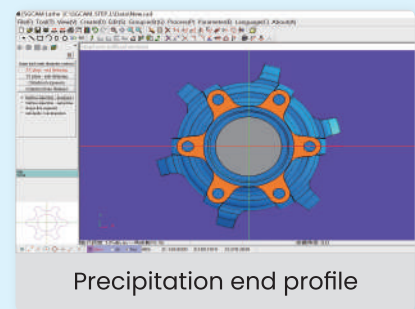
- ◎ Self-developed entity core
- ◎ Can directly load STEP entity files for processing
- ◎ Easy to learn, easy to understand, and easy to use. This is the most suitable machining software for machining industry. There is no need to memorize instructions while using the software.
- ◎ The shape of the workpiece can be drawn by AutoCAD, and then imported the DXF file and converted into CNC code.
- ◎ There is no need to draw 3D diagrams. 2D diagram with a contour line and a path line could be easily transformed into the turning-milling machining program.
- ◎ Cylindrical solid files can automatically generate expanded views
- ◎ The Turning-Milling contours of the solid side and faced side can be extracted.
- ◎ 3D solid cutting simulation preview can avoid interference and overcutting.
- ◎ On each and every parameter for the machine tools could be set by the actual Turning-Milling machine.



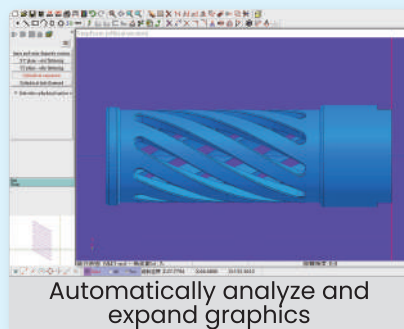
Open entity file



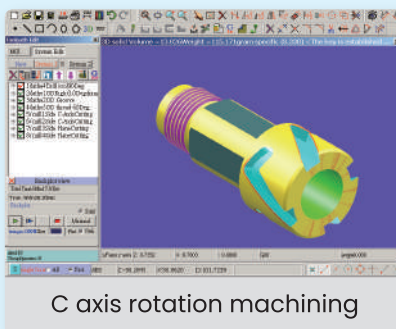
Separate the inner and outer contours



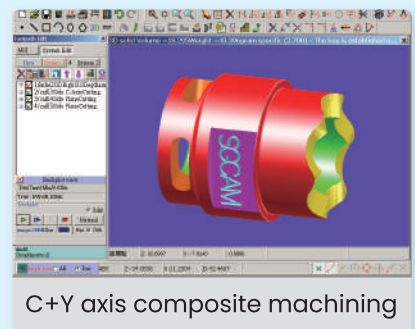
Precipitation end profile



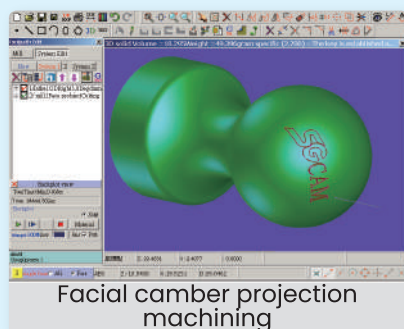
Automatically analyze and expand graphics



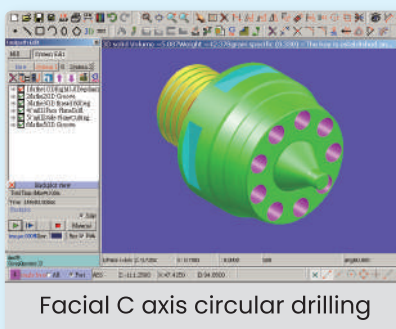
C axis rotation machining



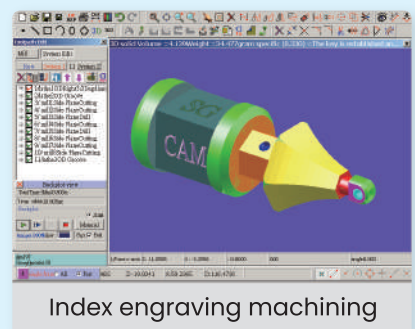
C+Y axis composite machining



Facial camber projection machining



Facial C axis circular drilling



Index engraving machining



Entity function introduction

- Separate out inner and outer contour
- X \ Y plane - End face flattening
- Y \ Z plane - Vertical flattening
- Cylindrical expansion
- Cylindrical hole flattening

Features of the Turning-Milling machining

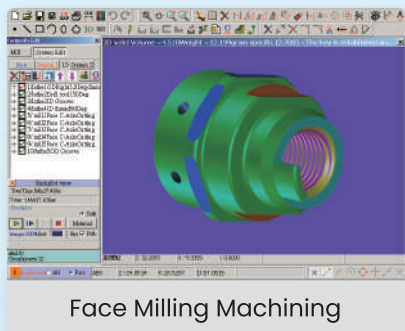
- ◎ The Turning-Milling machining methods are:
 1. Lateral plane projection
 2. Side cylindrical projection
 3. Cylindrical rotation
 4. End plane projection
 5. End arc projection
 6. Face rotation
 7. Outer diameter cam
- ◎ It can be used for lettering processing on the end face and arc surface.
- ◎ Support single-stroke font lettering.

System support

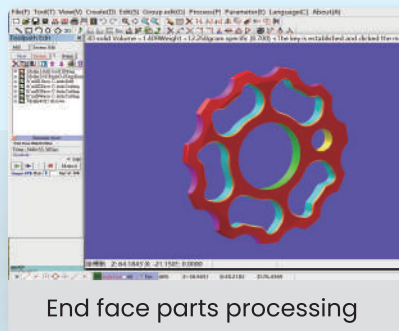
- ◎ Support C-axis, Y-axis, A-axis, Z-axis, X-axis
- ◎ Support circular machining instructions G87, G88, and G184 for flank milling and sidetracking etc.
- ◎ Support polar coordinate G12.1, G13.1, G112, G113
- ◎ Support cylindrical interpolation G07.1 and G107

Flexible post-processor settings

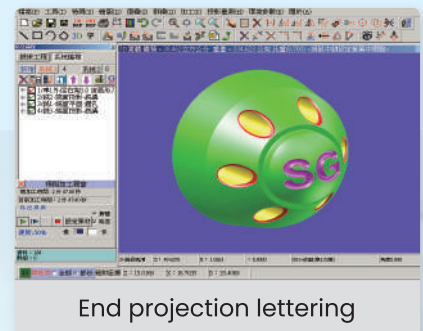
- ◎ The different G and M codes of various models can be easily set by the open post-processor to transfer the output type.
- ◎ The form and content of the Turning-Milling file header, file tail, and ATC could all be set up and generated for each single session program.



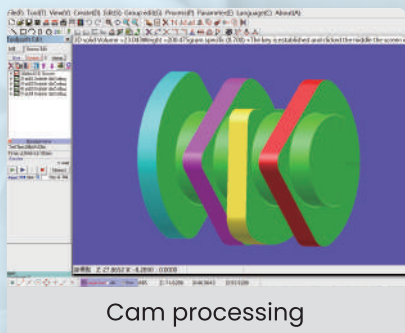
Face Milling Machining



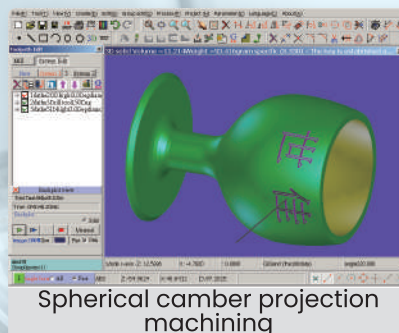
End face parts processing



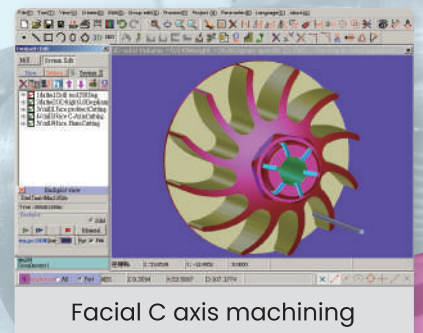
End projection lettering



Cam processing



Spherical camber projection machining



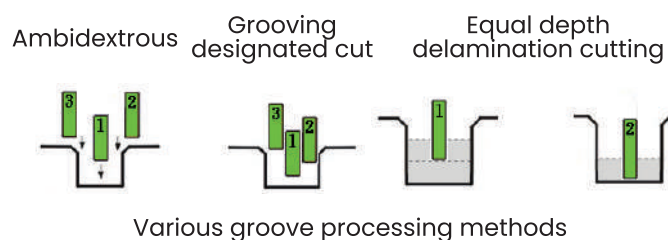
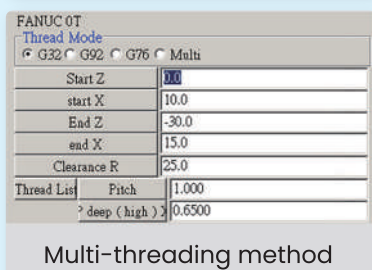
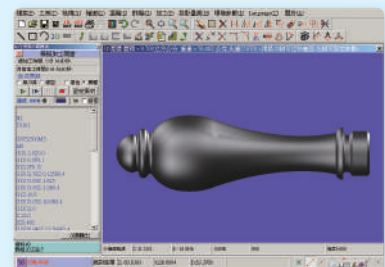
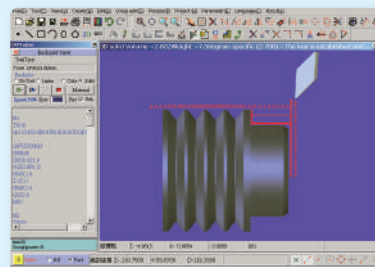
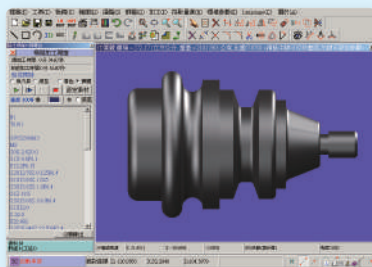
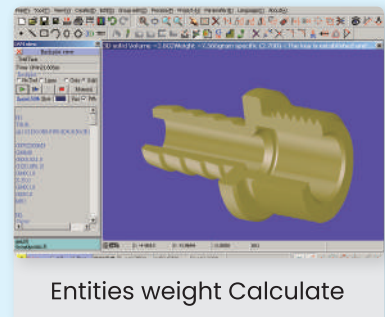
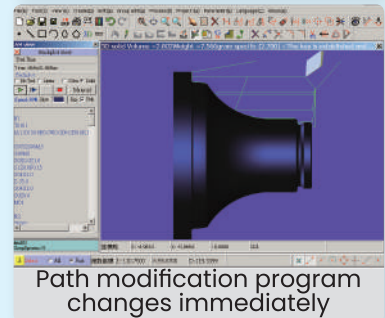
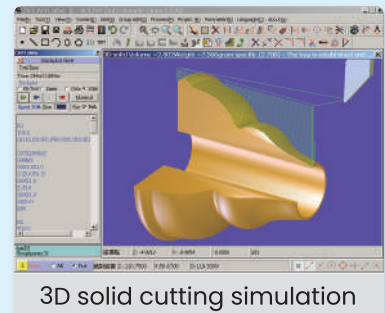
Facial C axis machining

CNC Lathe CAD/CAM Software

CNC Lathe CAD/CAM Software with the highest market share domestically

Main features

- ◎ Full Chinese screen, easy to learn 、 fast graphics, best meets industry use CAD/CAM software.
- ◎ The shape of the workpiece can be drawn by AutoCAD, and then imported into the DXF file, converted to CNC code.
- ◎ 3D dynamic simulation of real material cutting so that the cutting paths can be examined beforehand to prevent tool interference and over-cutting.
- ◎ Option to set the safety angle for the cutters to reduce the vibration caused by the blade coming in contact with the entire surface of the workpiece to extend tool's lifetime.
- ◎ Automatic check and filter, and delete redundant graph elements.
- ◎ Accurately calculate the machining time and the weight of workpiece so that you can give customer accurate pricing information, earn customer's trust and orders timely, and solve your problems of pricing and order-receiving.
- ◎ Support combined cycle cutting G71, G72, G74, and G75 (irregular shape can also use G75)
- ◎ Intelligent along the contour machining, save machining time (enhanced G73) .
- ◎ Intelligent automatic tool picking, chip-breaker, and delamination. Capable of performing the chip-breaker or pause movement for lines and arcs ; no more headache for tool break.
- ◎ Humane tool library setting, Ke Yi each user to set different commonly used tool.
- ◎ The cutting of special shaped thread, the cutting of continuous multi-thread.
- ◎ Graphical toolpath, the toolpath can also be made direct editing, editing is completed G-code changes immediately.
- ◎ Providing automatic conversion for arc lengths, angles, and incline degrees.



CNC program transmission management software



Main features

- Windows Chinese display, easy to learn, operate handy.
- Dedicated CNC program editor : CNC program instructions are color coded into G, M, and X , Z codes. For example, G01 X15.8 Z-30.5 allows the quick grasp of program at a glance.
- Support multiple transmission controller standards such as : Fanuc, Mitsubishi, Okuma, and PC-based...
- All the files on the CNC machine side will be exported to the PC side. They can be backed up as one file or separated into each files automatically.
- "Successful" or "fail" feedback messages can be setup during the transmission.
- Event monitor will record all the details of the transmission and reception processes for easy examination.
- Comments in parentheses at the end of a program name will be extracted automatically as new comments.
- Remote control, transmission program completely controlled by the CNC machine master console ; there is no need on the personal computer side to alleviate the hassles of running back and forth.

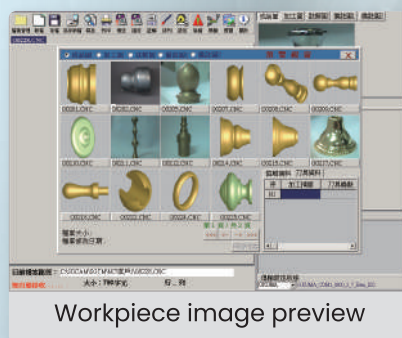
- Once the CNC machine programs are received, the PC side will automatically save the file into a designated folder.

Program and graphics management

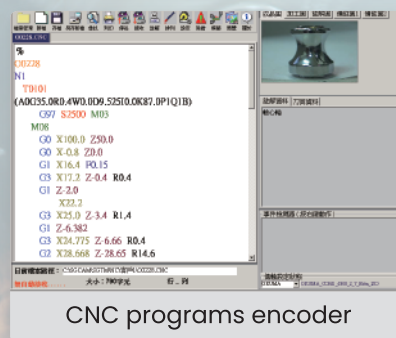
- Annotation database structure: provide functions such as quick input of phrases, insertion of file header, and the addition of tool used.
- Connection with network camera: directly capture the images of workpieces through the use of camera.
- CNC programs with the workpiece image displayed simultaneously, one can see 16 comments pictures, find the program easy to use.

3D dynamic simulation

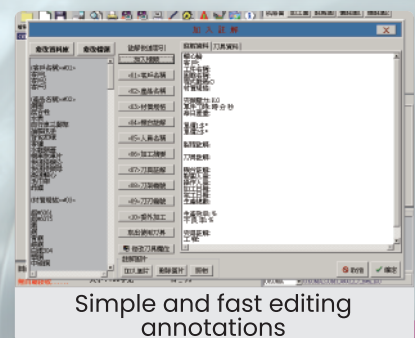
- 3D dynamic simulation of real material cutting so that the cutting paths can be examined beforehand to prevent tool interference and over-cutting.
- The graphics of real material simulation can be saved into image files and become part of the annotation image management system.



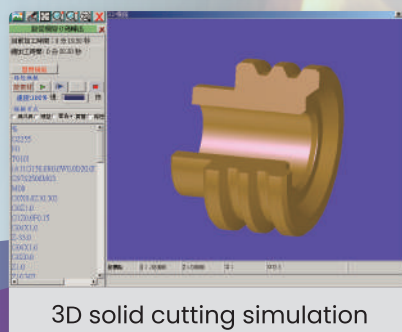
Workpiece image preview



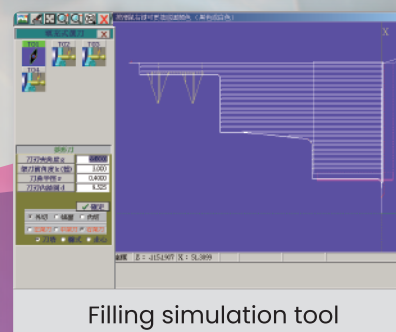
CNC programs encoder



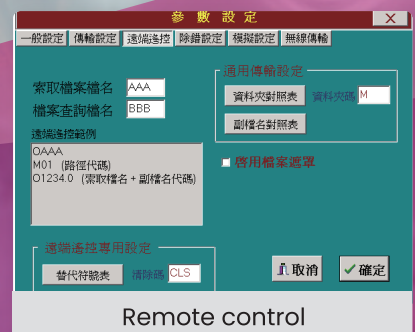
Simple and fast editing annotations



3D solid cutting simulation



Filling simulation tool



Remote control

CNC Mill 2.5D CAD/CAM software

Main features

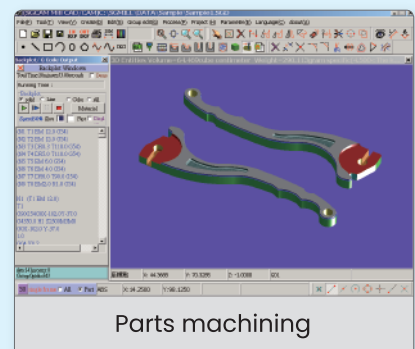
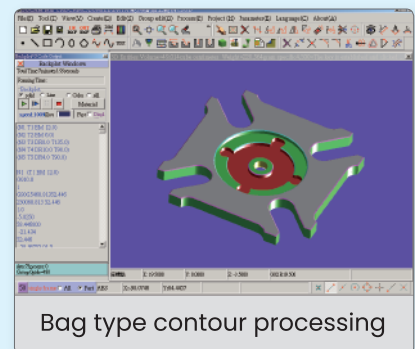
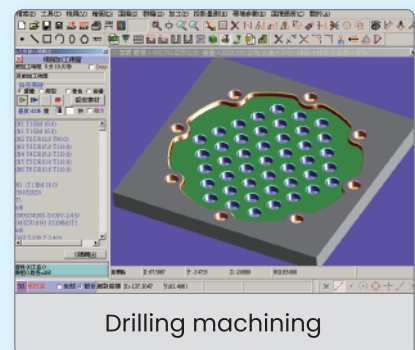
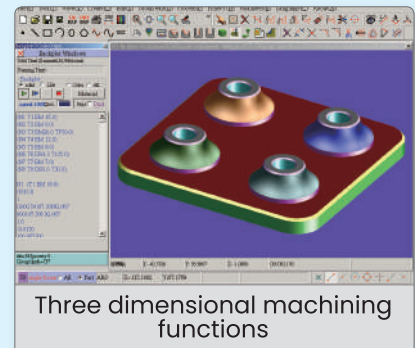
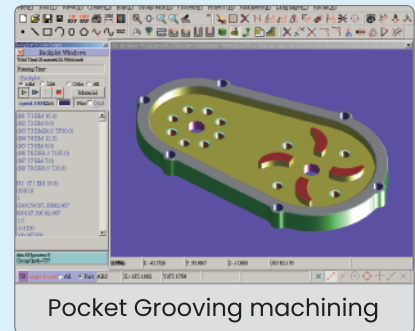
- ◎ Full Chinese screen, easy to learn, easy to understand, easy to use, is the most suitable machining industry software, operating software completely without back instructions.
- ◎ You can draw the outline of the workpiece using AutoCAD then import the DXF and IGS files to the system and convert to the CNC program.
- ◎ Parametric machining information setup only requires three steps for CAM :
 1. choosing machining method
 2. assign the machining parameters
 3. calculate and convert to machining G code.
- ◎ Parametric information setup: once the drawing is updated, the machining codes will be automatically changed accordingly.

Processing feeding and cutting methods

- ◎ Surround processing, specific direction, and angle processing can be specified.
- ◎ Cutting method: vertical cutting, oblique cutting, spiral cutting...
- ◎ Feed mode: tangent feed, vertical feed, arc feed, path extension...
- ◎ The cutting feed and general processing feed can be specified automatically and individually.
- ◎ Each cutting point can be specified by yourself during bag processing.

Intelligent functions

- ◎ The machining method and the machining contour can be replicated or modified directly; there is no need to re-configure.
- ◎ Automatic corner cleaning can clean up the corner residuals left by the prior tool used.
- ◎ Based on pore size, automatic search borehole drilling position, do not have to click on each hole designated.
- ◎ Fonts can automatically contour cutting periphery without editing slowly.
- ◎ Support single stroke font Lettering.
- ◎ Machining path optimization, The shortest distances between each machining paths are calculated automatically. Also, option for not raising the blade in between the machining paths can be set to shorten the machining time and reach the maximum machining efficiency.



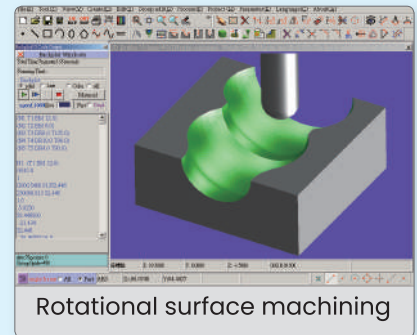
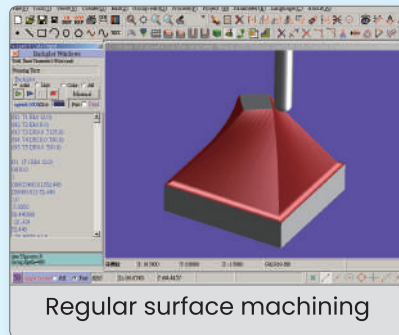
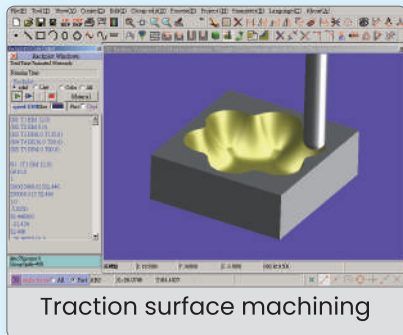


Extended functions

- ◎ C-axis function: projection processing, indexing processing, rotary processing (C-axis synchronous processing)
- ◎ The C-axis function is simple and convenient: after the 2D machining method is completed, just add a C-axis programming to transfer to the C-axis machining program.

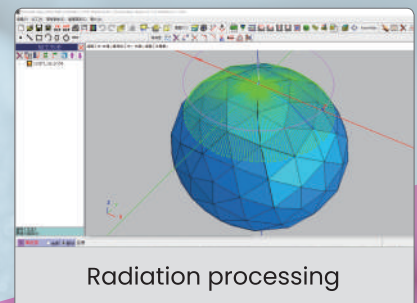
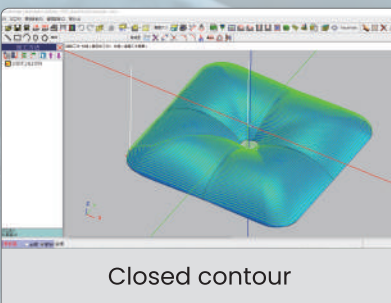
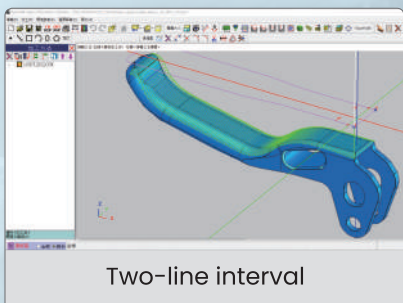
Three dimensional machining functions

- ◎ 3D machining method can be accomplished without the need to draw the 3D surfaces.
 1. Traction surface machining : capable of machining curved tubings and simple three dimensional shapes.
 2. Regular surface machining : regular slanted surfaces, quadrangular conical surfaces, and conical surfaces.
 3. Rotational surface machining : spherical surfaces and Gourd shape.



Advantages of 3D surface milling method

- ◎ SGCAM provides powerful and precise 3D surface milling functions, and can quickly and stably manufacture simple and complex workpieces.
- ◎ Rough machining and finishing machining methods ensure efficient 3D surface machining. The calculated toolpath will optimize the manufacturing time.
- ◎ Processing methods include : line segment translation processing, 2-line interval, closed contour, radial processing and other processing methods.



CNC machine project development industry CAD / CAM software

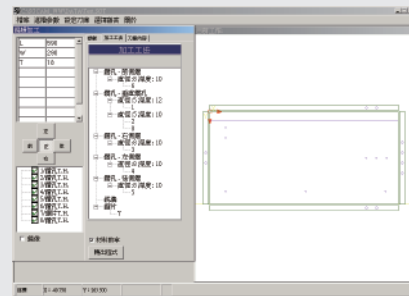
SGCAM has over 20 years experience in software development, and can be any special software for CNC industrial machinery development.

CNC programming industry, as there are many bottlenecks handwritten application, how to match the mechanical CAD / CAM software, the existing mechanical functions to maximize the effectiveness, if not fully exert the maximum limit of machinery, making the price is not comparable foreign price, if the machine with CAD / CAM software, so that the machine has more features, then the price can improve a lot.

CAD/CAM software & machine motion control for the CNC industry can be tailored according to customer needs



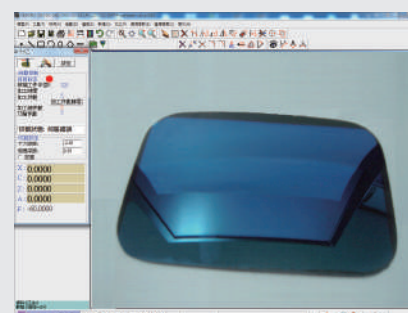
Woodworking cad/cam software



Flame cutting cad/cam software



Glass cutting cad/cam software

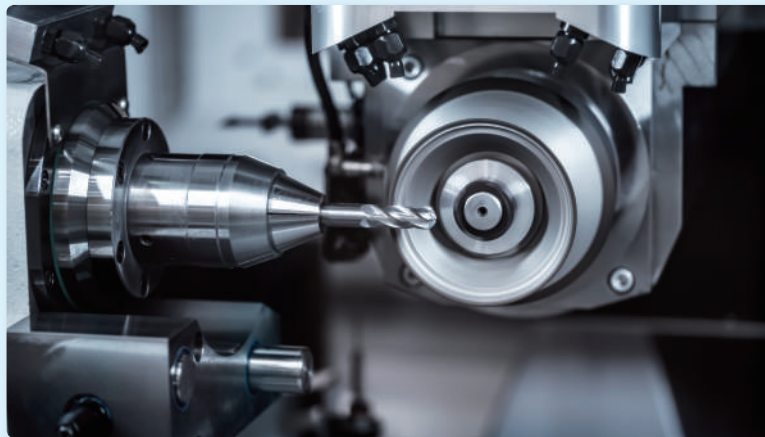


Software development projects

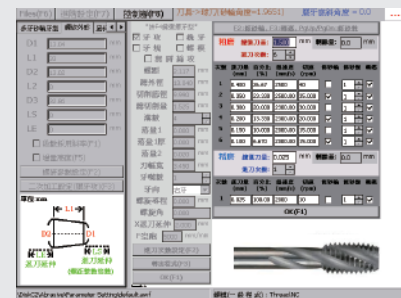
Tapping grinding software、Spining software、Glass cutting software、Glass grinding software、Roller Machine software、Punch machining software、Multi-head glass cutting publishing software、CCD automatic glass cutting bit software

CNC machining industry

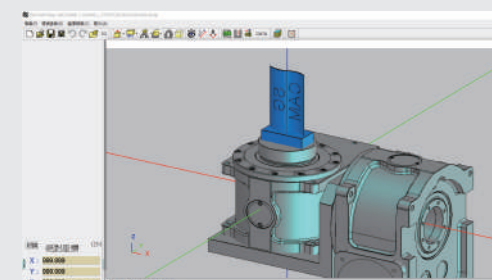
Woodworking machining、Waterjet cutting、Flame cutting、Dispensing Machine、Screw grinding、Tooth knife grinding、Cam grinding、Gear grinding、Wire EDM cutting、Laser machining



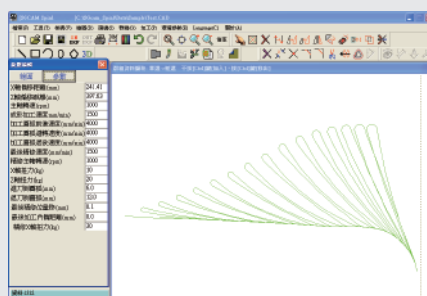
Tapping grinding cad/cam software



EDM drilling Five-Axis CAD/CAM



Spining cad/cam software



Screw grinding cad/cam software



**Innovative research and
development, professional skills,
integrity service**

**Leading technology, creating
unlimited business opportunities**

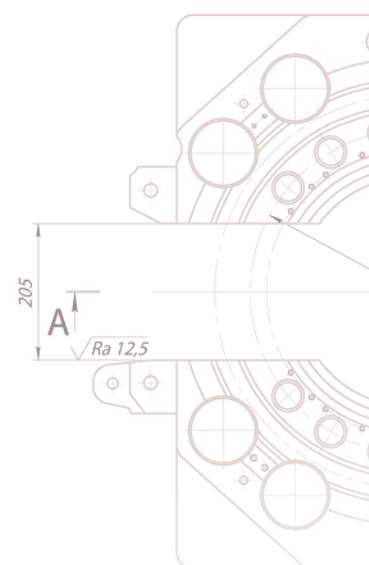
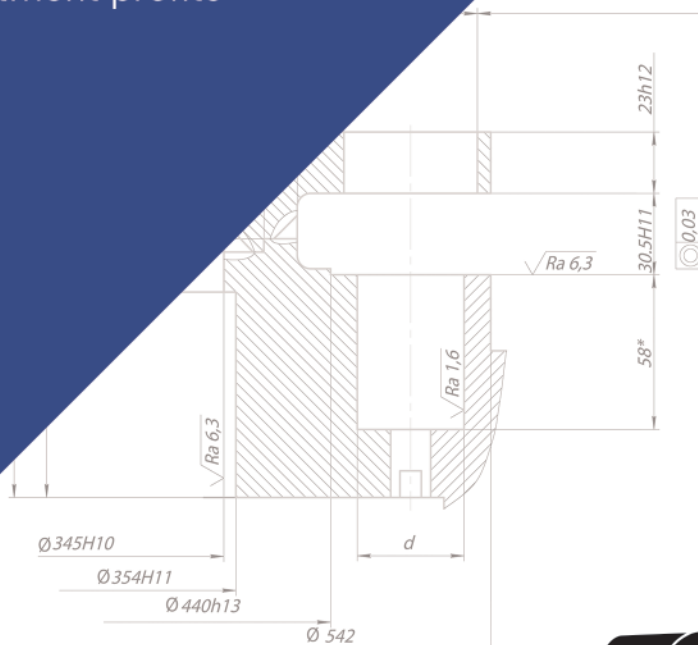
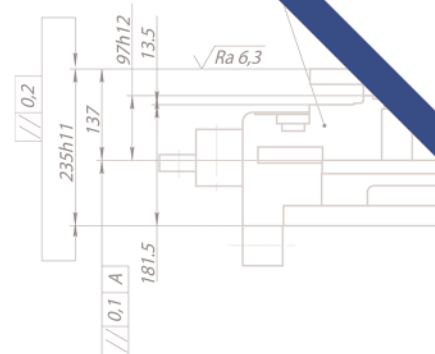
let you

Manage the technical personnel effectively

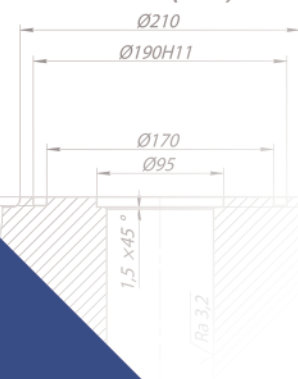
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SGCAM TECHNOLOGY CO., LTD.

No.89, Ln. 243, Sec. 2, Zhangxin Rd., Hemei
Township, Changhua County 508, Taiwan

TEL : 886-4-7367558

FAX : 886-4-7367556

WEBSITE : www.sgcaml.com.tw

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