FrankCAM

Turning Modules

Rough
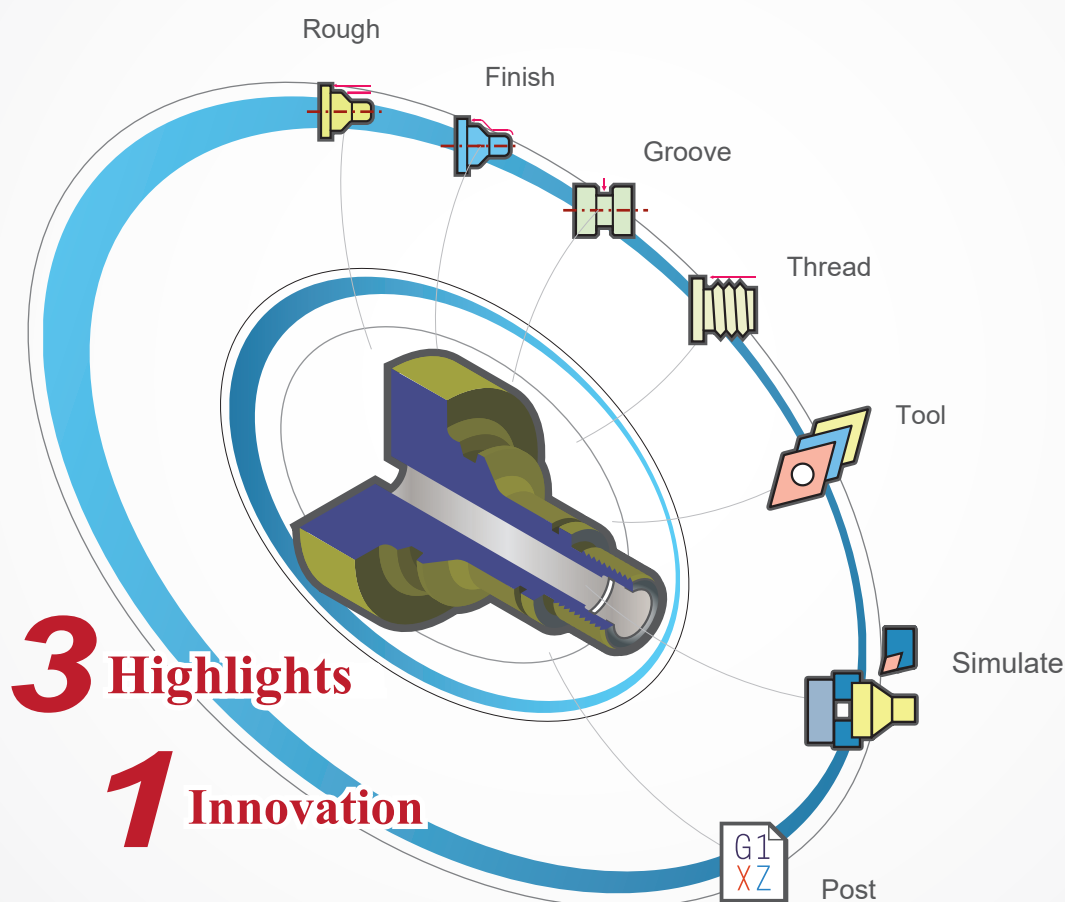
Finish

Groove

Thread

Tool

Simulate

Post

3 Highlights

1 Innovation

Visualized CAD/CAM system designed specifically for CNC turning professionals, reducing 80% of machining preparation time.

Innovation 1 — Guided Machining Steps Setting

Guided instinctive operation: Follow the steps from up to down to finish the work.
Greatly shortens learning time and enhances learning effectiveness.
What a simple and thoughtful design!

Greatly reduce machining preparation time.

Follow the icons
Up to down
5 steps only
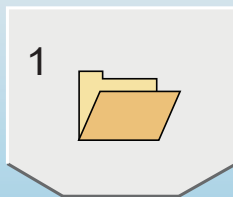
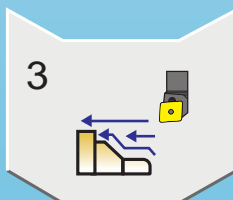**1** — **Thoughtful File Management & Material Settings Design**
A. New Files, Open Files, Recent Files.
B. Material Dimensions Settings
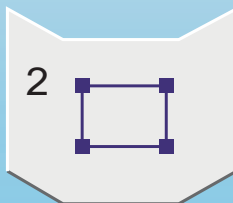
2 — **Intelligence CAD Drawing Method**
Points, lines, arcs and more drawing methods.
Whether it's tangent arcs or taper to arc,
no shapes are too complicated to be easily handled.

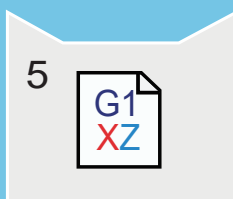**3** — **Detailed CAM Machining Settings**
Guide users with selection icons to set
roughing, finishing, grooving, threading, etc.
Fine selections, detailed settings – Flawless!
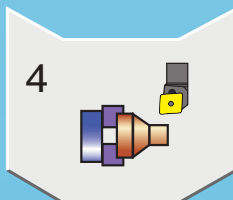
4 — **3D Animated Machining Simulation**
Simulate actual machining in 3D motion to avoid
interference and overcutting, verify tool paths to
eliminate the uncertainty of collisions.
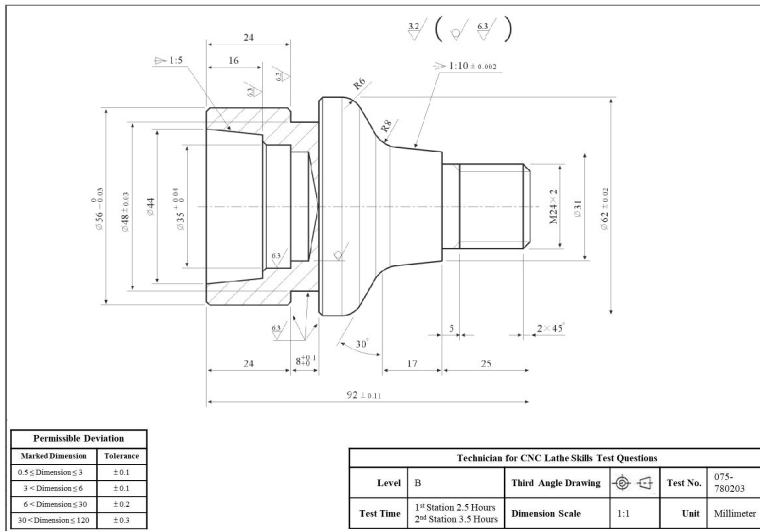
5 — **CNC Program Generation**
Automatic NC code generation.
Operation and settings as simple and quick as that.
Elevating you to a CNC programming expert

80%

FrankCAM Turning Modules

Highlight 1 — Geometry Master

Specifically designed to work without computer graphic skills. No need to draw, just directly input coordinates to automatically turn into machining outline.
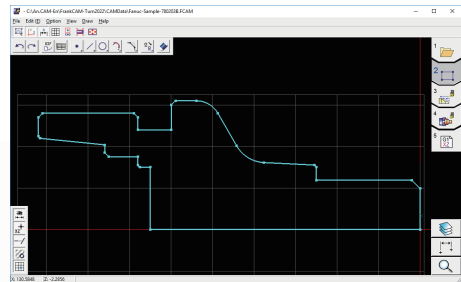
Get the hang of it easily even without computer graphic skills.

↓ Directly input coordinates and parameters following work drawing.

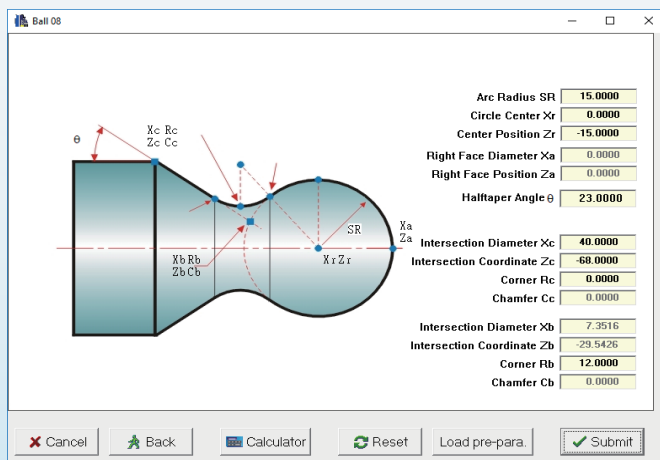↓ Directly transform into outline.

Highlight 2 — CounterTurn

Abundant selection of figures for common parts. Create all kinds of parts without using codes. Directly select a figure, input basic dimensions to automatically calculate and create drawing.

↓ Input the known dimensions of the workpiece and the system automatically calculates the other dimensions immediately.
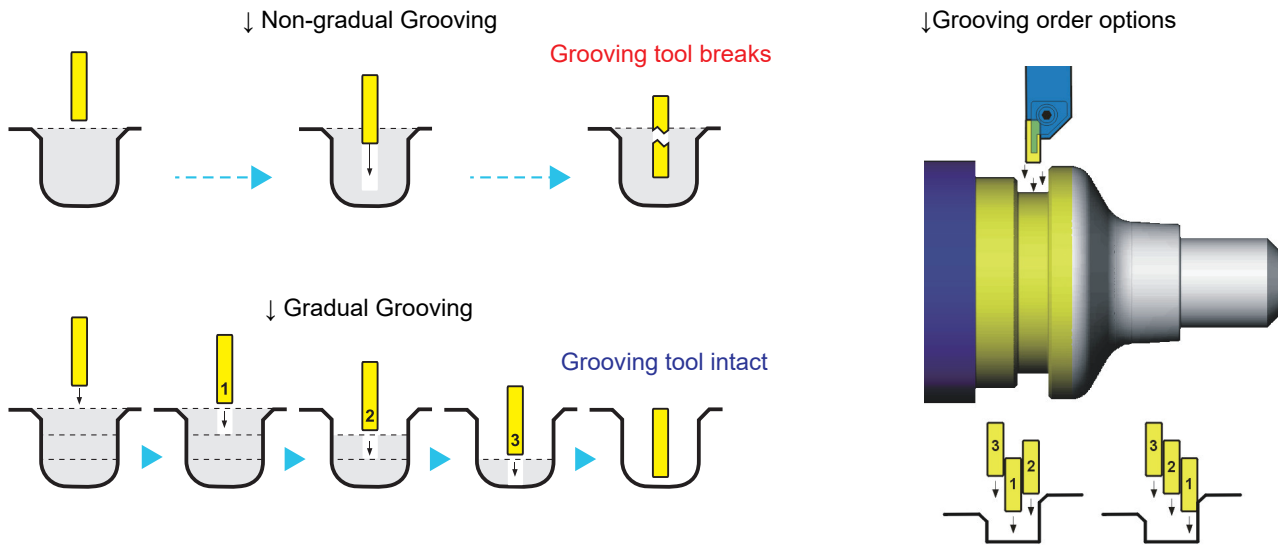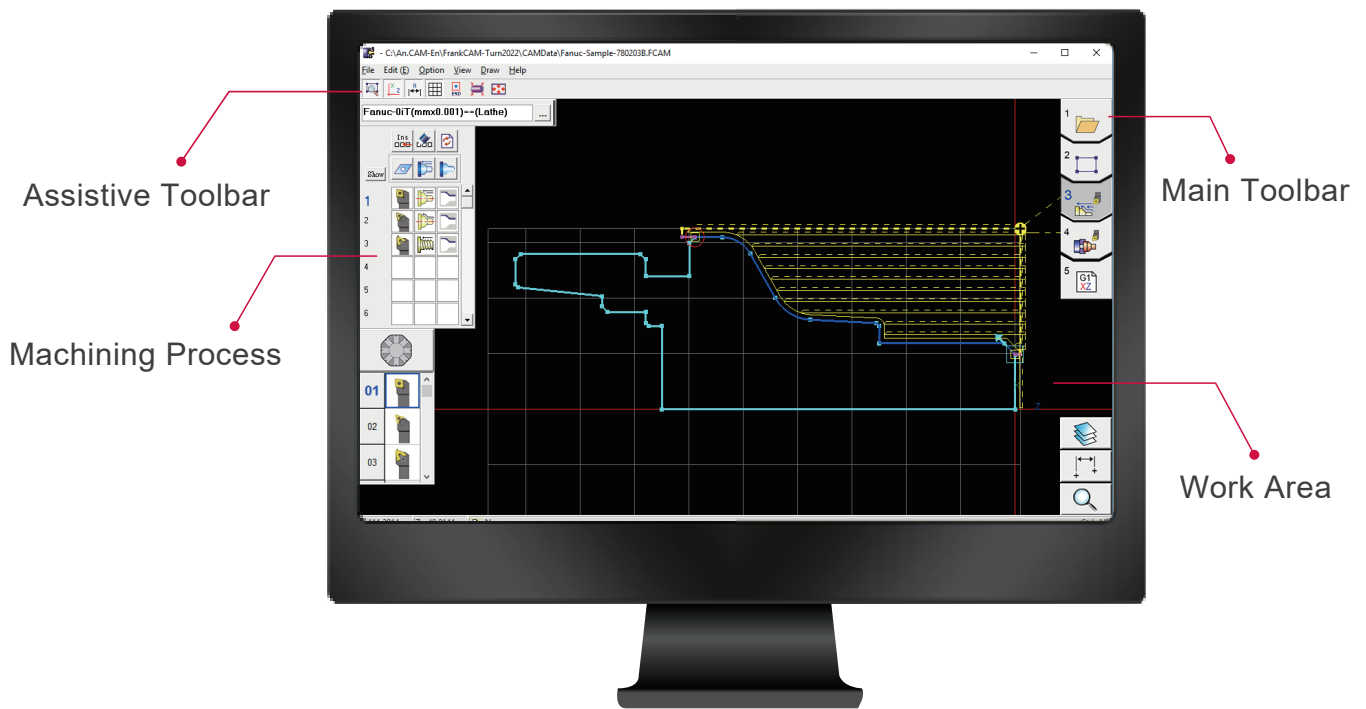

↓ Transform into outline.
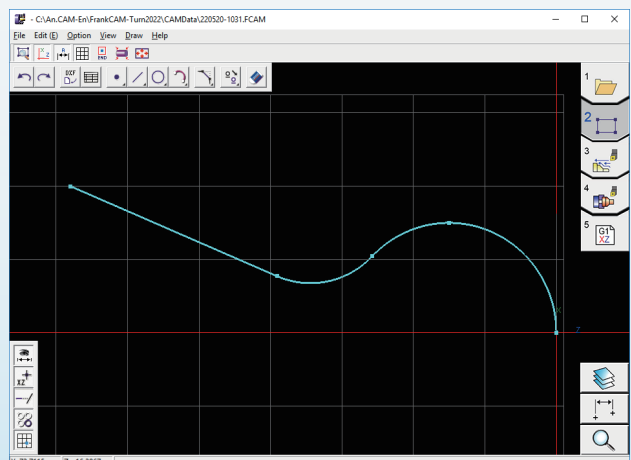
Utilize gradual same-depth grooving to prevent damaging tool while cutting deep into the workpiece. Coolant helps with cooling tool and removing chips smoothly. Greatly extending tool life up to three times.

↓ Non-gradual Grooving

Grooving tool breaks

↓ Gradual Grooving

Grooving tool intact

↓Grooving order options

Item	Specifications
Drawing	● Drawing Function 　(1)Point Function : Coordinate, Center, Intersection, Polar, Middle, on Arc 　(2)Line Function : Two Points Line, Angle, Angle & Tangent Arc, 　　　　　　　　　　Through Point & Tangent Arc, Two Arc Tangent, Shift 　(3)Circle Function: Center & Radius, Two Points & Radius, Through Point &Tangent, 　　　　　　　　　　Through Point & Tangent Circle, Tangent Two Lines, 　　　　　　　　　　Tangent Line & Arc, Tangent Two Arcs, 　　　　　　　　　　Begin Middle End, Two Points On Diameter, 　　　　　　　　　　Center Point & On Circle, Center & Tangent, 　　　　　　　　　　Wizard For Drawing Circle ● Cut and Corner: Auto Section, Section, Break, Cut, Corner-chamfer ● Modify Drawing: Workpiece Coordinate Zero Point Shift, Absolute Shift, Incremental Shift, Rotate, Mirror, Offset Contour, Scaling ● Layer Management: Add, Delete, Rename, Display ● Import DXF file made with any CAD systems. ● Measurement: Radius, Diameter, Length, Angle

Item	Specifications
Machining Process	◉ Rough, Finish, Groove. Choose to cut along axial direction or radial direction. ◉ Set material dimensions directly. System automatically calculates complete cutting path. ◉ Set cutting times and depth for rough cutting. ◉ Supports G71 and G72 canned cycle function for rough cutting. ◉ Supports G74 and G75 canned cycle for grooving and drilling. ◉ Supports standard thread and taper thread - quick threading settings. ◉ Supports workpiece cut off settings and generates cutting off program. ◉ Supports G01, G74 and G83 drilling settings. ◉ Supports G32, G84 tapping settings. ◉ Offers approach and retract extension function, control path without additional drawing. ◉ Simple tool nose type options. Allows adjusting limit tool cutting angle. ◉ Insert angle, cutting angle, auto overcut judgment, arc overcut judgment. ◉ Grooving entry options: Gradual peck cut, middle to sides or single direction. ◉ No drag function to protect grooving tool with only force from one direction. ◉ Set tool change position to reduce the chance of collisions. ◉ Display all tool paths at once for comparison.
Machining Simulation	◉ Tool motion and cutting process displayed in 3D simulation. ◉ Display tool, tool path, solid, or section during simulation. ◉ Simulate and display with actual machining. Adjustable simulation speed
Program Generation	◉ Generate NC code directly in the system. Greatly reduce program generation and commissioning time. ◉ Simulate and display with actual machining. Adjustable simulation speed

Assistive Toolbar

Machining Process

Main Toolbar

Work Area

Highlight 1

Geometry Master

Get the hang of it easily even without computer graphic skills.

Highlight 2

CounterTurn

Directly select a figure, input basic dimensions to automatically calculate and draw geometric figures.

Highlight 3

Grooving Feed Order and Gradual Grooving Options

Utilize gradual same-depth grooving to prevent damaging tool while cutting deep into the workpiece. Greatly extending tool life up to three times.

Innovation 1

Guided Machining Steps Setting

Guided instinctive operation: Follow the steps from up to down to finish the work.