

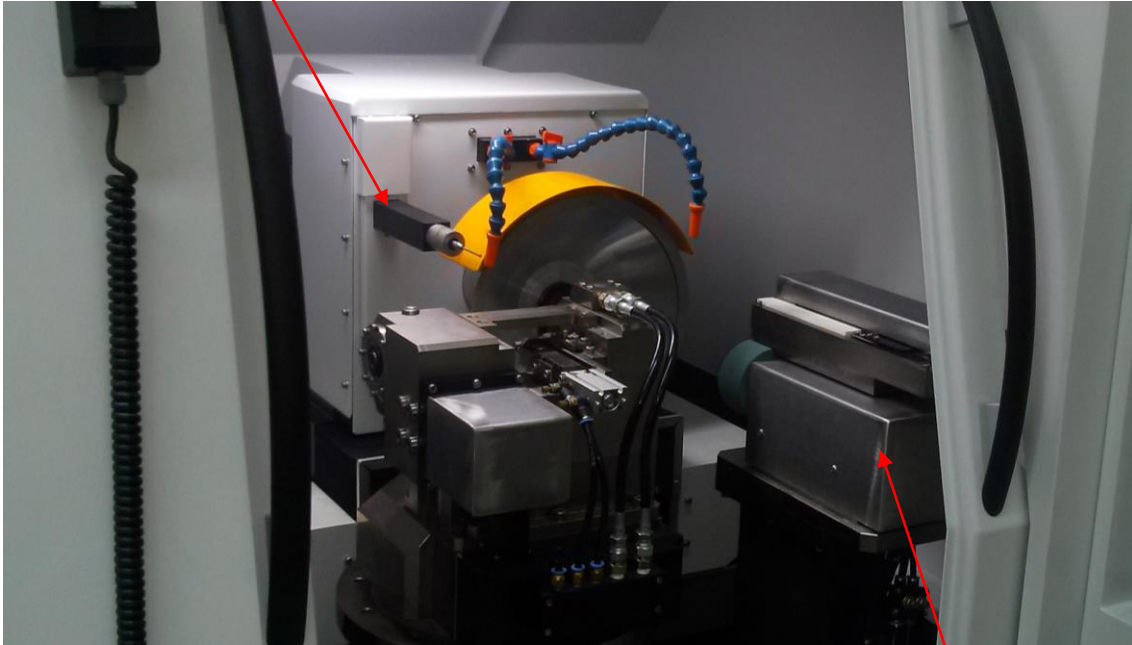
Precision-TG4

Precise 4-axes Grinding Machine For Indexable Inserts



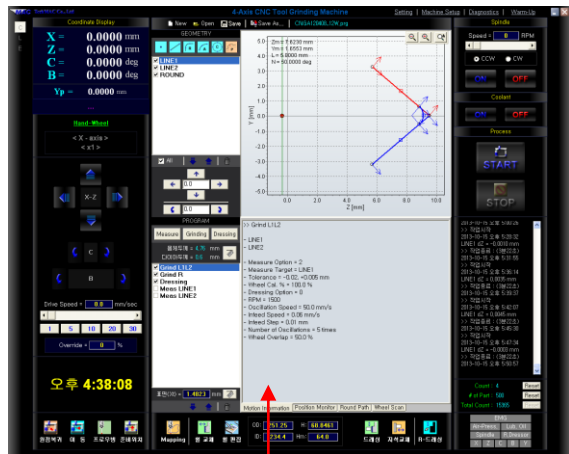
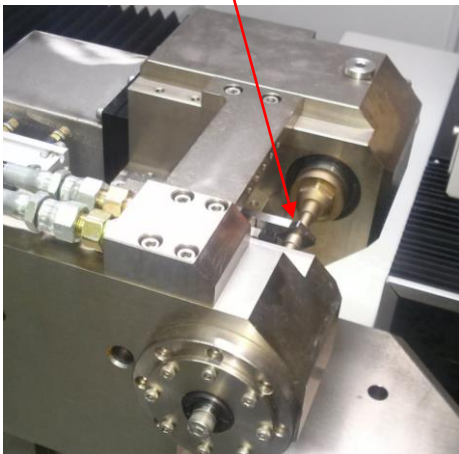
Purpose : Peripheral and one side K-land grinding for carbide or PCBN

소재 형상측정 및 치수보정을 위한
Touch Probe Measurement System



사각지석 및 컵휠을 이용한
Linear/Rotary Dressing System

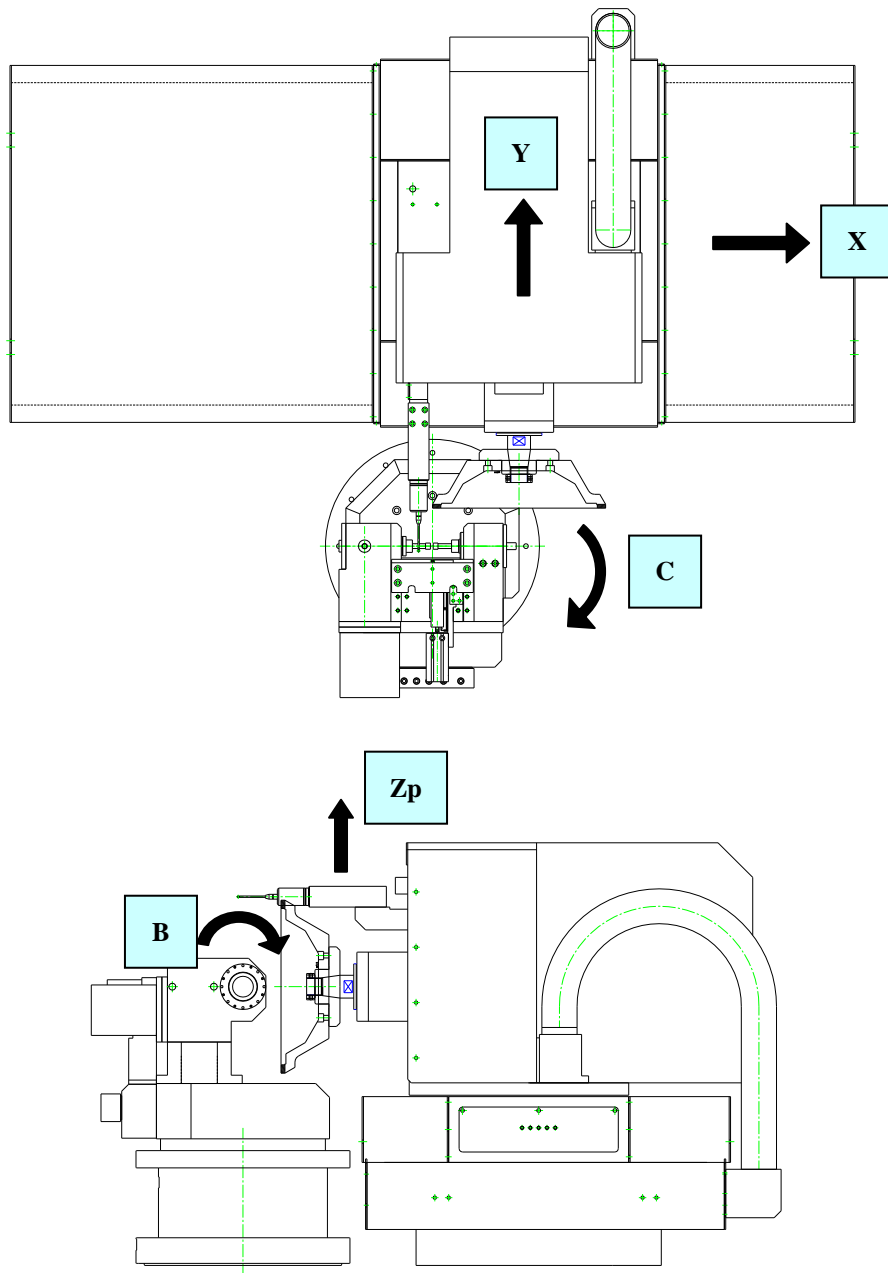
소재형상에 따른 기준바를 이용한
Hydraulic Clamping System



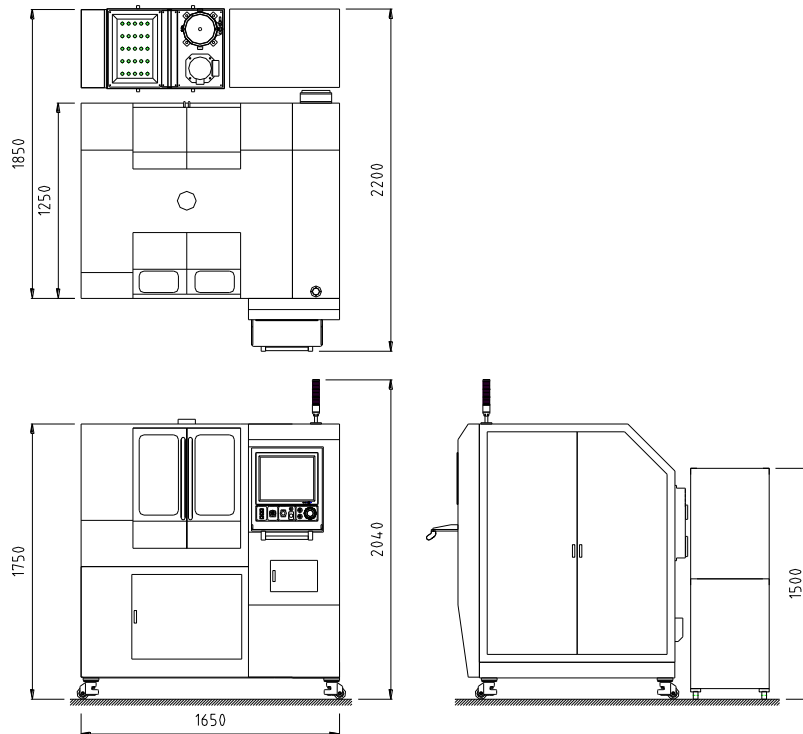
- Geometry(Line, Round, Arc, Circle) 직접입력에 의한 CAD/CAM 통합형 소프트웨어
- 작업리스트에 의한 측정/드레싱/가공조건 관리 및 순차제어 프로그래밍
- 편리한 가공치수 및 형상 보정 기능
- 소재 설치상태와 입력된 Geometry를 일치시키기 위한 Mapping 기능

Technical Data

	X axis	Y axis	B axis	C axis	Zp axis
Speed	50 mm/s	50 mm/s	50 deg/s	50 deg/s	50 mm/s
Range	-150 ~ 240 mm	120 mm	∞	-100 ~ 100 deg	-25 ~ 80 mm
Resolution	0.0001 mm	0.0001 mm	0.0001 deg	0.0001 deg	0.0001 mm



Grinding spindle	
Grinding wheel diameter	250 mm
Max. grinding wheel speed	3000 rpm
Motor power	3.7 kW
Workpiece clamping system	
Max. clamping force	7000 N
Clamping range	10 mm
Largest insert circumscribed circle	40 mm
Dimensions	
Machine	W1650 x D1250 x H1800
Coolant unit	W900 x D500 x H1100
Cooling unit & hydraulic power pack unit	W700 x D500 x H1500
Weights	
Machine	approx. 2000 kg
Coolant unit	approx. 40 kg
Cooling unit & hydraulic power pack unit	approx. 70 kg
Utilities	
Electrical connection	3x220V 50/60Hz
Power consumption	10 KVA
Required air pressure	5 bar
Ambient temperature	10 ~ 30°C
Humidity	30 ~ 95%



< Machine Layout >

Hybrid-TG6

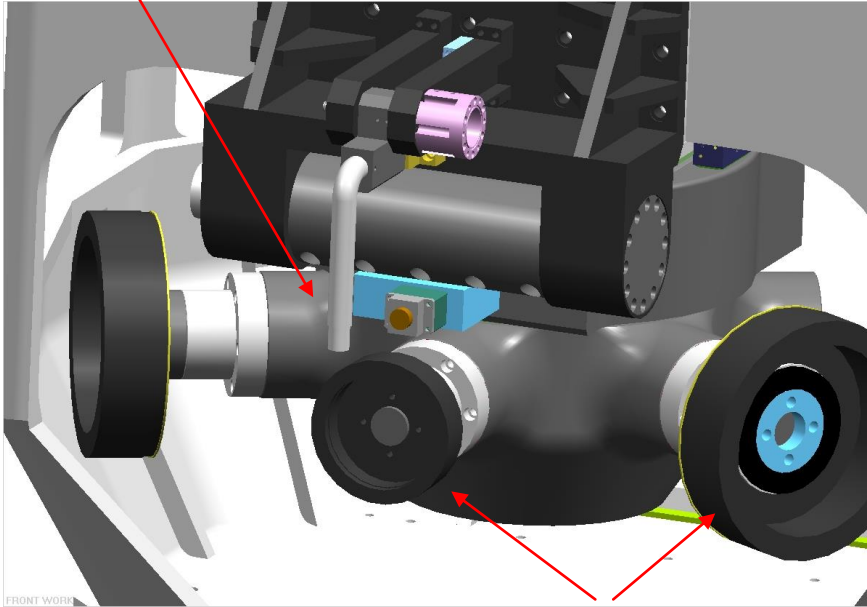
Precise Eroding & Grinding Machine For Tools



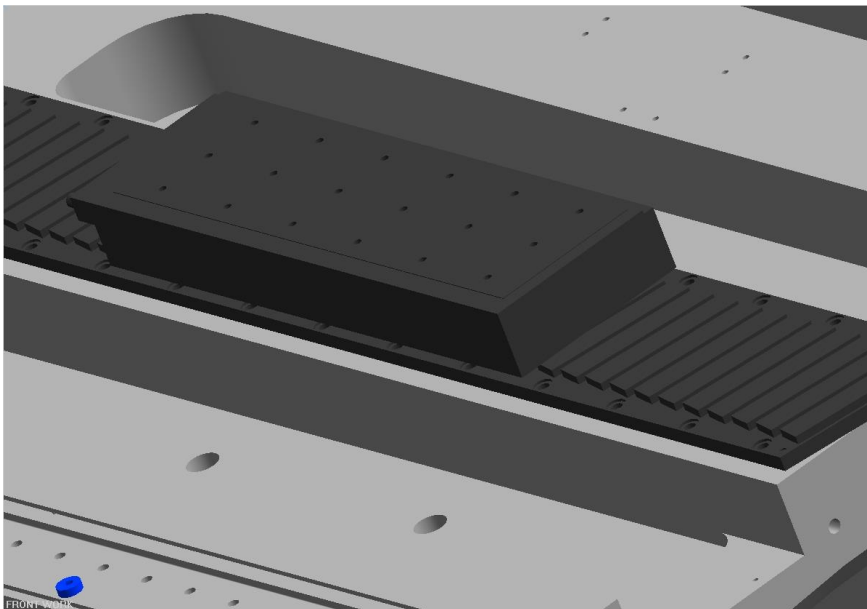
**Purpose : Eroding & grinding indexable inserts made of
HSS, Tungsten carbide, PCBN and PCD**

 TechMAC Co., Ltd.
Advanced Precision System

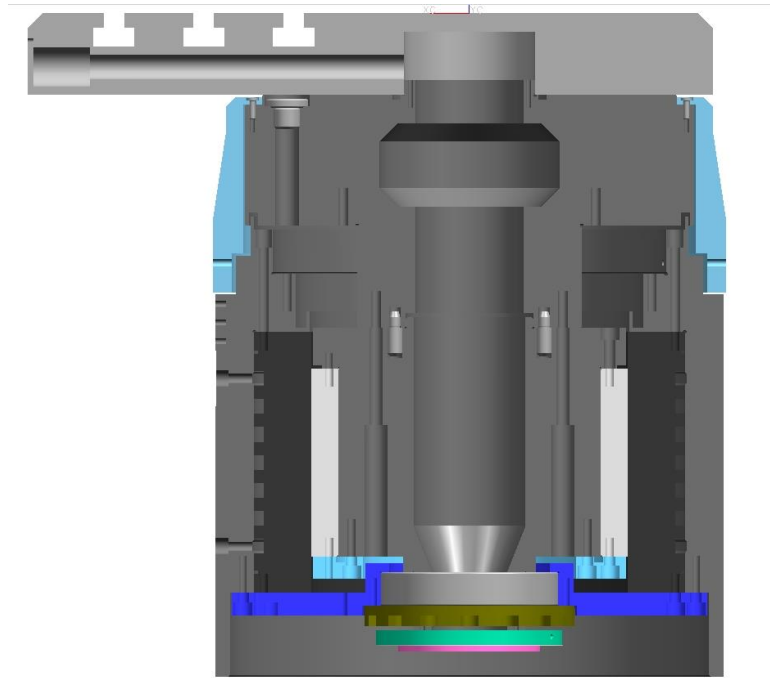
소재 형상측정 및 치수보정을 위한
Touch Probe Measurement System



방전가공용 전극 및 연마휠 장착용
Spindle => Max. 6 Pieces

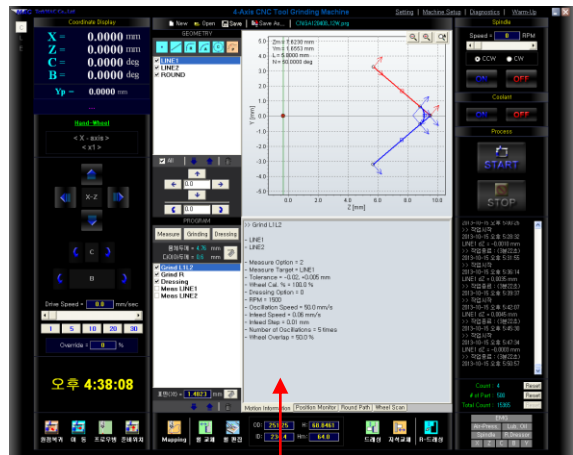
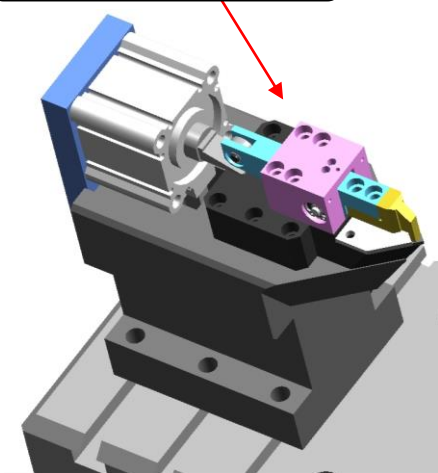


X-Axis, Y-Axis
=> Linear Direct Drive 적용

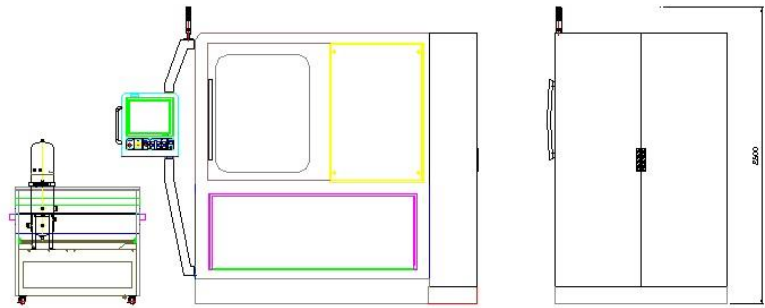
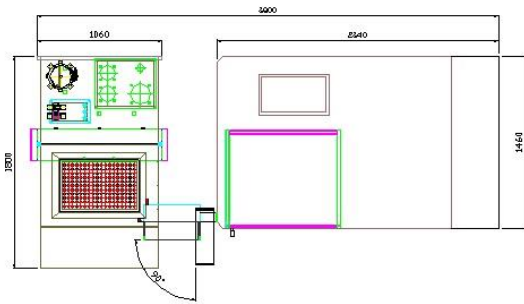
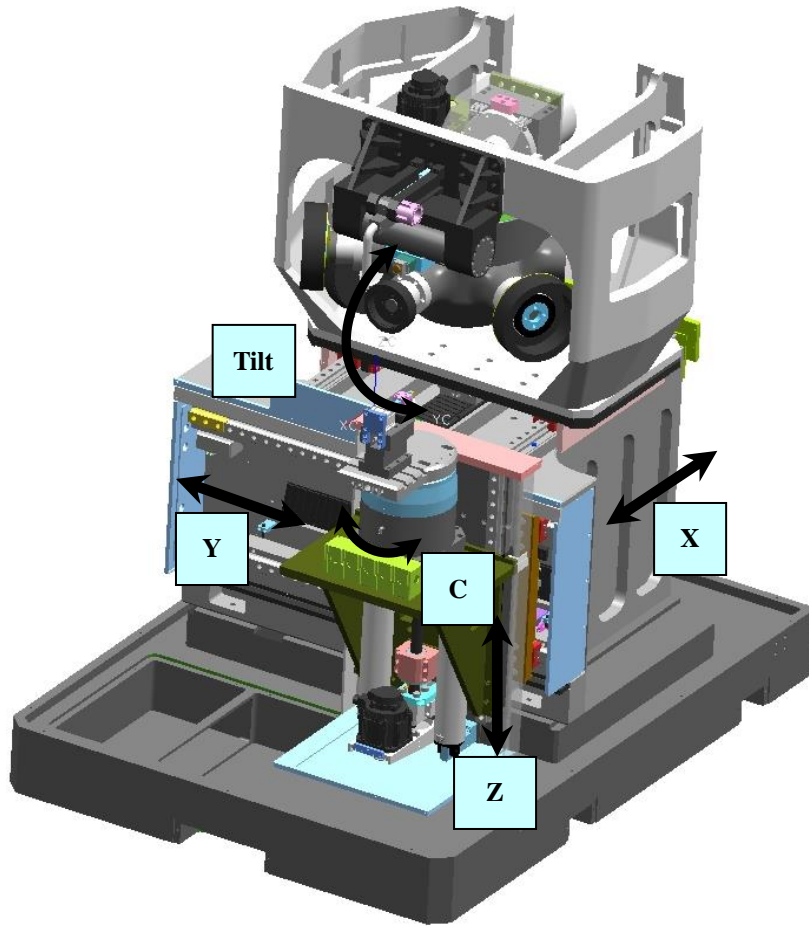


C-Axis => BLDC Drive 및 고강성 고정도 베어링 장착

가공물 고정을 위한
One clamping System



- Geometry(Line, Round, Arc, Circle) 직접입력에 의한 CAD/CAM 통합형 소프트웨어
- 작업리스트에 의한 측정/드레싱/가공조건 관리 및 순차제어 프로그래밍
- 편리한 가공치수 및 형상 보정 기능
- 소재 설치상태와 입력된 Geometry를 일치시키기 위한 Mapping 기능



< Machine Layout >

Technical Data

	X axis	Y axis	Z axis	C axis	Tilting axis
Speed	50 mm/s	50 mm/s	50 deg/s	50 deg/s	50 mm/s
Range	300 mm	420 mm	240 mm	-125 ~ 125 deg	10 ~ -20 deg
Resolution	0.0001 mm	0.0001 mm	0.0001 mm	0.0001 deg	0.01 deg

Spindle Motor	
Motor power	5.0 kW
Eroding & Grinding Spindle	
Spindle	3 ~ 6 Pieces
Wheel diameter	Max. 250 mm
Rotation	Max. 3000 rpm
Applied Materials	
HSS, Tungsten, Carbide, PCBN, PCD	
Dimensions	
Machine	W2340 x D1460 x H2500
Coolant unit	W1800 x D1060 x H1100
Weights	
Machine	Approx. 8000 kg
Coolant Tank	Max. 400Liters
Utilities	
Electrical connection	3x220V 50/60Hz
Power consumption	30 KVA
Required air pressure	5 bar
Ambient temperature	10 ~ 30°C
Humidity	30 ~ 95%