



ESG-TD / CNC
Smart PLC control Grinder



2017 Taichung city
 the 16th excellent
 SMEs Golden hand award.



2017 The 14th
 National brand:
 Remarkable enterprise
 Yushan Award.



2017 Republic of China
 prominent enterprise
 management association,
 the 18th golden peak award;
 Top 10 remarkable innovative
 research and development.



2017 Republic of China
 prominent enterprise
 management association,
 the 18th golden peak award;
 Top 10 excellent business
 pioneer model.



ISO 9001: 2015



Machinery
 Directive
 Number
 1674



IT'S VERY WELL
 MADE IN TAIWAN

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EQUIPTOP HISTORY



Experienced Managing Team / Brilliant Quality Policy / Marketing Management Complete Product Series / Fast Service / Innovative R & D Idea.

- 1988 Established "EQUIPTOP MACHINERY CO., LTD" Made a speciality of developing high precision surface grinders.
- 1990 Developed ESG-618 & 818 ASD series, 3 axis fully automatic surface grinders. Used PC-CAD to upgrade mechanical design and development.
- 1992 Developed ESG-1228 & 1236 ASD series, 3 axis fully automatic surface grinders.
- 1993 Developed ESG-1632 & 1640 ASD series, 3 axis fully automatic surface grinders.
- 1995 Developed ESG-1020 & 1224 ASD series, 3 axis fully automatic surface grinders. Obtained CE-Mark certificate from AMTRI CE in England.
- 1997 Developed ESG-2448 to 2480, 3axis fully automatic, digital positioning ADX series, with a downfeed jog movement providing just 0.5 μ m super microfeed for finer production finish. Column type surface grinder, using high anti-wear, heavy duty preloaded, H class linear guideway.
- 1998 Awarded ISO 9002 Certification by DNV company of Netherlands.
- 1999 Invested in "NANJING EQUIPTOP PRECISION MACHINERY CO., LTD." as branch in China.
- 2000 Developed ESG-3260 to 32120, 3axis fully automatic, smart digital positioning ADX series Received certified CE-MARK by DNV company.
- 2001 Awarded Certified ISO 9000 by Bell company. Developed NC series, 3 axis fully automatic smart digital positioning grinders.
- 2002 Grand Opening of a new factory. The new facility is over 13,000m². Invested 1.6 hundred million dollars in this new headquarters. Successfully developed new complex grinders, moving EQUIPTOP into the high technology area. Renamed the company as "**EQUIPTOP HITECH CORP.**"
- 2003 Awarded publication 2000 ISO 9001 certification. Developed "ASDII" series, 3 axis, fully automatic digital positioning grinders. Developed "ACUMEM" super microfeed servo control and auto-wheel dressing & compensation system grinders.
- 2004 Established the branch in Wu Hsi-Shuai Hung Precision Machinery LTD. to expand China market. Developed cantilever type ESG-6120~8300 ASD*series, 3 axis, fully automatic surface grinders.
- 2005 Obtained the prize of Taiwan Precision Product in manufacturing NC surface profile grinder.
- 2006 Developed ETM510APC tapping machine with auto pallet changer system & Double column grinding machine, table size 1500x3000~1500x5000 are available.
- 2008 Double column grinding machine, table size 1500x3000~1500x5000 are available.
- 2010 Upgrade ASDII series to TD type. PLC control & touch color screen.
- 2012 Double column type grinding machine, table size 1200x3000~1200x5000 are available. Developed ESG-2448 to 24120, 3axis fully automatic TD type with touch color screen.
- 2013 Execute rotary & square constitute, hydrostatic spindle and guide rail program. Presented EMV-600APC auto pallet change, and 800 x2000~5000mm, 1000x2000~5000 mm double column grinders.
- 2016 Developed and officially listed ECG-CNC Cylindrical Grinder series. Innovation patented invention:
1. Innovation surface grinding machine controller: Patent No.:1546161
 2. Innovation equal feeding speed control: Patent No.:M454893
 3. Innovation rotary & square constitute design: Patent No.:1508818 & M454892
 4. Innovation multi-sound alarm light structure: Patent No.: M486838
- 2016 Create 1224-TD Plus Man-machine PLC controller. Publish ECG-27 / ECG-36 CNC Cylindrical grinding machine with man-machine controller. Develop ERG-600 ERG-800 ERG-1000 CNC/PLC controller application.



- 2017 Presented at TIMTOS, March 2017, 1224-TD Plus, EG-36 CNC and ERG-600CNC, with man-machine controller. The operation and application showed In an Industrial 4.0 demonstration line.
- Wining with honor: D&B TOP 1000 SMEs Elite Award
- The 14th National brand: Remarkable enterprise Yushan Award.
- Taichung city the 16th excellent SMEs Golden hand award.
- Republic of China prominent enterprise management association, the 18th golden peak award: Top 10 excellent business pioneer model.
- Republic of China prominent enterprise management association, the 18th golden peak award: Top 10 remarkable innovative research and development
- 2018 Golden torch prize: TD, ADC get Research and Innovation Award.
- Golden torch prize: TD, ADC have the honor to win best satisfaction from customer.

EQUIPTOP



FEATURES



EXCELLENT



PROVIDE



VALUE



Patent Items

Obtained national patents for grinder:

- Longitudinal straight movement construction of surface grinder.
- Timing belt straight drive system.
- Dual motors, positioning and feeding structure.

More national patents:

- Timing belt drive system for the table of surface grinders.
- Roughing and micro table speed control construction.
- New travel direction change for surface grinding.

Obtained US patents:

- Surface grinding table reverse construction.
- Belt drive construction for surface grinding table.

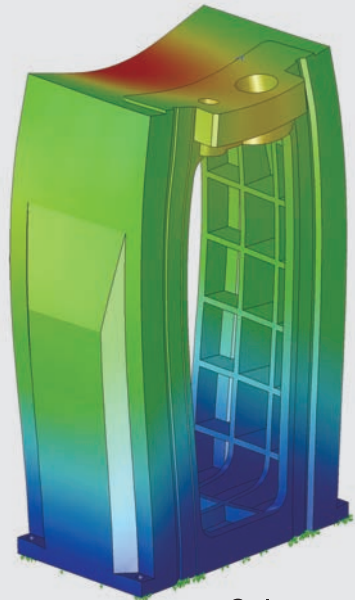
Obtain German patent:

- Safety handwheel system.

Honored with national patents:

- Multi-formed grinder.
- Dust collect / coolant and dust unit.

- NC & CNC multiple formed molds.
- One wire of table multiple transmission.
- Motor fan cooling structure.
- Simultaneous processor.
- Vacuum wind turbine structure for dust coolant.
- Improvement to dust coolant structure.
- Rotary square structure.
- Equal speed.
- New type double column complex spindle head.
- Milling grinding complex spindle head.



Column

/// Bushing Type High Precision Spindle

Enlarged spindle set is supported by front 4 & rear 2 preloaded precision angular contact ball bearings, and driven by V3 class motor. Suitable for heavy duty.

/// Y/Z Axes with Reliable Direct Drive Transmission and Sharp Roller Type Linear Sliding Way

Moving column type transmission structure with feeding by precision ballscrew ensures smooth motion, and precision roller type linear sliding way make sure the stable feeding rigidity and precision.

/// High Rigidity Frame

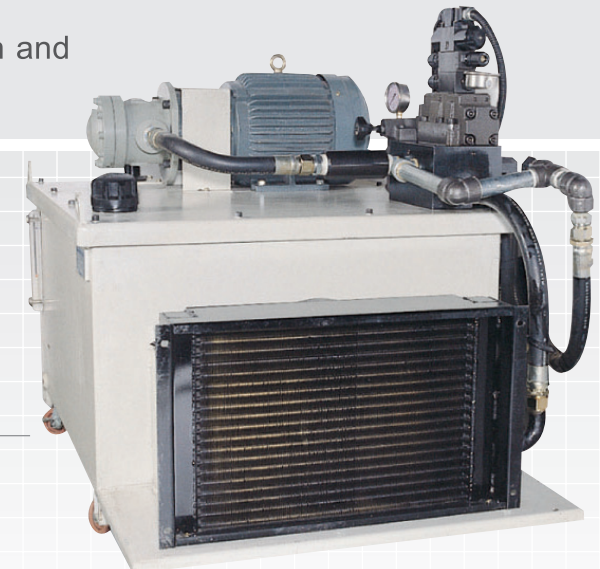
High-level cast iron construction of table, saddle and base is casted with high grade iron, strongly ribbed.

/// Enlarged Column and Base

High stability and rigidity enlarged honeycomb-ribbed column and base especially suitable for heavy duty grinding.

ESG 24 and 32 Series Features

Extra-large hydraulic oil tank equipped with hydraulic oil cooling fans



Auto Lubrication System

Superior rail lubrication system and independent oil tank with circulate oil pump force oil running. Offer excellent lubrication effect to every ballscrew and rail sliding surface. Optional HADC series precision hydrostatic guide way is available. Enlarged Anti-friction hydrostatic sliding rail has no back gap and stick affection. Vibration is absorbed for better finish and precision. Anti-friction prolong machine life time.

Cross and Elevation are driven by AC Servo Motor

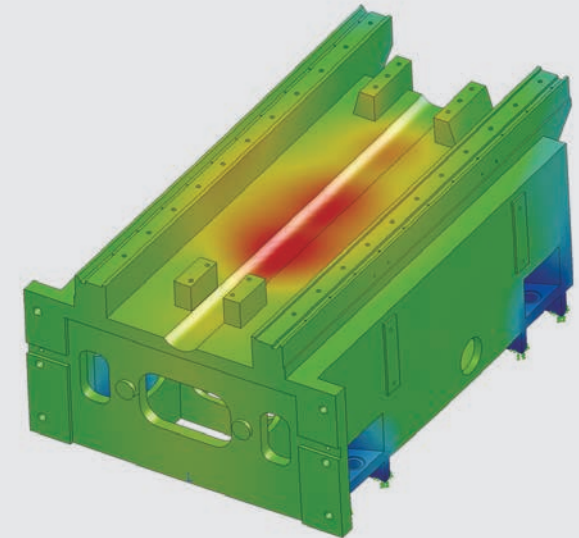
Ball screw for cross and elevation travel, powered by AC servo motor to provide rapid movement.

Longitudinal Driven by Hydraulic

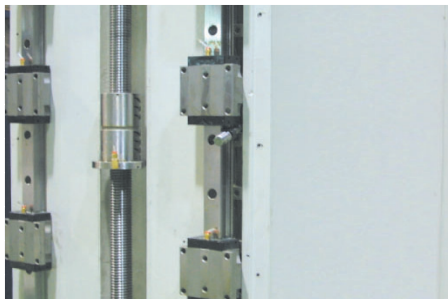
X axis is driven by hydraulic, with high rigidity and stable travel speed. (Optional hydrostatic sliding rail is available.)

Z and Y axes have coordinate feedback and display

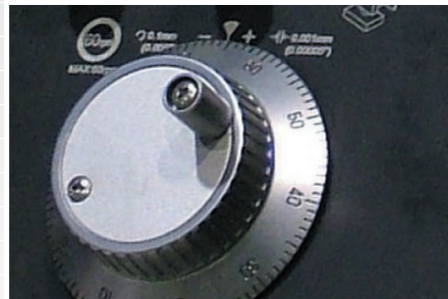
It saves optional digital readout. (Grinding wheel auto dressing and compensation and spindle inverter speed down are optional. Positioning and dressing to be done in one time.)



Base mechanism



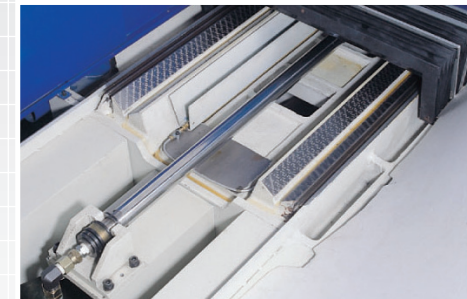
Precision Linear way and C3 class ballscrew for vertical



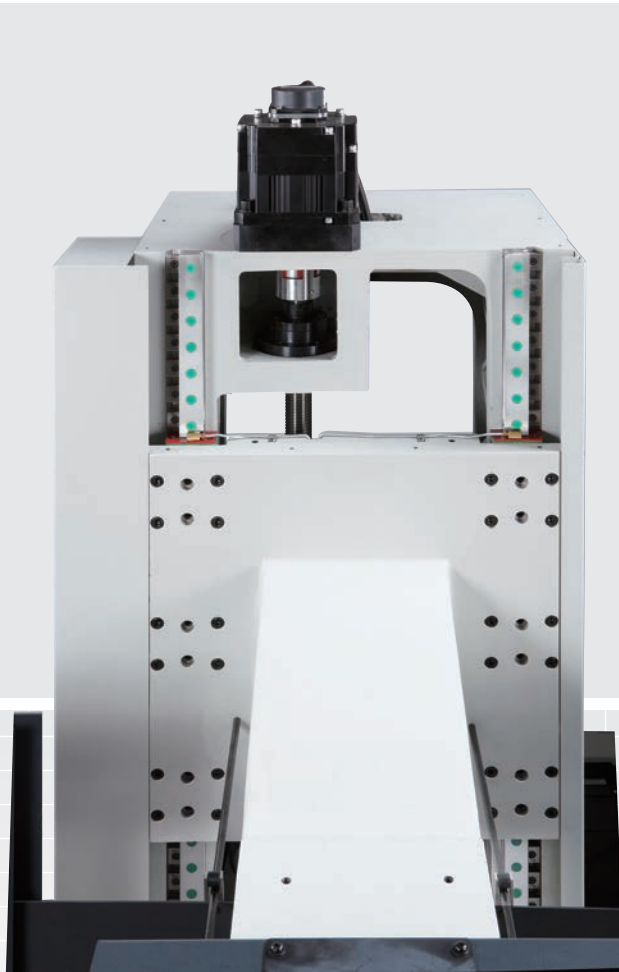
Micro adjustment manual pulse generator for Y & Z axes.



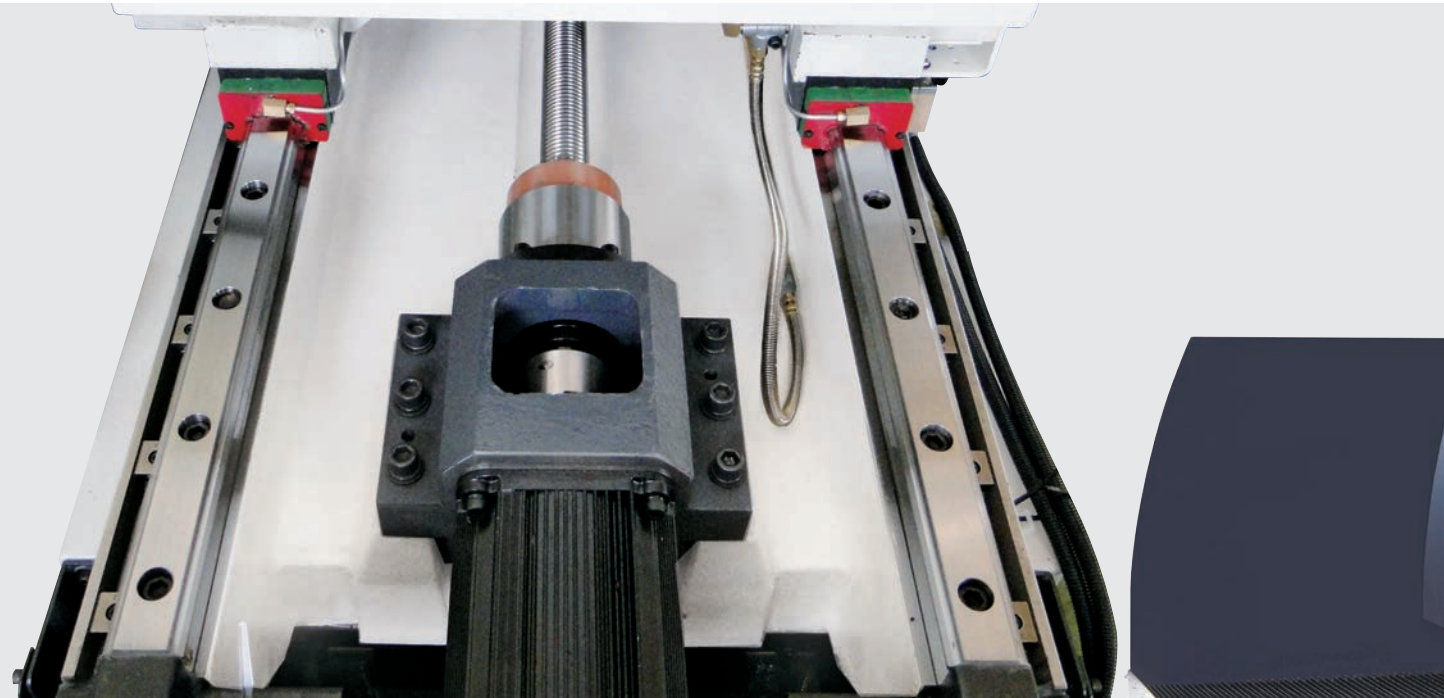
Patented hydraulic speed control



Enlarged double V slide way



Y axis linear rail direct drive transmission



Z Axis Linear Rail Direct Drive. Type Transmission Mechanism

Equipped with reliable direct drive transmission mechanism, collocated with excellent clever movement and supper precision SP class linear rail.High rigidity roller type rail is available.



Artificial intelligence evolution

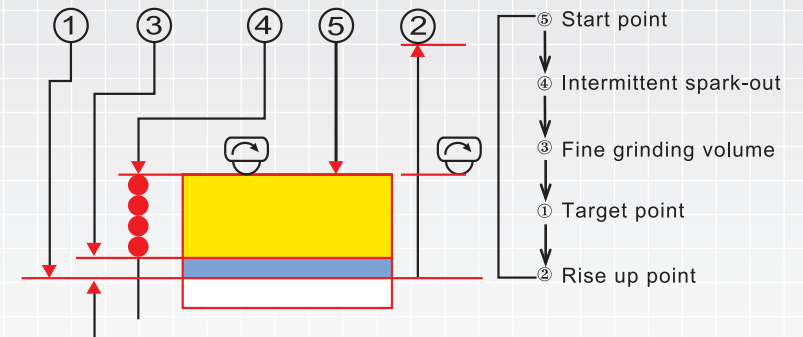
TD series: Minimum down feed value 1 μ m. Position is settable for start point, fine grinding volume, target point, and rise up point. Easy operation by digital display and touch screen panel.

Y axis is driven by AC servo motor for rapid up/down and for micro setting downfeed.

Display window for Y axis position. It displays spindle head position. Start grinding point, downfeed volume for rough grinding, fine grinding point, downfeed volume for fine grinding, target point, rise up point, and intermittent no feeding spark-out can be set on the panel.

Z axis saddle cross movement is driven by AC servo motor. Good for jog feed and constant feed grinding. Speed control for rough and fine grinding. Accomplish high efficiency.

Cross grinding distance and position can be set by servo motor via PLC fast memory.





7.2" touch screen, colored TFT LCD



MPG for Y/Z axis



Interface and features

Chuck Control with demagnetizer (optional)

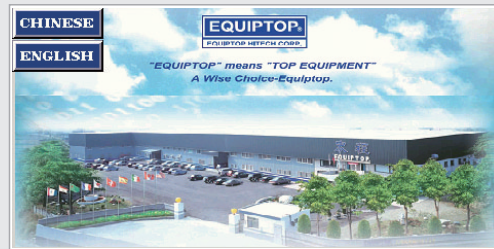
Travel distance setting for Z axis

Man-machine interface

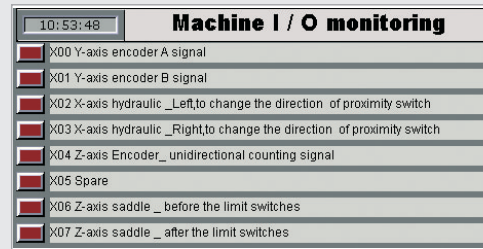
PLC computer numeric setting with EQUIPTOP designed tableau, easy learning and under standing of application program for operator.

Enlarged column

With high reliability and rigidity and honeycomb frame structure, the column is applicable for heavy load precision grinding.



Start up screen: language selection



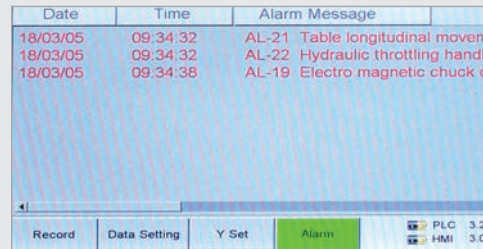
Monitor page to check input and output signal status and find out the fault easily.



Parts grinding dimension setting.



Grinding feed (for rough, fine, and spark-out setting). Min. display unit for Y/Z axis is 0.001mm.



Abnormal message display for trouble shooting.



Management screen for operator and adviser.

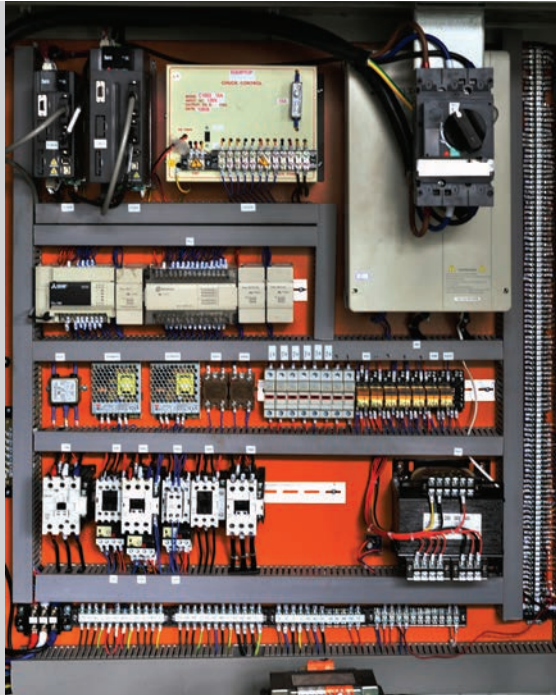
Static sliding rail unit

Superior wearproof, the seat of enlarged double V sliding rail reduces speed ratio and friction.

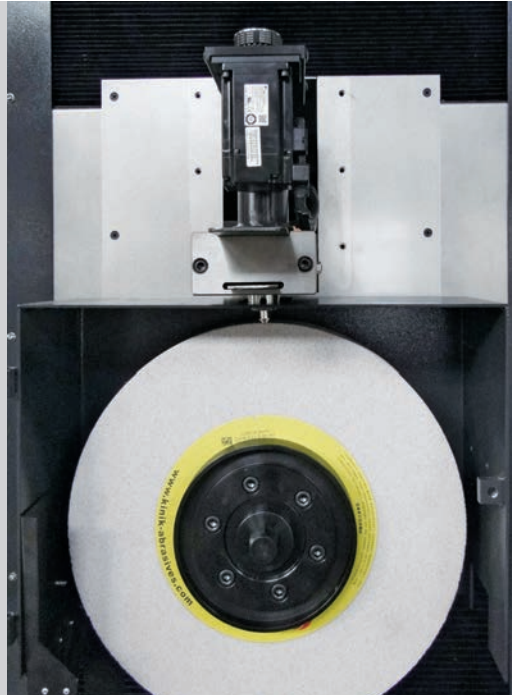
Eliminating back-gap and adhesion effect caused by sliding, absorb the vibration and ensure brilliant precision.

Auto lubrication

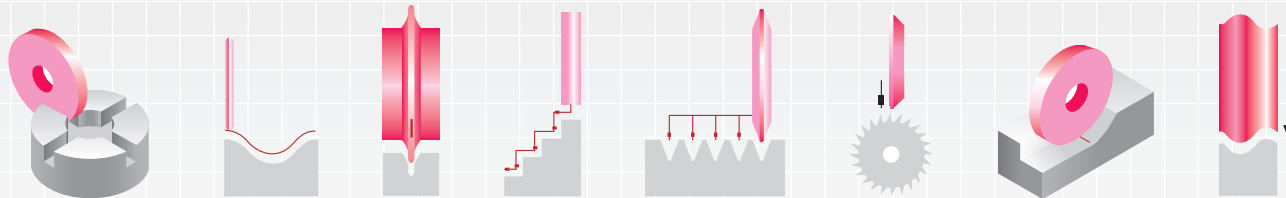
Circulating oil pump forces to lubricate screw and sliding surface. Extending life span of the machine.



CNC electric cabinet



Auto wheel top servo dressing & compensation mechanism. (option)

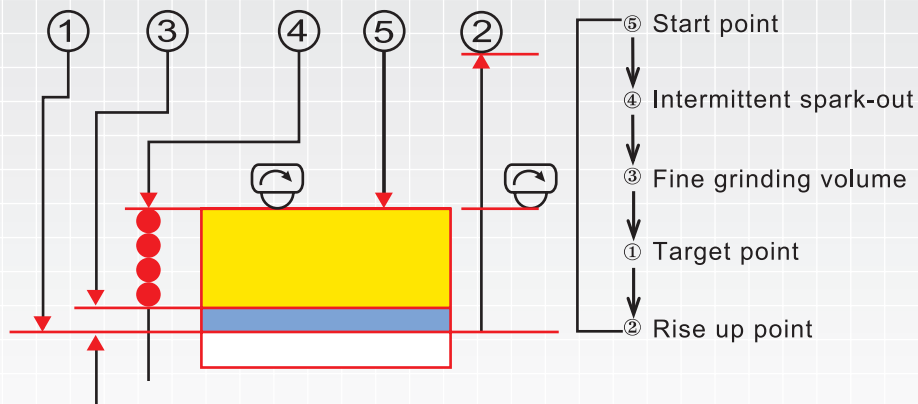




- /// Pou Yuen Control System*
- /// Mitsubishi Control System*
- /// Fanuc Control System*



ESG TD Series Grinding Procedure



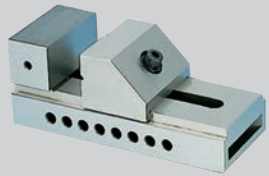
ESG-3280

ESG-TD / CNC

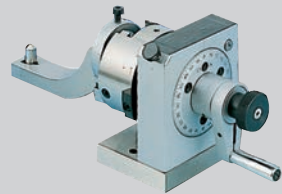


TD Controller

Optional Accessories



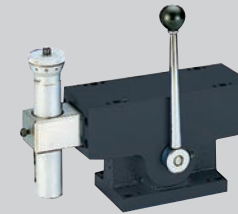
Precision vice



Punch former



Spare wheel flange



Manual parallel dressing attachment



Hydraulic oil coolant system



Halogen work light



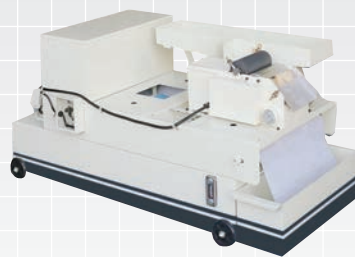
Digital readout



Frequency inverter



Electro magnetic chuck & Chuck control with demagnetizer



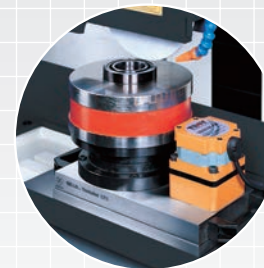
Auto paper feeding device and magnetic separator



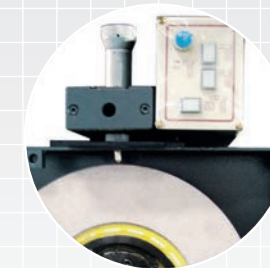
Coolant system



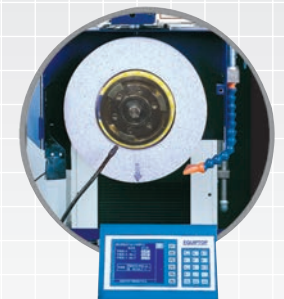
Coolant system with manual paper feeding



Adjustable speed rotary magnetic chuck



Electric parallel dressing attachment



Dynamic balancer

Specifications

1. TD: Smart PLC control grinder
2. CNC: Computer control system

ESG-TD / CNC

Item	Model Descriptions	ESG-2448 TD / CNC	ESG-2460 TD / CNC	ESG-2480 TD / CNC	ESG-24120 TD / CNC	ESG-3260 TD / CNC	ESG-3280 TD / CNC	ESG-32120 TD / CNC	
		Table size	600 x 1200mm	600 x 1500mm	600 x 2000mm	600 x 3000mm	815 x 1525mm	815 x 2035mm	815 x 3035mm
Max. grinding length	Longitudinal	1260mm	1560mm	2060mm	3060mm	1525mm	2035mm	3050mm	
Max. grinding width	Crosswise	610mm	610mm	610mm	610mm	815mm	815mm	815mm	
Max. distance from spindle center line to table surface		720mm ; 850mm(Optional)							
Stand magnetic chuck size		600 x 1200mm	600 x 750mm x 2PCS	600 x 1000mm x 2PCS	600 x 1000mm x 3PCS	800 x 750mm x 2PCS	800 x 1000mm x 2PCS	800 x 1000mm x 3PCS	
Longitudinal movement of table	Max. travel-hydraulic	1300mm	1600mm	2100mm	3100mm	1625mm	2135mm	3150mm	
	Max. travel-manual	1350mm	1650mm	2150mm	3150mm	1675mm	2185mm	3200mm	
	Infinitely variable	60HZ, 5 ~ 25m/min, 50HZ, 5 ~ 20m/min							
Cross movement of column	Auto jog feed (constant feed)	1 ~ 25mm (20 ~ 460mm)							
	Max. auto feed	660mm				880mm			
Grinding wheel vertical downfeed	Auto feed	0.001 ~ 0.05mm							
	Jog feed	0.001 ~ 0.05mm							
	Rapid travel Approx.	460mm							
	Slow travel Approx.	6mm							
	Handwheel revolution	MPG							
	Handwheel graduation	0.001mm x 1 / 0.001mm x 2 / 0.001mm x 4 (TD) ; 0.0001mm x 1 / 0.0001mm x 10 / 0.0001mm x 100 (CNC, ACUMENII)							
Spindle motor	Speed	60HZ, 1750rpm : 50HZ, 1450rpm							
	Power rating	Standard: 10HP/4P Optional: 15HP/4P ; 20HP/4P				Standard: 15HP/4P Optional: 20HP/4P ; 25HP/4P			
Standard wheel	O.D. x width x bore	405mm x 50mmx127mm				405mm x 65mm x 127mm			
Hydraulic motor	Power rating	5HP / 6P			7.5HP / 6P		5HP / 6P		7.5HP / 6P
Crossfeed motor	Power rating	2KW							
Elevating motor	Power rating	1KW							
Floor space (L x W x H)		5200 x 3500 x 2350mm	5800 x 3500 x 2350mm	6800 x 3500 x 2350mm	8800 x 3500 x 2350mm	5810 x 5050 x 2800mm	6810 x 5050 x 2800mm	8810 x 5050 x 2800mm	
Weight	N.W.(KGS)	6500kgs	7500kgs	8500kgs	10200kgs	9500kgs	10700kgs	12500kgs	
	G.G.W.(KGS)	7500kgs	8500kgs	9500kgs	11500kgs	10500kgs	12100kgs	14100kgs	
Rated power (Approx.)	Standard	22HP	22HP	22HP	24.5HP	27.5HP	27.5HP	30HP	
Packing dimension		4100 x 2290 x 2450mm	4700 x 2290 x 2450mm	5700 x 2290 x 2450mm	7700 x 2290 x 2450mm	4290 x 3280 x 2880mm	5290 x 3280 x 2880mm	7290 x 3280 x 2880mm	

EQUIPTOP®



"EQUIPTOP" means "TOP EQUIPMENT" A Wise Choice-Equiptop.



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