

Explanation for optional accessories:

1. **Electro Magnetic Chuck:** To fix the iron material on the table. If the material (workpiece is small than 60mmL, please consider to buy fine pole pitch (1+3mm) type.
2. **Auto. Demagnetizer for Chuck:** Also call chuck controller. To adjust the magnetic force of Electro magnetic chuck. When purchase Electro magnetic chuck, please also buy this item to use together.
3. **Cross Micro feed & Vertical Micro feed:** Min. 0.001mm/gra. of cross feed & vertical feed. Only for Saddle type 1545~4080.
4. **Power rapid up/down:** Spindle head Up & down that controlled from buttons of control Panel. (Saddle type is Option, standard function for other series.)
5. **Auto Down Feed (NC) AD5:** set total remove value, rough feed, fine feed, spark out from control panel, improve the grinding efficiency. (M & H type can't install this system)



6. **Parallel Dresser (Manual):** Over spindle head dresser. To dress the grinding wheel to right shape (flat) after grinding a period of time.
7. **NC Auto Parallel Dressing & Compansating Device:** Dressing and compensating the grinding wheel in auto mode. Improve the accuracy of workpiece after grinding. (M & H type can't install this system)

Features:

- 1) NC parallel dresser device has to be used with auto down feed.
- 2) Rough feed, fine feed setting, speed adjustment are all control from panel.
- 3) The lost distance of vertical after reconditioning the grinding wheel will be compensation.
- 4) The min. vertical feed is 0.001mm.
- 5) After setting the parameter of processing on the panel and start, the work will be proceeded itself.
- 6) You could save more time and do other things.



8. **Coolant system:** To decrease the temperature of workpiece when grinding.
9. **Dust suction system:** To decrease the dust fly in the air when grinding. (Only for 1545~3060)
10. **Dust suction with Coolant system:** Combine item 8~9 in one unit. (Only for 1545~3060)
11. **Magnetic Separator and Coolant System:** 2 in 1 coolant system, could make the recycle water more clean, especially for iron dust after grinding.
12. **Auto. Paper Strip Filter with Coolant System:** 2 in 1 coolant system, could make the recycle water more clean, especially for fine dust after grinding.
13. **Auto. Paper Strip Filter with Magnetic Separator and Coolant System:** 3 in 1 coolant system, could make the recycle water more clean than item 11~12. If customer needs high quality of surface on workpiece, they could choose this one.
14. **Auto cross stroke adjustment:** To setting the cross distance (approximate) from control panel.
Automatic cross stroke adjustment is for cross feed, so that this function is without any connection with Auto Down feed (NC) AD5 (Item 5).
Automatic cross stroke adjustment is for setting approx. cross distance, not positive cross distance, and the cross distance of saddle type 1545~4080 could be adjusted from limit dogs that fix at right side of base, it's very easy. So, if customer doesn't insist to has this function, you don't have to recommend them to buy it when quotation is for Saddle type machine.
This functions is recommend to Column type machine 50100~70200, because the limit dogs of Column type is at back side, fixing at right side of Column, it's hard to adjust it by one operator. So, if Column machine with this functions, operator could set the cross distance from control panel more convenient and effective. When column type machine with Back water splash shield, we strongly recommend to purchasing it as well.

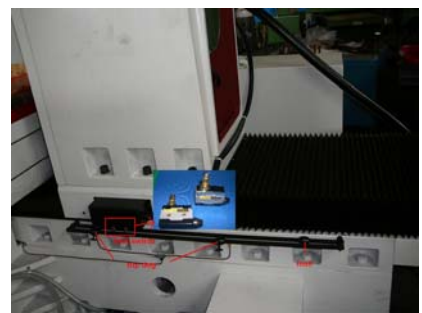
(Standard functions for Cantilever type & Double column type)



Saddle type 1545~4080



Column type 50100~70200



15. **Back water splash shield:** Mounted between table & Column, to avoid water splash everywhere, especially for higher workpiece. When quote this functions for Column type machine to customer, please recommend them to buy Auto cross stroke adjustment (Item 14) to adjust the cross distance from control panel instead of adjust the limit dogs from back side. (1545/2045 excluded)
16. **Enclosed Splash Shield:** To avoid the dust fly everywhere. (for 2550/3060/4080 and above)
17. **Spindle motor Inverter:** Spindle speed (grinding wheel speed) can't be changed. Different material needs separate cutting speed to have accuracy. When install this unit, customer could adjust suitable spindle speed to each material. The safety speed after installing this unit is $\pm 30\%$ of standard spindle speed.
18. **Wheel Flange:** To use with grinding wheel. Without this unit, grinding wheel can't be mount on the spindle.
19. **Tool Makers vise:** Clamp the workpiece (special shape or nonmetallic materials) to fix on the E.M.chuck(item 1)
20. **Auto Balancing Device:** To balance the grinding wheel anytime when grinding.
21. **Crisscross Grinding (for cross feed only):** increase the grinding area of cross feed, also improve the grinding efficiency, especially for thin iron plate. (M & H type can't install this system)
22. **Halogen lamp:** fixed next to the column. to keep the table more bright. (Standard for saddle type 1545~4080)
23. **Angles Forming:** Dressing the grinding wheel to angle shape.
24. **Sine Bar:** To assist workpiece become angle shape. Sine bar must be used with angle blocks.
25. **Radius Forming:** Dressing the grinding wheel to arc shape.
26. **Punch former:** Dressing the grinding wheel to different shape.
27. **Demagnetizer for workpiece:** To release the magnetic of the workpiece after grinding.
28. **Digital readout unit:** To confirm the position of cross feed & vertical feed.

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**** Option or Standard accessories for whole series**

Item	Description	Saddle type		Column type	Cantilever type	Double Column
		H	AH	50100 ~70200	80150 ~100400	120200 ~160600
1	Electro Magnetic Chuck	Option	Option	Option	Option	Option
2	Auto. Demagnetizer for Chuck	Option	Option	Option	Option	Option
3	Cross Micro feed & Vertical Micro feed	Option	Option	Without	Without	Without
4	Power rapid up/down	Without	Option	Standard	Standard	Standard
5	Auto Down Feed (NC) AD5	Without	Option	Option	Standard	Standard
6	Parallel Dresser (Manual)	Option	Option	Option	Without	Without
7	NC Auto Parallel Dressing & Compensating Device	Option	Option	Option	Option	Option
8	Coolant system	Option	Option	-	-	-
9	Dust suction system	Option	Option	Without	Without	Without
10	Dust suction with Coolant system	Option	Option	Without	Without	Without
11	Magnetic Separator and Coolant System	Option	Option	Option	Without	Without
12	Auto. Paper Strip Filter with Coolant System	Option	Option	Option	Without	Without
13	Auto. Paper Strip Filter with Magnetic Separator and Coolant System	Option	Option	Option	Option	Option
14	Auto cross stroke adjustment	Option	Option	Option	Standard	Standard
15	Back water splash shield (2550 above) (Standard for D4080)	Option	Option	Option	Standard	Standard
16	Enclosed Splash Shield (2550~160600)	Option	Option	Option	Option	Option
17	Spindle Inverter	Option	Option	Option	Option	Standard
18	Wheel Flange	Option	Option	Option	Option	Option
19	Tool Makers vise	Option	Option	Option	Option	Option
20	Auto Balancing Device	Option	Option	Option	Option	Option
21	Crisscross Grinding (for cross feed only)	Option	Option	Option	Standard	Standard
22	Halogen lamp	Standard	Standard	Option	Option	Option
23	Angles Forming	Option	Option	Option	Without	Without
24	Sine Bar	Option	Option	Option	Without	Without
25	Radius Forming	Option	Option	Option	Without	Without
26	Punch former	Option	Option	Option	Without	Without
27	Demagnetizer for workpiece	Option	Option	Option	Without	Without

PS. Item 8: If customer doesn't purchase any coolant system for Column type, Cantilever type & Double Column, we will offer a simple coolant system for standard.