

# Drill<sup>+</sup>

## AC servo Z axis lifter

Adopt ball screw feeding on Z-axis with traveling speed of 6,000 mm/min at 350 mm stroke. Precise sequence control for primary, pecking and extremity drilling in high efficiency and is capable to support not only drilling but also tapping for M8 ~ M32 and nibbling for Ø8 ~ Ø32 mm.

**Drill spindle - Servo motor drive** Taiwan patent number M420381  
China patent number 201120309716.1

## DS Spindle

From DS-050 to DS-080, drilling capacity from Ø6 ~ Ø80 mm (Max. Ø100 mm). Standard BT shank designed for tools quick change by one touch and automatic tool change.



DS servo spindle

### Optional Accessories:

#### Electric chip conveyor

Remove chips  
Coolant can be recycled

#### Chip bucket

Remove chips



Electric chip conveyor with chip bucket

#### ATC - Automatic tool change

5 tools capacity  
Support automatic working process

#### Drilling table (for gantry type)

Modular design convenient for shipping  
Save installation time

#### Cooling system for control box

For high temperature working environment

#### DG-032 Drill grinder

DG-032	
Drill size	Ø13 ~ 32 mm
Grinding shape	165° - 180°
Collect	ER-40
Rotation speed	6,000 rpm
Dimension	420L x 228W x 229H in mm
Weight	20 kgs.



Drill grinder

# Drill<sup>+</sup>

## Auto Drill Machine Intelligent Versatile & Powerful

*Drill<sup>+</sup> is an automatic, high efficiency and performance CNC drilling machine.  
ProArc makes drilling process friendly and simple.*



Table type

*We love metal arts*

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### UNITED PROARC CORPORATION

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# Drill<sup>+</sup>

ProArc Drill<sup>+</sup> is an automatic, high efficiency and performance CNC drilling machine. Automatic drilling process is constituted by Z axis servo lifter, tool length detector and plate height measuring device. It can increase the drilling efficiency and prevent mis-operation. ProArc Drill<sup>+</sup> makes drilling process easy and friendly.

## Features

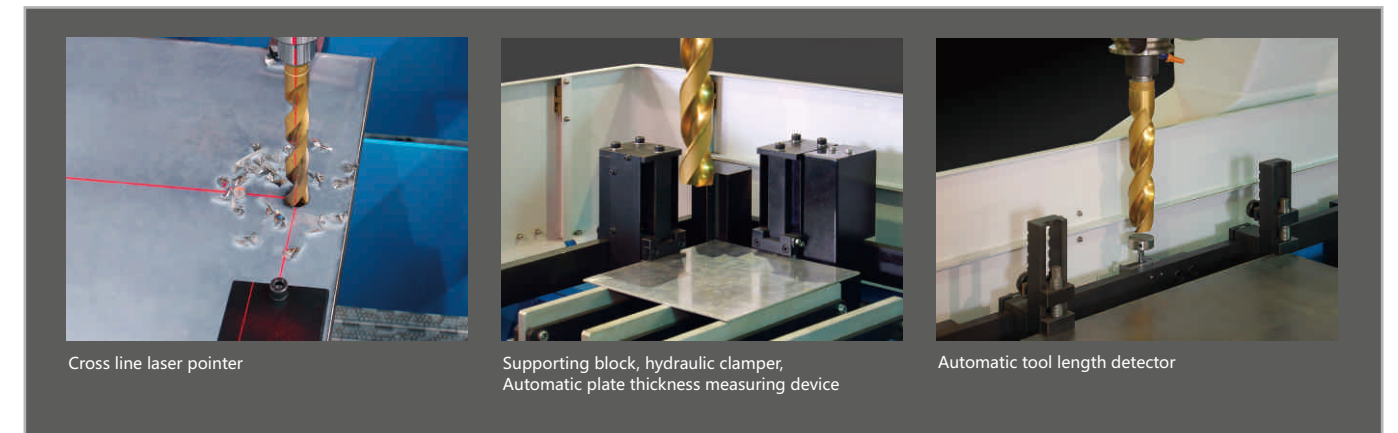
- **Automatic tool length detector- one touch**  
Save manual measurement time and avoid inaccuracy tolerance
  - **Automatic plate thickness measurement device (option for gantry type)**  
Hydraulic clamber with encoder to check the plate thickness after clamping.
  - **Quick Tool change device**  
Standard BT Shank design to support quick tool change
  - **IPC based CNC control system**  
Unique and intuitive GUI with 15" touch panel for easy operation
  - **Multi-task process**  
Multi-home positions can execute different jobs in one process
  - **Multi-application**  
Available for drilling, tapping and nibbling process
  - **Fast marking**  
Verify the first article inspection
  - **Teach mode**  
Create the drawing on-site by defining the coordinates
  - **CAD/CAM system**  
The controller is built-in Drill<sup>+</sup> CAM software which can read and edit dxf file on-site
  - **Safety protection design**  
Spindle is prohibited moving to working area during parts loading and unloading
  - **Simulation for position check**  
Simulate the drilling process to prevent interference of drills with bolster and supporting block
  - **Linear brake and clamp to keep stable drilling**
  - **Both Coolant Through Spindle (CTS) and from side are standard**
  - **Plate alignment function**
  - **Auto lubrication device**
- Gantry only**
- Working length is extendable by increasing the rail length at actual requirement
  - Drilling table and electric chip conveyor available (option)



Drill<sup>+</sup> 1640

## Table type

Specification			
Model	Unit	Drill <sup>+</sup> 1020	Drill <sup>+</sup> 1640
Table size	mm	1,000 x 2,000	1,600 x 4,000
Z lifter effective stroke	mm	350	
Plate thickness	mm	100	
Positioning accuracy	mm	± 0.1	
Positioning speed	m/min	16	
Number of spindle		1	1~2



Cross line laser pointer

Supporting block, hydraulic clamber, Automatic plate thickness measuring device

Automatic tool length detector

## Gantry type

Specification								
Model	Unit	Drill <sup>+</sup> 25	Drill <sup>+</sup> 30	Drill <sup>+</sup> 35	Drill <sup>+</sup> 40	Drill <sup>+</sup> 50	Drill <sup>+</sup> 60	Drill <sup>+</sup> 80
Table size	mm	1,700 x L	2,200 x L	2,700 x L	3,200 x L	4,200 x L	5,200 x L	7,200 x L
Parking space	mm	1,500				2,000		
Z lifter effective stroke	mm	350						
Track length (section)	mm	3,000						
Plate thickness	mm	100						
Positioning accuracy	mm	± 0.1						
Positioning speed	m/min	16						
Number of spindle		1 ~ 2						

Drill Spindle			
Model	Unit	DS-050	DS-080
Drills number		1	
Drive motor	hp	15	30
Drilling capacity	mm	Ø6 ~ 50	Ø6 ~ 80
Speed	rpm	10 ~ 2,000	
Effective length <sup>*1</sup>	mm	215 ~ 375	
Shank-standard		BT40-MT4	BT50-MT4
Shank-tapping (option)		BT40-TPM830 <sup>*2</sup>	BT50-TPM830 <sup>*2</sup>
		TPC830 <sup>*3</sup>	TPC830 <sup>*3</sup>
Shank-indexible drills (option)		BT40-SLA-OD	BT50-SLA-OD <sup>*4</sup>

<sup>\*1</sup> Effective length: From spindle nose-end to drills end  
<sup>\*2</sup> Shank w/ tapping chuck

<sup>\*3</sup> Quick change tapping collets  
<sup>\*4</sup> Shank w/ side lock holder

