



Shanghai Jintai Foundation Machinery

Specialist of Foundation Equipment
Rotary Drilling - CFA- Reverse Circulation Drill
SWM - RC DTH Hammer - Diaphragm Wall

Jintai SD12 Hydraulic Rotary Drilling Rig

1. Jintai SD12 Attachment.

Jintai SD12 Assembly for the base carrier JT45 consist of:

Mast in box type construction with interior reinforcement, torsion proof for SD Kelly drilling mode

-Mast height :	20,100mm
-Max. drilling depth:	50m
-Drilling diameter:	
*with casing driving facility:	1000mm
*without casing driving facility:	1500mm

Mast suitable for

Rotary Head

*Powered by **HAVE H2V108** hydraulic motor and **Brevini ED2150** reduction gear box.

-Rotary Head model	KDK120
-Max. torque	120kNm
-Rotary speed	8-30rpm

Crowd cylinder

-Stroke:	4.0m
-Crowd force:	160kN
-Pulling force	160kN

Main Winch

*Powered by **Rexroth A2FE125** hydraulic motor and **GFT-600W** reduction gear box.

-Max. line pull:	140kN
-Max line speed:	50m/min.
-Wire rope diameter:	24mm (Italy made)
-Wire rope length:	80m

Auxiliary Winch

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*Powered by **INI** hydraulic motor and reduction gear box.

-Max. line pull:	50kN
-Max. line speed:	55m/min
-Wire rope diameter:	17mm (Italy made)
-Wire rope length:	50m

2. Base Carrier for SD12

Hydraulic crawler base machine JT45, suitable for SD12 usage according to Jintai Specification.

Upper-carriage

Hydraulic upper carriage type Jintai special made excavator base is installed with water-cooled, turbo charged, diesel engine type **Cummins 6BTA5.9-C**

-Rated output:	125kW at 1950rpm
-Max. torque:	62.6kgm at 1,500rpm

Hydraulic system

2 main open circuits hydraulic system with variable displacement type pump.

-Main Pump	Kawasaki K3V112 x 2
-Max. pressure	320bar
-Max. oil flow	2 x 230L/min.

Hydraulic control system

Hydraulic control system is consisted with German made HAVE main control valve set

-Main control valve:	HAVE PSLH/300-5
-Main safety valve pressure:	300 bar
-Over flow pressure:	190-220bar

Slewing system

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Slewing ring is driven by a imported motor and reduction gear box to provide a stable and powerful turning for undercarriage.

-Slewing speed: 2.5-3rpm

Control Cabin

- Fully comfortable large vision driver cabin, with air conditioner and radio.
 - With Finland EPEC made PLC computerized control
 - Monitoring system is made by Germany GRAP with English vision display.
- All mast verticality and accuracy control with display of working parameter

Undercarriage

Undercarriage is designed with extendable crawler track and main components like tack pad, link, roller and tumbler is imported form INI Korea which is Komatsu compatible.

Traction motor and gear box:	Korea INI TM40VCC
Track shoe width:	600mm
Crawler length:	5090mm
Crawler width (retracted/ extended):	3200/4100mm

Total operating weight

SD12 operating rate is about 48ton with Kelly bar

Kelly Bar

-Interlocking type and friction type are available for different kind of soil and different drilling depth.

- Outer diameter of Kelly (interlocking type) 325mm
- Permanent torque transmission 120kNm
- Steel quality Q390B

Standard Tools and Accessories

SD12 would be completed with all standard accessories, tools, operation manual, part book, electric and hydraulic diagrams.