



SOLAR FOUNDATION DRILLING RIG

# JCS500

SOLAR PILING RIG

A purpose-built, self-propelled crawler rig for fast, accurate foundation drilling on solar PV projects. Auger and down-the-hole drilling, full 360° positioning, and Cummins diesel power — engineered to keep your pile programme on schedule.

AUGER

**500 MM**

DTH

**130–400 MM**

SLEW

**360°**

WEIGHT

**7.2 T**

**BUILT FOR THE SOLAR SITE**

# Foundation holes, drilled fast and straight.

Solar farms live or die on the pile programme. The JCS500 is a compact crawler drilling rig made for exactly that job — boring accurate foundation holes for ground-mount PV structures, row after row, across open and uneven terrain. A high-torque rotary head drives augers up to 500 mm and down-the-hole tooling from 130–400 mm, while the 360° rotating chassis lets one operator move from pile to pile without repositioning the base.

**85 kW**

CUMMINS DIESEL

**8000–12000 N·m**

POWER-HEAD TORQUE

**4100 mm**

HYDRAULIC FEED STROKE

**350 mm**

STEEL CRAWLER TRACKS

**Why Drillbuilders.** Supplied, supported and backed locally — full drilling package, parts and field support from our team, so your rig keeps turning long after the containers are unpacked.



# Engineered to **keep drilling.**

**01**

## **Fast, precise positioning**

An advanced load-sensing hydraulic system gives smooth, accurate mast and feed control, so every hole is spotted and drilled exactly where the layout calls for it.

**02**

## **High-torque rotary head**

8000–12000 N·m of power-head torque drives augers and DTH tooling through compacted, rocky and mixed ground without stalling.

**03**

## **Operator comfort & control**

A logically arranged control layout and roomy operating station reduce fatigue across long, repetitive piling shifts.

**04**

## **All-terrain steel tracks**

350 mm steel crawler tracks deliver grip and stability on sand, soft soil, grass and slopes — the real conditions of an open solar site.

**05**

## **360° rotating chassis**

Full slew lets the operator reposition to the next pile without moving the undercarriage — faster cycle times in tight, repetitive row layouts.

**06**

## **Tough & low-maintenance**

A heavy, stress-relieved structural frame and quality hydraulic components are built for continuous duty and easy upkeep in the field.



ROTARY POWER HEAD

OPERATOR CONTROLS

STEEL CRAWLER TRACKS

# Technical specifications

## DRILLING & ROTATION

|                             |     |               |
|-----------------------------|-----|---------------|
| Single maximum depth        | m   | 4             |
| Drilling rod diameter       | mm  | 75 / 85 / 100 |
| Hole diameter — DTH         | mm  | 130–400       |
| Hole diameter — auger (max) | mm  | 500           |
| Power-head torque           | N·m | 8000–12000    |

## FEED SYSTEM

|                    |    |                 |
|--------------------|----|-----------------|
| Feed type          | —  | Hydraulic slide |
| Feed stroke        | mm | 4100            |
| Slider swing angle | °  | L15 / R15       |
| Sliding guide tilt | °  | L5 / R5         |

## ENGINE

|                        |           |                |
|------------------------|-----------|----------------|
| Engine brand           | —         | Cummins diesel |
| Rated power            | kW        | 85             |
| Maximum torque / speed | N·m / rpm | 375 / 1850     |
| Rated speed            | rpm       | 2600           |
| Fuel tank capacity     | L         | 150            |

## HYDRAULIC SYSTEM

|                    |       |     |
|--------------------|-------|-----|
| Rated displacement | ml/r  | 105 |
| Working pressure   | MPa   | 19  |
| Rated flow         | L/min | 230 |
| Hydraulic oil tank | L     | 230 |

## WEIGHT & DIMENSIONS

|                     |                       |
|---------------------|-----------------------|
| Total weight        | 7232 kg               |
| Transport (L×W×H)   | 5670 × 1980 × 2375 mm |
| Working (L×W×H)     | 2375 × 1980 × 5670 mm |
| Tail swing radius   | 2030 mm               |
| Crawler track width | 350 mm                |
| Tramming speed      | 3 km/h                |
| Climbing grade      | 25°                   |
| Ground clearance    | 290 mm                |
| Slew angle          | 360°                  |

## Supplied drilling package

|              |               |
|--------------|---------------|
| Auger        | 305 × 3000 mm |
| DTH hammer   | 10"           |
| Drill bits   | 12" / 305 mm  |
| Drill pipe   | 114 × 3000 mm |
| Sub-adapters | 3½" reg       |

Specifications are nominal and may be updated without notice.  
Hydraulic post-driving hammer available separately on request. ©  
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