The DD-7 is one of the most compact Double Disc Grinding machines on the market. Applications range from printed circuit board drill blanks, carbide pins, ceramic blocks, alumina tubes and roller bearings for the aerospace, automotive, medical, metals and mining markets.

The DD-7 is a versatile machine, offered in available 7" or 10" work wheels on a granite bed for reduced vibration and thermal stability. We can also install an enclosure with mist collection protecting the operator from debris and misting offering a clean and safe work environment. Designed for grinding small diameter components, it accurately controls their length and perpendicularity. The DD-7 can be configured in three fixtureing modes, depending on the application, the shape of the part, and the degree of automation required.

Intuitive HMI Controls and Custom Software
The control software is entirely developed at Glebar and is fully customizable to address your application and process. The intuitive touch screen interface allows for ease of use and flexibility. The machine software interface was developed to allow an unskilled operator to run many high precision machines simultaneously.

Three Fixturing Modes
In Vertical Mode (sometimes referred to as carriage), parts are fed through the grinding wheels vertically using a precision-machined steel plate. Holes in the plate encapsulate the part during the grinding operation. High volume carbide drill blanks are processed automatically using this method. In Thrufeed Mode, components are fed in a continuous fashion through the machine, allowing for increased throughput. Silicon nitride roller bearings are ground using this method. In Precision Fixture Mode, a precision fixture is mounted on a high accuracy slide. Square ceramic blocks can be perpendicularly ground using this mode of operation. A competing process would be to surface grind parts in batches - a non-continuous, and therefore, slower method of manufacturing.

Fast and Precise Operation
The DD-7 uses brushless servo motors versus stepper motors. This is a faster and more precise way of moving slides. A servo-driven, close-looped drive offers the operator a high degree of control over the parts being ground. 0.1 micron linear glass scales coupled with absolute encoders on the axis make the machines faster and highly precise. An available brake dresser is equipped with a diamond roll to dress both wheels.

Remote Connectivity and Glebar Advanced Analytics
Remote connectivity is available via EtherCAT®, by and large the fastest industrial Ethernet technology. Glebar Advanced Analytics that interfaces to supervisory plant controls, is also available to gather production data and track maintenance and critical operational statistics.

// THE GLEBAR ADVANTAGE
The compact machine footprint is able to out produce much larger double disc grinders when the component to be ground is small in diameter. Combining the latest in multi-axis slide controls, the machine can be configured for your application specifically. The interface software can be designed to meet your production requirements encompassing controls for all peripheral attachments such as robots and bowl feeders. In-line inspection can be deployed to automatically adjust size, further improving the machine’s accuracy and repeatability.
KEY FEATURES

- Fast operation
- Small footprint
- Simple setup and control
- Bowl feeding with warning beacons
- Robot integration
- Gauging integration
- Conveyor integration
- Simple wheel adjustment
- Automatic wheel dressing
- Fully customizable
- Remote Connectivity via EtherCAT®

1. Vertical Mode
2. Thrufeed Mode
3. Precision Fixture Mode

SPECIFICATIONS

- Grinding Diameter Capacity: MAX 0.500" (13mm) - MIN 0.031" (0.8mm)
- Work Wheel Diameter: Two 7" (178mm) wheels or Two 10" (254mm) wheels
- Typical production rates: 5000 pcs per hour carbide drill blanks
- Grinding Diameter Stock: MAX 0.500” (13mm) - MIN 0.031” (0.8mm)
  (application dependent)
- Wheel Size: 2 wheels 7”or 10” x 1” (178 or 254” x 25mm)
- Work Wheel Spindle Power: 2 x 3 HP (2.2kW)
- Work Wheel RPM: 3450
- Work Wheel Length: 1” (25mm)
- Machine Weight: 5500 lbs.
- Grinding Length Stock: 5” (12.7cm)