

12kW DBC Fiber Laser Cutting Machine

FIBERTEX-Zero Series

The world's first Fiber Laser Cutting Machine that adopts the DBC (Dual Beam Control) Oscillator. KOIKE's Best Fiber Laser Cutting Machine, which meet all users demands.



K Torch, the New Torch Head for DBC Fiber Laser.



12kW Fiber Laser Cutting Material: SN490C 25mm

FIBERTEX-Zero

The new **12kW DBC Oscillator** brought to the fiber laser cutting segment more versatility with the significant improvements on the cutting capability, and in order to achieve the **Highest Level of Contour Accuracy** for CW Cutting by **DBC**, KOIKE also reviewed the machine's structure and completely renewed the drive system, introducing the new fiber laser cutting machine the **FIBERTEX-Zero**.

FIBERTEX-Zero kept all the best features from its predecessor and more, also allowing the customer to choose whether the **Operation Panel, Oscillator** and **Chiller** will be **On-board type** or **Standalone type**, while the **Fume Collector** remaining only as **Standalone type**.

What is DBC?

While the **Single Beam Mode** has only the **Central Beam**, **DBC** is a combination of a **Central Beam** and a **Ring Beam**, which brings more efficiency to the cutting process.

DBC allows the controlling of the shape of the **Central Beam** and the **Ring Beam** individually to the best condition according to the Materials Type, Surface Condition, and Surface Temperature, achieving a better Cutting Quality in a wider range of material from thin to thick plates, difficult-to-cut material, and even on rust material which now can be cut without pre-burning cutting.

Feature

- First ever **IPG 12kW DBC Oscillator** implemented.
- Cutting Performance enhanced to the utmost by adopting the new torch head "**K torch**", with DBC dedicated nozzle.
- Cutting accuracy significantly improved by machine body rigidity increase.
- Cutting of SN490C, known as one of the most difficult material to be cut by laser, has been greatly improved by the 12kW DBC achieving a very stable cutting with great cutting quality even on 25mm plate.
- Rust material cutting without pre-burning.

FIBERTEX-Zero - Main Specification

| | | |
|---------------------------|---|----------|
| Model | New FIBERTEX-xx12 Zero | |
| Oscillator | IPG YLS DBC | |
| Rating Output | 12000W | |
| Structure | Gantry Bridge (Onboard or Stand-Alone Oscillator) | |
| CNC | FANUC Series 31i | |
| Rail Span | 3500~6500mm (Increments of 500mm) | |
| Rail Length | 4800×Nmm (Max. 30000mm) | |
| Effective Cutting Width | Rail Span -1250mm | |
| Effective Cutting Length | Rail Length -4000mm | |
| Max. Cutting Speed | 10000m/min (High Speed Type : 24000mm/min) | |
| Max. Rapid Traverse Speed | 24000m/min (High Speed Type : 36000mm/min) | |
| Max. Torch Up/Down Speed | Manual Feed : 3000mm/min, Automatic Operation : 20000mm/min | |
| Cutting Thickness | Mild Steel | 3.2~28mm |
| | Stainless Steel | 1.5~30mm |