COIL-FED FIBER LASER

RDI LASER BLANKING SYSTEMS®
FIBER LASER SYSTEMS

Lower Operating Costs
The RDI Laser Blanking System is a revolutionary, patented technology which combines continuous coil feeding with high power fiber laser technology. Designed to reduce production costs by streamlining the parts manufacturing process, this innovative fiber laser system unites several manufacturing processes into one.

Efficient Fiber Laser
Featuring a high power fiber laser design, the RDI Laser Blanking System maintains the highest cutting speeds available, providing efficiency and low cost production. Unlike CO₂ lasers, fiber lasers cut up to 5 times faster and require almost no maintenance. With a projected life of up to 100,000 hours, fiber lasers deliver a powerful cutting beam through a maintenance-free fiber optic cable. Comparable CO₂ systems require a complex system of mirrors and optics. Fiber systems do not require laser gas to generate the laser beam so these costs are completely eliminated. Plus, fiber lasers are up to 6 times more energy efficient than CO₂ lasers.

Reduce the Cost-Per-Part
Perfect for cutting a wide variety of metals, the RDI Coil-Fed Laser System easily cuts aluminum, high-strength alloy, mild, stainless and galvanized steel, in a wide range of thicknesses. This system completely eliminates dies and die maintenance while increasing material savings and reducing overall labor and material handling costs. When combined with our powerful nesting software, the scrap rate goes down and part changeover times are greatly reduced. Additionally, the complete RDI Laser Blanking System has lower installation costs and a smaller footprint when compared to traditional laser or mechanical blanking equipment, saving valuable floor space that can be used for other manufacturing operations.

KEY BENEFITS
- Increase Production – Continuously laser cut parts from coil
- Multi-Axis Laser – X, Y and X Prime
- Eliminate Dies and Die Maintenance
- Reduce Scrap
- Reduce Maintenance
- Reduce Labor – One operator for the entire system
- Finished Parts Handling – Multiple stacking and secondary operation options

SPECIFICATIONS
- Up to 44,000 lb (20 tons)
- 0.38-3 mm thickness
- Up to 2 m width
**Multi-Axis Laser**
The fiber laser head moves in the Y axis via a high speed linear motor while a short stroke X prime axis makes quick work of critical, intricate cuts and small holes. Material moves in the X axis in a coordinated motion with the Y axis, producing clean edges and high quality parts.

**Fiber Laser**
Fiber lasers are smaller than traditional lasers, saving valuable floor space. While conventional lasers can be delicate due to precise mirror alignment, fiber lasers are more rugged and able to perform in variable working environments. The fiber laser is a modular design, built from multiple laser units, each one generating hundreds of watts of output power.

**Servo Feed System**
The high precision servo feed system controls the material traverse in the X axis, coordinating with the laser head moving in the Y axis to yield highly accurate parts. Heavy-duty servo motors combined with high precision gearboxes ensure accurate material movement and long life.

**Uncoiler**
The uncoiler utilizes an expansion mandrel to securely hold the coil I.D. while unwinding the coil into the leveling equipment. The uncoiler features a power driven mandrel and hold down roll for easy threading and rewinding of the coil. Single and double mandrel models are available, with weight capacities from 4,000 to 80,000 lbs.

**Coil Car**
The coil loading car allows for the safe and efficient transfer of the coil from a turnstile or crane to the mandrel of the uncoiler. Coil cars are available in both traveling and stationary styles.

**Leveling Equipment**
This high performance leveling equipment maximizes material output while correcting metal defects and coil set. Constructed with heavy duty, fabricated steel for a rigid construction, these levelers can be either 4, 5 or 6 high backup roll configuration to meet a wide range of applications. Available with a full range of accessories including automatic edge guides and cassette type roll change systems.
The RDI Group, the parent company of Reichel & Drews, Chicago Slitter, RDI Laser Blanking Systems, RDI Punching & Bending Systems, and RDI Enclosures & Systems, specializes in the design and manufacture of industrial systems for diverse worldwide markets including asphalt roofing, construction, telecommunications, power and metal coil processing industries. A respected leader in custom built machinery, The RDI Group has been helping customers improve productivity and profits for more than 110 years. The RDI Group is headquartered in Itasca, Illinois, USA with a sales and technology business unit in Bamberg, Germany and a sales office in Beijing, China.

Our mission is simple:

Build Great Machines

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