

Global CO2 Laser Drilling Machine Supply, Demand and Key Producers, 2026-2032

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Abstracts

The global CO2 Laser Drilling Machine market size is expected to reach \$ 1067 million by 2032, rising at a market growth of 5.7% CAGR during the forecast period (2026-2032).

A CO₂ Laser Drilling Machine is a precision manufacturing system that uses a carbon dioxide (CO₂) laser, typically operating at a wavelength of 10.6 μm, to drill micro-scale holes in non-metallic and composite materials through thermal ablation. It is widely used in PCB and IC substrate manufacturing to create microvias in dielectric layers such as epoxy resin, polyimide, and ABF films, offering high processing speed, good hole quality, and excellent consistency for high-density interconnection (HDI) applications. In 2025, global CO₂ Laser Drilling Machine production reached approximately 1700 units, with an average global market price of around US\$ 410 k usd per unit. The production capacity for CO₂ Laser Drilling Machine in 2025 was approximately 2000 units. The typical gross profit margin for CO₂ Laser Drilling Machine is between 20% and 40%.

The CO₂ Laser Drilling Machine market is driven by growing demand in industrial machining, electronics manufacturing, aerospace, automotive and energy sectors for precision drilling in non-metallic and composite materials. CO₂ laser drilling systems offer high-speed, thermally controlled, non-contact hole formation with minimal mechanical stress, making them well-suited for applications such as printed circuit boards, ceramic substrates, glass, polymers, composites and insulation materials. Market growth is supported by advancements in laser sources, automation integration, and rising adoption of additive manufacturing and micro-drilling technologies, with key regional drivers in Asia-Pacific, North America and Europe. Trends include hybrid laser systems, higher beam quality, and improved process monitoring to enhance precision and throughput.

This report studies the global CO2 Laser Drilling Machine production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for CO2 Laser Drilling Machine and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of CO2 Laser Drilling Machine that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global CO2 Laser Drilling Machine total production and demand, 2021-2032, (Units)

Global CO2 Laser Drilling Machine total production value, 2021-2032, (USD Million)

Global CO2 Laser Drilling Machine production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Units), (based on production site)

Global CO2 Laser Drilling Machine consumption by region & country, CAGR, 2021-2032 & (Units)

U.S. VS China: CO2 Laser Drilling Machine domestic production, consumption, key domestic manufacturers and share

Global CO2 Laser Drilling Machine production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Units)

Global CO2 Laser Drilling Machine production by Type, production, value, CAGR, 2021-2032, (USD Million) & (Units)

Global CO2 Laser Drilling Machine production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Units)

This report profiles key players in the global CO2 Laser Drilling Machine market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Mitsubishi Electric, ESI (MKS Instruments), Via Mechanics, Schmolz Maschinen, LPKF, Han's Laser, Tongtai, HGTECH, Suzhou Delphi Laser, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World CO2 Laser Drilling Machine market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (Units) and average price (K US\$/Unit) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global CO2 Laser Drilling Machine Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global CO2 Laser Drilling Machine Market, Segmentation by Type:

Single-Head System

Dual-Head System

Global CO2 Laser Drilling Machine Market, Segmentation by Laser Working Mode:CW CO₂ LaserPulsed CO₂ Laser

Global CO2 Laser Drilling Machine Market, Segmentation by Machining Hole Type:

Blind Via

Microvia

Global CO2 Laser Drilling Machine Market, Segmentation by Application:

Consumer Electronics

Communications

Automotive Electronics

Computers & Servers

Others

Companies Profiled:

Mitsubishi Electric

ESI (MKS Instruments)

Via Mechanics

Schmoll Maschinen

LPKF

Han's Laser

Tongtai

HGTECH

Suzhou Delphi Laser

Key Questions Answered:

1. How big is the global CO2 Laser Drilling Machine market?
2. What is the demand of the global CO2 Laser Drilling Machine market?
3. What is the year over year growth of the global CO2 Laser Drilling Machine market?
4. What is the production and production value of the global CO2 Laser Drilling Machine market?
5. Who are the key producers in the global CO2 Laser Drilling Machine market?
6. What are the growth factors driving the market demand?

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