NITROXTEC®

Clean Compressed Air & Reliable Gas

Laser Cutting Systems

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Laser Cutting Systems

AIRPLACE Air Cutting System (16 Bar)

Compressor Energy Consumption & Fiber Laser Cutting Machine Power (16 Bar)

Model	Compressor Energy Consumption	Flow Rate At 16 Bar	Fiber Laser Cutting Machine Power	Material Types	Cutting Thickness
AirPlace 1	15 kW	1.5 m³/min (90 m³/hour)	1-3 kW	Carbon Steel, Aluminum, Galvanized Steel, DKP, and Similar Materials	0.5-3 mm
AirPlace 2	22 kW	2.2 m³/min (132 m³/hour)	4-6 kW		0.5-6 mm
AirPlace 3	30 kW	3.0 m³/min (180 m³/hour)	8-10 kW		0.5-8 mm
AirPlace 4	37 kW	4.1 m³/min (246 m³/hour)	12 kW		0.5-12 mm

Notes:

- **Laser cutting machine brand and model may vary depending on technical specifications.**
- **Flow Rate at 16 Bar**: Compressor flow rates are given in cubic meters per minute (m³/min) and have been converted to cubic meters per hour (m³/hour) for 16 Bar pressure.
- **Fiber Laser Cutting Machine Power**: The power rating varies depending on the material and its thickness at 16 Bar.
- **Material Types**: Includes carbon steel, aluminum, galvanized steel, DKP, and similar materials.
- **Cutting Thickness**: Depending on laser power, cutting thickness can range from 0.5 mm up to 12 mm, adjusted based on the material and laser specifications.

AIRPLACE Air Cutting System (20 Bar)

Compressor Energy Consumption & Fiber Laser Cutting Machine Power (20 Bar)

Model	Compressor Energy Consumption	Flow Rate At 20 Bar	Fiber Laser Cutting Machine Power	Material Types	Cutting Thickness
AirPlace 1	15 kW	1.6 m³/min (96 m³/hour)	6-8 kW	Carbon Steel, Aluminum, Galvanized Steel, DKP, and Similar Materials	0.5 - 10 mm
AirPlace 2	22 kW	2.0 m³/min (120 m³/hour)	10 kW		0.5 - 12 mm
AirPlace 3	37 kW	2.8 m³/min (168 m³/hour)	12-20 kW		0.5 - 20 mm

Notes:

- **Laser cutting machine brand and model may vary depending on technical specifications.**
- **Flow Rate at 20 Bar**: Compressor flow rates are in cubic meters per minute (m³/min) and converted to cubic meters per hour (m³/hour).
- **Fiber Laser Cutting Machine Power**: Power rating varies based on the material and thickness.
- **Material Types**: Carbon steel, aluminum, galvanized steel, DKP, and similar materials.
- **Cutting Thickness**: From 0.5 mm up to 20 mm depending on laser power.

NitroMix Gaz Cutting System (40 Bar)

The **Nitrogen mix gas generator** is suitable for **fiber laser cutting machines** of **10 kW and above**. It automatically adjusts the **nitrogen purity** according to the cutting of **DKP (hot-rolled sheet)**, **carbon steel**, **black sheet**, and **galvanized steel**.

- **Nitrogen Purity Range**: 95% - 99%

Model	Nitrogen Generator Model	Capacity Purity Range (95% - 99%)
NitroMix 1	NT-10	256 - 137 (m³/hour)
NitroMix 2	NT-12	335 – 179 (m³/hour)
NitroMix 3	NT-13	434 – 231 (m³/hour)
NitroMix 4	NT-14	572 – 304 (m³/hour)

High Purity Nitrogen Cutting System (230-300 Bar)

- **Energy Consumption**: 0.3 - 0.7 kW of energy is required to generate **1 m³ of nitrogen gas**.
- Specifically designed for **fiber and CO2 laser cutting machines**, especially for high-precision cutting of all metals, such as **stainless steel (SS), chrome, aluminum, copper**, and **galvanized metals**.
- **Nitrogen Purity Range**: 99.99% - 99.999%

Nitroplace 1

High Purity Nitrogen Cutting System

(For 1-3 kW Laser Cutting Machines)

Nitrogen Generator Model	Generator Capacity (99.99% Purity)	Generator Capacity (99.999% Purity)	Storage Bundle Capacity
NT-05	16 m³/hour	8.5 m³/hour	12*50 @ 230 Bar = 138 m³
			16*50 @ 300 Bar = 240 m³

Nitroplace 2

High Purity Nitrogen Cutting System

(For 4-6 kW Laser Cutting Machines)

Nitrogen Generator Model	Generator Capacity (99.99% Purity)	Generator Capacity (99.999% Purity)	Storage Bundle Capacity
NT-06	20 m³/hour	10.63 m³/hour	12*50 @ 230 Bar = 276 m³
			16*50 @ 300 Bar = 480 m³

Nitroplace 3

High Purity Nitrogen Cutting System

(For 6 -8 kW Laser Cutting Machines)

Nitrogen Generator Model	Generator Capacity (99.99% Purity)	Generator Capacity (99.999% Purity)	Storage Bundle Capacity
NT-07	28 m³/hour	15 m³/hour	12*50 @ 230 Bar = 414 m³
			16*50 @ 300 Bar = 720 m³

Nitroplace 4

High Purity Nitrogen Cutting System

(For 8-20 kW Laser Cutting Machines)

Nitrogen Generator Model	Generator Capacity (99.999% Purity)	Storage Bundle Capacity
NT-10	30 m³/hour	12*50 @ 230 Bar = 552 m³
		16*50 @ 300 Bar = 960 m³

Nitroplace 5

High Purity Nitrogen Cutting System

Group (For 20-30 kW Laser Cutting Machines)

Nitrogen Generator Model	Generator Capacity (99.999% Purity)	Storage Bundle Capacity
NT-12	40 m³/hour	12*50 @ 230 Bar = 828 m³
		16*50 @ 300 Bar = 1440 m³

Nitroplace 6

High Purity Nitrogen Cutting System

(30 kW Laser Cutting Machines)

Nitrogen Generator Model	Generator Capacity (99.999% Purity)	Storage Bundle Capacity
NT-14	65 m³/hour	12*50 @ 230 Bar = 960 m³
		16*50 @ 300 Bar = 1920 m³

Note: “All information provided in the tables is for reference only, based on prior experience and testing. Actual results may vary depending on specific conditions and variables.”