

# **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		0.5-3 mm
AirPlace 2	22 kW	2.2 m³/min (132 m³/hour)	4-6 kW	Carbon Steel, Aluminum, Galvanized	0.5-6 mm
AirPlace 3	30 kW	3.0 m³/min (180 m³/hour)	8-10 kW	Steel, DKP, and Similar Materials	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,	0.5 - 10 mm
AirPlace 2	22 kW	2.0 m³/min (120 m³/hour)	10 kW	Galvanized Steel, DKP,	0.5 - 12 mm
AirPlace 3	37 kW	2.8 m³/min (168 m³/hour)	12-20 kW	and Similar Materials	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	10 2/	25.24	12*50 @ 230 Bar = 138 m³
NT-05	16 m³/hour	8.5 m³/hour	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 OC	NIT 00 00 m3/h a	40.02 3/h	12*50 @ 230 Bar = 276 m³
NT-06	20 m³/hour	10.63 m³/hour	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	
N1-07	26 III /IIOUI	13 111 /11001	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
NIT 40	20 m³/h a u r	12*50 @ 230 Bar = 552 m³
NT-10	30 m³/hour	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
		12*50 @ 230 Bar = 828 m³
NT-12	40 m³/hour	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
N1-14	65 III-/IIOUI	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."