

激光切割-氮气方案

—
LASER CUTTING
NITROGEN SOLUTION

OPPAIR
君威诺

君威诺空压机（上海）有限公司
SHANDONG OPPAIR MACHINERY MANUFACTURING CO.,LTD



HAND
LASER WELDING

手持激光焊

专用小型号高纯度制氮机

SPECIAL SMALL
HIGH-PURITY NITROGEN GENERATOR



AIR COMPRESSOR 空压机

7.5KW 8bar

永磁变频螺杆空压机，节能高效
Permanent magnet variable frequency screw air compressor, energy efficient

NITROGEN GENERATOR 制氮机

1/3/5/10³

制氮机，99.99%纯度，焊接专用
Nitrogen machine, 99.99% purity, special for welding

AIR TANK 储气罐

300L

配备300L储气罐，压力更稳定
Equipped with 300L air tank, the pressure is more stable

FEATURES 特点

- 空压机+制氮机一体化设计：节约客户安装成本和空间，操作简单
- PLC智能控制，配备纯度显示仪，自动启停，自动排空
- 配备永磁变频螺杆空压机，节能率可到达30%
- Air compressor + nitrogen machine integrated design: save customer installation cost and space, simple operation.
- PLC intelligent control, equipped with purity display, automatic start and stop, automatic emptying.
- Equipped with permanent magnet variable frequency screw air compressor, energy saving rate can reach 30%.



APPLY 应用

Model 型号	N2-1	N2-3	N2-5	N2-10
氮气流量 Nitrogen flow	1 Nm3/h	3 Nm3/h	5 Nm3/h	10 Nm3/h
配套方案 Supporting plan	带1台自动焊或者2台手持焊 With 1 automatic welding machine or 2 handheld welding machines	带3台自动焊或者4-6台手持焊 With 3 automatic welding machines or 4-6 handheld welding machines	带5台自动焊或者7-10台手持焊 With 5 automatic welding machines or 7-10 handheld welding machines	带10台自动焊或者14-20台手持焊 With 10 automatic welding machines or 14-20 handheld welding machines

型号	N2-1	N2-3	N2-5	N2-10	
制氮机	纯度%				
	最高99.999%，稳定运行在99.95%以上				
	产氮量Nm3/h	1	3	5	10
	电压V/Hz				
	220V 50/60Hz 1P				
	功率KW				
	0.1				
	耗气量m3/min	0.083	0.25	0.42	0.83
耗电量kw/h	0.9	2.7	3.5	1	
制造一瓶40L的氮气时间 h	5	1.7	1	0.2	
控制方式					
PLC自动控制，具备纯度显示、自动启停、自动排气等功能					
空压机	功率/马力 kw/hp				
	7.5/10				
	类型				
	变频				
	介质				
	空气				
	储气罐L				
380L					
冷却方式					
风冷					
工作压力bar					
8					
供气量m3/min					
1.1					
储气罐	容量L				
	300				
工作压力bar					
8					
整机	电压V/EZ				
	380V/400V/415V 50Hz 3P 220V/440V 60Hz 3P				
	产氮压力bar				
	≥5.5bar ≤7bar				
	氮气纯度				
	最高99.999%，稳定运行在99.95%以上				
	出气口尺寸				
DN15					
整机尺寸m					
1.48*1.46*1.84					
整机重量kg					
1000 1050 1100 1420					

Model	N2-1	N2-3	N2-5	N2-10	
Nitrogen Generator	Purity (%)				
	Up to 99.999%, stable operation above 99.95%				
	Nitrogen yield (Nm3/h)	1	3	5	10
	Voltage (V/Hz)				
	220V 50/60Hz 1P				
	Power (KW)				
	0.1				
	Air consumption(m3/min)	0.083	0.25	0.42	0.83
Power consumption (Kw/h)	0.9	2.7	3.5	1	
Make a 40L bottle of nitrogen time (H)	5	1.7	1	0.2	
Control method					
PLC automatic control with functions such as purity display, automatic start and stop, automatic exhaust, etc.					
Screw air compressor	Power/Horsepower (Kw/Hp)				
	7.5/10				
	Type				
	PM VSD				
	Medium				
	Air				
	Air tank (L)				
380					
Cooling Method					
Air Cooling					
Working pressure (Bar)					
8					
Air supply (m3/min)					
1.1					
Air tank	Capacity (L)				
	300				
Working pressure (Bar)					
8					
Complete Machine	Voltage (V/Hz)				
	380V/400V/415V 50Hz 3P 220V/440V 60Hz 3P				
	Nitrogen production pressure (Bar)				
	≥5.5bar ≤7bar				
	Nitrogen purity(%)				
	Up to 99.999%, stable operation above 99.95%				
	Air outlet size				
DN15					
Overall size (m)					
1.48*1.46*1.84					
Overall machine weight (Kg)					
1000 1050 1100 1420					

CARBON
STEEL

碳钢

低纯度激光切割专用制氮机

LOW-PURITY LASER CUTTING NITROGEN GENERATOR



FEATURES 特点

- 配备永磁变频螺杆空压机，节能高效
- 制氮机自备500L储氮罐，压力稳定
- 100-180Nm³/h,90-99%纯度，激光切割碳钢专用
- PLC智能控制，配备纯度显示仪，自动启停，自动排空
- 板换式冷干机+模组式吸干机+5级高效精密过滤器，保证氮气的洁净度
- Equipped with permanent magnet variable frequency screw air compressor, energy saving and high efficiency.
- The nitrogen machine is equipped with 500L nitrogen storage tank with stable pressure.
- 100-180Nm³/h,90-99% purity, specially designed for laser cutting of carbon steel.
- PLC intelligent control, equipped with purity display, automatic start and stop, automatic emptying. Plate change type dryer + module type dry machine +5 high efficiency precision filter to ensure the cleanliness of nitrogen.



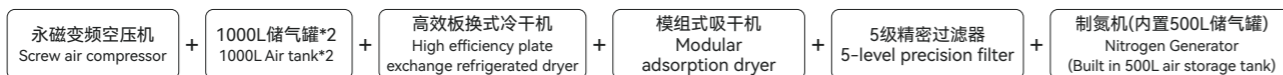
N2-100-99%



N2-150-99%



N2-180-99%



APPLY 应用

Model 型号	N2-100-99%	N2-150-99%	N2-180-99%
氮气流量 Nitrogen flow	100 Nm ³ /h	150 Nm ³ /h	180 Nm ³ /h
配套激光切割机 Matching laser cutting machine	≤2KW	3KW	≥4kw或两台2kw共用 ≥4kw or two 2kw units for sharing
切割材质 Cutting material	碳钢 Carbon steel		

型号	N2-100-99%	N2-150-99%	N2-180-99%	
制氮机	纯度%	90-99%		
	产氮量Nm ³ /h	100	150	180
	电压V/Hz	220V 50/60Hz 1P		
	功率KW	0.3		
	控制方式	PLC自动控制，具备纯度显示、自动启停、自动排气等功能		
空压机	功率/马力 kw/hp	37/50	37/50	55/75
	类型	变频	变频	变频
	介质	空气	空气	空气
	冷却方式	风冷	风冷	风冷
	工作压力bar	16	16	16
	供气量m ³ /min	4.2	4.2	6.8
储气罐	容量L	600*2	600*2	1000*2
	工作压力bar	16	16	16
冷干机	类型	板换式	板换式	板换式
	处理量m ³ /min	6.5	6.5	8.5
	耐压bar	16	16	16
吸附式干燥机	类型	/	模组式	模组式
	处理量m ³ /min	/	5	7.5
	耐压bar	/	16	16
整机	电压V/Hz	380V/400V/415V 50Hz 3P 220V/440V 60Hz 3P		
	产氮压力bar	14.5		
	氮气纯度%	90-99%		
	出气口尺寸	DN25		
	整机尺寸m	空压机/制氮机 2.13*1.98*2.18/1.65*1.3*2.1		2.3*2.6*2.18/1.65*1.3*2.1
	整机重量kg	2500	2600	3800

Model	N2-100-99%	N2-150-99%	N2-180-99%	
Nitrogen Generator	Purity (%)	90-99%		
	Nitrogen yield(Nm ³ /h)	100	150	180
	Voltage (V/Hz)	220V 50/60Hz 1P		
	Power (KW)	0.3		
	Control method	PLC automatic control, with functions such as purity display, automatic start and stop, automatic exhaust, etc.		
Screw air compressor	Power/Horsepower (Kw/Hp)	37/50	37/50	55/75
	Type	PM VSD	PM VSD	PM VSD
	Medium	Air	Air	Air
	Cooling Method	Air Cooling	Air Cooling	Air Cooling
	Working pressure(Bar)	16	16	16
	Air supply (m ³ /min)	4.2	4.2	6.8
Air tank	Volume (L)	600*2	600*2	1000*2
	Working pressure(Bar)	16	16	16
Air dryer	Type	Plate exchange type	Plate exchange type	Plate exchange type
	Processing capacity (m ³ /min)	6.5	6.5	8.5
	Pressure resistant (Bar)	16	16	16
Adsorption dryer	Type	/	Modular	Modular
	Processing capacity (m ³ /min)	/	5	7.5
	Pressure resistant (Bar)	/	16	16
Complete Machine	Voltage: (V/Hz)	380V/400V/415V 50Hz 3P 220V/440V 60Hz 3P		
	Nitrogen production pressure (Bar)	14.5		
	Nitrogen purity (%)	90-99%		
	Air outlet size	DN25		
	Device size (m)	Screw air compressor Nitrogen Generator 2.13*1.98*2.18/1.65*1.3*2.1		2.3*2.6*2.18/1.65*1.3*2.1
Device weight (Kg)	2500	2600	3800	

STAINLESS
STEEL

不锈钢

高纯度激光切割专用制氮机

HIGH PURITY LASER
CUTTING SPECIAL NITROGEN GENERATOR



FEATURES 特点

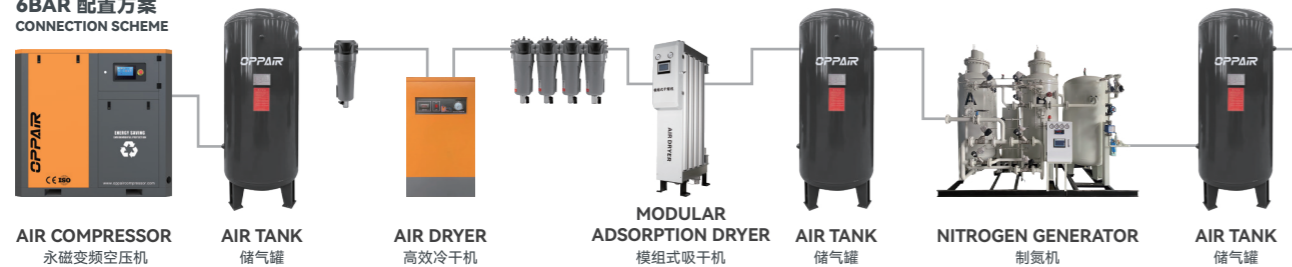
- 100-200Nm³/h, 99.99%高纯度, 激光切割不锈钢专用
- PLC智能控制, 配备纯度显示仪, 自动启停, 自动排空
- 板换式冷干机+模组式吸干机+5级高效精密过滤器, 保证氮气的洁净度
- 6公斤/16公斤两款可选
- 100-200Nm³/h, 99.99% high purity, specially designed for laser cutting of stainless steel.
- PLC intelligent control, equipped with purity display, automatic start and stop, automatic emptying.
- Plate change type dryer + Modular adsorption dryer + 5 high efficiency precision filter to ensure the cleanliness of nitrogen.
- 6bar/16bar two options.



APPLY 应用

Model 型号	N2-100-99.99%	N2-150-99.99%	N2-200-99.99%
氮气流量 Nitrogen flow	100 Nm ³ /h	150 Nm ³ /h	200 Nm ³ /h
配套激光切割机 Matching laser cutting machine	≤2KW	3KW	≥4kw或两台2kw共用 ≥4kw or two 2kw units for sharing
切割材质 Cutting material	不锈钢 Stainless steel		

6BAR 配置方案 CONNECTION SCHEME



16BAR 配置方案 CONNECTION SCHEME



型号	N2-100-99.99%	N2-150-99.99%	N2-200-99.99%	
制氮机	纯度%	99.99%		
	产氮量Nm ³ /h	100	150	200
	电压V/Hz	220V 50/60Hz 1P		
	功率KW	0.3		
	控制方式	PLC自动控制, 具备纯度显示、自动启停、自动排气等功能		
空压机	功率/马力 kw/hp	75/100	90/125	110/150
	类型	变频	变频	变频
	介质	空气	空气	空气
	冷却方式	风冷	风冷	风冷
	工作压力bar	8	8	8
	供气量m ³ /min	12.6	15	19.5
储气罐	容量L	2000*3	2000*3	3000*3
	工作压力bar	8	8	8
冷干机	处理量m ³ /min	13.5	15	20
	耐压bar	10	10	10
吸附式干燥机	类型	模组式	模组式	模组式
	处理量m ³ /min	15	15	20
	耐压bar	10	10	10
整机	电压V/Hz	380V/400V/415V 50Hz 3P 220V/440V 60Hz 3P		
	产氮压力bar	6bar (1-6bar可调)		
	氮气纯度%	99.99%		
	出气口尺寸	DN32	DN40	DN50
	整套安装尺寸m	10-12*1.5*2.9	12-14*2*3.1	13-15*2*3.2
	整机重量kg	4800	6400	8300

Model	N2-100-99.99%	N2-150-99.99%	N2-200-99.99%	
Nitrogen Generator	Purity (%)	99.99%		
	Nitrogen production (Nm ³ /h)	100	150	200
	Voltage (V/Hz)	220V 50/60Hz 1P		
	Power (KW)	0.3		
	Control method	PLC automatic control with functions such as purity display, automatic start and stop, automatic exhaust, etc.		
Screw air compressor	Power/Horsepower (Kw/Hp)	75/100	90/125	110/150
	Type	PM VSD	PM VSD	PM VSD
	Medium	Air	Air	Air
	Cooling method	Air Cooling	Air Cooling	Air Cooling
	Working pressure (Bar)	8	8	8
	Air supply (m ³ /min)	12.6	15	19.5
Air tank	Capacity (L)	2000*3	2000*3	3000*3
	Working pressure (Bar)	8	8	8
Air dryer	Processing capacity (m ³ /min)	13.5	15	20
	Pressure resistance (Bar)	10	10	10
Adsorption dryer	Type	Modular	Modular	Modular
	Processing capacity (m ³ /min)	15	15	20
	Pressure resistance (Bar)	10	10	10
Complete Set	Voltage: (V/Hz)	380V/400V/415V 50Hz 3P 220V/440V 60Hz 3P		
	Nitrogen production pressure (Bar)	6bar (1-6bar adjustable)		
	Nitrogen purity (%)	99.99%		
	Air outlet size	DN32	DN40	DN50
	Complete installation size (m)	10-12*1.5*2.9	12-14*2*3.1	13-15*2*3.2
	Complete set weight (Kg)	4800	6400	8300