



FIDAR
FARAZ FARTAK

General catalogue For Products





FIDAR FARAZ FARTAK

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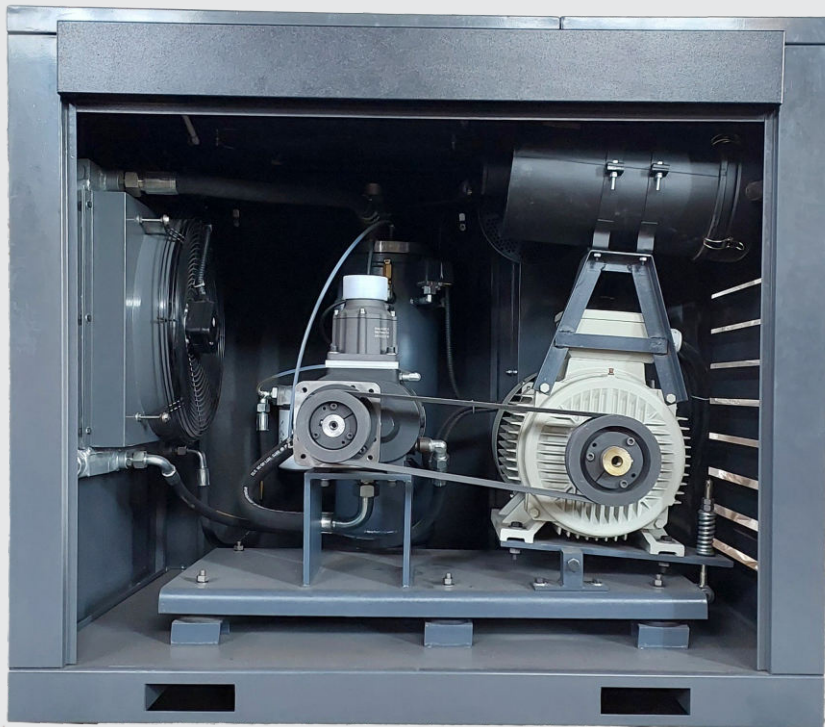
About Us:

Fidar Faraz Fartak is a leading engineering company based in Iran specializing in industrial **compressed air systems, Compressed air equipments, and PSA based nitrogen and oxygen generator packages**. With years of experience and a commitment to innovation, we deliver reliable, energy-efficient equipment and full technical support for industries across the world.



Screw Oil injected Air Compressors:

Fidar Faraz Fartak designs and manufactures a full range of high-performance screw air compressors engineered for efficiency, durability, and reliability. Our product line includes **belt-driven, direct-coupled, and permanent-magnet motor (PM) models, with both single and double stage airend units**, each developed to meet diverse industrial requirements. Every model can be equipped with a Variable Speed Drive (VSD) system, delivering significant energy savings and stable air output under varying load conditions. With advanced engineering, precision assembly, and dust protection up to **IP50**, our compressors offer dependable operation and long service life for a wide range of industries.



Screw Oil injected Air Compressors Specs:

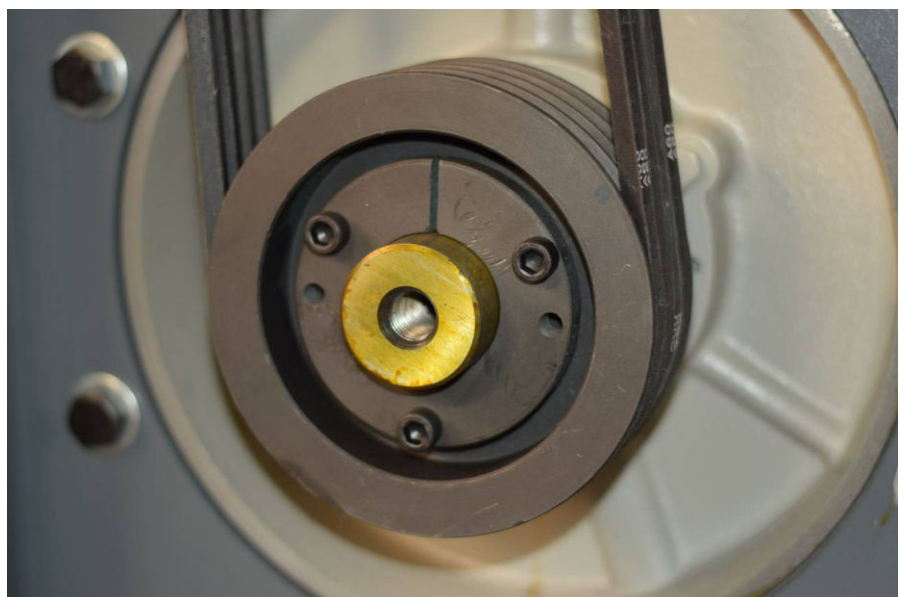
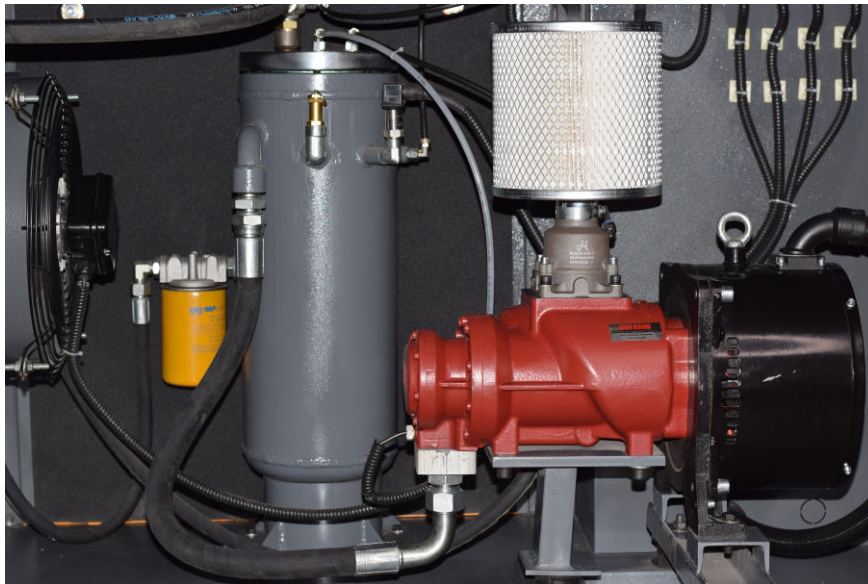
Fidar compressors deliver powerful performance and superior reliability across a wide range of industrial applications. Covering capacities from **5.5 KW up to 315 KW, with working pressures of 8, 10 and 13 bar**. Backed by our in-house engineering and design team, **Fidar Faraz Fartak** provides custom-built compressor systems tailored to meet the unique requirements of every client, ensuring optimal performance, energy savings, and long-term dependability.

Model	Power		Pressure		Delivery		Air OutletSize	Weight kg
	kw	Hp	Bar	psig	cfm	m ³ /min		
F 10 B_8	7.5	10	8	116	35.3	1	½ "	250
F 10 B_10			10	145	33.5	0.9		
F 10 B_13			13	186	28.6	0.8		
F 15 B_18	11	15	8	116	49.4	1.4	¾ "	290
F 15 B_10			10	145	45.9	1.3		
F 15 B_13			13	186	38.8	1.1		
F 20 B_8	15	20	8	116	74.1	2.1	¾ "	310
F 20 B_10			10	145	70.6	2		
F 20 B_13			13	186	56.5	1.6		
F 25 B_8	18.5	25	8	116	88.2	2.5	¾ "	400
F 25 B_10			10	145	84.7	2.4		
F 25 B_13			13	186	70.6	2		

Model	Power		Pressure		Delivery		Air OutletSize	Weight kg
	kw	Hp	Bar	psig	cfm	m ³ /min		
F 30 B_8	22	30	8	116	105.9	3.5	1 "	500
F 30 B_10			10	145	102.4	3		
F 30 B_13			13	186	88.2	2.8		
F 40 B_18	30	40	8	116	141.2	4.5	1 ¼ "	700
F 40 B_10			10	145	137.7	4		
F 40 B_13			13	186	116.5	3.8		
F 50 B_8	37	50	8	116	176.5	5.5	1 ¼ "	900
F 50 B_10			10	145	173	5		
F 50 B_10			13	186	160	4.5		
F 60 B_8	45	60	8	116	211.8	7	1 ¼ "	970
F 60 B_10			10	145	28.3	6.5		
F 60 B_13			13	186	183.6	5.7		
F 75 B_8	55	75	8	116	282.5	9	1 ½ "	1250
F 75 B_10			10	145	271.9	8		
F 75 B_13			13	186	247.2	7		
F 100 B_8	75	100	8	116	353.1	11	1 ½ "	1400
F 100 B_10			10	145	342.2	10		
F 100 B_13			13	186	317	9		

Model	Power		Pressure		Delivery		Air Outlet Size	Weight (Kg)
	KW	HP	Bar	psig	cfm	m3/min		
F 30 D_8	22	30	8	116	116.5	3.3	1"	550
F30 D_10			10	145	113	3.2		
F 30 D_13			13	188	109.5	3.1		
F50 D_8	37	50	8	116	185.4	5.25	1 ¼ "	950
F50 D_10			10	145	180.8	5.12		
F50 D_13			13	188	176.5	5		
F60 D_8	45	60	8	116	226	6.4	1 ¼ "	1020
F60 D_10			10	145	218.9	6.2		
F60 D_13			13	186	211.8	6		
F 75 D_8	55	75	8	116	293.1	8.3	1 ½ "	1300
F75 D_10			10	145	275.4	7.8		
F75 D_13			13	188	264.8	7.5		

Model	Power		Pressure		Delivery		Air Outlet Size	Weight (Kg)
	KW	HP	Bar	psig	cfm	m3/min		
F 100 D_8	75	100	8	116	406.1	11.5	1 ½ "	1450
F100 D_10			10	145	388.4	11		
F 100 D_13			13	188	370.8	10.5		
F120 D_8	90	120	8	116	480.2	13.6	2 ½ "	2800
F120 D_10			10	145	444.9	12.6		
F120 D_13			13	188	388.4	11		
F150 D_8	110	150	8	116	628.6	17.8	2 ½ "	3000
F150 D_10			10	145	547.3	15.5		
F150 D_13			13	188	466.1	13.2		
F 175 D_8	132	175	8	116	734.5	20.8	2 ½ "	3100
F 175 D_10			10	145	607.4	17.2		
F175 D_13			13	188	526.1	14.9		
F215 D_8	160	215	8	116	879.3	24.9	2 ½ "	3300
F215 D_10			10	145	773.3	21.9		
F215 D_13			13	188	674.5	19.1		
F270 D_8	200	270	8	116	1589.1	45	4"	5700
F270 D_10			10	145	1483.2	42		
F270 D_13			13	188	1412.5	40		
F335 D_8	250	335	8	116	1907	54	4"	6200
F335 D_10			10	145	1836.3	52		
F335 D_13			13	188	1555.8	44		





Pressure Vessels:

- Fidar Faraz Fartak designs and manufactures high-quality pressure vessels. Each vessel is engineered and fabricated using traceable, certified steel sheets to ensure maximum safety, durability, and performance.
- All surfaces are sand-blasted prior to coating for optimal adhesion and corrosion protection. Internal surfaces are coated with epoxy paint and external surfaces with anti-corrosive oil-based coating, both applied with thickness tailored to the vessel's operating environment.
- Fidar employs the mix welding, back welding and Submerged Arc Welding (SAW) process for superior weld integrity. During production, **VT (Visual Test) and PT (Pressure Test) inspections are conducted, followed by a complete hydrostatic test upon completion. UT (Ultrasonic Test) and RT (Radiographic Test)** can also be performed upon customer request.



Model	Capacity (Liter)	Working	Thickness (mm)	Connection (inch) Both Sides)	Dimensions (mm)			Manhole (Inch)
		Pressure (bar)			D	H1	H2	
TK 500	500	8	6	¾"	600	1680	2100	N/A
		10	6					
		13	8					
TK 1000	1000	8	6	1"	800	1680	2100	6
		10	8					
		13	8					
TK 2000	2000	8	6	2"	1200	1700	2100	16
		10	8					
		13	8					
TK 3000	3000	8	8	2"	1400	1700	2100	16
		10	8					
		13	10					
TK 4000	4000	8	8	3"	1250	3200	3850	16
		10	8					
		13	10					
TK 5000	5000	8	8	4"	1400	3200	3850	16
		10	10					
		13	12					
TK 8000	8000	8	10	6"	1800	3200	4000	16
		10	10					
		13	12					
TK 10000	10000	8	12	6"	1800	4200	4700	18
		10	12					
		13	12					

Model	Capacity (Liter)	Working Pressure (bar)	Thickness (mm)	Dimensions (mm)			Manhole (Inch)
				D	H1	H2	
TKH 500	500	40	15	750	1400	1700	N/A
TKH 1000	1000	40	15	750	2200	2450	N/A

Pressure boosters up to 40 bar:

Pressure booster units are designed to increase inlet pressure from 7–13 bar up to 40 bar, providing reliable and efficient performance across a wide range of industrial applications.

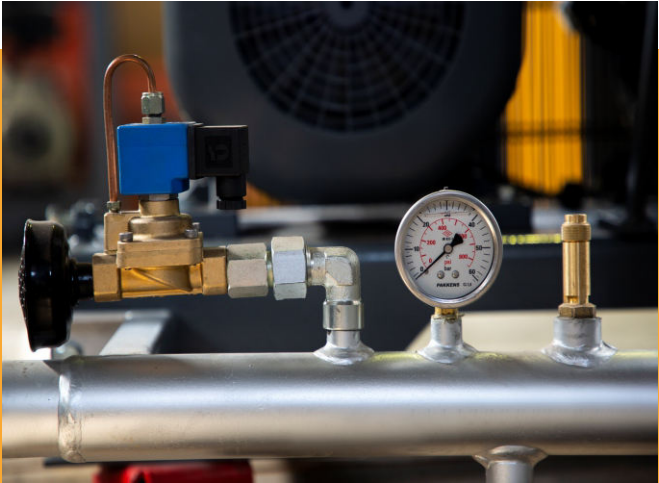
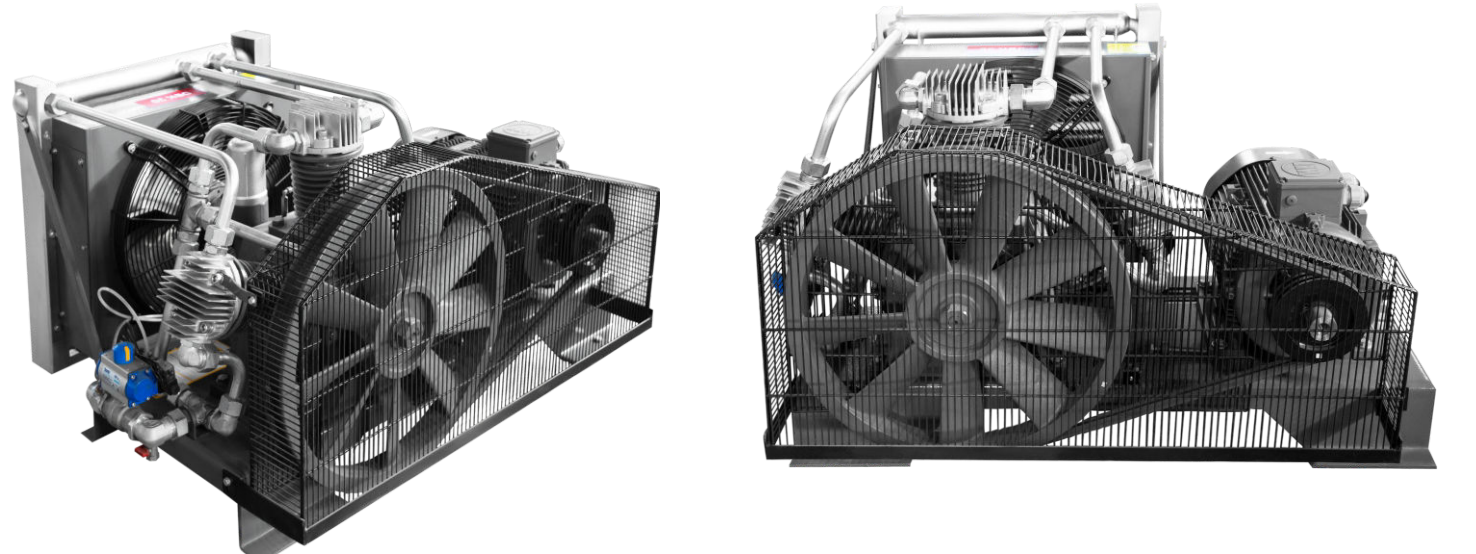
Specifications:

- Belt and pulley drive system for smooth and reliable operation Specially designed cast iron pulleys for durability and optimal power transfer.
- Easy belt tension adjustment system for simplified maintenance Splash lubrication system (finger type) ensuring proper lubrication and long service life
- High-strength cast iron crankshaft for superior mechanical stability
- Automatic condensate drain system for efficient moisture removal
- Long-life bearings designed for continuous industrial operation
- Air intake filter with silencer for reduced noise and clean air suction
- Oil level indicator for easy visual monitoring of lubrication status

•Safety Systems:

- Inlet air control system for optimized airflow management
- High-pressure cut-off system to ensure operational safety
- Non-return valve between booster and receiver tank for cylinder head protection
- Protective perforated guard for pulleys and belts to ensure operator safety
- Manual drain valve for easy condensate discharge
- High-pressure gauge (manometer) for precise pressure monitoring
- Safety relief valve to prevent over pressure conditions

Model	Pressure				Capacity (Intake)						Motor Power (KW/HP)	Connection Size (Inch)	Dimensions (mm)			Weight (kg)
	Minimum		Maximum		7 bar (Inlet)		10 bar (Inlet)		13 bar (Inlet)				Length	Width	Height	
	bar	psi	bar	psi	m3/min	cfm	m3/min	cfm	m3/min	cfm						
FBD 10	15	218	40	518	2.10	74	2.89	102	3.67	130	7.5/10	1	1286	825	753	265
FBD 15	15	218	40	518	2.45	87	3.37	119	4.29	152	11/15	1	1286	825	753	285
FBD 20	15	218	40	518	3.71	131	5.10	180	6.49	229	15/20	1	1357	820	758	300
FBD 25	15	218	40	518	4.90	173	6.73	238	8.57	303	18.5/25	1 ¼	1423	874	736	345
FBD 30	15	218	40	518	5.56	196	7.65	270	9.74	344	22/30	1 ¼	1423	881	736	390
FBD 40	15	218	40	518	6.68	236	9.18	324	11.68	413	30/40	1 ¼	1423	972	736	426



Desiccant Dryers:

Desiccant air dryers are designed to remove the moisture generated during air compression by using the adsorption process. The adsorbent materials used in these systems are selected based on the required dew point, which can be designed **from $-10\text{ }^{\circ}\text{C}$ down to $-70\text{ }^{\circ}\text{C}$** depending on the application. These dryers are engineered to deliver ultra-dry and clean compressed air, making them ideal for industries where air purity is critical, such as pharmaceutical, food, chemical, and electronics sectors.

Types Of desiccant Dryers:

Desiccant air dryers are generally classified into two main categories: Heatless and Heated types. Each type offers specific features, advantages, and limitations, and the selection depends on operating conditions, budget, and air quality requirements

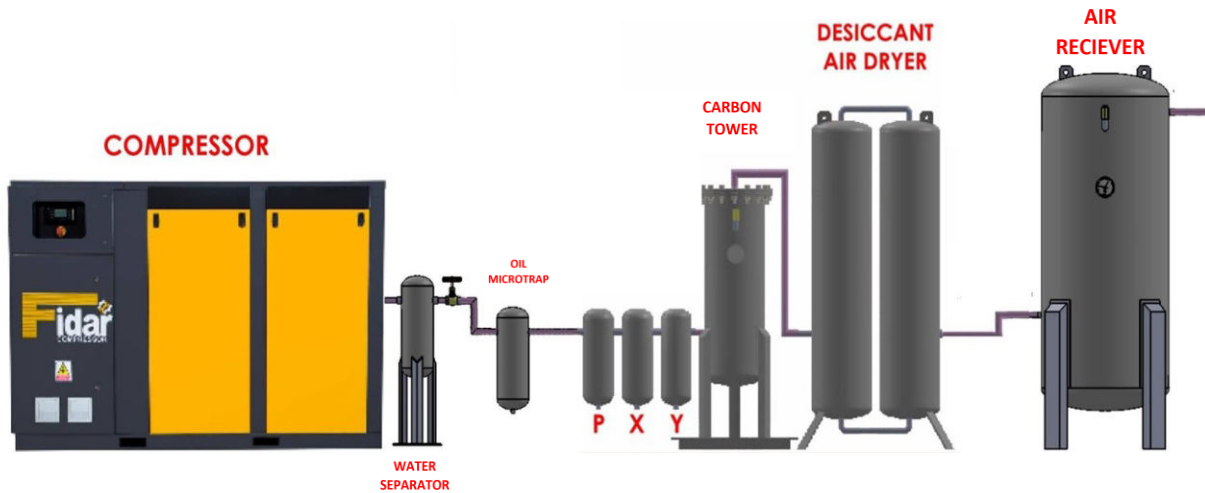
- **Heatless Desiccant Dryers** use a portion of the dried compressed air to regenerate the desiccant material. They feature simple construction, low initial cost, and minimal power consumption, making them a cost-effective choice for small to medium compressed air systems.
- **Heated Desiccant Dryers** use heated air for desiccant regeneration, resulting in higher efficiency and reduced purge air consumption. The regeneration process is performed using warm airflow provided by an electric heater, ensuring reliable operation for large-scale or critical applications.

Fidar Faraz Fartak dryers capacity and dew point:

- Nominal flow rate: from **$1\text{ Nm}^3/\text{min}$ up to $100\text{ Nm}^3/\text{min}$**
- Maximum inlet air temperature: 65°C
- Achievable outlet dew point: down to -70°C , in compliance with ISO 8573 – Class 1.1.1
- Equipped with an activated carbon tower for the removal of oil aerosols and vapors down to 0.003 micron .
- Precise capacity calculation performed based on FAD (Free Air Delivery), operating pressure, temperature, and duty cycle

Carbon Tower:

All Fidar Faraz Fartak desiccant air dryer models are equipped with an additional Activated Carbon Tower stage. This unit plays a crucial role in pre-filtration, removing oil vapors, unpleasant odors, and Volatile Organic Compounds (VOCs) from the compressed air before it enters the dryer. By ensuring the elimination of these contaminants, the activated carbon tower protects the desiccant material from degradation and helps maintain the highest air purity and dew point performance of the system.

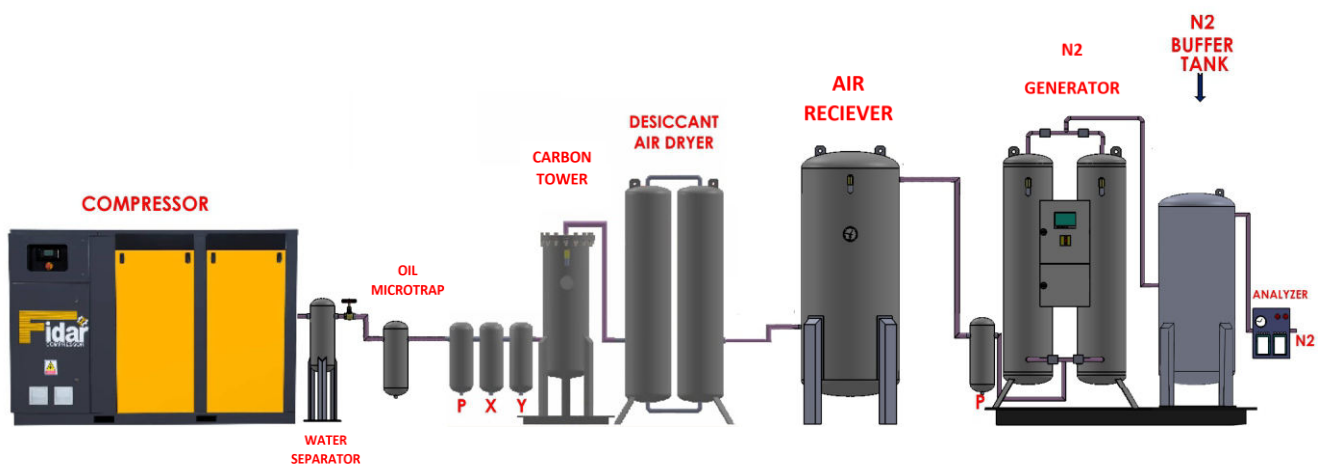


What is Nitrogen ?

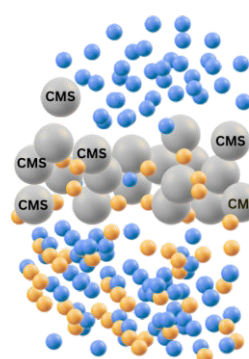
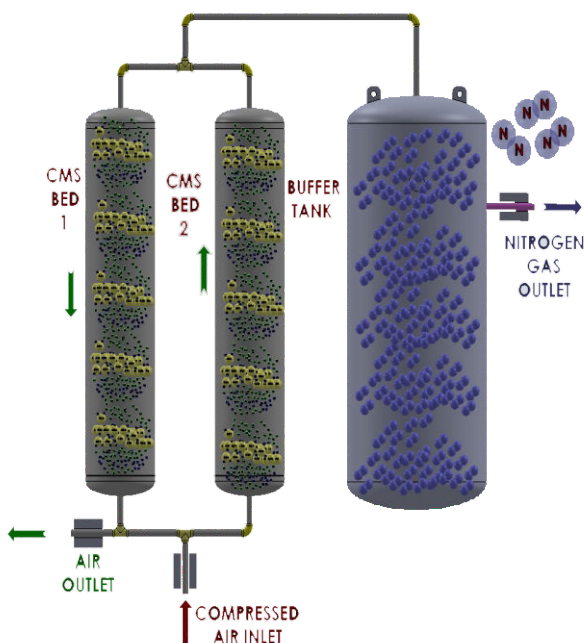
- Nitrogen belongs to Group 15 of the periodic table and is represented by the chemical symbol N_2
- Nitrogen constitutes approximately 78% of the Earth's atmosphere
- It is found in all living cells
- It forms important compounds such as ammonia, amino acids, nitric acid, and cyanides
- It is a colorless, odorless, tasteless, and non-flammable gas

From air to Nitrogen !!!

The nitrogen generation process in this system involves compressing ambient air, drying and moisture absorption, multi-stage purification, oxygen separation in PSA towers, and final storage in a buffer tank. This process operates fully automatically and continuously, ensuring the delivery of nitrogen gas with stable purity and pressure for industrial applications. The technology comprises a set of devices and auxiliary equipment, which are utilized as follows:



The PSA system consists of a set of adsorption towers containing molecular sieves, an automatic control panel, a nitrogen analyzer, a buffer tank, and multi-stage filters. These components operate in a coordinated and controlled manner, ensuring a continuous and stable production of high-purity nitrogen.



Pre size 3.1 angstrom

O_2 Molecule 2.9 Å

N_2 Molecule 3.1 Å



Inlet dew point		Ambient temp	Relative Humidity	Inlet Air Quality	Inlet Compressed air flow
Refrigerant Dryer	Desiccant Dryer	25°C	≤ 80%	1.4.1	Based on design capacity, installed location and purity needed
+3°C for purities lower than 99.5%	-40° C for purities higher than 99.5%				

PSA Packages Capacity :

The nitrogen generation packages manufactured by Fidar Faraz Fartak are designed and produced with capacities ranging from **1 m³/hr to 1120 m³/hr** and purities from **95% to 99.999%**. In addition, custom designs can be provided to meet the specific requirements of various industrial projects.

