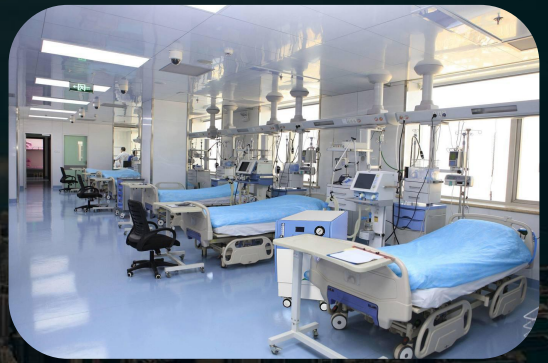
Pioway Medical

Oxygen Generating System

Solution for hospital up to 100 beds

II.1 Application

For an anaesthesia machine in an operating room

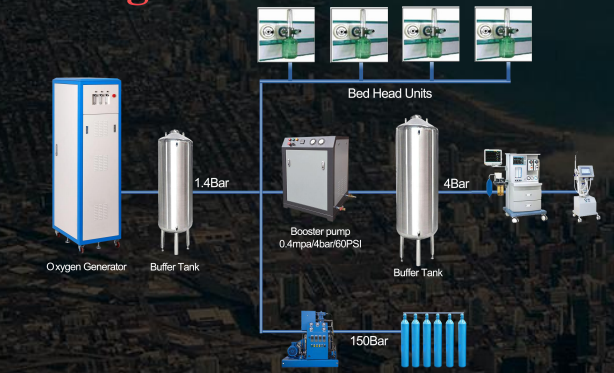


For a ventilator in an Intensive Care Unit (ICU)

For oxygen generating system and oxygen cylinder filling system

For clinics

II.2 Advantage



VS

1. Especally designed for clinics and small hospitals **up to100 beds**.
2. **Small size** and occupy small area
3. **Easy installation**.
4. The design is made for **24/7 operation**.It is a strong system.
5. Convenient maintenance and **low maintenance cost.**
6. Equipped with **automatic start&stop** function.Safer and more reliable design. Humanization design. More longer equipment life.
7. Total **oil free system**, safer and healthier.
8. **Easy operation**.
9. Economic system to meet small hospitals **low investment** requirement

III. Solution

How to calculate what kind of system a hospital needs?

All solutions depending on we know about the hospital requirement very well.
For example, how many patient beds? if there is ventilator or anesthesia machine?
After we learn about these information, we can provide a solution with below formula.

- An ordinary hospital bed requires 3L of oxygen with pressure within 1 bar/0.1Mpa, and 60% utilization.
- If it is an ICU bed, each bed needs 5L with pressure within 1 bar/0.1Mpa, 100% utilization
- One anesthesia machine with 20L oxygen under pressure 4bar /0.4Mpa;
- One ventilator with 10L oxygen under pressure 4bar /0.4Mpa.
- For cylinder filling. we count it as 24 hrs working continuously and the cylinder tank 40L(150bar).
  For example, an JAY-60 can fufill 12 cyliners in 24 hrs.
  We count it as 40L *150 bar / 60L =100min. It takes approximately 2 hrs to fufill 1 tank.

For general patient ward only

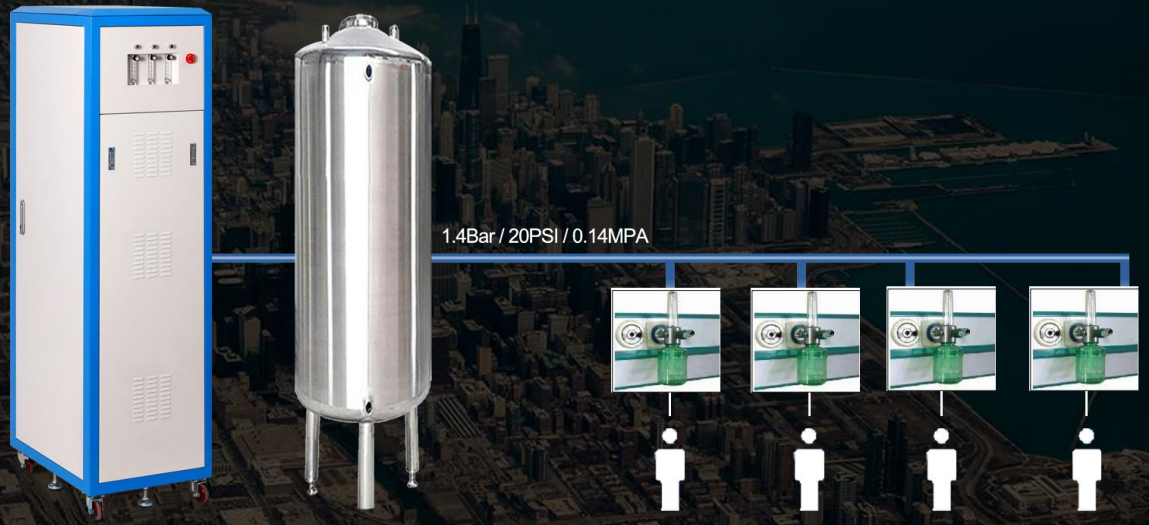
Hospital's requirement

Application	Quantity
For patient beds	20pcs

Solution

Application	The flow we offered	The system we offered
For patient beds 20 pcs	40LPM	JAY-40 (2.4Nm3/h)oxygen concentrator : 1 pc 500L Buffer tank: 1 pc

Sketch


1.4Bar / 20PSI / 0.14MPA
Oxygen Generator
Buffer Tank
Bed Head Units

For ICU and operating room

Hospital's requirement

Application	Quantity
For ventilator	2pcs

Solution

Application	The flow we offered	The system we offered
For ventilator 2 pcs	20LPM	20LPM (1.2Nm3/h)oxygen concentrator: 1 pc 500L buffer tank: 1 pc

Sketch

Oxygen Generator Buffer Tank Anaesthesia Machine / Ventilator

For general patient ward, ICU, operating room

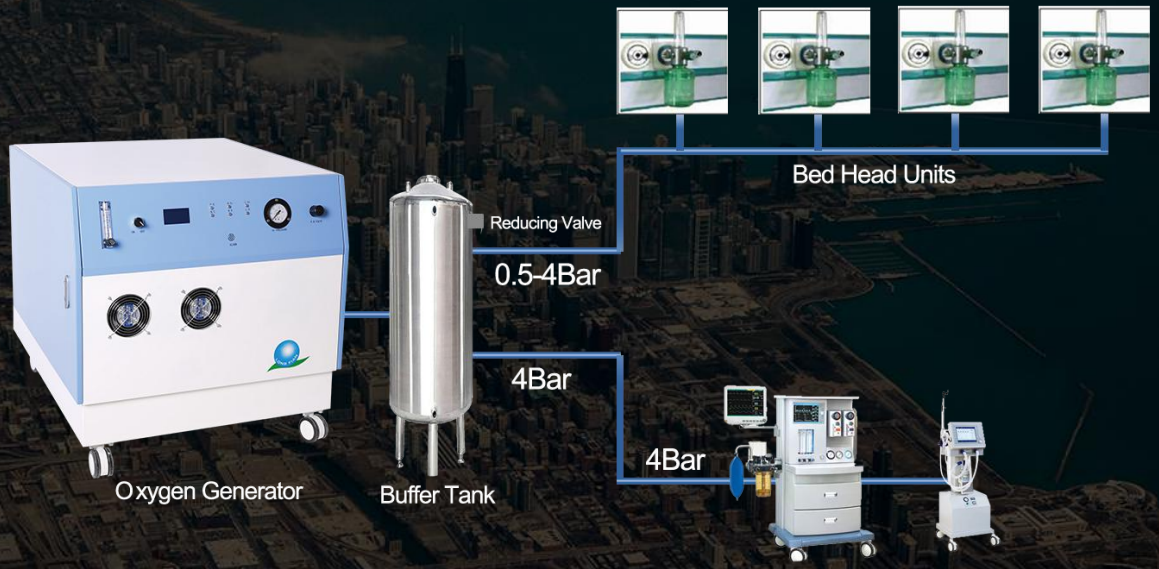
Customer's requirement

Application	Quantity
For patient beds	5pcs
For ventilator	1pc

Solution

Application	The flow we offered	The system we offered
For patient beds 5pcs	10L	JAY-20 (1.2Nm3/h) oxygen concentrator: 1 pc 500L buffer tank: 1 pc
For ventilator 1pc	10L	

Sketch


Bed Head Units
Reducing Valve
0.5-4Bar
4Bar
4Bar
Oxygen Generator
Buffer Tank

For general patient ward, ICU, Operating room

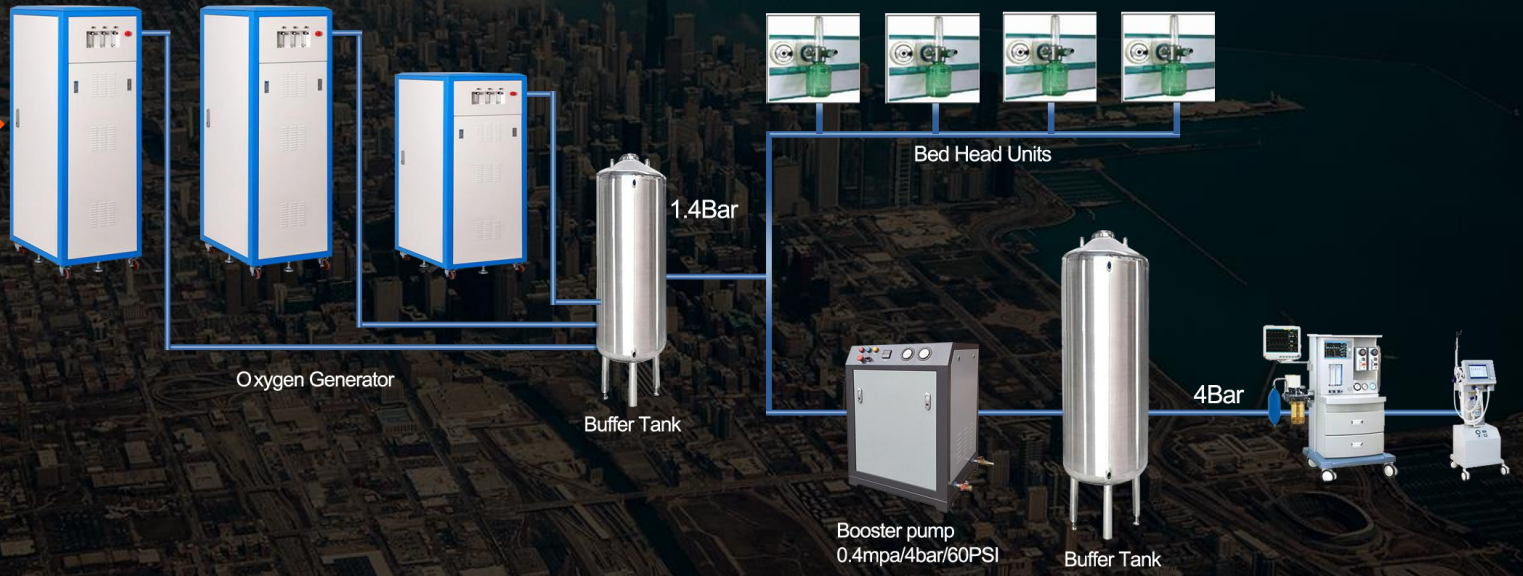
Hospital's requirement

Application	Quantity
For patient beds	50pcs
For ventilator	2pcs
For anaesthesia machine	2pcs

Solution

Application	The flow we offered	The system we offered
For patient beds 50pcs	100L	JAY-60(3.6Nm3/h)oxygen concentrator: 2 pcs JAY-40 (2.4Nm3/h) oxygen concentrators: 1 pc 1000L buffer tank: 1 pc JAY-3.6/1.4-4 (3.6 Nm3/h) booster pump:1pc 2000L storage tank: 1 pc
For ventilator 2pcs	20L	
For anaesthesia machine 2 pcs	40L	

Sketch


Oxygen Generator
Buffer Tank
1.4Bar
Bed Head Units
Booster pump
0.4mpa/4bar/60PSI
Buffer Tank
4Bar

For oxygen cylinder filling station

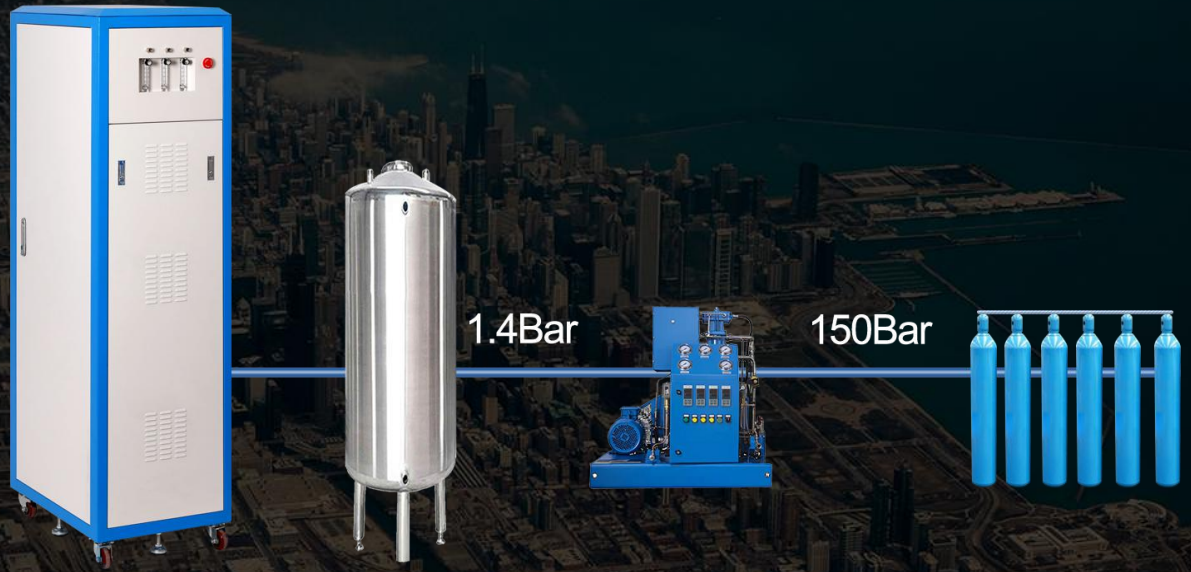
Customer's requirement

Application	Quantity
For oxygen cylinders(40L)	12pcs

Solution

Application	The flow we offered	The system we offered
For oxygen cylinders 12 pcs	60L	JAY-60 (3.6Nm3/h)1.4bar oxygen concentrator:1 pc 500L buffer tank: 1 pc JAY-3.6/1.4-150:(3.6Nm3/h) high pressure oxygen compressor:1pc

Sketch



Oxygen Generator Buffer Tank High Pressure Oxygen Compressor

For general patient ward and oxygen cylinder filling station

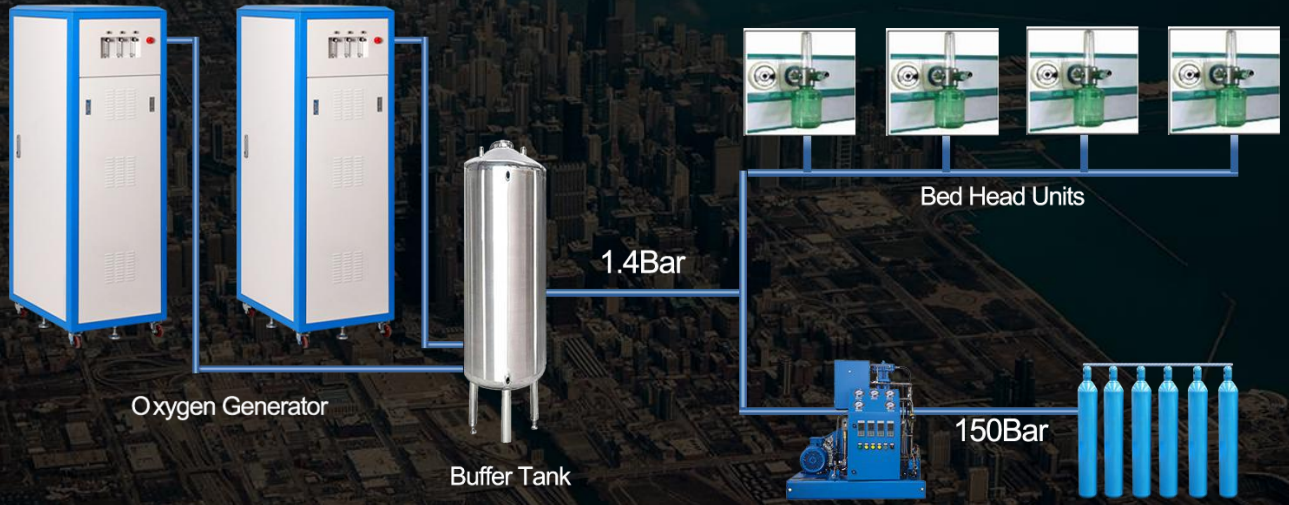
Customer's requirement

Application	Quantity
For patient beds	40pcs
For oxygen cylinders	8pcs

Solution

Application	The flow we offered	The system we offered
For patient beds 40pcs	80L	60L(3.6Nm3/h) 1.4bar oxygen concentrator: 2 pcs JAY-2.4/1.4-150 (2.4 Nm3/h)high pressure oxygen compressor:1pc 1000L buffer tank: 1 pc
For oxygen cylinders 8pcs	40L	

Sketch



For general patient ward, ICU, operating room and oxygen cylinder station

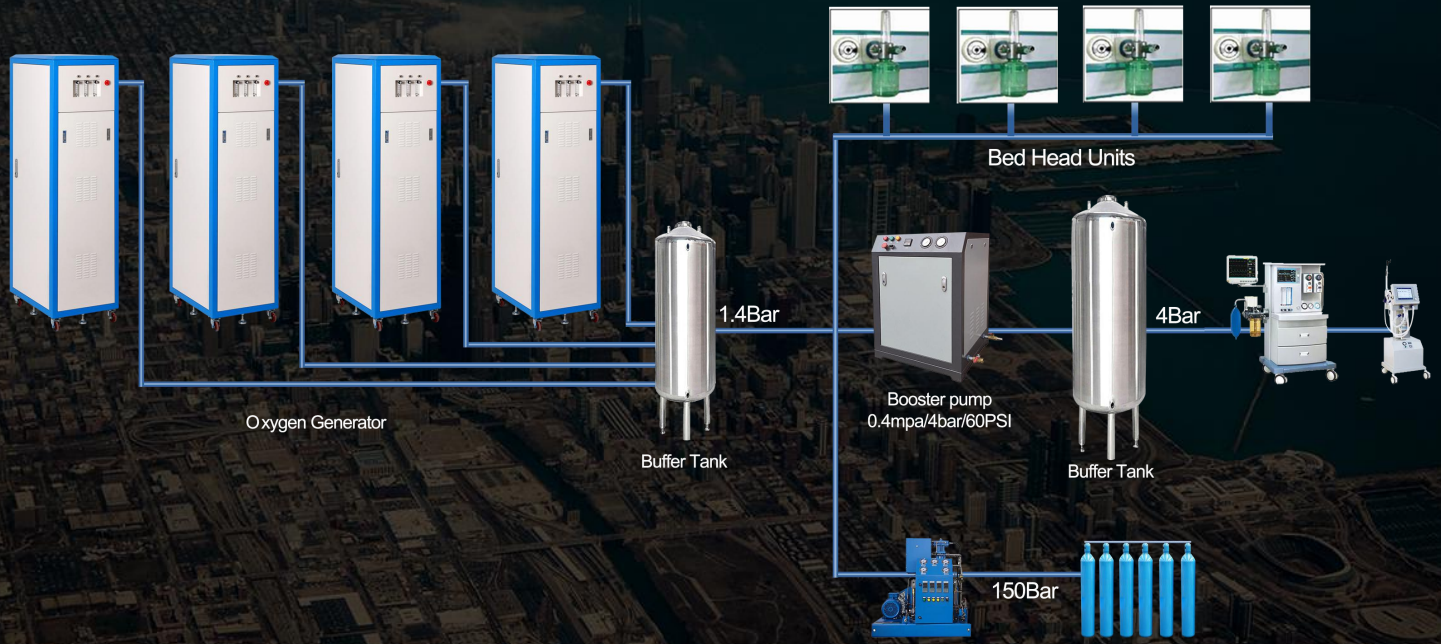
Customer's requirement

Application	Quantity
For patient beds	40pcs
For ventilator	2 units
For anaesthesia machine	2 units
For oxygen cylinders	20pcs

Solution

Application	The flow we offered	The system we offered
For patient beds 40pcs	80L	JAY-60(3.6Nm3/h) 1.4bar oxygen concentrator: 4 pcs 2000L buffer tank: 1pc JAY-6.0/1.4-150 (14.4Nm3/h) high pressure oxygen compressor:1pc JAY-3.6/1.4-3.6(3.6Nm3/h) booster pump:1pc 2000L buffer tank: 1pc
For ventilator 2units	20L	
For anaesthesia machine 2units	40L	
For oxygen cylinders 20pcs	100L	

Sketch


Bed Head Units
1.4Bar
4Bar
Oxygen Generator
Buffer Tank
Booster pump
0.4mpa/4bar/60PSI
Buffer Tank
150Bar

Summary

- **Beds*100:** For patient beds up to 100 beds
- Cylinder*50: For filling 50 pieces 40L oxygen cylinders per 24 hours.
- Customized solution: For other more complicated application,we can do customized solution according to hosptals' actual requirement. And to offer right solution we need to know below information

1).How many general patient beds?
2).How many beds in ICU&OT?
3).How many anaesthesia machine?
4).How many ventilator?
5).How many cylinder(40L) needs to fill one day?
6)Floor plan of hospital
7)Connector standard

IV. About Installation

1. Convenient to install by vedio instruction
2. Container -type free installation