

BiO₂Flow

High Flow Oxygen
Therapy Device



biosys

Arçelik

TECHNOLOGY THAT MAKES DIFFERENCE

BiO₂Flow

HFO Device

BIOFLOW

biosys





INNOVATIVE MEDICAL TECHNOLOGIES

Advanced Ventilation and Respiratory Equipments

Since 2012, Biosys has been producing innovative medical technologies together with expert engineers and doctors with high R&D knowledge and field experience, and has been creating new generation solutions by determining the needs of the industry. Biosys is constantly working to improve healthcare services worldwide and to ensure that more people can benefit from these services.

Biosys and Arçelik, which had made a global impact with the Intensive Care Type Mechanical Ventilation Device Biyovent and realized a vital solution for patients with respiratory difficulties, now continue to provide services to the world with BiO₂Flow, which provides high flow oxygen therapy. BiO₂Flow, developed after a detailed preliminary research and design process based on field experience of doctors and healthcare staff, is a revolution for HFO devices.

As in design of intensive care ventilator; with the cooperation of Arçelik and Biosys R&D engineers with high knowledge, equipment and experience, the design and quality of the BiO₂Flow device come to the forefront. BiO₂Flow is produced in Arçelik facilities with advanced production technologies.

ADVANCED TECHNOLOGY

OPTIMAL LEVEL OF PREVENTIVE **CARE AND TREATMENT**

BiO₂Flow, which breaks new ground in HFO therapy with its innovative features, shows its difference with its ergonomic design and easy usage. Thanks to its structure that emphasizes functionality; it can be used not only in hospitals but also in home care situations without the need for a healthcare professional.

High flow oxygen therapy provided by BiO₂Flow reduces the probability of patients being intubated. It also allows the patient to be treated without the need for intensive care. Thanks to the product developed after long R&D processes and by analyzing the needs of the health sector, the desired level of oxygen therapy can be provided to the patient.



HIGH FLOW, EFFECTIVE THERAPY

Designed for healthcare professionals, optimized for patients

BiO₂Flow is designed to adapt to patients with different therapy needs. It supports this unique flexibility with different modes and precise control features. It provides an advantage for the patient to release secretion easily.

The hardware and software features of BiO₂Flow, which can be easily operated with a single button, allow the device to be used in patients with respiratory failure, post cardiac surgery, heart failure, bronchoscopy, post extubation. It can also be used in other cases where high FiO₂ is required.



Integrated Nebulizer



Precise FiO₂ adjustment



Integrated battery



Integrated humidifier



Flow rate up to 100 lpm



One-button push and operate



ULTIMATE SECURITY WITH EMERGENCY PRECAUTIONS



HIGH-LEVEL TREATMENT WITH HIGH LEVEL SAFETY

Bio₂Flow has been developed to detect all situations that may occur in advance and give warning thanks to the sensors and valves it contains. Bio₂Flow, the safest high flow oxygen

therapy device in its class, passes all tests successfully and offers high quality and safety simultaneously.

- System that prevents leakage even in very sudden pressure changes
- Double-deck insulated heater
- Fan providing ventilation
- Sensors that instantly detect all malfunctions and an advanced alarm system that gives warning
- V₀ external design with non-flammability class

ONE DEVICE TWO FUNCTIONS

Advanced treatment with integrated nebulizer

Most external nebulizers have no practical use as they are not portable, and it may not be possible to initiate therapy whenever needed. With BiO₂Flow, this problem is overcome.

The internal nebulizer of BiO₂Flow allows medication while the patient is receiving high flow oxygen therapy. Both oxygenation and medication of the patient are performed by just breathing. In this way, there is no interruption or reduction in oxygen treatment.



HIGH PATIENT COMFORT

Prevents Mucosal Drying with its moisturizing feature

High flow oxygen can cause dryness in the nose and general respiratory passage after a while. New generation internal humidifier of BiO₂Flow imitates the natural temperature and moisture balance in the lungs, normalizes the oxygen supply to the patient's tissues and organs and protects the cells in the patient's respiratory system.

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TIMELY RESPONSE

FiO₂ alarm system

BiO₂Flow, allows to predetermine the maximum and minimum FiO₂ rate the patient will receive. Thus, the patient's saturation can be kept at an optimal level. The warning system is activated when the minimum value is exceeded or the maximum value is exceeded and makes it easier to control the therapy process.

The patient's condition is constantly under control with the alarm system, which is activated in cases such as electrical power cut, unexpected changes in pressure levels, battery failure, disconnection of the patient or failure to calibrate.





EVERY SECOND COUNTS

Integrated Battery

The most important point during high flow oxygen therapy is that some pressure should build up in the respiratory tract. Thanks to this pressure, respiratory tract is kept open in patients with respiratory failure. The therapy should not be interrupted in order to maintain this pressure value, which provides great advantages.

BiO₂Flow ensures that the therapy of the patient is not interrupted thanks to its integrated battery. The desired pressure and oxygen flow is maintained.





INNOVATIVE TOUCH TO HEALTH





Both ergonomic and functional

- ▶ Modern and compact design
- ▶ Ease of operation with one button
- ▶ Special carrier foot providing transportation advantage
- ▶ Oxygen tank that can be mounted to the carrier foot
- ▶ A perfect combination of advanced engineering and contemporary design

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TECHNICAL FEATURES

General Features

Flow: 2-100 lt/mins (5 lpm resolution)

FiO₂: 21%-100% (%1 resolution)

Temperature: 31-37°C Degree

Integrated Nebulizer

Integrated Humidifier

Internal Battery

Universal Patient Circuit Connection

Carrier Foot for Oxygen Cylinder

Pressure Welding

Ventilation: Internal Blower

Oxygen: 2.5-7 Bar (pressure welding)

Safety

Flow cut-off feature against clogging/blockage and bending situations

Flow cut-off at excessive pressure rise

Oxygen cut-off at possible failure

3 temperature sensors

Internal thermostat

Double-deck insulated heater

System preventing leakage

Pressure sensors

Fan providing ventilation

Advanced alarm system

Exterior design V_0 with non-flammability class



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