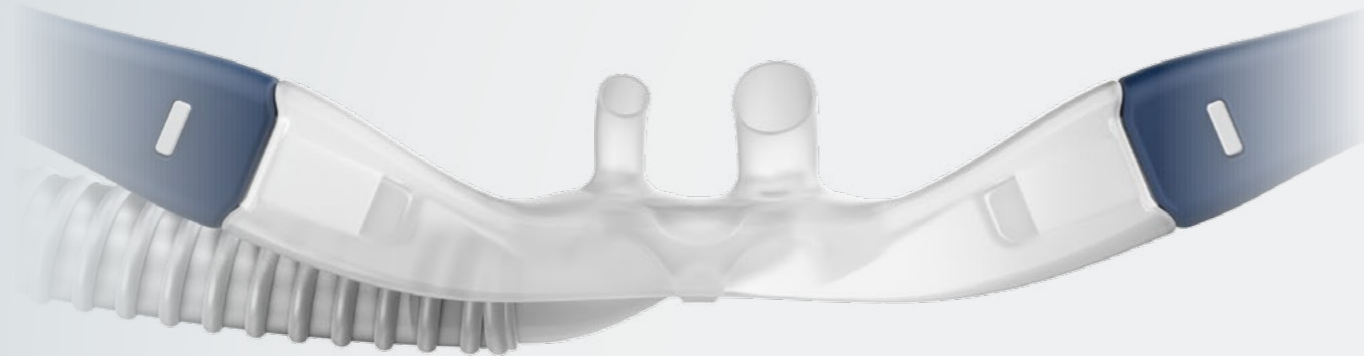


ASYMMETRIC INTERFACE HIGH FLOW THERAPY - ENHANCED

Pressure¹ / Dead Space Clearance¹ / Comfort²



Asymmetric interface.

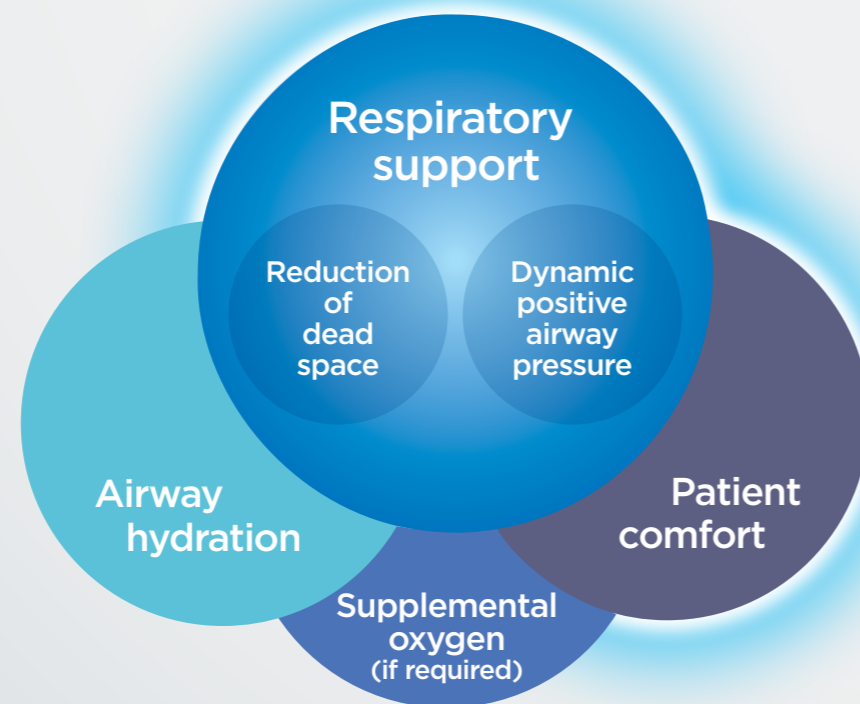


High flow therapy – enhanced.

Decades of experience in nasal high flow has produced an interface designed to deliver and **enhance** therapy.

The unique asymmetric design improves **dead space clearance** and **pressure** – delivering improved respiratory support without compromise.

Prong design	Dead space clearance	Pressure
Symmetric	↓	↑
Symmetric	↑	↓
Asymmetric	↑	↑



Pressure, dead space clearance, comfort.

Dynamic positive airway pressure

Optiflow Duet increases pressure¹

Asymmetric design provides greater occlusion without compromise on dead space clearance.¹

Inherent gap maintains an open system.

Asymmetric: ~30% more occlusion

Symmetric

PEEP in an upper airway model*

Flow Rate (L/min)	Asymmetric PEEP (cmH ₂ O)	Symmetric PEEP (cmH ₂ O)
20	~1.2	~1.0
40	~3.2	~1.8
60	~6.5	~3.8

Reduction of dead space

Optiflow Duet increases dead space clearance¹

Asymmetric design creates unidirectional flow which improves efficiency of dead space clearance without compromise on pressure.¹

Symmetric NHF **Asymmetric NHF**

Humidified fresh gas CO₂ rich gas

Dead space clearance in an upper airway model*

Flow Rate (L/min)	Asymmetric Clearance (%)	Symmetric Clearance (%)
20	~52	~20
40	~80	~40
60	~85	~50

Patient comfort

Optiflow Duet reduces noise³

Asymmetric design offers a quieter³ interface for patient comfort and compliance.

72% of users reported that the Optiflow Duet was quieter during therapy.^{#4}

*Adapted from Tatkov S, et al. 2023. # Compared to their usual interface.



ASYMMETRIC INTERFACE HIGH FLOW THERAPY - ENHANCED

Pressure¹ / Dead Space Clearance¹ / Comfort²



Find out more at
www.fphcare.com

1. Tatkov S, Rees M, Gulley A, et al. Asymmetrical nasal high flow ventilation improves clearance of CO₂ from the anatomical dead space and increases positive airway pressure. J Appl Physiol. 2023; 134(2):365-377.
2. Boscolo A, Pettenuzzo T, Zaranonello F, et al. Asymmetrical high-flow nasal cannula performs similarly to standard interface in patients with acute hypoxemic post-extubation respiratory failure: a pilot study. BMC Pulm Med. 2024; 24:21. Study conducted on patients with post-extubation hypoxemic acute respiratory failure. 3. Rees M et al. TR-37238 (internal F&P benchtop testing) 2021. Compared to symmetric interface, Optiflow+ Duet was lower in average dBA at 30, 40 and 50 L/min, p<0.05. 4. Gerez L, et al. TR-40899 (internal F&P preference trial) 2023. Cross-sectional survey with 18 participants at 15 sites in 3 countries.