



**TRACOE COMFORT
PRODUCT LINE**

TRACOE[®]
comfort

TRACOE *comfort* product line

In 1958 engineer Rudolf Köhler, the grandfather of one of our current owners, Stephan Köhler, invented a new tracheostomy tube. The innovation consists of a flexible and transparent plastic material (PVC). Before this new invention, only inflexible tubes made of metal were available. Rudolf Köhler succeeded in securely gluing the cannula to the neck plate, which is only 2 mm thick. This is a breakthrough for the flexible, thermoplastic tracheal tube, since the application has become considerably more comfortable for patients.

Even today, 40 years after the founding of TRACOE medical, the first PVC based tube still is an important part of the company's product range: TRACOE *comfort*, the long-term tube for the homecare market.


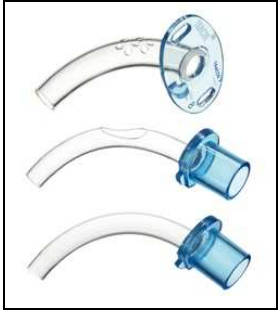






The tube offers many advantages: The unbreakable material is flexible and its shape can be altered. The perfect fit and surface properties significantly reduce the risk of pressure marks, bleedings, and inflammations. Tracheal secretion caused by the foreign object occurs considerably less in comparison with metal tubes. Moreover, the transparent material is cosmetically inconspicuous and easy to clean. PVC is permeable for X-ray and cobalt therapy, so patients can continue to wear their tubes also during X-ray or radiotherapy. Even during magnetic resonance imaging (MRI) the tube can remain inside the patient.

Still to this day, the *comfort* tubes are produced by hand in order to guarantee the highest quality and comfort. All tube types are available in different designs and sizes and can be custom-made according to the patients' requirements to ensure the most comfortable wearing experience.

Features	Benefits
<ul style="list-style-type: none"> • hand-crafted product 	<ul style="list-style-type: none"> • Designed for long term use, offering superior comfort to the patient
<ul style="list-style-type: none"> • Very flexible, medical grade PVC • DEHP-free (standard cannulas) 	<ul style="list-style-type: none"> • The highly flexible material ensures an easy adaption to individual tracheas at body temperature and minimises the risk of sores • The tube weighs only 1/3 of the weight of a metal tube (the stoma does not extend or change its position) • Less allergies due to the tissue-friendly material • Not room / outside temperature sensitive
<ul style="list-style-type: none"> • Long-term use / durability (due to high-grade material and manufacturing by hand) 	<ul style="list-style-type: none"> • Even after long-term use and maintenance <ul style="list-style-type: none"> ○ Functionality remains well-preserved ○ Cannula keeps in visually good condition • Easy to clean due to transparency
<ul style="list-style-type: none"> • Cannula design 	<ul style="list-style-type: none"> • conical shaped <ul style="list-style-type: none"> • Tube diameter behind the neck flange is larger than the outer diameter at the tube end: <ul style="list-style-type: none"> ○ Better sealing of the stoma ○ Less leakage of air ○ Less stridor ○ Less wheezing • easy to insert - no obturator required • end of cannula has a smaller OD and therefore less contact with tracheal mucosa > less irritation • smoothly rounded ends
<ul style="list-style-type: none"> • Very good phonation 	<ul style="list-style-type: none"> • The hand assembled manufacturing process guarantees a good fitting of the inner in the outer cannula which minimises unwanted noise
<ul style="list-style-type: none"> • Lubricant for all inner cannulas Liquid paraffin REF 902 	<ul style="list-style-type: none"> • Assures best possible fit and good quality of speech. • Necessary to smoothly insert and remove the inner cannulas.

Features	Benefits
<ul style="list-style-type: none"> Sizes 	<ul style="list-style-type: none"> <i>comfort</i> standard length: sizes 03 up to 14 <i>comfort</i> extra-long: sizes 05 up to 14 <p>Please note: sizes 03 and 04 as well as 13 and 14 are manufactured on demand only.</p>
<ul style="list-style-type: none"> Please note: No size conformity because of conical shape 	<ul style="list-style-type: none"> one to two tube sizes bigger are recommended (e.g. change <i>twist</i> size 08 to <i>comfort</i> size 09 or 10 – please refer to dimension chart in Full Line Catalogue)
<ul style="list-style-type: none"> Transparent material 	<ul style="list-style-type: none"> inconspicuous appearance Easy to clean
<ul style="list-style-type: none"> Metal-free 	<ul style="list-style-type: none"> Outer cannula can stay in place during X-rays or cobalt treatment Less allergies due to the tissue-friendly material
<ul style="list-style-type: none"> Standard and extra-long models available 	<ul style="list-style-type: none"> Alternating between two different lengths helps to avoid mucosa irritations Pressure dispensation occurs on different levels if indicated To bridge an already existing stenosis
<ul style="list-style-type: none"> Customisable to required length 	<ul style="list-style-type: none"> Custom-made tube length to meet individual user requirements
<ul style="list-style-type: none"> Customisable fenestration 	<ul style="list-style-type: none"> Custom-made fenestration pattern (size and location) for individual user requirements
<ul style="list-style-type: none"> Available inner cannulas 	<ul style="list-style-type: none"> Inner cannulas with two different types of speaking valves Inner cannula with 15 mm connector Inner cannula with low profile

Features	Benefits
<ul style="list-style-type: none"> Choice of two different speaking valves 	<ul style="list-style-type: none"> Type A with detachable silver flap valve connected to the inner cannula and secured by a small chain. Type B with swivel flap valve attached to the inner cannula which can be opened by sliding to the side. (most popular type) <p>Also available as product variants with oxygen supply port.</p>
<ul style="list-style-type: none"> REF 115 / REF 215 With fenestrated outer cannula, one fenestrated inner cannula and one solid inner cannula with 15 mm connector 	<ul style="list-style-type: none"> For weak patients who are not able to use a flap-valve speaking cannula This cannula can be used with the attachable phon assist I speaking valve (REF 650-T or REF 650-TO) <ul style="list-style-type: none"> ➤ easier to operate
<ul style="list-style-type: none"> Multiple fenestration 	<ul style="list-style-type: none"> Fenestration holes allow for additional airflow making it easier to speak Minimises tissue ingrowth Prevents risk of penetration by suctioning catheter and injury of the posterior tracheal wall
<ul style="list-style-type: none"> Inner cannula with 15 mm connector 	<ul style="list-style-type: none"> To attach artificial noses (HMEs), e.g. the TRACOE humid assist I

Complementary products	
TRACOE liquid paraffin - REF 902	 <p style="text-align: right;">REF 902</p>
TRACOE humid assists REF 640-CT, REF 641, REF 642	 <p style="text-align: right;">REF 640-CT</p> <p style="text-align: right;">REF 641</p> <p style="text-align: right;">REF 642</p>
TRACOE occlusion cap - REF 516	 <p style="text-align: right;">REF 516</p>
TRACOE care product group	<ul style="list-style-type: none"> • neck straps • compresses • cleaning kits, • bibs • scarfs • etc.

TRACOE support material

Comparison chart: TRACOE *comfort* vs. silver/metal tubes

Size conversion chart: Silver / TRACOE *comfort*

TRACOE *comfort* tubes COMPARED to metal/silver tubes

Criteria	TRACOE <i>comfort</i> tubes	Metal/Silver tubes
Quality of material	<ul style="list-style-type: none"> • light weight (approx. 10 g) • transparent → acceptable cosmetic appearance • easy to clean due to transparency • soft → perfect fitting to trachea • thermo-sensitive • transparent on X-rays • rounded ends → no danger of injury • less allergies • DEHP-free material (standard cannulas) 	<ul style="list-style-type: none"> • heavy weight (approx. 30 g) • attract attention • more difficult to clean • hard → often causes irritations • has to be removed during X-ray treatment • becomes sharp-edged with time → danger of injury • extra maintenance costs
Manufacturing	<ul style="list-style-type: none"> • hand-made → comfortable for patient → long durability 	<ul style="list-style-type: none"> • partially hand-made → less comfortable for patient → long durability
Range of sizes	<ul style="list-style-type: none"> • 12 different sizes in standard lengths • 10 extra-long sizes • 6 sizes of short models 	<ul style="list-style-type: none"> • mostly no great variety of sizes • extra-long tubes with inner cannulas made of hard material are not possible
Product varieties	<ul style="list-style-type: none"> • a number of different tubes (two types of speaking valves) • extra-long tubes 	<ul style="list-style-type: none"> • only one type of speaking valve
Accessories/ Spare parts	<ul style="list-style-type: none"> • extensive product range 	<ul style="list-style-type: none"> • small product range
Service	<ul style="list-style-type: none"> • custom-made tubes are offered • short delivery time 	<ul style="list-style-type: none"> • custom-made tubes are very expensive, if possible at all • no statement possible
Registration	<ul style="list-style-type: none"> • CE and FDA registered 	<ul style="list-style-type: none"> • depending on manufacturer
Price	<ul style="list-style-type: none"> • much cheaper than silver tubes 	<ul style="list-style-type: none"> • up to two to three times the price of TRACOE <i>comfort</i> tubes • extra maintenance costs