



Silicone Airway Stents

NOVATECH

Because Life is Precious.

Founded in 1986, we have been producing silicone stents developed by Dr. Dumon for over 30 years. In order to improve patient care, we have added many developments over the years, such as STERITALC® and various instruments for bronchoscopy.



Office, production and warehouse in La Ciotat, South of France

Quality made in Europe

Our commitment to quality, function and cost-effectiveness along with the ability to respond quickly to individual needs, has earned us the trust of physicians worldwide.

The full package. Expert advice on demand.

Do your require training for new members of staff or an entire team? Perhaps a brief refresher in stent placement? Our qualified experts can deliver training sessions in stent placement at your location. Our anatomically correct models provide your staff with an opportunity to gain hands-on experience, handling stents and instruments in a relaxed atmoshphere. **Training is crucial** — only a finely-tuned team will achieve optimal results. Each year, we organize rigid bronchoscopy workshops in France – a valuable opportunity for experienced physicians and for beginners. A highly-esteemed faculty, small groups and extensive hands-on practice guarantee a high level of participant satisfaction.





Our extensive experience and strict quality standards serve one goal:

Providing products which improve patient quality of life.



NOVATECH SA has been part of the bess group since 2003. Located in Berlin, Germany, bess group is a family-owned and owner-managed medical device company with more than 30 years of expertise in medical device technology.





Original DUMON®

Silicone Airway Stents

Tried and tested for decades

Since 1989, Novatech has been offering the patented **DUMON®** stents - a stent system that has proven itself as a reference product for improving patient comfort in airway stenosis.

DUMON® stents are made of specially treated transparent or radiopaque medical grade silicone (implantable for more than 29 days). **They are considered to be the gold standard with which all other stents should be compared.^{1,2}**

State-of-the-art

Since 2011, on optimised line of the original **DUMON®** stent is available:

NOVATECH® GSS™ feature studs filled with gold and barium sulphate.

They combine good x-ray visibility with an optimised endoscopic vision of the tissue.

1 Dutau, H. (2013). Endobronchial Silicone Stents for Airway Management. In: Ernst, A., Herth, F. (eds) Principles and Practice of Interventional Pulmonology. Springer, New York, NY.

2 Mehta AC, Dasgupta A. Clin Chest Med. 1999 Mar;20(1):139-51. doi: 10.1016/s0272-5231(05)70132-5.PMID: 10205723 Review.

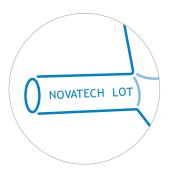




Quality

DUMON® stents are manufactured from unrestrictedly implantable silicone and are very well tolerated by the airway mucosa. DUMON® stents are supplied sterile and ready-to-use.







Traceability

"NOVATECH" and LOT number are printed on each DUMON® stent. This means that a NOVATECH stent can be identified as an original at any time. (excluding radiopaque stents and stents with diameters < 10 mm.)

Selection

To give the clinician maximum room for manoeuvre when treating airway stenoses, we provide a wide range of stent types, diameters and lengths.

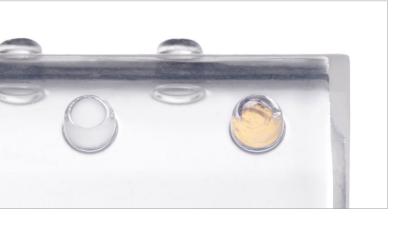






Well conceptualized

down to the smallest detail



X-ray visibility plus transparency

Studs on the outer surface of the stents are filled with gold and barium sulphate. This combines a good positional assessment of the stent during imaging with an optimised endoscopic view of the tissue.



Easy placement

DUMON® stents can be easily loaded into the TONN™ NOVATECH® Stent Applicator. In this way they are prepared for release at their target by the rigid bronchoscope.

Do you need any information about the instrumentation? Contact us!



Safe removal

DUMON® stents can be retrieved and removed using forceps during a rigid bronchoscopy.



Anti-migration studs

The studs minimise the risk of migration by securing the stent between the cartilage rings of the tracheobronchial tree.



Anti-adherent surface

A special silicone-based surface treatment provides an anti-adherent surface that reduces any risk of obstruction.



Bevelled ends

To facilitate the transport of secretions, the ends of the DUMON® stents are atraumatically bevelled.





DUMON®. The correct solution. For every patient.





Tracheal Stent

GSS™ TD Standard tracheal stent

- Wall thickness: 1.5 mm
- Rows of studs: $4 (\emptyset \ge 20 \text{ mm: } 3)$







GSS™ TF Thin tracheal stent

With a 1 mm wall thickness for increased air flow.

- Wall thickness: 1 mm
- Rows of studs: $4 (\emptyset \ge 20 \text{ mm}: 3)$





Comparison of wall thicknesses: left GSSTM TD (1.5 mm), right GSSTMTF (1 mm)

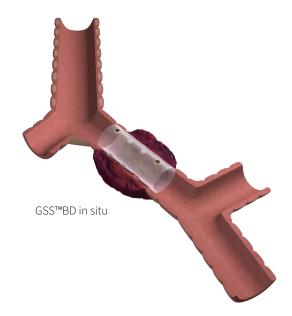


Bronchial Stent

GSS™ BD

Smaller diameters for bronchial indications.

- Wall thickness: 1 mm
- Rows of studs: 4





Ultra-thin Stent

DUMON® BB

DUMON® BB are completely radiopaque (white). Their wall thickness of just 0.5 mm makes them particularly suitable for small airways. Thin walls and only two rows of studs facilitate insertion through the vocal cords. Due to their small size, the studs of the DUMON® BB are not filled with gold and barium sulphate.

- Wall thickness: 0.5 mm
- Rows of studs: 2
- only radiopaque



DUMON®. The correct solution. For every patient.





Hourglass Stent

GSS™ ST Stent for benign, annular stenosis

The hourglass-shaped ST stents were developed in collaboration with Prof. Vergnon (University Hospital Saint Etienne, France).

They are particularly suited to complex benign tracheal stenoses, such as post-intubation or post-tracheostomy stenoses. The diameters of the proximal and distal ends correspond to the diameter of the healthy trachea. The middle part is narrower to reduce the risk of injuring the stenotic section of the trachea, but wide enough to ensure a sufficient air flow.

• Wall thickness: 1.5 mm

• Rows of studs: 4

Vergnon JM, Costes F, Polio JC; Efficacy and Tolerance of a New Silicone Stent for the Treatment of Benign Tracheal Stenosis: preliminary results; Chest. 2000; 118(2): 422-426



GSS™ DST

GSS™ DST stents are a further design development of GSS™ ST stents with modified proportions: The centre section is narrower in relation to the wider distal and proximal ends. GSS™ DST stents are more rounded internally, while the ends are shorter compared to ST stents.

• Wall thickness: 1.5 mm

• Rows of studs: 4





Diameters and lengths - straight stents

$\mathbf{GSS^{\mathsf{TM}}}\,\mathbf{TD}\,/\,\mathbf{GSS^{\mathsf{TM}}}\,\mathbf{TF}/\mathbf{GSS^{\mathsf{TM}}}\,\mathbf{BD}/\mathbf{DUMON^{\circledcirc}}\,\mathbf{BB}$

Determine the desired stent length (stenosis length + 10 mm) and diameter and select from the available stents.

| Length (mm) ► | | | | | |
|--------------------------|----------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Outer Diameter (mm) ▼ | 20 | 30 | 40 | 50 | 60 |
| 5 | 025301S20 (BB) | 025301S30 (BB) | 025301S40 (BB) | 025301S50 (BB) | |
| 6 | 026201S20 (BB) | 026201S30 (BB) | 026201S40 (BB) | 026201S50 (BB) | |
| 7 | 026501S20 (BB) | 026501S30 (BB) | 026501S40 (BB) | 026501S50 (BB) | |
| 8 | 026701S20 (BB) | 026701S30 (BB) | 026701S40 (BB) | 026701S50 (BB) | |
| 10 | 01 BD 1020 | 01 BD 1030 | 01 BD 1040 | 01 BD 1050 | 01 BD 1060 |
| 11 | 01 BD 1120 01 TD 1120 | 01 BD 1130 01 TD 1130 | 01 BD 1140 01 TD 1140 | 01 BD 1150 01 TD 1150 | 01 BD 1160 01 TD 1160 |
| 12 | 01 BD 1220 01 TD 1220 | 01 BD 1230 01 TD 1230 01 TF 1230 | 01 BD 1240 01 TD 1240 01 TF 1240 | 01 BD 1250 01 TD 1250 01 TF 1250 | 01 BD 1260 01 TD 1260 01 TF 1260 |
| 13 | | 01 TD 1330 01 TF 1330 | 01 TD 1340 01 TF 1340 | 01 TD 1350 01 TF 1350 | 01 TD 1360 01 TF 1360 |
| 14 | | 01 TD 1430 01 TF 1430 | 01 TD 1440 01 TF 1440 | 01 TD 1450 01 TF 1450 | 01 TD 1460 01 TF 1460 |
| 15 | | 01 TD 1530 01 TF 1530 | 01 TD 1540 01 TF 1540 | 01 TD 1550 01 TF 1550 | 01 TD 1560 01 TF 1560 |
| 16 | | 01 TD 1630 | 01 TD 1640 01 TF 1640 | 01 TD 1650 01 TF 1650 | 01 TD 1660 01 TF 1660 |
| 18 | | | 01 TD 1840 01 TF 1840 | 01 TD 1850 01 TF 1850 | 01 TF 1860 |
| 20 | | | 01 TF 2040 | 01 TF 2050 | 01 TF 2060 |



Custom-made stents are possible. Contact us!

| 70 | 80 | 90 | 100 | 110 |
|-------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------|------------------------------------------|------------------------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| 01 BD 1070 | | | | |
| 01 BD 1170 01 TD 1170 | 01 TD 1180 | | | |
| 01 BD 1270 01 TD 1270 01 TF 1270 | 01 BD 1280 01 TD 1280 01 TF 1280 | | | |
| 01 TD 1370 01 TF 1370 | 01 TD 1380 | | | |
| 01 TD 1470 01 TF 1470 | 01 TD 1480 | | | |
| 01 TD 1570 01 TF 1570 | 01 TD 1580 01 TF 1580 | 01 TD 1590 01 TF 1590 | 01 TD 15100 01 TF 15100 | 01 TD 15110 01 TF 15110 |
| 01 TD 1670 01 TF 1670 | 01 TD 1680 01 TF 1680 | 01 TD 1690 01 TF 1690 | 01 TD 16100 01 TF 16100 | 01 TD 16110 |
| 01 TF 1870 | 01 TF 1880 | 01 TF 1890 | 01 TF 18100 | 01 TF 18110 |
| 01 TF 2070 | 01 TF 2080 | 01 TF 2090 | 01 TF 20100 | 01 TF 20110 |



GSS™ TD



GSS™ TF

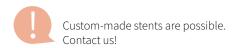


GSS™ BD

DUMON® BB

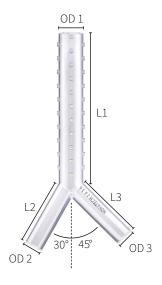


Diameters and lengths - special shapes



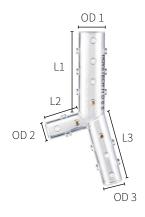
GSSTM Y

| | Dimensions (mm) | | | | | | | |
|-------------|-----------------|----|----|--------|----|----|-----------|--|
| REF | OD | | | Length | | | Wall | |
| | 1 | 2 | 3 | L1 | L2 | L3 | thickness | |
| 01Y121010 | 12 | 10 | 10 | 70 | 50 | 50 | 1.0 | |
| 01Y141010 | 14 | 10 | 10 | 110 | 50 | 50 | 1.0 | |
| 01Y141010V1 | 14 | 10 | 10 | 40 | 30 | 30 | 1.0 | |
| 01Y151212 | | 12 | 12 | 110 | 50 | 50 | | |
| 01Y151212V1 | 15 | | | 40 | 30 | 30 | 1.0 | |
| 01Y151212V2 | | | | 50 | 30 | 30 | | |
| 01Y161313 | | | | 110 | 50 | 50 | | |
| 01Y161313V1 | 16 | 13 | 13 | 40 | 30 | 30 | 1.0 | |
| 01Y161313V2 | | | | 50 | 30 | 30 | | |
| 01Y181414 | 18 | 14 | 14 | 110 | 50 | 50 | 1.0 | |



GSS™ OKI

| | | Dimensions (mm) | | | | | | |
|-------------|----|-----------------|----|--------|----|----|----------------|--|
| REF | OD | | | Length | | | II .I . I | |
| | 1 | 2 | 3 | L1 | L2 | L3 | Wall thickness | |
| 010KI130910 | 13 | 9 | 10 | 40 | 17 | 35 | 1.0 | |





GSS™ ST

| | Dimensions (mm) | | | | | | | | |
|---------------------|-----------------|----|----|--------|----|----|-----------|--|--|
| REF | OD | | | Length | | | Wall | | |
| | 1 | 2 | 3 | L1 | L2 | L3 | thickness | | |
| 01 ST 121012 | 12 | 10 | 12 | 15 | 20 | 15 | | | |
| 01 ST 141214 | 14 | 12 | 14 | 15 | 20 | 15 | | | |
| 01 ST 151315 | 15 | 13 | 15 | 15 | 20 | 15 | 1.5 | | |
| 01 ST 161416 | 16 | 14 | 16 | 15 | 20 | 15 | | | |
| 01 ST 181618 | 18 | 16 | 18 | 15 | 20 | 15 | | | |



GSS™ DST

| | | Dimensions (mm) | | | | | | | | |
|-------------|----|-----------------|----|--------|----|-----|-----------|--|--|--|
| REF | OD | | | Length | | | Wall | | | |
| | 1 | 2 | 3 | L1 | L2 | L3 | thickness | | | |
| 01DST141214 | 14 | 12 | 14 | 7.5 | 20 | 7.5 | | | | |
| 01DST161416 | 16 | 14 | 16 | 7.5 | 20 | 7.5 | 1.5 | | | |
| 01DST181618 | 18 | 16 | 18 | 7.5 | 20 | 7.5 | | | | |



Which TONN™ NOVATECH® Stent Applicator (BLUE, RED, GREEN, WHITE) fits which DUMON® stent?

All dimensions in mm

| | TD | | Length | | | | | | | | |
|---|----|----|--------|----|----|----|----|----|----|-----|-----|
| | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 |
| | 11 | | | | | | | | | | |
| | 12 | | | | | | | | | | |
| Ø | 13 | | | | | | | | | | |
| | 14 | | | | | | | | | | |
| | 15 | | | | | | | | | | |
| | 16 | | | | | | | | | | |
| | 18 | | | | | | | | | | |

| | TF | | | | | Length | | | | |
|---|----|----|----|----|----|--------|----|----|-----|-----|
| | | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 |
| | 12 | | | | | | | | | |
| | 13 | | | | | | | | | |
| Ø | 14 | | | | | | | | | |
| | 15 | | | | | | | | | |
| | 16 | | | | | | | | | |
| | 18 | | | | | | | | | |
| | 20 | | | | | | | | | |

| | BD | | Length | | | | | | | | |
|---|----|----|--------|----|----|----|----|----|--|--|--|
| | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | | | |
| | 9 | | | | | | | | | | |
| Ø | 10 | | | | | | | | | | |
| | 11 | | | | | | | | | | |
| | 12 | | | | | | | | | | |

| | BB | | Length | | | | | | | |
|---|----|----|--------|----|----|--|--|--|--|--|
| | | 20 | 30 | 40 | 50 | | | | | |
| | 5 | | | | | | | | | |
| Ø | 6 | | | | | | | | | |
| | 7 | | | | | | | | | |
| | 8 | | | | | | | | | |

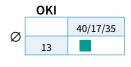
<u>Please note:</u> Stents that can be placed with the <u>BLUE</u> system can also be placed with the <u>RED</u> set. For stents which do not appear in this overview and/or for custom-made devices, please contact our customer services.



| | Υ | | | | |
|---|----|-----------|----------|----------|----------|
| | | 110/50/50 | 70/50/50 | 50/30/30 | 40/30/30 |
| | 12 | | | | |
| Ø | 14 | | | | |
| 0 | 15 | | | | |
| | 16 | | | | |
| | 18 | | | | |

| | СВ | Length | | | | | | | |
|---|----|--------|----|----|----|----|--|--|--|
| | | 20 | 30 | 40 | 50 | 60 | | | |
| | 9 | | | | | | | | |
| Ø | 10 | | | | | | | | |
| | 11 | | | | | | | | |
| | 12 | | | | | | | | |

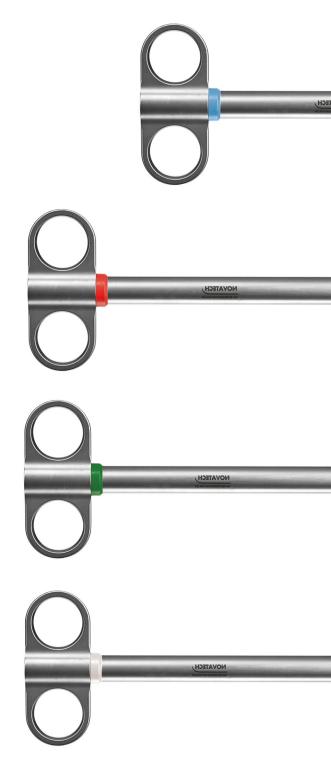
| | ST | |
|---|----|--|
| Ø | 12 | |
| | 14 | |
| | 15 | |
| | 16 | |
| | 18 | |



TONN™ NOVATECH® Stent Applicator

| Colour | Introducer tube working length (cm) | Introducer tube OD (mm) | REF |
|--------|----------------------------------------|----------------------------|--------------|
| BLUE | 32 | 12.75 | 02 BRS B 120 |
| RED | 42 | 12.75 | 02 BRS R 130 |
| GREEN | 42 | 10.25 | 02 BRS G 140 |
| WHITE | 42 | 8.2 | 02 BRS W 150 |

Individual components are available as spare parts. Please contact us for a quote.





Standard stent shapes may be insufficient when addressing specific issues pertaining to challenging airway anatomy. In these cases, patients may benefit from the **NOVATECH® 3D**, a fully individualized airway stent.

For further information, please request our catalog.





Request information about further pulmonology products:



STERITALC® for Talcum Pleurodesis



Instruments for Bronchoscopy



NOVATECH EWS™ Endobronchial Watanabe Spigots



Leufen **aer**stent® self-expanding Nitinol Stents

The products in this catalog are *←*-marked.



Novatech SA — La Ciotat, France



Please note that only the current instructions for use apply. Details in this catalog about the use of products serve as a guide only and reflect the information available at the time of print. If necessary, please request a current version!



The instructions for use for some of our products are available only in electronic form (in pdf format) on our website.

Please see the product label for the required access information.

Please note that product availability may vary by country. Please contact us for details.



Silicone Airway Stents





capital stock: 160.000 € • 398 941 260 RCS Marseilles
TVA CEE FR59398941260 • certified according to EN ISO 13485
Jurisdictional venue / seat of the company:
Z.I. Athélia III — 1058, Voie Antiope
F—13705 La Ciotat Cedex, France

Tel. +33 (0) 442 98 15 60 info@novatech.fr