



SAFER FOR SURE

TRO-VEBSITE safety

EU DIRECTIVE 2010/32



EU directive 2010/32

NEEDLE-STICK INJURIES AS AN OCCUPATIONAL HAZARD

NEW TECHNOLOGY MINIMISES RISK



With its Directive 2010/32, the EU is following a clear line with regard to the most common occupational injuries in medical practices and hospitals. The directive principally addresses the issue of accidental injury to patients, medical professionals and other staff by used needles. By making it compulsory to use products with integrated safety systems, the risk of injury is lowered significantly.

With its innovative product TRO-VENSITE safety, Troge Medical offers a state-of-the-art system that sets new standards as a result of its complexity and user-friendliness.

In addition to the health risks associated with injuries from infected needles, the resulting burden on those bearing the costs should also be considered. With an estimated 500,000 needle-stick injuries per year in Germany, the loss of working hours for necessary check-ups equates to more than € 70 million.

This figure does not even take into account the treatment costs or possible follow-up costs for any infections that may result. In individual cases, these may reach six or seven figures.

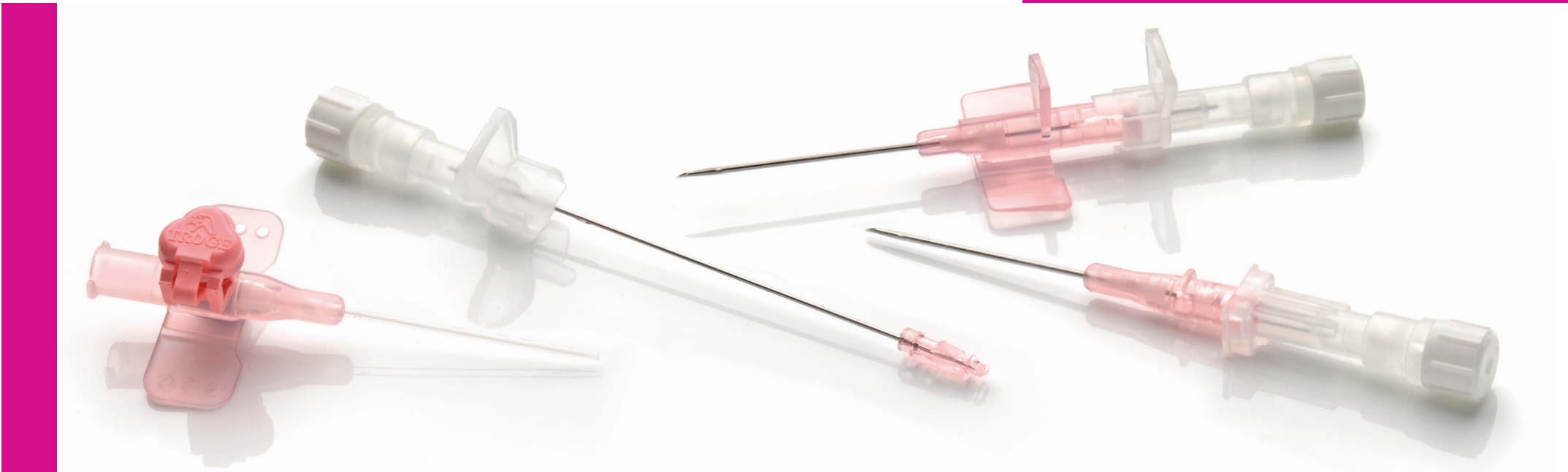
Particularly in situations such as the fast-paced environment of an accident and emergency department or in the ambulance service, safety systems have been compulsory for some time. This new directive now extends employers' duty of care to the entire clinical environment.

In addition to minimising the risk to medical personnel, the use of safety systems also minimises injuries to cleaning staff that may result from the improper disposal of contaminated needles. The danger is particularly significant here as cleaning staff often do not have basic medical training.

Tangible click mechanism

ABSOLUTE SAFETY

PATIENTS AND USERS BENEFIT WITH TROGE



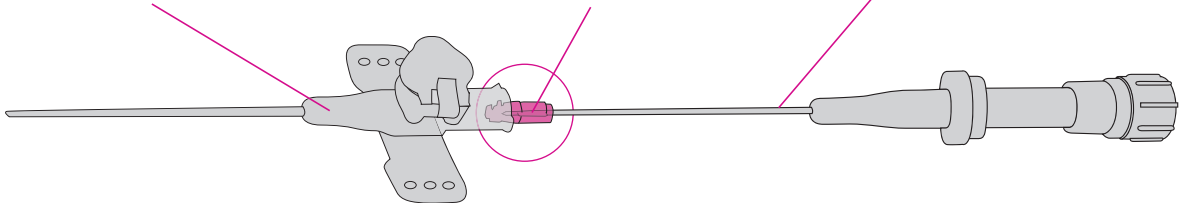
The key feature of TRO-VENSITE safety is our innovative new safety clip. In contrast to many similar systems, this clip is completely integrated and guarantees that you will be able to use the product as usual. After establishing vascular access, the user gets a clear notification that the safety clip is clicking into place. At this point, the needle is surrounded by a plastic locking

mechanism, which reduces the risk of injury to a minimum. Although the product must still be disposed of in a sharps box, there are always situations when there isn't an appropriate disposal box to hand – by using our system, the associated risks are eliminated almost completely.

IV cannula with integrated safety clip corresponding to the requirements of EU Directive 2010/32

Safety clip clicks into place

Steel needle is removed after puncture



Precision bevelled edge

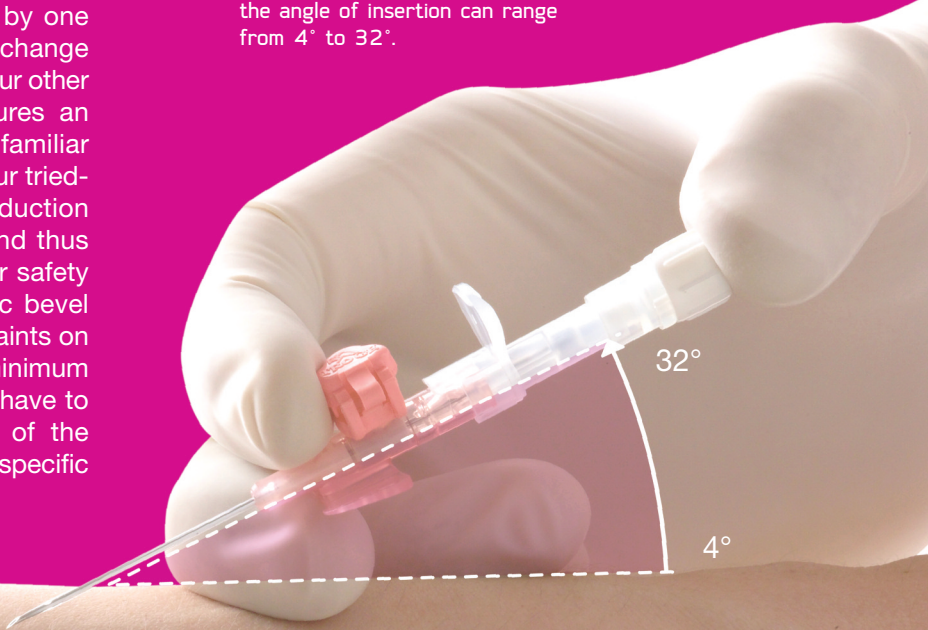
EXTREME SHARPNESS

THE NEEDLE THAT ADAPTS TO YOUR NEEDS



TRO-VENSITE safety is characterised by one thing above all – you don't have to change anything about the way you use it! Like our other products, this new system also features an ergonomically perfect design and the familiar needle design with triple-facet bevel. Our tried-and-tested laser-controlled production machines ensure precise sharpness and thus guarantee exceptional ease of use. Our safety needles also feature the Troge-specific bevel angle, which does not place any constraints on how it is inserted and only requires a minimum of effort. This means that users do not have to adjust their techniques to the angle of the needle, rather the needle adapts to their specific puncture method.

Thanks to the unique bevel angle, the angle of insertion can range from 4° to 32°.



PERFECT HANDLING

UTMOST SAFETY THROUGH DESIGN



Design follows function: the TRO-VERSITE safety system lives up to this characteristic of successful design in every respect. As a result, we are one of the few manufacturers to integrate the automatic safety system completely into the needle, without any perceptible gradations. Users therefore do not notice any difference in terms of insertion technique – handling stays the same and no specific user training sessions are required.

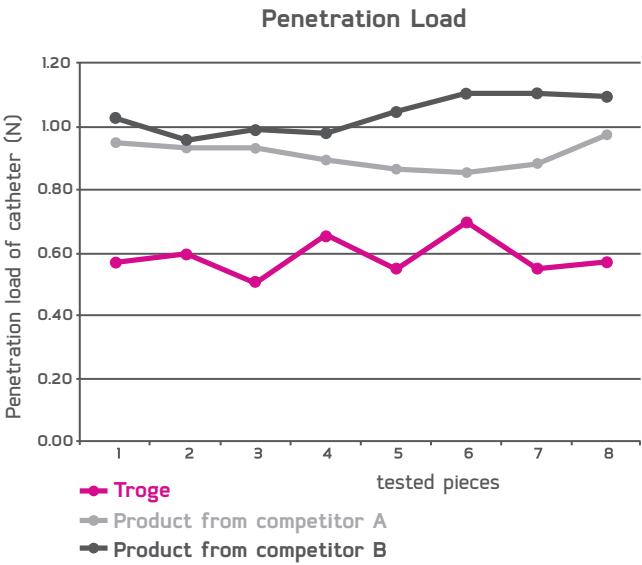
In addition to increased convenience for the patient, the system's ease of use also reliably avoids droplets of blood when the needle is removed. This also represents a major safety benefit and embodies our philosophy of providing the exceptional ease of use with absolute safety.

The optional injection port can be opened and closed with just one finger. Not only is this more hygienic, it also makes working with patients even easier.

ENORMOUS FREEDOM OF USE

PU OR TEFLON – THE SITUATION DECIDES

TRO-VERSITE-safety-systems are available in PU or Teflon, depending on what the user prefers. The PU cannulas adapt better to patients' veins thanks to their flexibility, but the properties of the material require more care and attention on the part of the user when inserting the catheter. By contrast, the smoother surface structure of Teflon makes the insertion process much gentler. Thus, the user always has a suitable material for every situation. However, regardless of whether a medical professional prefers PU or Teflon, TRO-VERSITE safety always offers the ideal system for the task at hand.



TRO-VENSITE safety

Needle gauge	Length of catheter (mm)	Outer diameter (mm)	Colour code	Flow rate (ml/min)	Order no./ Ref/FEP	Order no./ Ref/PUR
14 G	45	2.0	orange	275 – 351	90241	90203
16 G	45	1.7	grey	180 – 230	90242	90204
17 G	45	1.5	white	128 – 163	90243	90205
18 G	32	1.3	green	86 – 109	90244	90206
18 G	45	1.3	green	86 – 109	90245	90207
20 G	32	1.1	pink	59 – 75	90246	90208
22 G	25	0.9	blue	29 – 45	90247	90209
24 G	19	0.7	yellow	18 – 28	90248	90210
26 G	19	0.6	violet	14 – 21	90249	90211



TRO-VENSITE safety plus

Needle gauge	Length of catheter (mm)	Outer diameter (mm)	Colour code	Flow rate (ml/min)	Order no./ Ref/FEP	Order no./ Ref/PUR
14 G	45	2.0	orange	275 – 351	90250	90220
16 G	45	1.7	grey	180 – 230	90251	90221
17 G	45	1.5	white	128 – 163	90252	90222
18 G	32	1.3	green	86 – 109	90253	90224
18 G	45	1.3	green	86 – 109	90254	90223
20 G	32	1.1	pink	59 – 75	90255	90225
22 G	25	0.9	blue	29 – 45	90256	90226
24 G	19	0.7	yellow	18 – 28	90257	90227
26 G	19	0.6	violet	14 – 21	90258	90228



TRO-VENSITE safety sine

Needle gauge	Length of catheter (mm)	Outer diameter (mm)	Colour code	Flow rate (ml/min)	Order no./ Ref/FEP	Order no./ Ref/PUR
14 G	45	2.0	orange	275 – 351	90270	90230
16 G	45	1.7	grey	180 – 230	90271	90231
17 G	45	1.5	white	128 – 163	90272	90232
18 G	32	1.3	green	86 – 109	90273	90234
18 G	45	1.3	green	86 – 109	90274	90233
20 G	32	1.1	pink	59 – 75	90275	90235
22 G	25	0.9	blue	29 – 45	90276	90236
24 G	19	0.7	yellow	18 – 28	90277	90237
26 G	19	0.6	violet	14 – 21	90278	90238



TRO-VENSITE safety pen

Needle gauge	Length of catheter (mm)	Outer diameter (mm)	Colour code	Flow rate (ml/min)	Order no./ Ref/FEP	Order no./ Ref/PUR
14 G	45	2.0	orange	275 – 351	90260	N/A
16 G	45	1.7	grey	180 – 230	90261	N/A
17 G	45	1.5	white	128 – 163	90262	N/A
18 G	32	1.3	green	86 – 109	90263	N/A
18 G	45	1.3	green	86 – 109	90264	N/A
20 G	32	1.1	pink	59 – 75	90265	N/A
22 G	25	0.9	blue	29 – 45	90266	N/A
24 G	19	0.7	yellow	18 – 28	90267	N/A
26 G	19	0.6	violet	14 – 21	90268	N/A



The new IV cannulas from Troge – featuring exceptional precision with absolute safety. TRO-VENSITE safety also complies with our philosophy that needles have to feature the right level of sharpness and bevel angle in order to adapt to the user's insertion methods, rather than

the user having to adjust to the needle. Our tried-and-tested systems have been setting standards in the clinical environment and in practical use for years. The latest technological features round off our range in terms of safety.