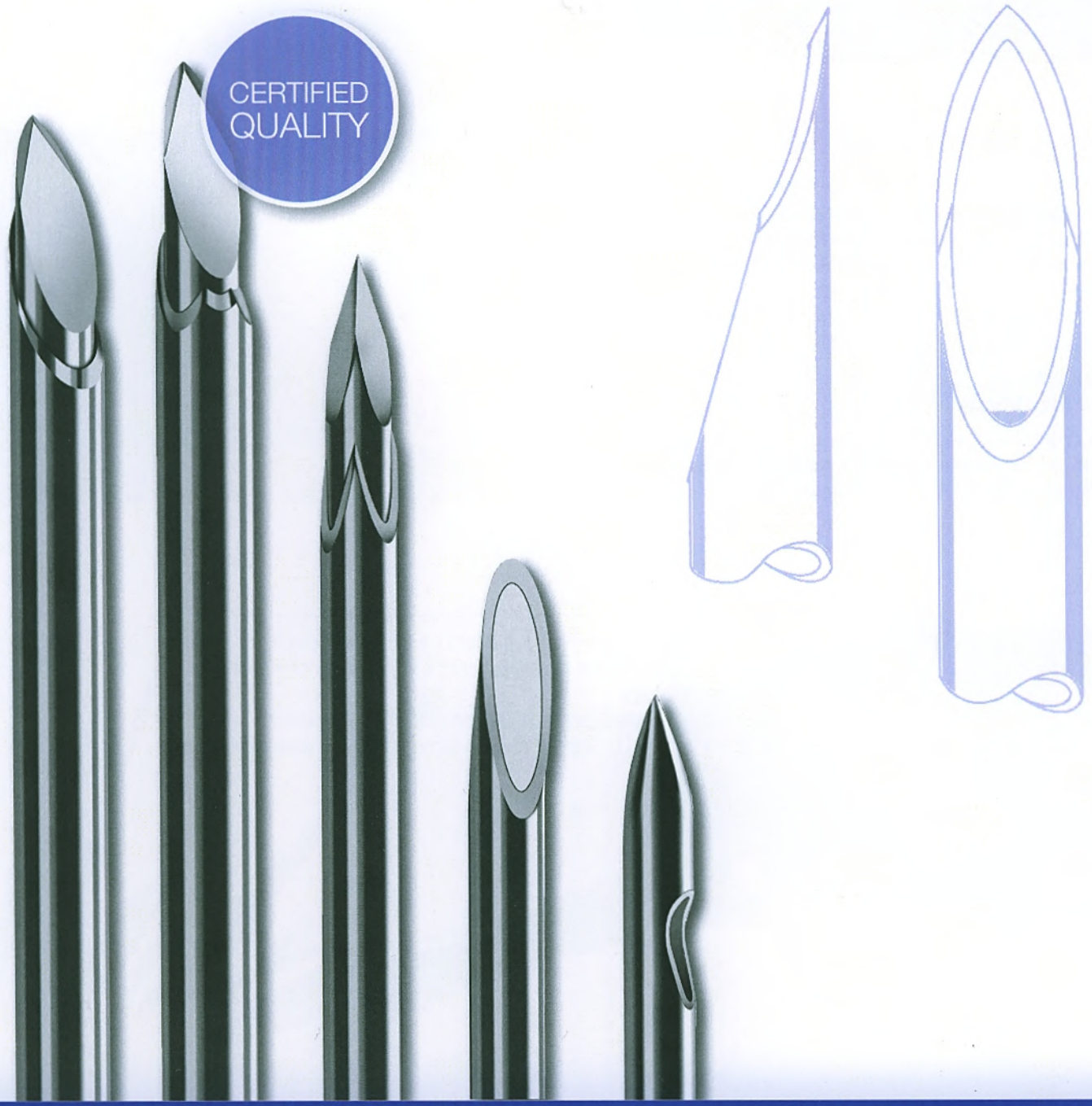
THE TIP MAKES
THE DIFFERENCE



www.injecta.de

INJECTA
SARSTEDT GROUP

INJECTA

Injection and Special Cannulae, High Precision Tubes

INJECTA – The Company

The company...

Our company's continued growth is exemplified by our production expansion. With more than 5,000 square meters of production area at our disposal and clean room quality products, we have made another significant step towards consolidating our company's progress and market position.

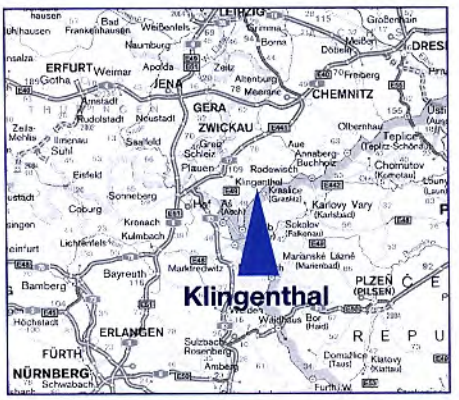
We are looking forward to meeting your challenges!

How to reach us...

By car:
Exit the Autobahn 72 at Plauen Süd (South). Follow the signs for Oelsnitz i.V. towards Klingenthal. In Klingenthal follow road B283 (Markneukirchnerstraße, Auberbacherstraße).
Then take S304 (Falkensteinerstraße) towards Falkenstein.
Approximately 1 km after leaving town, you will reach the industrial area at Schwarzberg and INJECTA GmbH.

By plane:
Closest airports: Prague, Leipzig, Dresden and Nürnberg.

By train:
You can reach our premises either from the central station in Zwickau or Plauen with the "Vogtlandregionalbahn".



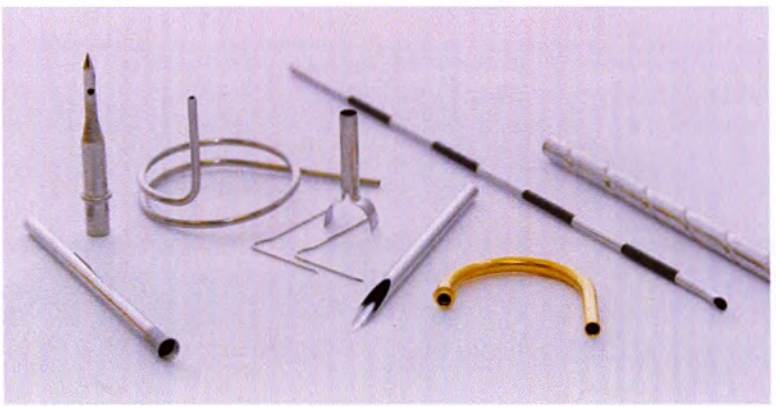
Certified Quality...

You can rely on premium products and reliable quality to meet your stringent requirements in the fields of medicine and technology.
Our Quality Management System ensures compliance with DIN EN ISO 9001. Supporting documentation is available upon request.

Experience and quality

Over 50 years experience...

...and continuous improvements in the manufacturing of stainless steel precision tubes set apart our wide range of medical and industrial products.



Highly experienced personnel...

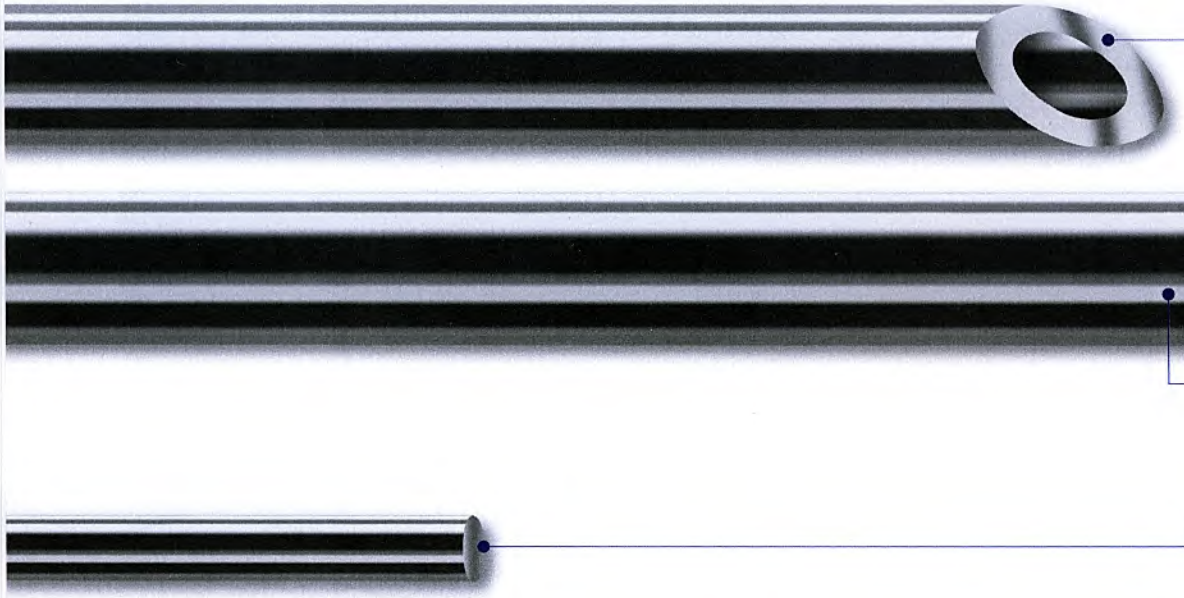
...along with the most current production techniques guarantee consistently high quality products. Continuous interaction with our customers enables common solutions to meet individual user requirements.

Forward-looking...

...our Quality Management System enables us to systematically plan and improve our processes to meet the evolving needs of our customers. With Certified Industrial Mechanic apprenticeships, we are ensuring a trained workforce for the future.

We produce for **medicine & industry**

High precision tubes, wires and cut offs



Wall thicknesses from
0.05 to 0.5 mm

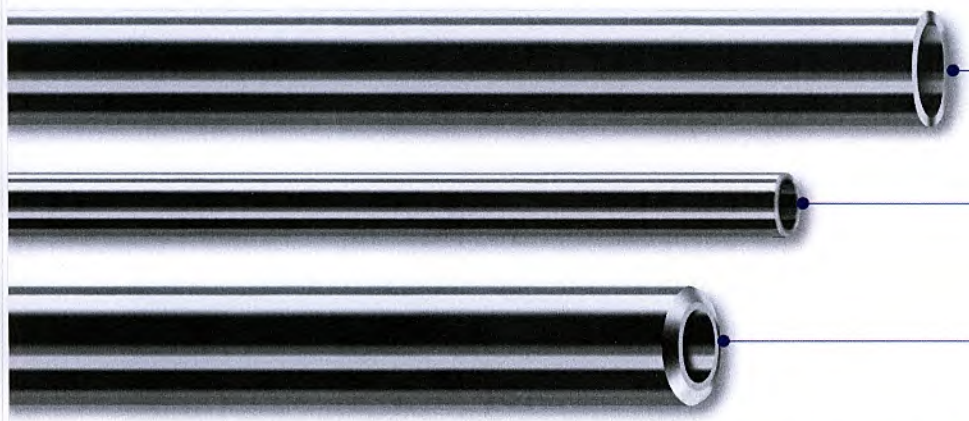
Diameters from
0.30 to 5.0 mm

Materials:
1.4301, 1.4306,
1.4404, 1.4435,
1.4310 (only wires)

High precision wires from
0.30 - 1.00 mm

Available dimensions and materials as listed on the back

High precision tubes and cut offs:



free of burrs

rounded

conical end

Our tubes are manufactured according to ISO 9626. This guarantees that our customers receive consistently high quality regarding stiffness and breaking strength.
We can also provide intermediate sizes not included on the following table.
On request, we can certify chemical composition, tensile strength and surface roughness in inspection reports according to EN 10 204.

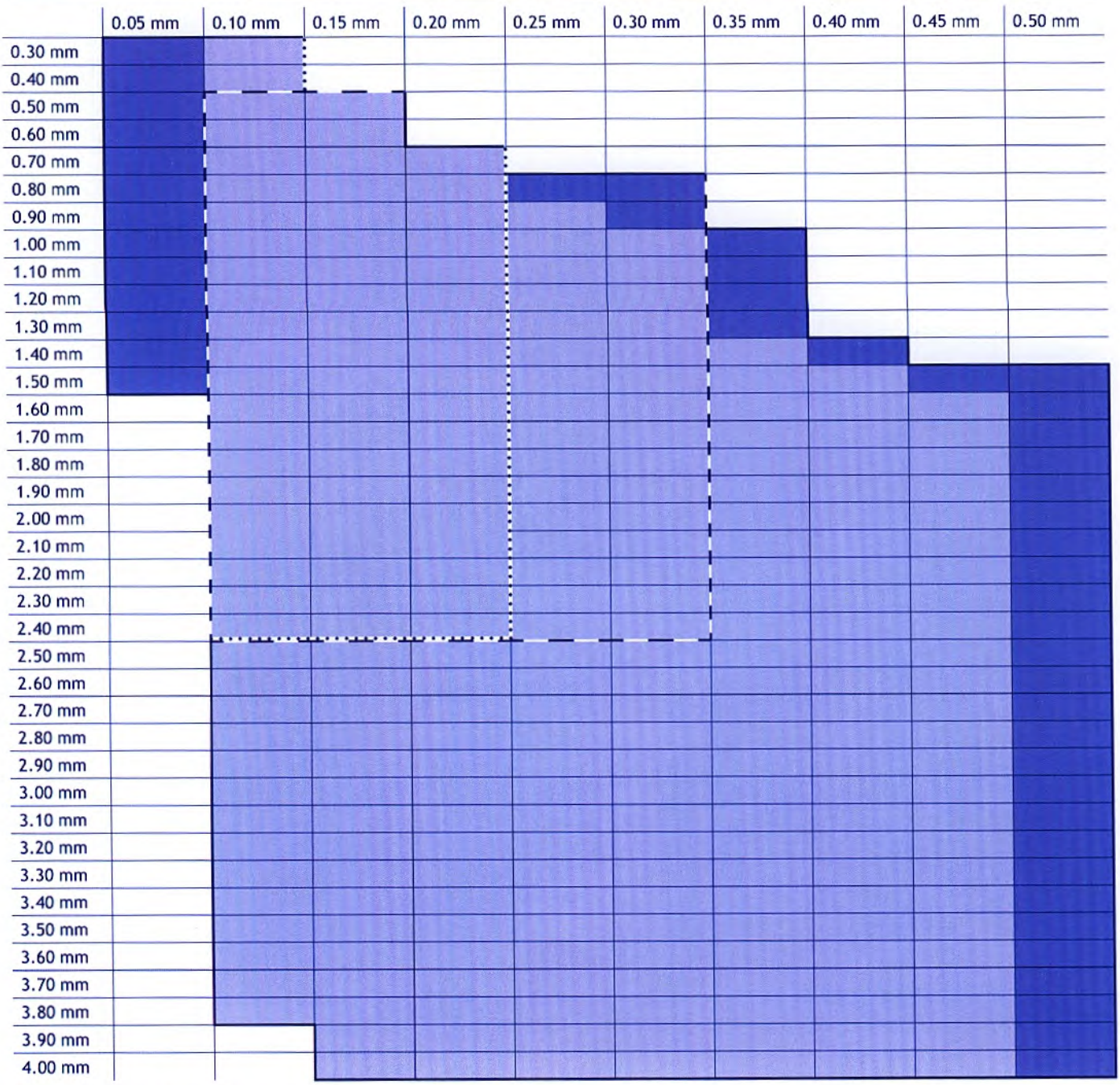
Tensile strength:

Our tubes are available with the following strengths:

hard	Rm > 900 N/mm²
half-hard	Rm 720 - 900 N/mm²
annealed	Rm < 720 N/mm²

High precision tubes and cut offs

Available dimensions



Available with tolerance limits, please contact Customer Service

Available material quality 1.4301 and 1.4404 (1.4401 upon request)

Available material quality 1.4306

Available material quality 1.4435

mm	0.30	0.33	0.36	0.40	0.45	0.50	0.55	0.60	0.70	0.80	0.90	1.10	1.20/1.30	1.40/1.50	1.60/1.70	1.75/1.80/1.90	1.95/2.10/2.15	2.30/2.40/2.50	2.65/2.70/2.85	2.95/3.00/3.15	3.30/3.40/3.50
gauge dimension	30G	29G	28G	27G	26G	25G	24G	23G	22G	21G	20G	19G	18G	17G	16G	15G	14G	13G	12G	11G	10G

Available qualities, standards and technical data

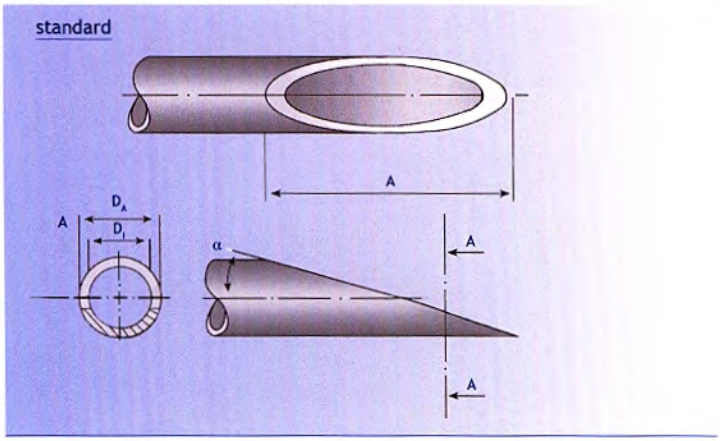
Material specification	X5 CrNi 18-10	X5 CrNiMo 17 12 2	X2 Cr Ni 19-11	X2 CrNiMo 18 14 3	X10 CrNi 18 8
German specification (EN 10088-2)	1.4301	1.4401/1.4404	1.4306	1.4435	1.4310
International standards	AISI 304	AISI 316 und 316L	AISI 304 L	AISI 316 L	AISI 301
Chemical analysis*					
C	</= 0.07 %	</= 0.07 % (1.4401) </= 0.03 % (1.4404)	</= 0.03 %	</= 0.03 %	</= 0.05 - 0.15 %
Si	</= 1.00 %	</= 1.00 %	</= 1.00 %	</= 1.00 %	</= 2.00 %
Cr	17.5 % - 19.5 %	16.5 % - 18.5 %	18.0 % - 20.0 %	17.0 % - 19.0 %	16.0 % - 19.0 %
Ni	8.0 % - 10.5 %	10.0 % - 13.0 %	10.0 % - 12.0 %	12.5 % - 15.0 %	6.0 % - 9.5 %
Mo	-	2.0 % - 2.5 %	-	2.5 % - 3.0 %	</= 0.80 %
Mn	</= 2.00 %	</= 2.00 %	</= 2.00 %	</= 2.00 %	</= 2.0 %
Characteristics	corrosion resistant in water and hypochloric media	higher resistance against corrosion caused by chlorine ions	higher resistance against intercranular corrosion	higher resistance against acid and intercranular corrosion	corrosion resistant in water and hypochloric media
	good cold forming properties	good cold forming properties	improved cold forming properties	cold forming properties	limited cold forming properties
Application	Medical technology as recommended needle material according to ISO 9626	Medical technology and pharmaceutical industry as recommended needle material according to ISO 9626	Medical technology	Pharmaceutical industry	Medical technology only for high precision wires

* according to EN 10088

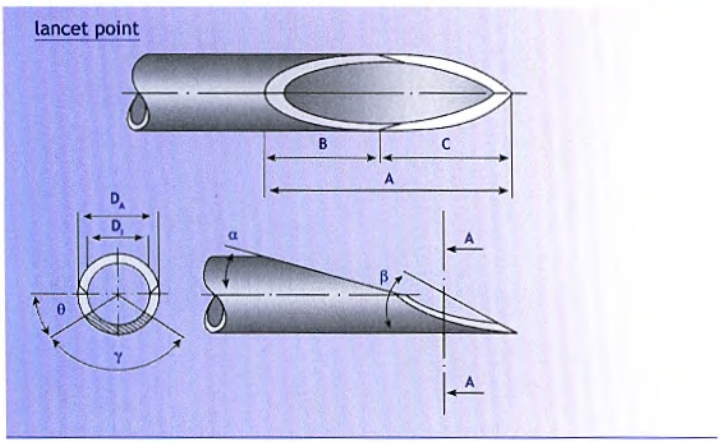
Bevelled cannula needles for standard and special cannulae

Standard cannulae according to DIN 13097

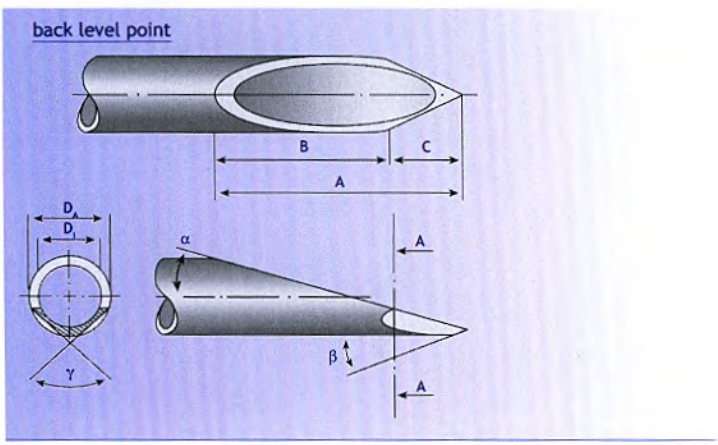
standard



lancet point



back level point



D_A: outer diameter
D_I: inner diameter
A: point length
C: lancet (back bevel) length
extra long tip α = 9° +/-1°
medium-sized tip α = 15° +/-1°

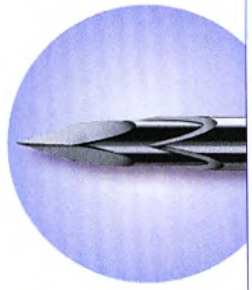
α: primary bevel angle
β: tip angle
θ: rotation angle
γ: lancet (back bevel) angle
long tip α = 12° +/-1°
short tip α = 18° +/-1°

Special cannulae

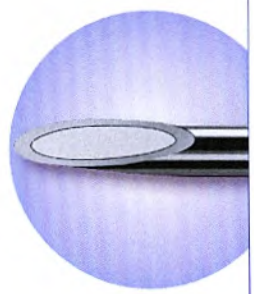
standard biopsy

crown core cut

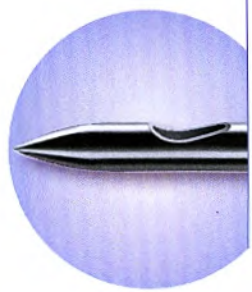
franseen style



epidural needles (toughy)



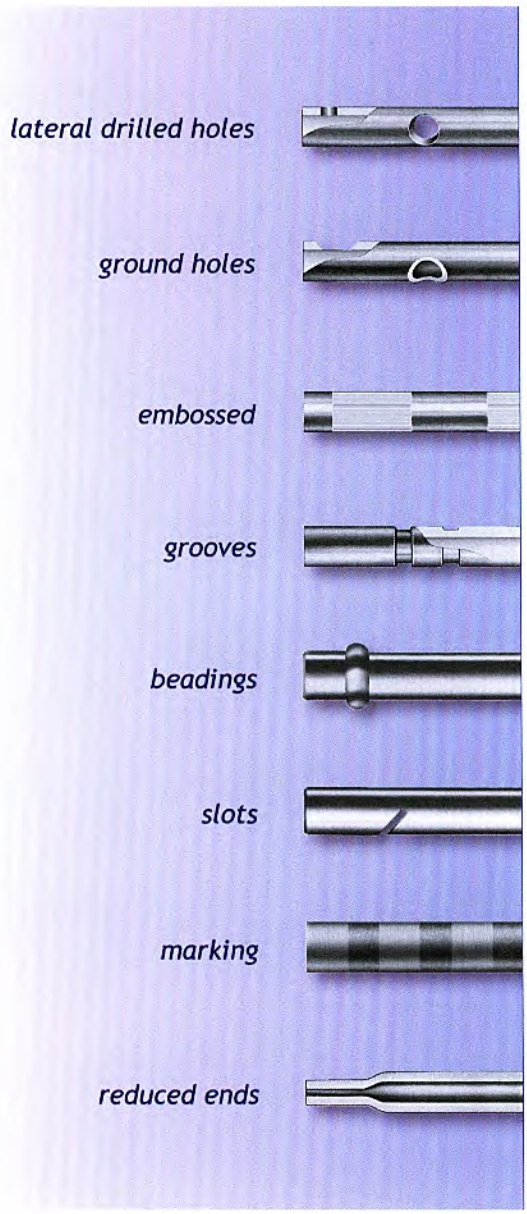
spinal needles

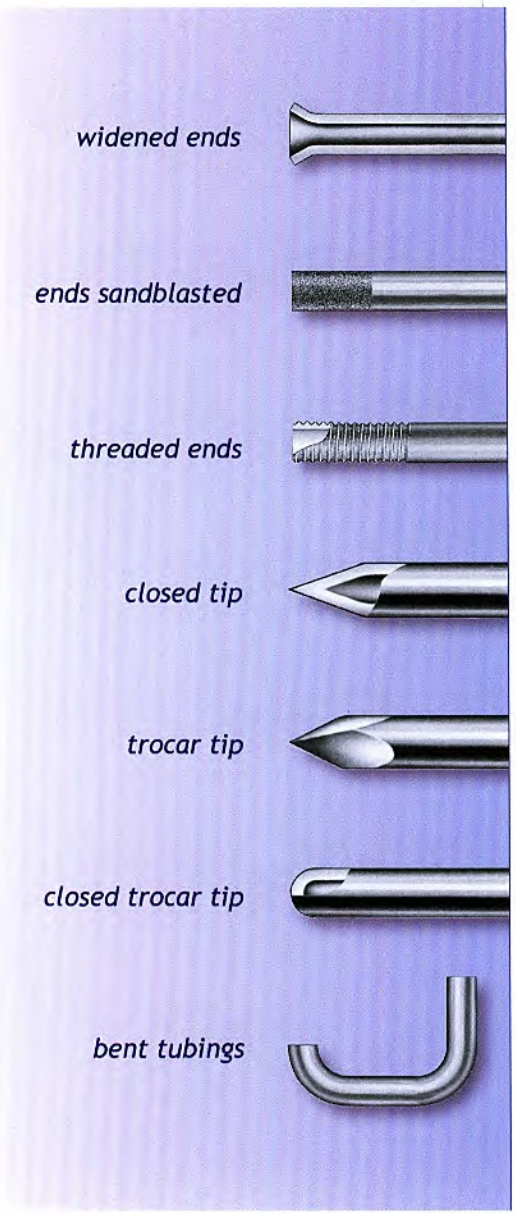


We produce for **medicine & industry**

Tubular components

A wide selection of machined tubular precision components of various shapes and options forms one sector of our product range. Our extensive range of production techniques provide flexibility to meet new requirements for premium products for medical and technical applications. Our principal production options are shown below:





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We are looking forward to meeting your challenges!

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