

Safety measures



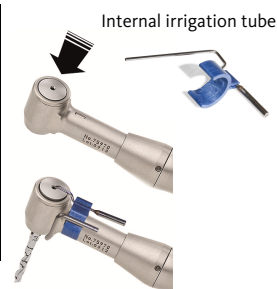
- We deliver an unsterile Contra Angle. Clean, disinfect, and sterilize the Contra Angle before the first application and immediately after each use!
- Do not clean the Contra Angle with compressed air!
- The Contra Angles may be applied with max. 50,000 rpm!
- Do not operate the Contra Angle while the motor is running!
- Do not attempt to open the chuck while the motor is running!
- The instrument may be operated by qualified personnel only!
- Improper use or repair, or failure to observe these instructions, relieve us from any obligation arising from warranty provisions or other claims.

Symbols

	Conform to EU standards		Autoclavable at 135°C		Suitable for thermal disinfection		Date of expiry
	Warning		Manufacturer		Observe instruction for use		Serial number
	Order number						

Technical Data

Transmission (Ref.)	1 : 1 (5051)	2 : 1 (5109)	16 : 1 (5200)	20 : 1 (5053)	32 : 1 (5201)
Coupling standard	ISO 3964	ISO 3964	ISO 3964	ISO 3964	ISO 3964
Shank-Ø in mm	2.35	2.35	2.35	2.35	2.35
Speed range in rpm.	300 – 50,000	150 – 25,000	20 – 2800	15 – 2100	10 – 1200
Max. torque in Ncm	6	12	27	70	55
Weight in g	63	63	90	90	90
Cooling, internal/external	-/•	•/•	•/•	•/•	•/•



Operation

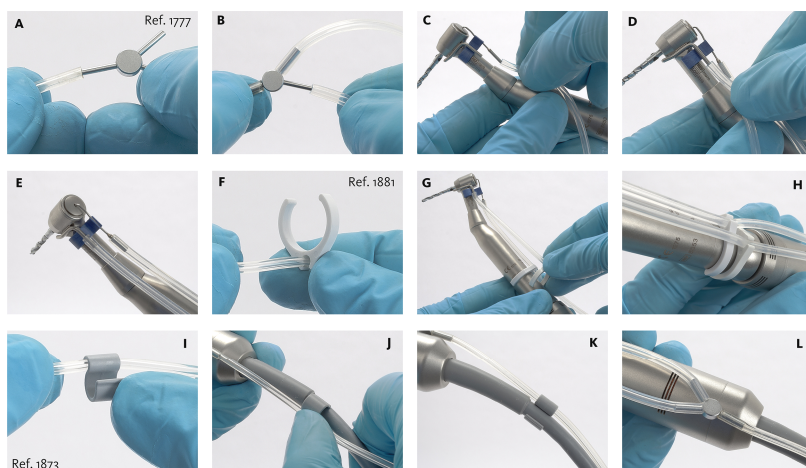
External cooling:

- Connect the open end of the irrigation tube set with the cooling pipe of the Contra Angle.
- Attach white clip to the tube set.
- Attach white clip with tube set to the Contra Angle.
- Connect the electronic motor with the Contra Angle.
- Attach grey clip (optional, ref. 1873) to the tube set.
- Attach grey clip with tube set to the cable of the motor
- Ready to use drill unit with attached external cooling system.



Internal/external cooling:

- Attach open end of the tube set (ref. 1706) to the single out branch of the Y-connector (optional, ref. 1777).
- Connect a 16 cm piece of tube (optional, ref. 1773) to each of the branching tubes of the Y-connector.
- Connect one of the 16 cm pieces of tube, that branch out of the Y-connector, with the internal cooling tube of the contra angle (delivered together with the contra angle, ref. 39116).
- Connect the second piece of tube that branches out of the Y-connector with the external cooling pipe of the contra angle (welded on laterally to the contra angles head).
- Both 16 cm pieces of tube are now connected to the cooling system of the contra angle.
- Secure a white tube clips (included with the contra angle, ref. 1881) to each of the short tube pieces.
- Secure tube clips to the contra angle.
- Contra angle with attached tube clips.
- Fix a gray clip (optional, ref. 1873) to the tube set leading to the Y-connector.
- Fix tube set with the gray clip to the motor cable.
- Motor cable with ready attached tube set to the motor cable. Secure further gray clips to the motor cable if needed.
- Tube set routing with Y-connector for internal and external cooling of the instrument.





Ready mounted cooling at Contra Angle and motor.

Essential accessories for internal cooling:

- Ref. 1777 Y-connector
- Ref. 1873 Motor cable clips
- Ref. 1773 16 cm connection tubes

Preparation instructions

Restrictions of treatment	Frequent reprocessing hardly affects the Contra Angle. The products life end usually is determined by damage, wear and tear caused by usage.	
INSTRUCTIONS		
Location of use	Wipe dirty surfaces with an expendable cloth/tissue paper.	
Storage and transport	No special requirements. Avoid lengthy waiting periods before preparation because of risk of drying and corrosion.	
Cleaning preparations	Remove burr, irrigation tubing, tube clip and cooling clip from contra angle. Remove visible soiling with cold water. Don't use ultrasonic bath.	
Automatic cleaning and disinfection	<p>Equipment: Cleaning/disinfection device with a special loading carrier, which ensures Handpiece connection to the cleaning/disinfection device and channel irrigation. A fine-meshed basket shall be used for the small parts. Rinse the Contra Angle from the rear. Use a neutral or alkaline cleaning agent in the recommended concentration.</p> <ol style="list-style-type: none"> 1. Load Contra Angle in the load carrier (irrigation of the channels must be ensured). 2. Place small parts into fine-meshed basket and close it. 3. Set cleaning cycle with effectual rinsing and cleaning. Carry out a rinse cycle with demineralized water. 4. For thermal disinfection rinse with demineralized water at 93°C for 10 minutes. 5. By taking the Contra Angle out check whether there's still visible dirt in gaps. If necessary repeat cycle or clean manually. 	
Manual cleaning	<p>Equipment: Neutral cleaning agent, soft brush, running cold water</p> <p><i>Procedure:</i></p> <ol style="list-style-type: none"> 1. Rinse surface dirt off the Contra Angle and small parts under running water. 2. Apply cleaning agent with brush on all surfaces as well as gaps. 3. Thoroughly rinse the Contra Angle under running water. 	
Manual disinfection	For manual disinfection, wipe the Contra Angle and small parts with a cloth soaked in disinfectant solution on an ethyl alcohol basis.	
Drying	If the drying/disinfection equipment does not provide any drying program dry Contra Angle and small parts manually or in a drying chamber.	
Inspection and maintenance Ref. 1958		<p>Check for visual damage, corrosion, and wear. After disinfection spray the Contra Angle with NouClean spray thoroughly and briefly, wipe with a moistened cloth (see instructions on the spray can).</p> 
Packaging	<p>Single: Pack the Contra Angle in an individual sterile supply package. The bag must be large enough that the seal is not under tension.</p> <p>Sets: Arrange the Contra Angles into the foreseen trays or put onto an all-purpose sterilization tray.</p>	
Sterilization	<p>Autoclave in vacuum autoclaves at 135°C for at least 5 minutes*. Do not exceed the maximum load of the sterilizer, if several instruments are sterilized during one sterilization cycle. Observe a drying phase for autoclaves without post-vacuum. Allow the Contra Angle to dry in the bag with the paper side upwards.</p> <p>*The temperature hold times must comply with the local guidelines and standards.</p>	
Storage	No special requirements. If the sterilized Contra Angle is not used immediately after sterilization the package must be marked with the sterilization date. Nouvag AG recommends to add a sterility indicator to the package.	

The above-mentioned instructions were validated as suitable from NOUVAG AG. The person accomplishing the treatment is responsible that the treatment that actually took place leads to the desired results in the treatment facility with the available equipment, materials, and personnel. To ensure this it is normally necessary to validate and supervise the process. Each deviation from the instructions provided should be evaluated carefully with regard to effects and negative consequences.

Troubleshooting

Problem	Cause	Solution
Motor is running, but tool does not turn	Contra Angle is not connected properly to the Motor	Press Contra Angle firmly on Motor, until Contra Angle snaps in. Check fitting
Tool functions irregularly	Tool is not clamped properly to the Contra Angle	Fix tool and tighten chuck
Contra Angle is noisy	Ball bearings are not lubricated or dirty	Spray the Contra Angles interior with Nou-Clean spray

Spare parts

Ref.	Description	Units
1777	Y-connector	1 piece
1773	Tubing for Y-connector (160 mm)	20 pieces
1881	Clip-Set complete (3 Clips)	1 piece
1969	Wrench for Contra Angle	1 piece
1882	Oil bottle	1 piece
1940	Cleaning pin	1 piece
1984	Nou-Clean Spray	1 piece
1958	Nozzle for Nou-Clean Spray	1 piece

Service centers

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For service, maintenance, spare parts and general inquiries please contact your local dealer or representative.

Disposal:

Disposal of device, components and accessories must strictly conform to local laws and regulations as set out by the relevant authorities.