

Powerful yet quiet: Contra-angle handpieces and turbines for improved comfort during treatments

Loud noises in the dental practice, such as rotating instruments, can cause stress for both the practice team and patients, hence the focus on decreasing the noise levels of the contra-angle handpieces and turbines. The latest innovation on this front is the new red contra-angle handpiece- one of the quietest on the market.

Bensheim/Salzburg, February 1st, 2018. For many people, visiting the dentist is not enjoyable, and the noises produced by the contra-angle handpieces and turbines can provoke further discomfort. For the practice team, exposure to these sounds throughout the course of the working day, and in particular to the high-frequency tones, can be a significant stress factor. Therefore, it is important for rotating instruments to work quietly.

In addition to emphasizing high performance, Dentsply Sirona is confident in the development of contra-angle handpieces and turbines that operate as quietly as possible. The aim is to manufacture high-performance instruments that neither unsettle patients nor have a negative effect on the health and work of the practice team. At the dental practice, certain noise sources can reach a level of 90 dB, which is 5 dB above the limit for possible damage to hearing.

"It is very important to us to continue optimizing our instruments, especially in terms of noise emission," explains Jan Siefert, Group Vice President, Instruments, at Dentsply Sirona. "We pay attention to both intelligent design and the precise manufacture of the individual components."

The importance is evident in the new red contra-angle handpiece. In combination with optimum illumination and small heads, the fine mist from the 4-nozzle spray ensures good visibility during treatment. Ceramic ball bearings with a special diamond-like carbon coating guarantee longevity. Thanks to the continuous improvement of balancing and manufacturing technologies, it is now quieter than ever before, and, as such, one of the quietest on the market.

Innovative solutions for less noise

Dentsply Sirona's turbines have been the quietest on the market for many years. They are equipped with an improved rotor that, because of how exceptionally smoothly it runs, stands out from the crowd. Low revolutions also help to limit the noise level. The 4-nozzle spray was developed in order to reduce the noise level even further. The water and air are thereby only combined outside of the instrument's head.

Press Contact

Marion Par-Weixlberger
Director Corporate Communications
and Public Relations
Sirona Straße 1
5071 Wals bei Salzburg, Austria
T +43 (0) 662 2450-588
F +43 (0) 662 2450-540
[marion.par-
weixlberger@dentsplysirona.com](mailto:marion.par-weixlberger@dentsplysirona.com)

Daya Bronner
Edelman.ergo
Niddastr. 91
D-60329 Frankfurt am Main
T +49 (0) 69 401 254 498
daya.bronner@edelmanergo.com
www.edelmanergo.com

About Dentsply Sirona:

Dentsply Sirona is the world's largest manufacturer of professional dental products and technologies, with over a century of innovation and service to the dental industry and patients worldwide. Dentsply Sirona develops, manufactures, and markets a comprehensive solutions offering including dental and oral health products as well as other consumable medical devices under a strong portfolio of world class brands. As The Dental Solutions Company™, Dentsply Sirona's products provide innovative, high-quality and effective solutions to advance patient care and deliver better, safer and faster dental care. Dentsply Sirona's global headquarters is located in York, Pennsylvania, and the international headquarters is based in Salzburg, Austria. The company's shares are listed in the United States on NASDAQ under the symbol XRAY. Visit www.dentsplysirona.com for more information about Dentsply Sirona and its products.

The sustained noise reduction has been verified in independent studies¹. In a simulated oral cavity, the sound levels of rotating instruments were determined. Turbines from leading manufacturers were tested, together with the T1 and T2 turbines from Dentsply Sirona. Under the conditions of the study, that closely resembled the everyday situation in a dental practice, the Dentsply Sirona turbines proved to be the quietest. Furthermore, they also count among the most powerful on the market. In combination with the patented control function, that guarantees high torque, they also enable continuous, rapid preparation. The speed brake, which is also patented, ensures good grinding performance with low abrasion, thereby allowing the turbine to work much more quietly.

IMAGES

Available for [> download](#) on the website



Fig. 1: Thanks to further technological developments, the new red contra-angle handpiece impresses with its low noise levels.



Fig. 2: According to a study, T1 (in the picture) and T2 turbines are currently the quietest models available on the market

¹ Dr. Andre Jakob, *advacoustics Report: Acoustic Study – Dental Turbines*