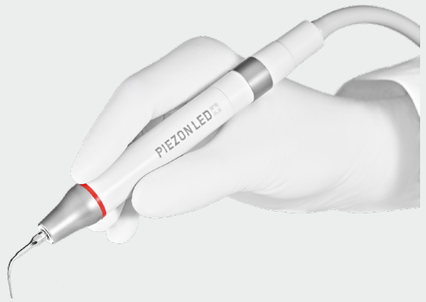
EMS

PIEZON® NO PAIN

Why is PIEZON® my tool of choice?

Calculus removal is an essential step for periodontal disease prevention and treatment. Ultrasonic scaling saves us from long hours of manual scaling and achieves superior results.1 Along with the the micro-vibrations' mechanical action, ultrasonic scalers generate acoustic streaming and cavitation in the cooling water flowing along the tip, helping the debridement. However, not all ultrasonic scalers are the same. The EMS PIEZON®, a piezo-ceramic ultrasonic device, is well known and widely used because of the gentle yet very effective treatment that it delivers. Here are some reasons why PIEZON® is also my absolute favourite tool.



- The PIEZON® movement

PIEZON® Instruments have a linear bi-directional oscillation, with low uncontrolled lateral displacement than sonic and magnetostrictive scalers.[2] With the correct position and angulation, piezoelectric instruments oscillate following the surface like a windscreen wiper, impacting against the hard deposits and not against the tooth. This movement translates into less vibrations conveyed through the tooth and higher comfort for the patient.[3] Moreover, different clinical studies report lower roughness on surfaces treated with piezoelectric instruments than magnetostrictive ones.[2,4,5]

- NO PAIN® - The latest technology to assist you

All the new EMS PIEZON® devices are equipped with the PIEZON NO PAIN® module and handpieces. NO PAIN® technology is an intelligent feedback system that detects the resistance on the instrument while scaling and automatically increases or decreases the power of vibration. We know surface damage increases when working with high lateral pressure.[4] With the PIEZON® there is no temptation to push on the calculus. I simply apply the instrument and let the vibration do the job for me, also saving my wrist. This technology helps me be more gentle and less invasive, improves the patients' experience, and reduces the noise that we hate so much.

- PS Tip - One instrument for many applications

The lateral displacement of the instrument during movement depends on the instrument's shape/design and the power setting.[6] Narrow, probe-shaped tips are less aggressive than wide thick ones,[2] but it does not mean that you have to give up on effectiveness. Moreover, they can penetrate even deeper than curettes in active periodontal pockets, reaching the most apical portion.[7] EMS Instrument PS is my go-to tip for both supra and sub-gingival debridement. The PS Instrument is slim enough to reach narrow interproximal spaces, long enough to debride effectively in deep pockets, and powerful enough to get rid of the hardest calculus. I obtain the best results with the PS Instrument operating on low power settings (30-40% of the maximum power). Lower power settings can be as effective as full power,[8] while keeping the undesired lateral movement of the tip very low.[9] Using a lower power respects the enamel and cementum and gives the best comfort to the patient.

Finally, I always make sure my tips are not worn, as they become less effective in calculus removal and can cause more discomfort.10 EMS provides Instrument Check Cards with each device to check whether your EMS Instruments need replacing. Regular replacement delivers measurable treatment efficacy. To get a free Instrument Check Card, visit https://professional.airflowdentalspa.com.au/instrumentcheck.

Finally, I stay away from "compatible" copy tips. They have a lower price, but they resist way less treatments and sterilisation cycles than the original and, on the long-term they can damage the handpieces. Always check the sterilization cycles on your tips before purchasing – you'll be surprised how much less sterilization cycles they permit.

The PIEZON® technology, combined with the AIRFLOW® system in the Guided Biofilm Therapy protocol, has brought my hygiene appointments to a higher level of quality and comfort, both for my patients and me.

PIEZON® products are available from Critical Dental on (02) 8883 0674

About the Author
Dr Annamaria Sordillo

Dr Annamaria grew up in Italy, where she obtained her combined Bachelor and Master degree in Dentistry with Honours. She moved to Sydney in 2017 to be with her Australian husband and she now lives and works in the Hunter region of New South Wales.

She has an interest in oral surgery, restorative dentistry and management of periodontal disease. Dr Sordillo lectures nationally and internationally and is a renowned clinical writer and researcher. She collaborates regularly with a periodontal research group at the University of Brescia (Italy) where she has co-written several international research papers.

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