

# “Help clinicians to make an excellent treatment even better”

## Interview with Integration Diagnostics Sweden

**Fig. 1:** Anders Petersson, President of Integration Diagnostics Sweden.



Fig. 1

**Resonance frequency analysis (RFA)** and ISO were introduced into the dental implant industry in 2001. Now, 15 years later, they have become established methods of measuring implant stability and osseointegration. Anders Petersson, President of Integration Diagnostics Sweden, has been among the pioneers of RFA, developing its early prototypes as well as the commercial product in 2001. For implants: international magazine of implant dentistry, Anders has taken the time to talk about the beginnings of his company, product philosophy, the principles behind RFA and future developments.

**Integration Diagnostics Sweden AB (IDSAB) was formed in 2015. What was your impetus for its foundation? Which goals did you want to achieve?**

We wanted to be able to offer an uncomplicated and affordable “RFA” system for the measurement of

implant stability, a system that did not require the dentist to purchase disposables to use. Our goal is to make it possible for all dentists to have their own Penguin RFA.

**One year later, what is your résumé so far? What are your milestones?**

The market response has been fantastic so far, both from users and distribution partners. The sales has actually surpassed all our initial expectations. Some important milestones until now were to develop MultiTiegs for all major implant systems, to get FDA clearance for the US and also certify the company according to ISO 13485. Another important strategic issue has been to develop our distributor network and we are extremely happy that so many want to become our business partners.

**What are the clinical benefits of your product?**

To assure enough implant stability and osseointegration to be able to load the implant with a prosthetic solution. Especially in situations with compromised bone or with other risk factors and also when you want to use shorter treatment time.

**Can you describe how measuring implant stability is achieved? What does it correlate to?**

The MultiTiegs is screwed onto the implant and the instrument tip is held close to the top of the peg—the reading will then appear in a second. In technical terms, the instrument measures the resonance frequency of the MultiTiegs, which correlates to the stiffness of the implant-bone interface.

The technique is non-contacting and cannot be sensed by the patient. The measurement unit is ISQ (implant stability quotient) which correlates to the micro mobility of the implant.

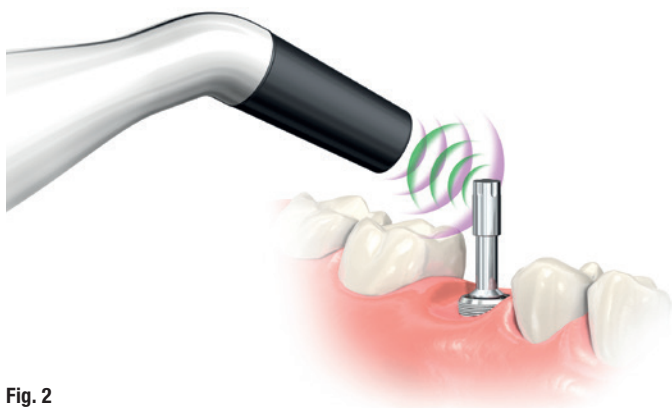


Fig. 2



Fig. 3

**Can you also measure osseointegration? How does it work? What values should the user go for?**

Yes, it can be measured by taking at least two measurements with some time in between, and monitor the change in ISQ. Research has showed that 70 ISQ or above corresponds to a stable implant. It is recommended to measure at two occasions, at installation and before loading, to see the trend in the ISQ-value.

**Do you plan to be present at the EAO Congress 2016?**

Yes, we are at the EAO meeting in Paris, and you are most welcome to visit us at booth no. 53.

**Excellent, can you already give us a preview on what you will present at the EAO?**

We will exhibit the Penguin RFA instrument, and demonstrate how it works. We use demo implants with adjustable stability, so there is an opportunity to test it hands-on. We will also have clinical expertise in the booth on at least one occasion during the exhibition. The people in the booth have extensive experience in the field of implant diagnostics and especially

ISQ, so I hope many take the opportunity to be there and meet with us.

**What can we expect from you in the future?**

We will continue to build our distributor network globally to make Penguin RFA available everywhere in the world. We will also continue our research in implant diagnostics and associated areas. Hopefully, it will lead to other valuable tools that will help clinicians and patients to make an excellent treatment even better.

**Anders, thank you very much for the interview.**

## contact

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**Fig. 2:** Penguin<sup>RFA</sup> measures the resonance frequency of the reusable MulTipeg<sup>TM</sup> with a non-contacting technique. The frequency is displayed as an ISQ-value (implant stability quotient) from 1–99. The ISQ-value correlates strongly to the micro mobility of the implants.

**Fig. 3:** The Penguin<sup>RFA</sup> system consists of a hand-held instrument and a reusable, tissue-friendly and autoclavable MulTipeg<sup>TM</sup>. A charger is delivered together with the instrument as well as a stainless steel driver for attaching the MulTipeg<sup>TM</sup> to the implant.

