41st International Dental Show (IDS) 2025

Implantology is a key theme

In 2025, the International Dental Show (IDS) will once again consolidate its position as the world's leading trade fair for the dental industry. More than 1,300 exhibitors have already registered for the 41st edition, which will take place in Cologne from 25 to 29 March 2025. In addition, country pavilions from all continents will be staffed by about 500 representatives.

The trade fair will once again aim to cover the entire spectrum of the dental world, from dentistry and dental technology, infection prevention, maintenance, all the way to services and information, communication and organisational systems.

Digital techniques in implant dentistry

In recent years, digital procedures have made oral implantology easier and more reliable. In the future, this development will accelerate, expand and make its preventive potential even more apparent. IDS in Cologne will show how today's dental practices are preparing for tomorrow's implantology therapies.

Oral implantology is becoming increasingly important in dental prophylaxis. Digitally supported techniques, especially backward planning, are an essential part of the future of dental implantology.

This involves matching 3D radiographs with intra-oral scans to an accuracy of typically ±250 microns. This tolerance is displayed to the dentist in colour, along with the alveolar nerve and the dimensions of and distances to the neighbouring teeth. Finally, the pre-planned prosthetic restoration is displayed on the screen to enable optimal alignment of the implants.

Conversely, especially for immediate implants, the prosthetic restoration can be virtually displayed on the finalised implant treatment plan (implant positions, implant angles, straight or angled abutments).

Based on this, a healing abutment is fabricated, and the crowns or other superstructures are made by subtractive manufacturing (milling/grinding) or by additive manufacturing (3D printing).

Surgical aspects

While implants can be placed using the classic freehand method, this approach does not take advantage of the key benefits of backward planning. Computer-guided surgery allows smaller tolerances in positions and angles. Bone drills are continuously displayed on the screen in real time and in relation to one or more radiographs.

An alternative option is static guided surgery using a drilling template made in the laboratory. Again, there is a choice between subtractive manufacturing (milling/grinding) and additive manufacturing (3D printing). Depending on the manufacturer, additional navigation tools may be available in the form of drilling sleeves, keys and other guidance tools to define drilling directions and angles.

Static guided surgery offers a choice of drilling templates supported by the bone, mucosa or teeth. They offer specific advantages when treating edentulous patients, in flapless surgery, etc. At IDS you can quickly get an overview of all the options available today.

The future: AI and more

In future, artificial intelligence (AI) software is expected to get better and better at identifying structures, even suggesting preferred implant positions and angles to dentists. Magnetic resonance imaging (MRI), which is already an accurate method used in other medical fields (e.g. breast cancer screening), could become a common method in dentistry as a radiation-free alternative to conventional 2D radiographs.

The trend is towards 3D printing for the fabrication of implant prosthetics and drilling templates. One of its advantages is the sustainable use of materials, as the additive process produces virtually no waste.

Materials used

In addition to the most established material, titanium, other materials such as zirconia (gingiva-friendly) or plastics (amenable to additive manufacturing) are available. These offer the opportunity to create more natural-looking designs, such as fibreglass posts that are inserted into an existing zirconia implant and act as a cushioning element with dentin-like properties. Such two-piece implants have shown good results in a long-term study (causing no peri-implantitis and exhibiting high implant survival rates). "In view of this dynamic development, I can hardly see any limits," said Mark Stephen Pace, Chairman of the Executive Board of the Association of the German Dental Industry (VDDI). "The combination of several digital tools should simplify implant prosthetics and help to increase its prophylactic potential on a broad basis. The International Dental Show (IDS) in Cologne from 25 to 29 March 2025 will show how dentists and their teams can prepare for this future today."

IDS is held in Cologne every two years and is organised by the GFDI, the commercial arm of the Association of the German Dental Industry (VDDI). It is staged by Koelnmesse GmbH, Cologne.

BDIZ EDI will be there again, too—opposite the German Dental Association (BZÄK) in hall 11.2, booth O69/N60.

Source: Koelnmesse/EB

Tickets

Tickets for IDS 2025 are personalised and only available online. Visitors will benefit from the flexible ticket management of IDS, tailored to their individual needs. The ticket can be managed via the official IDS app, loaded into a smartphone wallet or printed on paper. Tickets have been available online since mid-November.

For example, a free VRS/VRR ticket for local transport is available in conjunction with the admission ticket. There are also exclusive train and flight offers from Deutsche Bahn and Lufthansa. Exhibitors and visitors can also use Koelnmesse's hotel booking portal to book up to five rooms online at the same time and benefit from special rates. IDSconnect, the online platform accompanying the trade fair, will offer extended networking and preparation opportunities from the beginning of March 2025.