The International Dental Show (IDS) at Cologne has long been recognized as the perfect event for professionals operating in the dental sector to keep abreast of the state of the art, and to catch a glimpse of the future of dental products and the latest solutions for dentists and dental technicians. This year, being no exception, the event will feature the latest advances in intraoral scanning and 3D printing. A major international showcase, the event will house stands from over 2000 firms hailing from 56 countries. Italy, with over 250 firms signed up, is rivalled only by Germany in terms of exhibitor numbers, and is set to confirm once again the worldwide reputation of the “Made in Italy” brand.

In 2013, there were over 125,000 visitors to the event, and those attending this year will find that they are really and truly spoilt for choice. All the major international firms will be present, exhibiting a dizzying range of solutions for dentists and dental laboratories, from products to prevent infections and ensure optimum hygiene to solutions that help take information, communication, and organization to the next level. The inside word, courtesy of Martin Rickert, president of the managing committee of the German Dental Industry Association (VDDI), is that, “in addition to numerous and fascinating single innovations, the spotlights of the Cologne International Dental Show will be firmly focussed on computer-aided dentistry and smart communication networks.”

“The world of digital diagnostic and production systems now spans the entire workflow, embracing every aspect of both the dental practice and the dental laboratory. At the same time the entire computer-aided chain is aimed towards great flexibility. With open systems, impressions, CAD designs for restorations, surgical drill guides and virtually everything else can be codified into STL format, leaving all the options open: milling, drilling, laser-assisted procedures, handling various types of ceramics, biomedical alloys or plastics, and even the creation of PMMA components for melting noble metals. The possibilities are almost endless. Added to that are the links with procedures based on imaging techniques. For example, by combining 3D radiographs with clinical scan data, it will be possible to design and plan better implant procedures, right up to the finished drill guide. The terms “dental” and “digital” are now closely interlinked.”

Indeed, this is the area where the Italian firms exhibiting their solutions at Cologne are set to shine, carrying on a long tradition of innovation, reliability, and – why not? – superlative aesthetics and excellent taste.

Norberto Maccagno
Right across Europe, digital technology is revolutionizing the way dentistry is being practiced, especially in terms of the manufacture of prosthetic devices in dental laboratories. Italy is no exception, and in fact, is at the forefront of the digital revolution. According to the Association of European Dental Dealers (ADDDE) 2013 figures, Italy could boast the highest number of digital diagnostic systems installed, and it is also among the frontrunners in terms of CAD/CAM technology. As revealed by KeyStone Consulting’s annual OmniVision report, the number of prosthetic solutions created with the aid of CAD/CAM is rocketing up by 30% per year on average. Indeed, it is estimated that 350,000 were made in 2009, and by 2013 the figure had exceeded 1,100,000, despite an overall reduction in the number of prosthetic devices manufactured.

Roberto Rosso, Key-Stone CEO reminds us, “The continual renewal of technologies has meant that the entire equipment sector experienced, in 2013 up to mid 2014, a revival after a long investment lag.” According to a survey conducted by the Odontoiatria33 online bulletin in September 2014, 68.5% of interviewees declared that they had at least one dental radiograph in their surgery. Still lagging behind, however, are the cone-beam scanner and CAD/CAM milling devices. Among the other new technologies will a lot of ground still to cover are intraoral scanners, at 14.3%, a figure sure to increase over the next few years, and dental lasers at 27.0%

As in all manufacturing sectors, these new technologies have not had a uniform impact across the profession, and even though 26.8% of dentists stated that they wanted to equip their surgery with at least one new digital tool in the next 24 months, 73.2% declared that they had no intention of doing so. “The difficulty of professionals in approaching these new technologies is due to the way the dental service market is organized in Italy,” explains Prof. Massimo Gagliani, Scientific Coordinator for the Dentistry division of the EDRA/LSWR, “specifically in the hands of sole operators with one dental assistant. A single-dentist surgery, particularly in these times, does not have sufficient financial resources to be able to afford the expense that one, let alone several, such tools entail.” Added to that are the issues linked to an information gap in this hyper-technological age, as over 50% of practicing Italian dentists are over 50 years old. “This generation of dental professionals,” continues Gagliani “is rather ambivalent about the technological revolution, whether it be the use of a personal computer, the internet, or CAD/CAM technology. The over-50s dentist is highly suspicious of technological innovation, and sees changes in workflows in particular as an arduous mountain to climb in such uncertain weather and on such slippery economic ground.”

This is reflected in Odontoaiatria33’s survey, which detected a problem adapting to change, despite an awareness that the digital revolution will inevitably alter the way the profession is practiced. Indeed, a strong majority of interviewees declared that they are aware that CAD/CAM technology will revolutionize the way dental prostheses are manufactured, as these technologies enable the production of prostheses that are more precise (43.0%), in a shorter time (39.2%), and with reduced overall manufacturing costs (17.8%).