The WeldOne™ concept

Facilitating stable and durable chairside solutions
With the help of WeldOne Welding Unit and special welding components, a titanium wire is permanently connected onto the abutment.

Immediate reinforcement of the temporary by a titanium framework.

Specially designed XIVE welding components.
The WeldOne concept is worldwide unique as DENTSPLY Implants offers the first complete, proven and sophisticated concept for intraoral welding based on resistance spot welding principle.

With the help of the WeldOne Welding Unit and special welding components, a titanium wire is permanently connected to the abutment with precisely the correct force to achieve an optimum weld. An electric current leads to fusion of the titanium material in the contact points between the titanium wire and the abutment in milliseconds.

The permanent joint between the titanium wire and the abutment enables an immediate and stable titanium framework to be made which will provide the optimum support for temporary or durable restorations.

This concept is exclusively designed for dental implants made by DENTSPLY Implants.

Different procedures of fabrication can be selected for this unique concept of prosthetic restoration:
- Temporary restorations on implant level
- Temporary or durable restorations on abutment level

The WeldOne concept provides a stable, passively fitting framework for temporary or durable prostheses for immediate restorations on the same day of surgery.

It is a fast and economical solution to deliver partial- and full-arch restorations – suitable for immediate or late loading.

- **Meets the patients’ demand for immediate restorations**: Surgical procedure and prosthetic delivery on the same day of surgery.

- **Significant time and cost reduction**: Standardized protocol with specially designed components for a reduction of appointments to a minimum and the opportunity to reduce total treatment costs.

- **Less risks of fractures on temporaries**: Immediate reinforcement of the temporary by a titanium framework.

- **Safely and predictably for immediate loading treatment**: As a consequence of reduced mobility of implants due to immediate rigid splinting a risk of implant failures during healing phases can be minimized.

- **No additional impression-taking of implants necessary**: Simultaneous delivery of a titanium framework on implant abutments at one time. Advantage of the one abutment at one time philosophy in case of abutment level restorations.

“Vision becomes reality”

Dr. Marco Degidi
Bologna, Italy
The inventors of this concept are Dr. Marco Degidi and his dental technician Gianluca Sighinolfi both from Bologna, Italy. Their excellent knowledge, craftsmanship and teamwork are the basis for the successful creation of this unique stable and durable chairside concept. The teamwork of the surgeon and the dental technician is key for success.

Although the WeldOne concept is cutting-new, an impressive amount of publications in peer reviewed journals is already available (see below).

The WeldOne concept is an advanced protocol addressed to surgeons and prosthodontists that already have experience with immediate loading treatment.

Special training courses tailored to meet the indication requirements and the experience level are highly recommended. Please see last page of this brochure for course offers or contact your local representative.

Additional product information:

Intra-oral welding

Known for decades – now brought to perfection

Dr. Marco Degidi Bologna, Italy
Active member of the Academy of Osseointegration, Diplomate of International College of Oral Implantology. Private Practice in Bologna, restricted to implant surgery & prosthetics. Adjunct Professor, Postgraduate Program in Clinic Implantology and Biomaterials, University of Chieti. Adjunct Professor, Postgraduate Master in Clinic Implantology, University of Bologna. Speaker in many national and international seminars, congresses and courses; many national and international publications.

Gianluca Sighinolfi, Bologna, Italy
In 1989 he was awarded his diploma from the Villaggio del Fanciullo in Bologna, Italy. He immediately began work in an important dental lab in Bologna, later to become a partner. He has had extensive specialist training and conducted courses both in Italy and internationally. Since 1996, Gianluca has collaborated with Dr Marco Degidi and Prof Piattelli on immediate loading research, contributing to the development of new surgery protocols and numerous articles on this subject that have been published in leading international reviews and journals.
Step-by-step

The WeldOne™ concept for XiVE®

- Specially designed XiVE Temporary Welding Abutments

- Implant level restorations

- Placement of implants

- Abutment level restorations

- Placement of dedicated welding abutments

XiVE Welding Sleeve for D 3.4 / D 3.8

XiVE Welding Sleeve for D 4.5
Bending, alignment and intraoral welding of titanium wire

Extraorally welded retentions are added to the framework

Finalized and opaque coated titanium framework

Completed restoration
The WeldOne™ concept

Specially created WeldOne Welding Unit with touch screen and easy menu guidance
The WeldOne™ concept for XiVE® – designed function

It is recommended to use the following custom-built tools manufactured by USTOMED. This handful of simple tools allows you to create a titanium framework with a few simple steps. To get detailed information, please contact USTOMED directly: www.ustomed.de

Sharp Curver
bends the bar into more acute angles for single abutments.

Soft Curver
bends the titanium bar along the curve of the arch.

Holder
grasps and holds the titanium bar firmly in place during the welding process.

Cutter with tungsten carbide inserts easily and efficiently cuts off excess material.

Three sizes of titanium wires to ensure the stability of the framework according to the right application and respective indication.
Products

The WeldOne™ concept for XiVE®

**Titanium Wire**
- **D 1.2 / L 100** Grade 2 (10 pcs)
- **D 1.5 / L 150** Grade 2 (10 pcs)
- **D 2.0 / L 150** Grade 2 (10 pcs)

**Order no.**
- 47 – 4710
- 47 – 3012
- 47 – 3013
- 47 – 3014

XiVE® MP Welding Sleeve

- **D 3.4 / D 3.8**
- **D 4.5**

**Order no.**
- 45 – 4741*
- 45 – 4751*

XiVE® Temporary Welding Abutment

- **D 3.4**
- **D 3.8**
- **D 4.5**

**Order no.**
- 46 – 1231*
- 46 – 1241*
- 46 – 1251*

* incl. retaining screw
Expert training
The WeldOne™ concept for XiVE®

Please contact your local sales representative to learn more about WeldOne™ product availability and specifications, trainings and congress presences.

• Practical and theoretical approach
• Hands-on supported

To gain the maximum benefit from the course, it is recommended that your lab technician attends the course as well.
About DENTSPLY Implants
DENTSPLY Implants offers comprehensive solutions for all phases of implant therapy, including ANKYLOS®, ASTRA TECH Implant System™ and XIVE® implant lines, digital technologies, such as ATLANTIS™ patient-specific CAD/CAM solutions and SIMPLANT® guided surgery, SYMBIOS® regenerative solutions, and professional and business development programs, such as STEPPS®.
DENTSPLY Implants creates value for dental professionals and allows for predictable and lasting implant treatment outcomes, resulting in enhanced quality of life for patients.

About DENTSPLY International
DENTSPLY International Inc. is a leading manufacturer and distributor of dental and other healthcare products. For over 115 years, DENTSPLY’s commitment to innovation and professional collaboration has enhanced its portfolio of branded consumables and small equipment. Headquartered in the United States, the Company has global operations with sales in more than 120 countries.