



### Implant Torque Verification System (ITVS)

The ITVS is designed to prevent improper torquing of dental implants by verifying the calibration of implant torque wrenches.

The ITVS contains the following:

- Mini Torque Screwdriver (1)
- Latchgrip Connector (1)
- Square/Hex Connector (1)
- SmartMarker – Nobel Biocare compatible (2)
- SmartMarker – Straumann compatible (2)

#### Instructions for Use:

All implant torque wrenches should be regularly verified: weekly for toggle-type and monthly for beam-type.

1. Refer to included instructions for use and care of the Mini Torque Screwdriver.
2. For **toggle-type** torque wrenches:
  - a. Set desired calibration value on the Mini Torque Screwdriver. 25 N-cm or 35 N-cm can be used as a reference value if there are no other specific requirements.
  - b. Set desired calibration value on the toggle-type torque wrench.

**NOTE: the calibration value set on the Mini Torque Screwdriver and the torque wrench should be the same.**

- c. Insert appropriate ITVS Connector into the hex head of the Mini Torque Screwdriver.
- d. Engage implant torque wrench onto ITVS Connector.
- e. Activate the torque wrench slowly. The Mini Torque Screwdriver will produce a “click” noise when the torque setting is achieved. Likewise, the toggle-type torque wrench will produce a “click” noise when the torque setting is achieved.
- f. Note your findings and take corrective action if necessary:
  - i. **If the toggle-type torque wrench clicks *before the Mini Torque Screwdriver*:** the torque wrench is under-torquing and should be recalibrated. Follow manufacturer instructions to recalibrate before using in a clinical setting.
  - ii. **If the toggle-type torque wrench clicks *at the same time as the Mini Torque Screwdriver*:** the torque wrench is accurately calibrated and can be used in clinical settings.



iii. If the Mini Torque Screwdriver clicks *before the toggle-type torque wrench*: the torque wrench is over-torquing and should be recalibrated. Follow manufacturer instructions to recalibrate before using in a clinical setting.

3. For **beam-type** torque wrenches:

- a. Set desired calibration value on the Mini Torque Screwdriver. 25 N-cm or 35 N-cm can be used as a reference value if there are no other specific requirements.
- b. Insert appropriate SmartMarker into measurement channel of the beam-type torque wrench. Instructions for use of the SmartMarker can be found at [www.implantwisedental.com/ifu](http://www.implantwisedental.com/ifu).
- c. Insert appropriate ITVS Connector into the hex head of the Mini Torque Screwdriver.
- d. Engage implant torque wrench onto ITVS Connector using manual screwdriver head (if applicable).
- e. Activate the torque wrench to the desired torque. The Mini Torque Screwdriver will produce a “click” noise when the torque setting is achieved.

**NOTE: read the final torque achieved as indicated by the SmartMarker to ensure the beam-type torque wrench achieved the desired torque value.**

f. Note your findings and take corrective action if necessary:

- i. **If the Mini Torque Screwdriver clicks and the SmartMarker reads *over* the desired torque value**: the torque wrench is under-torquing and should be recalibrated or replaced. Follow manufacturer instructions to recalibrate or replace the torque wrench before using in a clinical setting.
- ii. **If the Mini Torque Screwdriver clicks and the SmartMarker reads *at* the desired torque value ( $\pm 5\%$ )**: the torque wrench is accurately calibrated and can be used in clinical settings.
- iii. **If the Mini Torque Screwdriver clicks and the SmartMarker reads *under* the desired torque value**: the torque wrench is over-torquing and should be recalibrated or replaced. Follow manufacturer instructions to recalibrate or replace the torque wrench before using in a clinical setting.

Additional video demonstrations of the ITVS can be found at [www.implantwisedental.com/ifu](http://www.implantwisedental.com/ifu).



**Storage:**

The Mini Torque Screwdriver should be stored at the zero torque setting. All ITVS components should be stored in a clean and dry environment.

The Mini Torque Screwdriver and other components of the ITVS should never be autoclaved or exposed to heat.

*For questions or assistance with the ITVS, please contact [info@implantwisedental.com](mailto:info@implantwisedental.com).*