SURGICAL INSTRUMENTS

Straumann® VeloDrill™ System

High performance.
Low temperature.

straumann

Straumann® VeloDrill™ System
Speed. Flexible. Simply cool.

The Straumann® VeloDrill™ System shortens oral surgery chair time, minimizes heat generation and delivers high drilling stability. Suitable for all surgical protocols, the system lowers setup cost by maximizing synergy between instrumentation for freehand and guided surgery.

Instrumentation for implant surgery has not changed much over the past decades, until now.

Current literature[1–4] shows that heat generation during drilling remains a major concern during dental implant surgery. Also, guided surgery adoption is hindered due to challenges of time, money and fear.[6]

Our answer is the new VeloDrill™ System. Designed for use in freehand and guided surgery, the VeloDrill™ System delivers speed, precision, high drilling stability and low drilling temperature.

When used for guided surgery, VeloDrill™ allows a pilot to final drill protocol that significantly shortens chair-time. For freehand surgery, VeloDrill™ can be used with a drill stop to provide precise depth control.

FLEXIBLE
Shared instrumentation for freehand and guided surgery.

FAST
Shorter chair-time with a simplified drilling protocol.

LOW TEMPERATURE DRILLING
Avoids overheating surrounding structures.

High performance delivered.

VeloDrill™ System is designed to allow dentists to shorten surgery chair time and to have more control during drilling. The shorter pilot-to-final guided surgery protocol is possible due to the VeloDrill™ low heat generation technology.

Simply cool

Combines low heat generation with high drilling stability.

Free one hand

Compatible with self-locking drill handles for guided surgery.

Customized setup

Used with the Straumann® Modular Cassette, a VeloDrill™ freehand setup could easily be upgraded into a guided surgery setup.

Single use drill stops and self-locking drill handles allow dentists to have precise depth control and free up one hand during drilling.

Stay in control

Compatible with single use drill stop that provides precise depth control.

Shorter chair time

Pilot-to-final guided surgery protocol at 800 rpm.

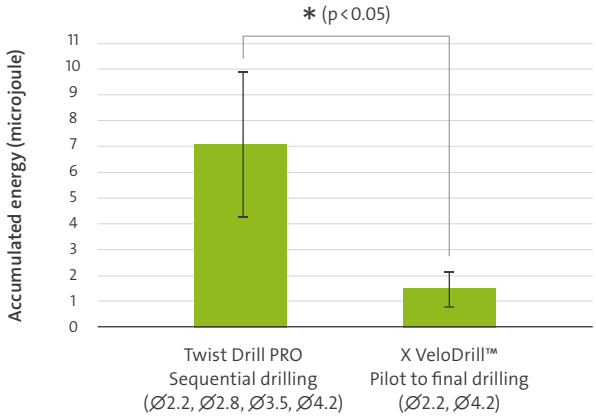
Low temperature drilling.

Studies show that thermal damage adversely impacts bone healing.[1–4]

The VeloDrill™ System is designed to minimize heat generation.[5] This is facilitated by the new cutting geometry design and surface treatment that limits friction and facilitates debris extraction.

When used for guided surgery, the low-temperature drilling allows VeloDrill™ to be used for a pilot-to-final drill protocol, without generating more heat compared to the traditional sequential drilling protocol.[5]

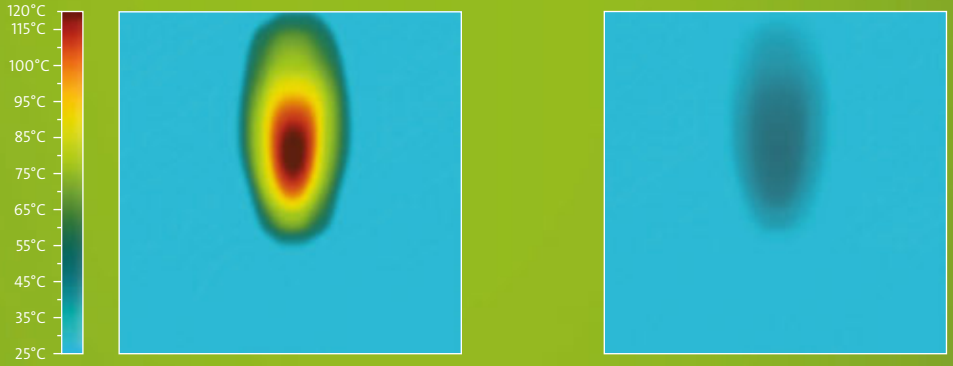
Accumulated energy measured above room temperature (25 °C) accross the drilling protocol in PUR plate (pcf 50) simulating hard bone



Avoid overheating surrounding structures.

Twist Drill PRO

X VeloDrill™



Ø 2.8 mm drill, direct drilling in PUR (pcf 50) plate simulating hard bone measured with infrared camera.[5]

Straumann® VeloDrill™ System
Speed. Flexible. Simply cool.

- Shorter chair time and simplified drilling protocol
- Shared instrumentation for freehand and guided surgery
- Avoid overheating surrounding structures

REFERENCES

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