

Biological drilling protocol

TAILORED TO ALL BONE TYPES

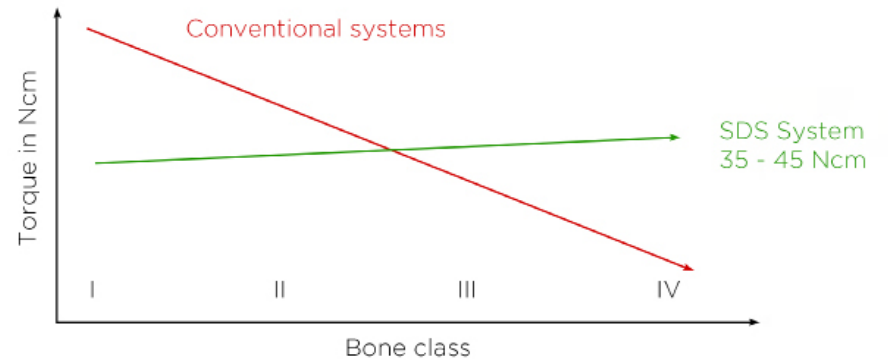
Most conventional implant systems generate higher torques the harder the bone. This is absolutely contraindicated and counterproductive in biological terms as, according to Mammoto's Law, increased pressure on poorly perfused bone leads to resorption. The SDS drilling protocol takes biology and this important biological law into account by generating decreasing insertion torques as the bone gets harder and matching drills and drilling protocols to bone types. This conserves the bone and supports vascularization, which is crucial for the long-term preservation of any tissue.

DRILLING PROTOCOLS

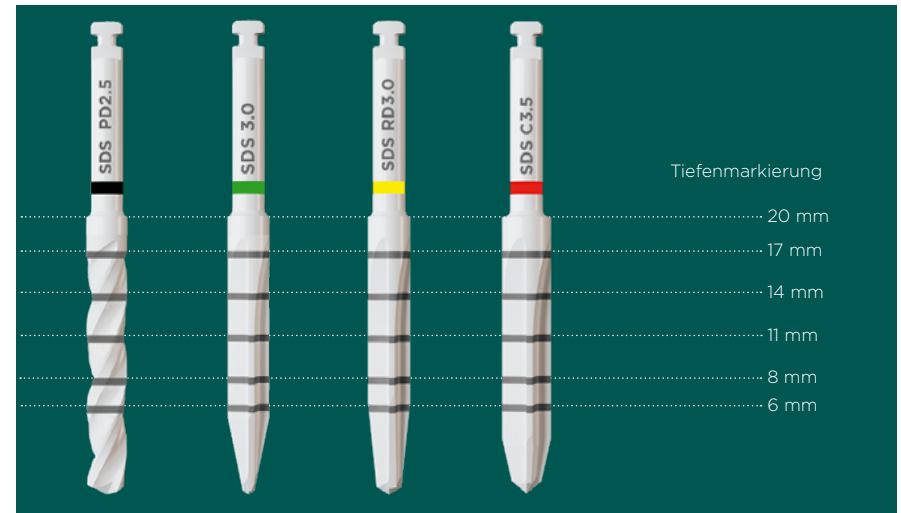
We recommend having these drill sequences on hand during surgery to ensure that protocol is followed perfectly. The varied drilling protocols also make it possible to optimally adapt the implant bed preparation in atypical situations, depending on the bone density. The illustrations show the drilling sequences, starting with the rose bur and ending with the form drill projected onto the implant, so that you can see exactly which thread depth remains for stabilization purposes.

CORRECT USE

Drilling should be carried out intermittently and with constant external cooling with precooled (5°C/41°F) sterile Ringer's solution. External cooling prevents the bone tissue from overheating and facilitates bone chip removal and/or drainage. Preparation is performed under low pressure to the desired depth at a speed of 300–600 rpm.

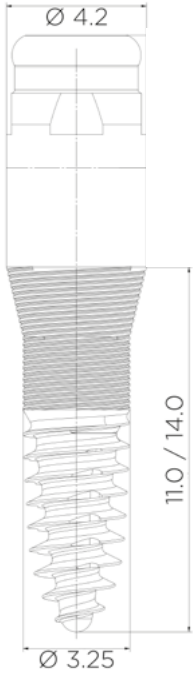


Uniform torque in all four bone types when using the SDS drilling protocol compared to conventional systems.



SDS1.2_3.3 Type III and II bone

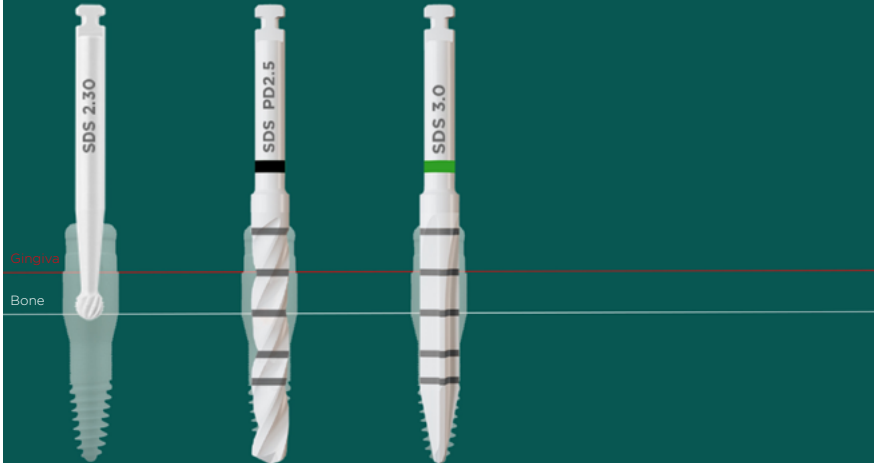
SDS1.2_3.3



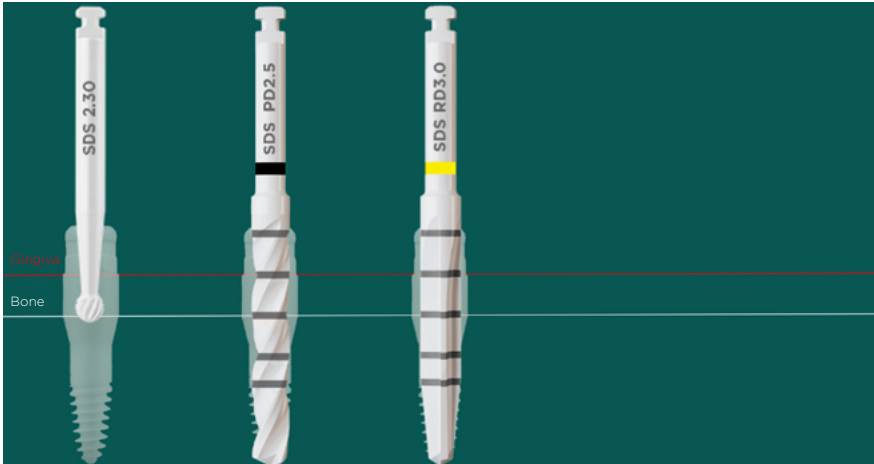
Recommended rpm

SDS 2.30	6000/min
SDS PD2.5	1000/min
SDS 3.0	300-600/min
SDS RD3.0	300-600/min

SDS1.2 Ø 3.3 mm - Type III bone

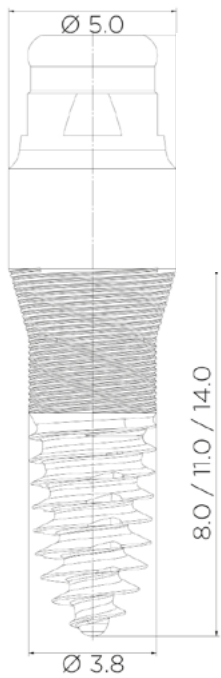


SDS1.2 Ø 3.3 mm - Type II bone

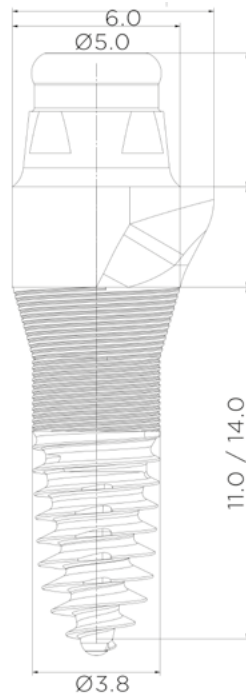


SDS1.2_3.8 Type IV and III bone

SDS1.2_3.8



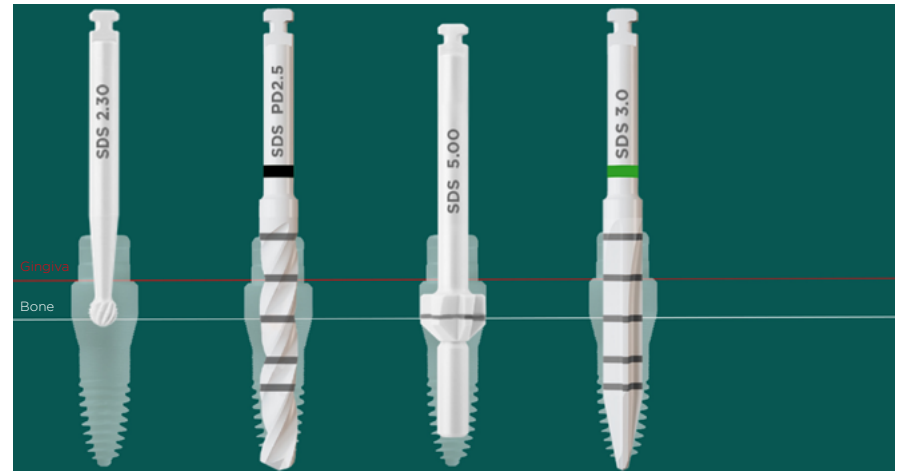
SDS1.2_3.8-ba



Recommended rpm

SDS 2.30	6000/min
SDS PD2.5	1000/min
SDS 3.0	300-600/min
SDS 5.00	300-600/min
SDS CS5.0	300-600/min

SDS1.2 Ø 3.8 mm - Type IV bone

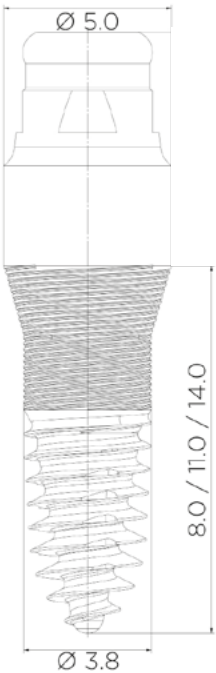


SDS1.2 Ø 3.8 mm - Type III bone

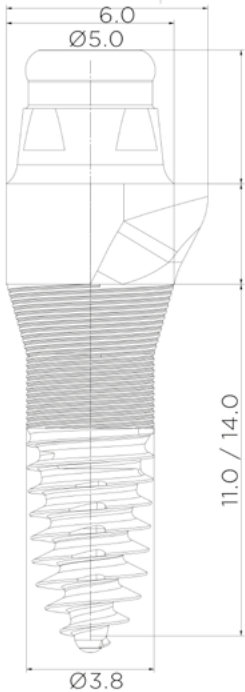


SDS1.2_3.8 Type II and I bone

SDS1.2_3.8



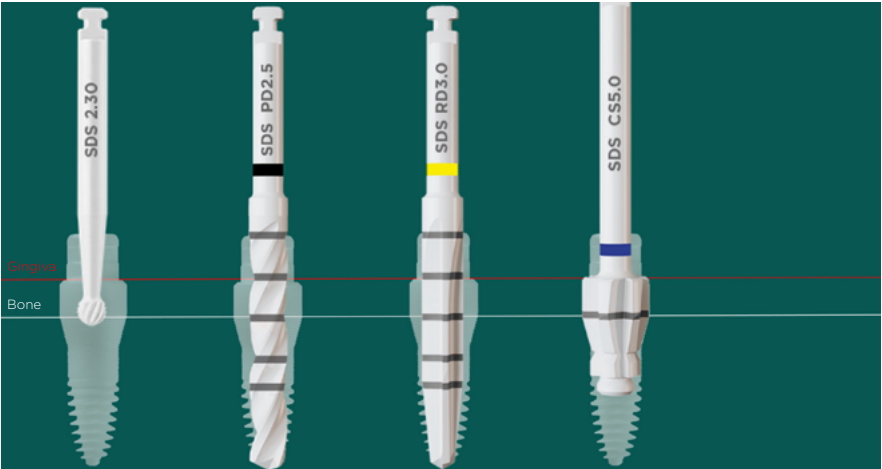
SDS1.2_3.8-ba



Recommended rpm

SDS 2.30	6000/min
SDS PD2.5	1000/min
SDS RD3.0	300-600/min
SDS CS5.0	300-600/min
SDS C3.5	300-600/min

SDS1.2 Ø 3.8 mm - Type II bone



SDS1.2 Ø 3.8 mm - Type I bone

