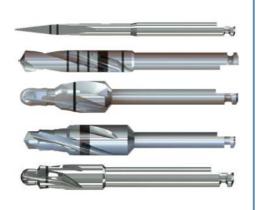
## SURGICAL INSTRUMENTS

# S.I.N. DLC Surgical Drills



The S.I.N. DLC Surgical Drills Family are intended for surgical procedures for installing dental implants, which must be performed by qualified professionals. The way of using the product and surgical techniques are inherent to the professional's training. The use of the product must be performed in a surgical environment and in conditions suitable for the health and safety of the patient.



#### PRODUCT DESCRIPTION

S.I.N. DLC Surgical Drills are produced in stainless steel, at one end it has a fitting for a contra angle (active device) and at the other end an active tip with a cut and geometry compatible with the implant to be installed. The drills are laser marked to determine the depth of the drilling according to the surgical planning. The drills have a DLC (Diamond-Like Carbon) surface.

**Lance Drill:** Used to mark the location where the implant will be installed, promoting the rupture of the cortical bone, facilitating the insertion of other drills.

**Helical Drill:** Used to deepen and direct the perforation into the bone according to the surgical plan.

**Conical Drill:** Used in sequence to enlarge the perforation in progressive diameter until the final dimension is suitable for installing the implant following the surgical planning.

**Countersink Drill:** Used to increase the diameter in the cervical region of the implant. The purpose of this drill is to make space for the correct seating of the implant platform.

**Drill Bone Profile:** Used to facilitate the removal of bone on the implant cover after osseointegration.

**Pilot Drill:** Used in the surgical sequence after the helical drill and before each conic drill to avoid increasing the temperature while drilling.

**Trephine Drill:** Used to removal of implants and/or bone tissue.

**Extracting Drill:** Used to perform a circular incision on the mucosal tissue.

**Round Bur:** Used to mark the place where the implant will be installed, promoting the rupture of the cortical bone and facilitating the insertion of other drills.

#### **INDICATIONS OF USE**

S.I.N. DLC Surgical Drills are surgical instruments indicated for the preparation of the surgical alveolus for the installation of dental implants.



## PURPOSE AND OPERATION PRINCIPLE

The purpose of the S.I.N. DLC Surgical Drills is to drill the surgical alveolus with the appropriate dimensions for the installation of dental implants. The drills have active cutting points of surgical steel that by shearing mechanical action cut the bone.

#### **HOW TO USE THE INSTRUMENT**

- 1. Select the set of drills necessary to obtain the proper drilling of the place considering the desired length and width.
- 2. Ensure that the drills are properly sterilized when starting the procedures (see sterilization conditions contained in this instruction for use).
- 3. The drills must be fitted to the contra angle, configure the motor to the speed, torque and irrigation suitable for the type of implant to be installed.
- 4. Carry out drilling with continuous insertion and removal movements using the drill with the planned length and diameter.
- 5. Proceed with surgical procedures.



## ATTENTION

S.I.N. DLC Surgical Drills are intended for specialized procedures, which must be performed by qualified professionals in implantology. The use of the product must be performed in a surgical environment and in proper conditions for the health and safety of the patient.

#### **PRECAUTIONS**

Before drilling, make sure the drills fit into the counter angle and adjust the motor in relation to rotation, torque and irrigation. During drilling, pressure must not be excessive, and intermittent movements must be made. The drills are not capable of sharpening and using them without cutting can generate undue bone heating, compromising the success of the procedure. The use of drills or inappropriate drills can compromise the performance of the implant, resulting in system failures, such as loss or fracture of the Implant. Before each procedure, check the condition of the instruments, always respecting their useful life. It is necessary to replace the instruments in case of damage, erased markings, compromised sharpening, deformations and wear.

#### RECOMMENDATIONS

The product should only be used by qualified dental professionals who already have all the scientific information necessary for the correct use of the product. Always clean and sterilize as recommended before the surgical procedure. Care must be taken in cases of patients who show signs of allergy or hypersensitivity to stainless steel. The drills can be used for up to 30 surgical instruments depending on proper handling, cleaning and sterilization. It is necessary to check the sharpness of the instrument after each surgical procedure and if a lack of sharpness is found, the material must be discarded. Of which: 20 perforations in high-density bones; 30 perforations in low density bones.



### CONTRAINDICATION

Use of drills without irrigation, which can cause bone necrosis. Use for purposes other than preparing the surgical alveolus for installing dental implants.

#### **SIDE EFFECTS**

Side effects can only occur if the drill is not handled according to the instructions for use.

#### **WARNING**

Do not use the instrument if you notice cracks, wear or spots of oxidation/corrosion. This may cause problems in the operation of the instruments. All items may exhibit natural wear and tear and should be replaced whenever the professional identifies loss of fit or accuracy of these products as they may interfere with the result of the work.

## **TRACEABILITY**

All S.I.N. products have sequential batches that allow traceability, thus promoting greater safety for professionals skilled for the procedure. Through this lot number it is possible to know all product history from the manufacturing process to the time of distribution.

#### **STORAGE**

S.I.N. DLC Surgical Drills should be stored in a cool dry place at a temperature of 15°C to 25°C and protected from direct sunlight in their original unopened packaging and should not be damaged.

## **HANDLING**

Once sterilized, the instruments should be handled in a sterile environment by properly attired professionals and in appropriate clothing at the time of surgery to install implants. Scratches or notches of the instruments should be avoided as such factors can increase the possibility of corrosion of the products.

#### **DISPOSAL OF MATERIAL**

The disposal of materials should comply with local hospital regulations and applicable local laws.

#### **TRANSPORTATION**

S.I.N. DLC Surgical Drills must be transported adequately to avoid falling and stored at a maximum temperature of 25°C, protected from heat and moisture. Transport must be carried out in its original packaging.



### **COMPLEMENTARY INFORMATIONS**

Multiple use product. Exclusive for dental use. Reprocessing is allowed. Refer to the cleaning and sterilization conditions contained in this instruction for use. Any serious incident that has occurred in relation to the device should be reported to the manufacturer and competent authority of the country in which the dentist and/or patient is established. If you need the printed version of this instruction for use, without any cost, please request by e-mail to sin@sinimplantsystem.com or call to 0800 770 8290 will receive until 7 days calendar.

#### **CLEANING INSTRUCTIONS**

- 1. Prepare the enzymatic detergent according to the detergent manufacturer's instructions.
- 2. Immerse all parts of the product into the prepared detergent solution and leave for 5 minutes. Then, using a soft bristle brush, scrub the parts for at least 2 minutes until you completely remove organic matter from the products.
- 3. Remove the parts from the detergent solution and rinse with tap water for 1 minute until the residue is completely removed. Repeat the rinse two more times.
- 4. Visually inspect each part to check for process residues or organic residues from the use of the product.
- 5. If residue in detect in the product, repeat the cleaning process until the residue is completely removed.
- 6. Dry with soft, clean, dry cloth or disposable paper.
- 7. Proceed with the sterilization process.

#### **RECOMMENDATIONS**

- a. Wear appropriate clothing (gloves, masks, glasses, hats, etc.)
- b. Begin cleaning immediately after surgical use.
- c. Never let the instrument dry containing organic residues after surgical use.
- d. Never let the instrument dry naturally after cleaning.
- e. Never use saline solutions, especially sodium hypochlorite and saline, disinfectants, hydrogen peroxide or alcohol to clean or rinse surgical instruments and Kit trays.
- f. Never use steel wool or sponges or abrasive products, so that the instruments are not damaged.
- g. Do not accumulate instruments in large quantities on top of each other to avoid deformation of smaller and delicate pieces.

## **STERILIZATION**

Reusable product and provided non-sterile. It must be clean and sterilized in autoclave before use.

- 1. Dry all instruments before the steam sterilization cycle.
- 2. The product must be enclosed with a sterilizable steam wrap.
- 3. Steam sterilizes in cycles of 121°C at 1 ATM pressure for 30 minutes or of 134°C at 2 ATM pressure for 20 minutes. Drying time 30 minutes.
- 4. Always accommodate the case in autoclave over a plane surface and away from device walls.
- 5. Never stack objects or other cases.



#### **RECOMMENDATIONS**

- a. Sterilize the products on the same day or one day earlier the procedure.
- b. Chemical sterilization is not recommended, since some products may cause discoloration and damage to the case.
- c. Do not use temperature higher than 60°C to drying process.
- d. Do not use dry heat stoves for sterilization of the instruments and kits from S.I.N. Implant System.

## **LIFETIME**

S.I.N. DLC Surgical Drills can be used for up to 30 surgical instruments depending on proper handling, cleaning and sterilization. It is necessary to check the sharpness of the instrument after each surgical procedure and if a lack of sharpness is found, the material must be discarded. Of which: 20 in high-density bones perforations and 30 in low-density bones perforations.



NON	NÃO ESTÉRIL	NON-ESTERILE	NON STÉRILE
Ţ <u>i</u>	CONSULTAR AS INSTRUÇÕES DE USO	CONSULT INSTRUCTIONS FOR USE	CONSULTER LE MODE D'EMPLOI
CE	MARCAÇÃO CE	CE MARK	CE MARQUE
Ť	MANTENHA SECO	KEEP DRY	GARDER AU SEC
*	MANTENHA AO ABRIGO DO SOL	KEEP AWAY FROM SUNLIGHT	TENIR À L'ABRI DE LA LUMIÈRE DU SOLEIL
<b>®</b>	NÃO UTILIZAR SE A EMBALAGEM ESTIVER VIOLADA	DO NOT USE IF PACKAGE IS DAMAGED	NE PAS UTILISER SI L'EMBALLAGE EST ENDOMMAGÉ
$\bigwedge$	ATENÇÃO	CAUTION	ATTENTION
EU REP	REPRESENTANTE AUTORIZADO NA COMUNIDADE EUROPEIA	AUTHORIZED REPRESENTATIVE IN THE EUROPEAN COMMUNITY	REPRÉSENTANT AUTORISÉ DANS LA COMMUNAUTÉ EUROPÉENNE
18°C	LIMITE DE TEMPERATURA	TEMPERATURE LIMIT	LIMITE DE TEMPÉRATURE
Rx only	ATENÇÃO: A LEI FEDERAL (EUA) LIMITA A VENDA DESTE DISPOSITIVO POR OU POR ORDEM DE UM PROFISSIONAL DE SAÚDE LICENCIADO.	CAUTION: FEDERAL LAW (USA) RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A LICENSED HEALTHCARE PRACTITIONER.	ATTENTION: LES LOIS FÉDÉRALES (AMÉRICAINES) LIMITENT LA VENTE DE CET APPAREIL PAR OU SUR ORDRE D'UN PROFESSIONNEL DE LA SANTÉ AGRÉÉ.
	FABRICANTE	MANUFACTURER	FABRICANT
سا	DATA DE FABRICAÇÃO	DATE OF MANUFACTURE	DATE DE FABRICATION
REF	CÓDIGO DE REFERÊNCIA	REFERENCE CODE	CODE DE RÉFÉRENCE
MD	DISPOSITIVO MÉDICO	MEDICAL DEVICE	DISPOSITIF MÉDICAL
UDI	IDENTIFICADOR ÚNICO DO DISPOSITIVO	UNIQUE DEVICE IDENTIFIER	IDENTIFICATEUR UNIQUE DE L'APPAREIL
	IMPORTADOR	IMPORTER	IMPORTATEUR
	DISTRIBUIDOR	DESTRIBUTOR	DISTRIBUTEUR
BRA	PAÍS DE FABRICAÇÃO	COUNTRY OF MANUFACTURE	PAYS DE FABRICATION
LOT	LOTE	BATCH CODE	CODE DE LOT
Δ	EMBALAGEM RECICLÁVEL	RECYCABLE PACKAGING	EMBALLAGE RECYCLABLE
DESCRIPTION ON THE LABEL	CONTÉM: 1 UNIDADE	CONTENT: 1 UNIT	CONTENU: 1 UNITÉ
DESCRIPTION ON THE LABEL	PRODUTO NÃO ESTÉRIL	NON STERILE PRODUCT	PRODUIT NON STÉRILE





## MANUFACTURER

## S.I.N. Implant System LTDA.

CNPJ [Corporate Taxpayer's Registry]: 04.298.106/0001-74 Rua Soldado Ocimar Guimarães da Silva, 421 - Vila Rio Branco CEP: 03348-060 - São Paulo - SP - Brasil

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#### **RESPONSIBLE TECHNICIAN**

Alessio Di Risio CREA-SP: 5061207169

#### **SYSTEM**

S.I.N. DLC Surgical Drills

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