

SAN DIEGO
SWISS
MACHINING
INCORPORATED



Non-returnable if opened.

Caution:

U.S. federal law restricts this material to the sale by, or on the order of a dentist.



See Instructions For Use

Indications For Use:

The IRS® *Superior Edition* (Instrument Removal System) is an Endodontic device designed to remove broken or separated instruments such as files, silver points, posts and carrier based obturators or other intra-canal obstructions.

There are four (4) instruments in the following color coded sizes:

GREEN: Designed to accommodate the coronal 1/3rd. Provides a 16 gauge micro-tube and a 12mm length of micro-tube exposure.

Outside Diameter (O.D.) = 1.6mm

Inside Diameter (I.D.) = 1.3mm

BLACK: Designed to accommodate the coronal 1/3rd. Provides a 19 gauge micro-tube and a 12mm length of micro-tube exposure.

Outside Diameter (O.D.) = 1.0mm

Inside Diameter (I.D.) = 0.8mm

RED: Designed to accommodate the coronal 1/3rd and middle 1/3rd. Provides a 21 gauge micro-tube and a 16mm length of micro-tube exposure.

Outside Diameter (O.D.) = 0.8mm

Inside Diameter (I.D.) = 0.6mm

YELLOW: Designed to accommodate the middle to the apical 1/3rd. Provides a 24 gauge micro-tube and a 21mm length of micro-tube exposure.

Outside Diameter (O.D.) = 0.55mm

Inside Diameter (I.D.) = 0.36mm

All micro-tubes provide a "reverse bevel" at an angle of 20°. When encountering an obstruction that is lying against a canal wall, use the long portion of the bevel to "lift" the obstruction away from the canal wall. Continue to slide the micro-tube over the obstruction.

Precautions:

None Known

Instructions For Use:

Note: Often time's ultrasonics alone will remove the obstruction. When ultrasonics cannot deliver desired results, you may try the following.

Establish a straight line access. You may use burs, GG's, ultrasonic instruments, or other appropriate instruments to achieve straight line access.

Visualize the coronal end of the obstruction. Select the appropriate IRS® core drill. (sold separately) and using a watch-wind motion, trephine around the obstruction until 1.0mm – 1.5mm of the obstruction has been exposed.

Place the appropriate "IRS® *Superior Edition*" instrument assembly over the obstruction. (*Note: Assembly needs to be "unthreaded" at this point so that the screw wedge may freely slide in and out of the tube.*) Insert the micro-tube so that the long side of the bevel is oriented to the outer wall of the canal. Once enveloped in the tube, slightly tilt the IRS in the opposite direction of the window so that the obstruction protrudes out of the window.

Begin threading the "screw wedge" in a "Counter-Clockwise" direction until it engages the obstruction. Gently tighten the screw wedge assembly until you feel the wedge obtain a secure purchase of the obstruction. (*Note: There is no need to over tighten the assembly.*)

Once engaged, gently and consistently move the entire assembly back and forth in a clock-wise to counter-clockwise motion to assist in loosening the obstruction. Continue to move and lift the entire assembly in the appropriate direction to encourage the obstruction out of the canal.

External Cleaning:

Clean instruments externally with alcohol

Rinse with sterile saline or water

Sterilization:

Sterilize before each use. Follow operating instructions of the sterilization equipment manufacturer. Only sterilize clean instruments. Autoclave at 250°F/121°C for 30 minutes, including fast steam sterilization. Separate components before autoclaving.

IRS® is a registered trademark of San Diego Swiss Machining, Inc.

Manufactured by San Diego Swiss Machining, Inc. in the USA under Patent Nos. 5,879,160; 6,227,855B1 other patents and foreign patents pending.