
Flexi-Post[®] is the only prefabricated post system that delivers maximum retention of the post and core with minimum stress to the root.

This post system is color-coded, easy to insert and is compatible with amalgam or composite buildups. Flexi-Post safely simplifies the procedures involved in both creating original abutments and salvaging existing bridgework!

Essential Dental Systems recommends the use of:

Flexi-Flange[®] (Stainless Steel Cat. # 410-00 & Titanium Cat. # 415-00) incorporating a wider flange to provide essential stability in cases where there is little or no coronal dentin.

Flexi-Overdenture[®] (Stainless Steel Cat. # 211-00, 210-00 & Titanium Cat. # 212-00, 215-00, 212-01, 215-01), utilizing the patented Flexi-Post[®] split-shank, offers the highest retention with minimal stress.

EZ-Change[®] (Cat. No. 250-00), A patented keeper and cap insert system allows for “quick and easy” nylon cap replacement in the Flexi-Overdenture System. A metal keeper is **permanently** cold cured into the denture to hold a threaded nylon cap. When worn, this cap may be easily removed, requiring only seconds for replacement and considerably shortening chair time.

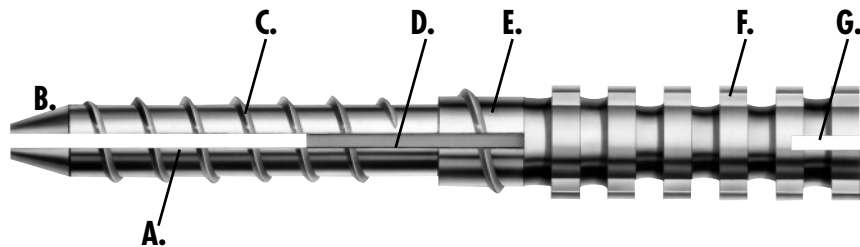
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Flexi-Post Characteristics



A. THE UNIQUE SPLIT SHANK DESIGN OF THE FLEXI-POST

- redirects all stresses of insertion and cementation safely to the post, not the root.
- creates vertical blades which remove all dentinal debris from the thread line during insertion, further enhancing the ease of placement.

- creates a threaded post-hole in a gradual fashion, once again minimizing stress to the root.

B. TAPERED TIP permits deep seating (an additional 1-2 mm into the canal) of Flexi-Post without the risk of tooth fracture. Non-threaded, this tip offers the advantage of self-limiting insertion, further protecting the root from potential fracture.

C. PARALLEL-SIDED SUPER SHARP

THREADS cut into the dentin rather than push it aside. Flexi-Post's construction maximizes post retention without contributing to the production of tensile stresses.* Flexi-Post requires no separate tapping and may be trial seated prior to final insertion.

D. THE FLEXI-POST VENT releases internal hydrostatic pressure upon cementation.

E. THE SECOND TIER OF THE SHANK

increases the intimacy of fit between the post and the natural point at which the canal widens, thereby reducing destructive long lever arms.

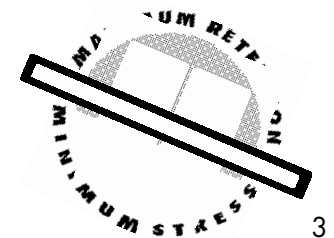
F. FLEXI-POST may be used for existing bridge work and for new abutments. The expanded surface area of the serrated head permits greater retention of

composite material and is suitable, as well, for amalgam buildups.

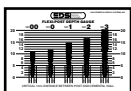
G. CROSS SLOTS used with internal wrench which fits within the post diameter for post placement in tight areas.

*Research has shown that under function, the Flexi-Post distributes the stresses evenly throughout the length of the post in the root. In comparison with passively seated posts, these studies conclude that the Flexi-Post produced fewer fractures.

For more information, ask for a free copy of the Essential Dental Systems Research Abstract (available in English only).



Components and Their Uses



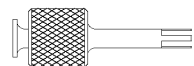
Depth Gauge - used in conjunction with a radiograph, it facilitates the proper choice of post size, placed within the root. (see p. 7)



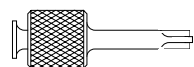
Primary Reamer - used to create the primary post-hole after use of the Peeso or Gates Glidden reamer. (Essential Gates Glidden drills are recommended.) The Primary Reamer is self limiting within each size.



Secondary Drills - used to create the countersink space for the second tier of Flexi-Post sizes 0 thru 3. The second tier of the post allows better adaptation of the post to the normal anatomic flare of the post-hole.



External Wrench - fits snugly over the post and drives the post into place; one wrench fits all serrated post sizes.



Internal Wrench - fits inside the cross slots of the head of the post and drives it into place. One wrench fits all serrated post sizes.



Extender - allows the primary reamer or secondary drill to fit within it to gain 19 mm additional length; extra length may be needed when lack of space prevents the placement of the contra-angle between teeth.

Flexi-Post Facts

The Flexi-Post is part of a color coded system containing posts of five sizes to optimally accommodate the vast majority of your requirements. All five sizes come with a serrated head which the dentist may use with either amalgam or composite. Because of the geometry of the head, coronal dentin may be kept, if desired, rather than flattening the occlusal surface.

Post Number	00	0	1	2	3
Color Code	WHITE	YELLOW	RED	BLUE	GREEN
Length of Head	3.50mm	3.50mm	5.00mm	6.00mm	7.00mm
Length of Shaft	7.00mm	8.00mm	9.50mm	10.50mm	13.00mm
Total Length of Post	10.50mm	11.50mm	14.50mm	16.50mm	20.00mm
Diameter of Shaft (Without Threads)	0.75mm	0.79mm	1.00mm	1.25mm	1.50mm
Diameter of Shaft (With Threads)	0.95mm	1.07mm	1.40mm	1.65mm	1.90mm
Diameter of Primary Reamer	0.78mm	0.90mm	1.20mm	1.45mm	1.70mm
Length of Primary Reamer	8.00mm	9.00mm	11.00mm	12.00mm	14.50mm

Recommended uses for Flexi-Post

#00 (White)

- very thin buccal or mesial roots of molars
- very thin roots of maxillary first premolars

#0 (Yellow)

- thin to average buccal of mesial roots of molars
- thin to average roots of maxillary first premolars
- thin roots of lower anteriors

#1 (Red)

- average to large buccal of mesial roots of molars
- normal to large roots of maxillary first premolars
- average roots of anteriors
- thin roots of premolars
- thin roots of maxillary laterals
- thin distal and palatal roots of molars

#2 (Blue)

- average roots of all maxillary anteriors
- average roots of premolars
- large roots of mandibular anteriors
- large distal and palatal roots of molars

#3 (Green)

- large maxillary centrals
- large maxillary canines

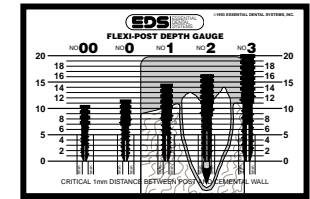
Technique: Use of the Depth Gauge in Post Selection

Research shows that parallel, solid shanked* posts should have at least 1 mm of tooth structure lateral to the most apical placement of the post. To aid in this placement, Flexi-Post uses a transparent plastic depth gauge with silhouettes of the different sizes of the posts. Lateral and parallel to each silhouette are vertical lines spaced 1 mm from the threads. By placing the gauge over an accurate radiograph of a tooth, the dentist may easily determine if the 1 mm of lateral clearance exists. If the lines fall outside the root on the x-ray there is potentially not enough lateral tooth structure for safe placement.

In the latter case, the dentist should either go to a smaller post or remove enough apical post length for the post to fit at least 1 mm within the external borders of the root. Most importantly, *the second tier of the post must always be fully seated*. The dentist should *never* allow the second tier of the post not to seat. This would allow a loose coronal fit that would increase the chances of the post loosening over time!

If the dentist chooses to remove apical length of the post, either because the full length of the placed post would thin out the lateral tooth structure too much or because the post-hole is too short for placement of the complete post length, he should follow the steps listed below:

- 1) Trial seat the post, thus creating the internal thread in the root.
- 2) Unthread the post from the root.
- 3) Cut off the necessary apical post length, *allowing the second tier to seat fully*.
- 4) Cement the post as usual.



*The split-shank Flexi-Post is inherently safer than any solid shanked post and, therefore, less lateral tooth structure is necessary to prevent fracture.

Post Hole Preparation

The post-hole preparation begins with the removal of the root filling material using either a Peeso or Gates Glidden reamer. Then, in sequence, a non-end cutting drill (Peeso or Gates Glidden reamer) is used until 100% of the post-hole length and 90% of the post-hole width have been established. The following chart indicates which non-end cutting drill will produce 90% of the post-hole width for the various Flexi-Post sizes.

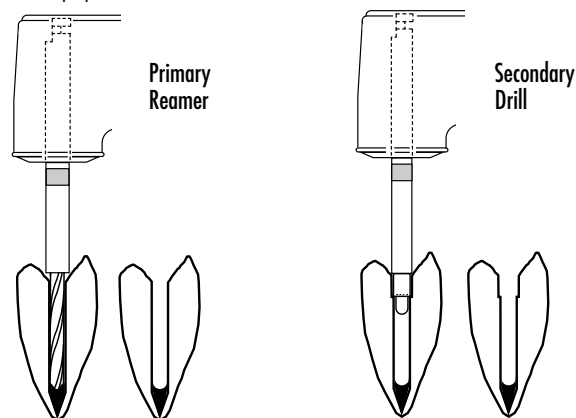
Peeso		Gates Glidden		EDS Gates Glidden		Flexi-Post Primary Reamer
-	or	1	or	white	then	00 (white)
1	or	2	or	yellow	then	0 (yellow)
3	or	4	or	red	then	1 (red)
4	or	5	or	blue	then	2 (blue)
5	or	6	or	green	then	3 (green)

When 100% of the post-hole length and 90% of the width have been achieved, the primary reamer is used. Since the Flexi-Post will fit optimally if a more concentric hole is maintained, the number of entries into the post-hole with the primary reamer should be limited. It is much easier to prepare the post-hole when the canal is lubricated with

either water or an anesthetic solution, or with any suitable wetting agent.

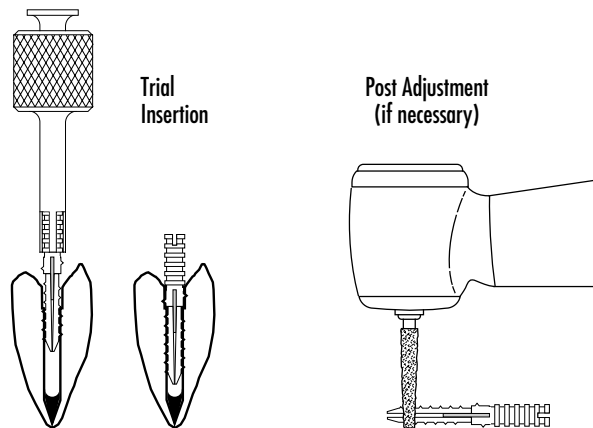
The secondary drill prepares a countersink in the coronal post-hole preparation. The second tier of the post *must* always fit completely within this countersink preparation. If the dentist does not seat the post completely, he is reducing Flexi-Post's tremendous retention and increasing its chances of fracture under function. To satisfy this requirement, in post-hole preparations shorter than the length of the shank of the post to be placed, the dentist must remove enough apical post length to allow full seating of the post's second tier.

Flexi-Post sizes 0 thru 3 have secondary drills. Flexi-Post size 00 has no second tier and, therefore, no secondary drill. The smooth extension on the secondary drill is simply a lead to facilitate parallelism between the primary post-hole and the countersink preparation.



Post Insertion

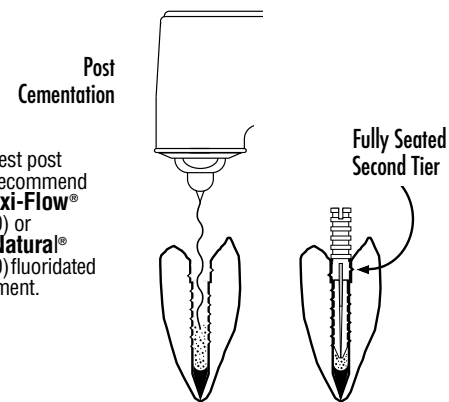
The selected Flexi-Post is inserted with the appropriate wrench. It is important to note that the Flexi-Post is designed to be seated on a trial basis in order to ensure accurate fit and position. During the trial-seating, if moderate resistance is felt, the post may be backed off 1/4 to 1/2 turn and then advanced again. Advancing while backing off 1/4 turn when moderate resistance occurs is repeated until the post is fully inserted and the thread is created inside the root canal for the post. This procedure will remove debris from the thread line and facilitate insertion.



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The trial seating creates the thread inside the root canal for the post. The post is now unthreaded out of the root. At this point, alterations to the post may be made. It is extremely important to note that the second tier must always fully seat. Therefore, alteration should be made to the apical end of the post. Be sure to remove all dental debris from the split with an air syringe at this time.

Cement is now placed in the post-hole and on the post. The post is inserted into the post-hole and threaded in with light pressure. The post will seat completely with minimal resistance. Excess cement is now removed. The Flexi-Post has now been inserted and cemented with minimal stress being transmitted to the root.



*For the greatest post retention we recommend the use of **Flexi-Flow**[®] (Cat. # 850-00) or **Flexi-Flow Natural**[®] (Cat. # 860-00) fluoridated composite cement.

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Core Formation

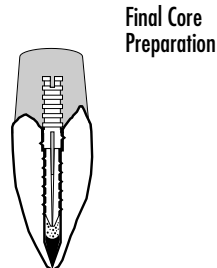
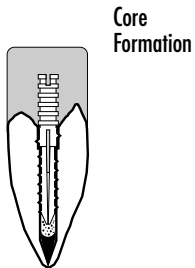
Composite Cores - Any core form may be used with composite materials. The composite should be placed in the core form and seated over the post, using moderate pressure to ensure close adaptation of the composite to the core.

Amalgam Cores - Any matrix may be used with amalgam buildup. The amalgam should be condensed around the Flexi-Post in the standard manner used for restorations. A high copper spherical amalgam is recommended for easy condensing and rapid set.

All excess core material, especially that within the sulcus, must be removed.

The abutment is now ready for crown preparation.

*For core formation with the strength of dentin we recommend the use of **Ti-Core®** (Cat. # 800-00) or **Ti-Core® Natural** (Cat. # 810-00) or **Ti-Core® Fast Set** (Cat. # 805-00) or **Ti-Core® Natural Fast Set** (Cat. # 815-00) fluoridated composite core material.



Flexi-Post Kits and Their Contents

To order Flexi-Post and Flexi-Post accessories and for information on contract sales, contact your authorized EDS dealer or call 1-800-22-FLEXI.

	<u>Stainless Steel</u>	<u>Titanium</u>
Introductory Kits:		
(4 posts each of sizes 0, 1, 2, and accessories)	Cat. No. 110-00	115-00
(4 posts each of sizes 1, 2, 3, and accessories)	Cat. No. 110-01	115-01
Refills:		
(10 posts, reamer, drill) #00.....	Cat. No. 130-00	135-00
#0.....	Cat. No. 130-0	135-0
#1.....	Cat. No. 130-01	135-01
#2.....	Cat. No. 130-02	135-02
#3.....	Cat. No. 130-03	135-03
Economy Refills:		
(30 posts, reamer, drill) #00.....	Cat. No. 140-00	145-00
#0.....	Cat. No. 140-0	145-0
#1.....	Cat. No. 140-01	145-01
#2.....	Cat. No. 140-02	145-02
#3.....	Cat. No. 140-03	145-03
Sterilization Box:		
(10 posts each of sizes 00, 0, 1, 2, 3 and accessories)	Cat. No. 197-01	197-02
Mini Sterilization Box:		
(2 posts each of sizes 00, 0, 1, 2, 3 and accessories)	Cat. No. 197-05	197-06