







INNOVATIVE DESIGN IN FULL-ARCH FIXED RECONSTRUCTION:









Developed over the years into a simple, yet predictable procedure, thousands of patients have benefited from the FlatOne[®] treatment modality. The streamlined FlatOne[®] System and Protocol enable both the dentist and the laboratory technician to work together in a highly efficient, closely coordinated manner.

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In an age of instant gratification, dental patients demand not only beautiful teeth and excellent function, but also an economic, definitive restoration as quickly as possible.

The FlatOne[®] Abutment System and Protocol is designed for full mouth rehabilitation with these criteria in mind. It reduces chair-side time, laboratory costs, and the time from surgery to function (to as little as 48 hours). The finished case is a full-arch fixed prosthesis... not a hybrid denture.

The heart of the system consists of a screw-retained metal framework which attaches to FlatOne[®] abutments. It provides for cross-arch stabilization. This framework enables the fabrication of a final restoration that is characterized by exceptional strength for long-term durability and resistance to acrylic fractures. It provides for outstanding esthetics.





- Full-arch Fixed Prosthesis, Not a Hybrid Denture
- Reduces Chair-side Time & Laboratory Costs
- Case Time Condensed (to as little as 48 hours)







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- Restoration Supported by a Wide, Flat Platform
- Eliminates the Need for Implant Parallelism
- Does Not rely on a Retaining Screw for Support

FlatOne[®] Abutments have a flat occlusal table. This flat surface mates precisely with the cylinders in the prosthetic framework ensuring that the load of the restoration is supported by a wide, flat platform. This provides greater strength to the prosthetic system in contrast to conventional two-piece abutments that rely on a retaining screw for support.

The FlatOne[®] System is specifically designed to eliminate the need for implant parallelism. The clinician can place implants in the most advantageous locations and positions (often ranging from six to twelve), where the amount/quality of bone is more suitable or where critical anatomy must be avoided. As many implants as deemed appropriate can be placed with the assurance of a simultaneous, passive seating of the prosthesis.

Its strong metal framework also enables early delivery of the prosthesis. It acts as a surgical splint and provides stabilization for the implants, especially during the healing phase.







The FlatOne[®] Protocol enables the laboratory to fabricate and assemble the structural components of the prosthesis with extreme efficiency. This is also true for the functional and cosmetic aspects, which are fulfilled by composite teeth and any additions that are necessary to compensate for soft tissue defects.

This system incorporates all of the intrinsic characteristics of Intra-Lock[®] implants: OSSEAN[®] bioactive surface for predictable healing in the early treatment phase, a ferrule/ Morse Taper interface providing a virtually hermetic seal, implant architecture designed for lower compression and higher bone-to-implant-contact, and a final fixation screw with a proprietary surface ensuring ultimate compressive clamping forces secure the framework in place.



- Laboratory Efficiency
- Teeth Emerge From the Soft Tissue
- Incorporates Intrinsic Features of Intra-Lock® System







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Diagnostic Workup and Case Presentation

1. In addition to routine examination protocols, full mouth impression, bite registration, diagnostic wax-up, scan guide, a CBCT scan, surgical guide and an index for the final restorations/occlusion are generated.

The diagnostic wax-up is first used for the treatment plan and case presentation appointment. This will give the patient an appreciation for the restorative and esthetic goals that can be achieved.

2. Upon acceptance of the treatment plan, a CT Scan Guide is prepared.





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Implant Placement

3. Utilizing the CT scan and the diagnostic data, the clinical team definitively plans and coordinates the case.

Note: During the clinical phases, the clinician will only use five components: Intra-Lock Implants, FlatOne[®] Abutments, Impression Transfers, Healing Abutments and Clinical Retaining Screws.

4. The day of the surgery the patient is appointed for a morning visit. By afternoon, as many implants as per treatment plan (6-10 implants) are placed.

Abutment Placement

 After implant placement, the appropriate FlatOne[®] Abutments are secured and seated to a torque value of 35 Ncm.

Note: FlatOne[®] Abutments are available in two platforms, a 3.5mm narrow platform and a 5mm wide platform. In addition, they are available in three different heights, ranging from 1 to 3mm, enabling the ideal placement of each abutment and optimum margination of the final restorations.

Impression

6. The case is finalized and ready for the working impression. FlatOne® Abutment Impression Copings are placed and secured by Long Impression Screws. An open tray final impression is taken.

Note: FlatOne Impression Copings are available to match each platform; 3.5 or 5mm in diameter.

7. The laboratory technician has been on standby and immediately receives the impression.

Cover Screws

8. FlatOne[®] Cover Screws are placed. The patient is given post-op instructions and reappointed for the next day.









Fabrication of the Master Model

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Note: The dental laboratory utilizes FlatOne[®] Analogs, Analog Cylinders, Castable Cylinders, Titanium Cylinders and Retaining Screws. The functional and cosmetic components consist of composite and/or denture teeth and any additions that are necessary to compensate for soft tissue defects.

- **9.** Upon delivery of the impression, FlatOne[®] Abutment Analogsare placed in the impression and secured by Long Impression Screws. The impression is boxed and stone is poured.
- **10.** While the Master Model is setting, an index is made of the dentition on the Wax-Up Model. This will be used to duplicate the precise location, position and height of each tooth on the FlatOne[®] Bridge. Upon setting, the Master Model is separated, trimmed and finalized.







Placement of FlatOne® Cylinder Analogs

11. FlatOne[®] Brass Cylinder Analogs are positioned onto the FlatOne[®] Abutment Analogs.

Note: There are two diameters of FlatOne[®] Brass Cylinder Analogs, each matching the FlatOne[®] Abutment diameters. One Standard (which is 5mm in diameter), and one Narrow (which is 3.5 millimeters in diameter).

12. Plastic cylinders are positioned onto the Brass Cylinder Analogs and secured by FlatOne[®] Abutment Retaining Screws. The FlatOne[®] Plastic Cylinders are shortened to their correct heights and positioned over the FlatOne[®] Brass Cylinder Analogs.





13. The full-arch wax-up is then crafted. It will define the framework of the prosthesis. Upon completion, the framework is unfastened and carefully removed and invested. It is cast in non-precious, chrome cobalt alloy and finished.







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Uniting Framework with Titanium Cylinders

- 14. The cast framework is returned to the Master Model. Composite cement, such as "Ceka-Site" by Ceka, or "Ultra-Bond" by Kulzer is used for uniting the framework to the Titanium Cylinders. All of the cylinders are painted with resin cement and inserted into the framework.
- **15.** Once completed, the assembly is then securely fastened back onto the master model using the same Laboratory FlatOne[®] Abutment Retaining Screws. The composite resin cement is allowed to set.
- **16.** The metal framework and cylinder assembly is polished and the bridge is placed back on the Master Model. The simultaneous, passive seating of the completed assembly is verified.







Note: The diameter of the Titanium Cylinders is slightly smaller than the Brass Cylinders. This creates a space for the composite resin cement.



Placement of Teeth and correction of any soft tissue defects

- **17.** Pre-cut denture teeth, which have been seated in the index, are brought into position. Resin material is applied to secure the dentition and to esthetically correct soft tissue deficits.
- **18.** The FlatOne[®] Bridge is placed on the articulator with the opposing dentition and the occlusion is adjusted.
- **19.** The case is returned to the clinician's office the after noon of the second day.









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Delivery of the FlatOne Bridge

- **20.** Upon arrival at the office, the FlatOne[®] Bridge is inspected for accuracy of fit, occlusion and esthetics. Any final adjustments are made at this time and prior to the patient's arrival.
- **21.** The patient arrives and the bridge is placed. The accuracy of all clinical parameters is verified both visually and radiographically. The simultaneous, passive seating of the prosthesis is confirmed and the esthetics, phonetics and occlusion are adjusted. Patient acceptance is confirmed and the case is secured by FlatOne[®] Clinical Retaining Screws, tightened to 20 Ncm of torque with a Torque-Lock[®] wrench.

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- **22.** A pellet of cotton is placed over each screw. This is followed by composite resin which is polished upon setting.
- **23.** The occlusion and esthetics are finalized and the case is completed. The patient receives post-treatment instructions and home care education. Upon review of these procedures, the patient is reappointed for a final post-op check.

This completes the fabrication and placement of the $\mathsf{FlatOne}^{\circledast}\,\mathsf{Bridge}.$







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CLINCAL FLATONE® COMPONENTS



FlatOne[®] abutments are available in two occlusal tables, a 3.5mm Narrow base and a 5mm Standard base.



In addition, they are available in three different heights, ranging from 1 to 3 millimeters, thus enabling the ideal placement of each abutment and optimum margination of the final restorations.



FlatOne[®] Angled Abutments are available for all three implant prosthetic platforms. All three have a 3.5mm occlusal table.



FlatOne [®] Solid Abutments				
Height	Platfo	orm	Product Description	Ref. No.
1 mm	S	Q	F1 Abutment, Narrow	ISFAN1
2 mm	S	Q	F1 Abutment, Narrow	ISFAN2
3 mm	S	Q	F1 Abutment, Narrow	ISFAN3
-	S	Q	F1 Abutment, 30° Angled, Narrow	ISAFA
1 mm	S	Т	F1 Abutment	IFA1
2 mm	S	т	F1 Abutment	IFA2
3 mm	S	т	F1 Abutment	IFA3
-	S	т	F1 Abutment, 30° Angled, Narrow	IAFA
1 mm	W	D	F1 Abutment	IFAW1
2 mm	W	D	F1 Abutment	IFAW2
-	W	D	F1 Abutment, 30° Angled, Narrow	IAFAW
1 mm	ST	WD	F1 Abutment, Narrow	IFAN1
2 mm	ST	WD	F1 Abutment, Narrow	IFAN2
3mm	ST	WD	F1 Abutment, Narrow	IFAN3

FlatOne[®] Cover Screws

Height	Product Description	Ref. No.
-	F1 Abutment Profile Cover Screw	IFAPCS
-	F1 Abutment Profile Cover Screw, Narrow	IFANPCS
4.5 mm	F1 Abutment Profile Cover Screw	IFAPCS4
4.5 mm	F1 Abutment Profile Cover Screw, Narrow	IFANPCS4
6 mm	EP F1 Abutment Profile Cover Screw	IFAPCS6
6 mm	F1 Abutment Profile Cover Screw, Narrow	IFANPCS6

FlatOne® Impression Screws

Product Description	Ref. No.
F1 Abutment Long Impression Screw	IFALS
F1 Long Transfer Screw for Angled FlatOne® Abutment	IFALS2

FlatOne [®] Transfers	
Product Description	Ref. No.
F1 Abutment Transfer, Narrow, w/Retaining Screw	IFANT
F1 Abutment Transfer, w/Retaining Screw	IFAT
F1 Open Tray Transfer, Narrow	IFONT
F1 Open Tray Transfer	IFOT

FlatOne [®] Retaining Screws		
Product Description	Ref. No.	
F1 Abutment Srew	IFARS	
F1 Clinical	IFARS2	
F1 Retaining Screw for Angled FlatOne® Abutment	IFARS3	



FlatOne[®] Cylinders Product Description

F1 Abutment Plastic Cylinder, w/Retaining Screw

F1 Abutment Short Titanium Cylinder + Lab Screw

F1 Abutment Titanium Cylinder, Narrow (Not Shown)

F1 Abutment Titanium Cylinder (Not Shown)

F1 Abutment Plastic Cylinder, Narrow, w/Retaining Screw

F1 Abutment Narrow Short Titanium Cylinder + Lab Screw

LABORATORY FLATONE' COMPONENTS

FlatOne [®] Analogs		
Product Description	Ref. No.	
F1 Abutment Analog	IFAA	
F1 Abutment Analog, Narrow	IFANA	



IFAA

IFANA

FlatOne [®] Cylinder Analogs	
Product Description	Ref. No.
F1 Abutment, Narrow, Short Cyl Analog + Castable Cylinder	FANSCBA
F1 Abutment, Short Cyl Analog + Castable Cylinder	FASCBA





FASCBA

FANSCBA



IFAPC IFANPC

FANSTC FASTC

 FlatOne® Retaining Screws

 Product Description
 Ref. No.

 F1 Abutment Srew
 IFARS

Ref. No.

IFAPC

IFANPC

FANSTC

FASTC

IFATC

IFANTC









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