



Secure, pharmaceutical-style packaging protects posts from debris & contamination.

# MACRO-LOCK POST

## A pioneer in endodontic rehabilitation

Established in 1968 by Dr. Marc Reynaud, RTD developed and commercialised the fibre post and is the worldwide leader in this field. RTD is certified ISO 9001 / ISO 13485, employs engineers, technicians and chemists, and is also protected by numerous patents.

From our facilities in the "high-tech corridor" of Grenoble, France, over 95% of RTD's production is exported to over 70 countries, and enjoys market leadership in most of those countries.

RTD posts have been independently tested and described in the dental literature over 75 times, and are used and taught in dental schools on every continent.

Worldwide patents :

EP 1 115 349 & EP 0432001

US 5328 372 & US 5 890 904

And patents pending



For a first use  
Intro kit with 20 posts + drills

For refills  
Blister pack of  
10 posts of same size



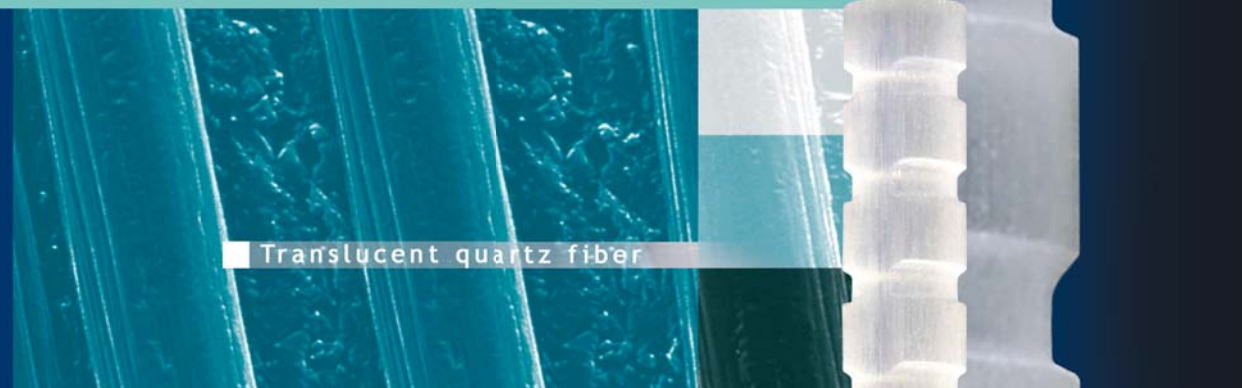
N°: 45002GB rev. 10/06 - 2006



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Distributor

SIGMA N° 061766 - Photos : H. Martin



Translucent quartz fiber

## MACRO RETENTIVE FIBER POST

Superior retention is just the beginning

- RADIOPAQUE
- RELIABLE
- AESTHETIC
- EASY TO USE



# MACRO-LOCK POST

- Flexural strength : 1600 MPa
- Interlaminar shearing strength : 65 MPa
- Elastic modulus (30°) : 13 GPa



## A caring, complete control of the process:



1. Fabrication process



2. Analysis degree of conversion



3. Flexural strength test



4. Shear Strength test



5. Computer driven grinding



6. Tolerance scanning



7. Fatigue Testing



8. User-friendly package design

from the manufacturing of the raw material to the final grinding of the post.

RTD is the originator of the fibre reinforced endodontic post. Over nearly 40 years' time, we have developed and adapted innovative materials, equipment and techniques for design, production, processing and testing of the products.

RTD is highly automated and uses computer-driven technology to maintain full in-house control over raw materials, degree of polymerisation, mechanical properties and dimensional tolerances- to name a few- on ALL our posts.

All of this helps provide RTD, our distributors, dentist customers and patients a great peace of mind, and expectations of long-term clinical success.

## A well-tested material

Macro-Lock is made from the same material as our D.T. Light-Post®, which has won the prestigious REALITY'S CHOICE award three years in a row.



No clinical root fractures due to an elastic modulus close to dentin

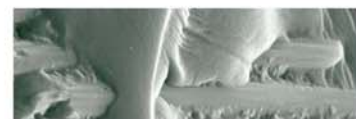
Cannot corrode, like stainless steel can

High translucency provides aesthetics and light transmission

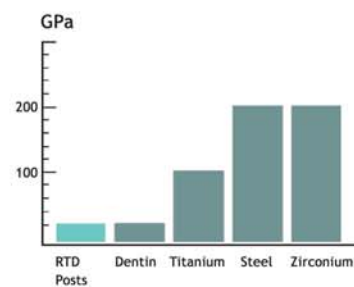
Radio opaque for easy diagnostic

Removable in minutes

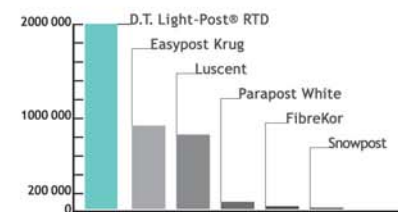
Successful biological, in-vitro and clinical behaviour reported world-wide



## Low Elastic Modulus (Angle=30°)



## Cyclic fatigue test



Grandini S., Goracci C., Monticelli F., Borracchini A., Ferrari M. An evaluation, using a three-point bending test, of fatigue resistance of certain fiber posts. Il Dentista Moderno, March, 2004, 70-74

## CLINICAL CASE

Courtesy of Dr Duret



Isolate, remove gutta

Create post space

Try-in

Trim excess length

Etch post space

Rinse. Remove water

Apply adhesive. Cure

Apply adhesive. Cure

Place dual cure resin

Seat post

Light cure

Load core material

Place core matrix

Light-cure

Trim the core build-up

## A sophisticated design

Macro serrations and anti-rotation features interlock with the core to increase retention

Passive macro serrations maximize the connection to the resin cement

Tapered shape enhances adaptation to the root anatomy & conserves dentin

4 colour-coded sizes satisfy anatomical & clinical demands without compromise

