

IDS 2025 NEWS

CYTEC^{pro}

pro LightTransmitting

The CYTEC^{pro} root posts are an excellent addition to the white opaque CYTEC, which has been successfully used in clinical practice worldwide for more than 20 years. The CYTEC^{pro} are characterized by the same outstanding properties:

High flexural strength

1,430 MPa, determined according to EN ISO 178
This is achieved through the use of high-tenacity (HT) glass fibers, which form a perfect bond with the matrix.

High fatigue and fracture resistance

Homogeneity due to dentin-like modulus of elasticity

High radiopacity

Optimized adhesion through a microporous surface

The micro-retentive surface supports the bonding of the root post with the adhesive system. The additional mesh-like retentions optimize the bond – easily and efficiently, without the use of silane.

CYTEC^{pro} eco

without mesh-shaped retentions. Therefore, careful application of the adhesive system is of particular importance.



pro LightTransmitting

extends across the entire apical post area, enabling an optimized and simultaneously shortened primary curing of the composite right up to the apical tip of the root post.

In a tightly scheduled procedure, every second counts. These saved seconds allow the dentist to proceed to the next step without any time loss.



Flexural Strength According to DIN EN ISO 178: Plastics – Determination of Flexural Properties

At the Leibniz Institute for Composite Materials of the Technical University of Kaiserslautern, three-point bending tests were conducted on our CYTECpro root posts as well as on root posts from five competing manufacturers.

Test Setup

Determination of Flexural Properties of Root Posts According to DIN EN ISO 178

Material: Root posts made of glass fiber, round
Diameter: approx. 1.5 mm
Number of Test Series: 7
Number of Samples per Series: 4

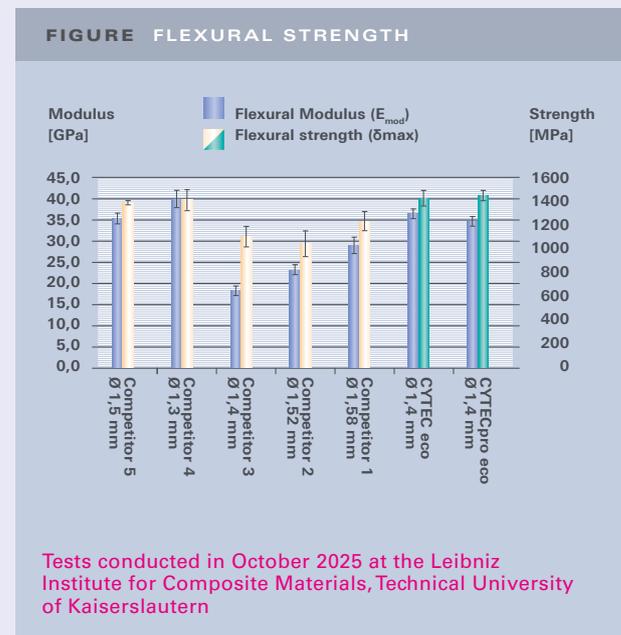
Setup

Testing Machine: Zwick Retroline 1445
Load Cell: 10 kN
Pre-load: 0.1 N
Test Speed: 2 mm/min
Span Length: 12 mm
Temperature: Room temperature
Relative Humidity: 50 %rH

Both HAHNENKRATT root posts achieve an almost equally high flexural strength with the following values:

1.400 MPa – CYTEC eco

1.430 MPa – CYTECpro eco



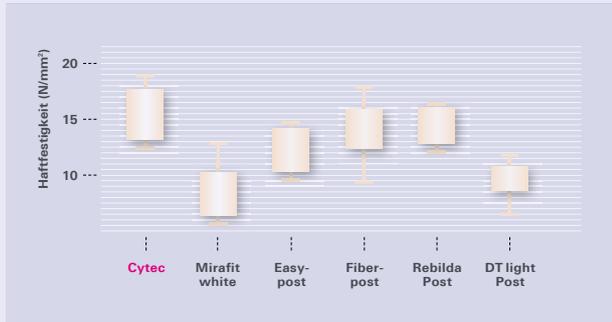
Optimized adhesion thanks to a microporous surface

The additional mesh structure on the surface of the CYTECpro post enhances the adhesive bond between the post's microporous surface and the composite. The result is optimized retention – without the use of silane – simple and efficient.

Findings from a scientific study conducted at the University of Rostock confirm this for the Cytec system.

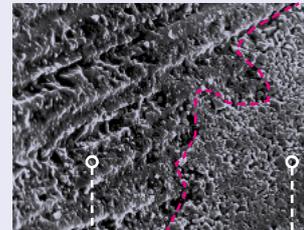


▲
CYTECpro
six sizes



CYTEC achieves the highest bond strength in comparison. This demonstrates that the unique surface structure of our root posts supports microporous adhesion and results in optimized bonding between the post and the adhesive luting material.

Published in Biomed Tech 2009
Scientific study conducted at the University of Rostock

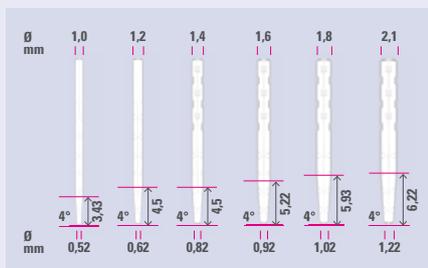


Root post with bonder
Fiber structure still visible



Root post with bonding
agent + composite

CYTECpro



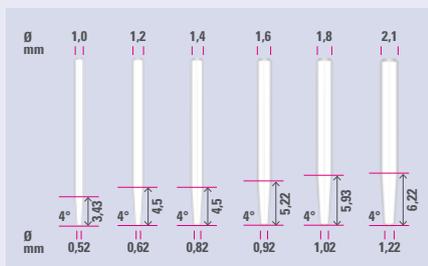
REF 43800 CYTECpro, Standard Set
All Sets are shipped in a SHIPPING BOX.



Refill Pack

CYTECpro Root Post System			universal	1,0 mm	1,2 mm	1,4 mm	1,6 mm	1,8 mm	2,1 mm
		Code	-	red	white	yellow	green	blue	black
Instruments		pack.of	REF						
	Pilot Drill with guiding tip	1	42010						
	Pilot Drill with cutting tip	1	43000						
	Calibration Drill	1		4300D10	43001	43002	4300D16	43003	43004
CYTECpro		pack.of	REF						
Standard Set	2 Pilot Drill univ. 6 Calibration Drill 22 Root Post	1	43800						
Test Set	2 Pilot Drill univ. 1 Calibration Drill 3 Root Post	1	43810						
ChangeOverSet	2 Pilot Drill univ. 6 Calibration Drill	1	43800COS						
	Root Post	5		4380D10C5	43801C5	43802C5	4380D16C5	43803C5	43804C5
	Root Post	10		4380D10	43801	43802	4380D16	43803	43804
System Box + Organizer, empty		1	10001 + 10100						

CYTECpro eco



REF 43900 CYTECpro eco, Standard Set
All Sets are shipped in a SHIPPING BOX.

REF 10001 (empty)

CYTECpro eco Root Post System			universal	1,0 mm	1,2 mm	1,4 mm	1,6 mm	1,8 mm	2,1 mm
		Code	-	red	white	yellow	green	blue	black
Instruments		pack.of	REF						
	Pilot Drill with guiding tip	1	42010						
	Pilot Drill with cutting tip	1	43000						
	Calibration Drill	1		4300D10	43001	43002	4300D16	43003	43004
CYTECpro eco		pack.of	REF						
Standard Set	2 Pilot Drill univ. 6 Calibration Drill 22 Root Post	1	43900						
Test Set	2 Pilot Drill univ. 1 Calibration Drill 3 Root Post	1	43910						
ChangeOverSet	2 Pilot Drill univ. 6 Calibration Drill	1	43900COS						
	Root Post	5		4390D10	43901	43902	4390D16	43903	43904
System Box + Organizer, empty		1	10001 + 10100						