
EXCELLENCE IN FIXED PROSTHODONTICS: CONTEMPORARY APPROACHES AND BEST PRACTICES

1. ADVANCEMENTS IN PROVISIONAL RESTORATIONS
2. DIGITIZATION IN FIXED PROSTHODONTICS

1. ADVANCEMENTS IN PROVISIONAL RESTORATIONS

Composite provisional materials

Available as self-cure and light cure system. These materials underwent recent development with nanotechnology leading to higher flexural strength, higher hardness, higher break resistance, and better esthetics. Such enhancements allowed for the use as long-term bridges



1. ADVANCEMENTS IN PROVISIONAL RESTORATIONS

Such materials include:

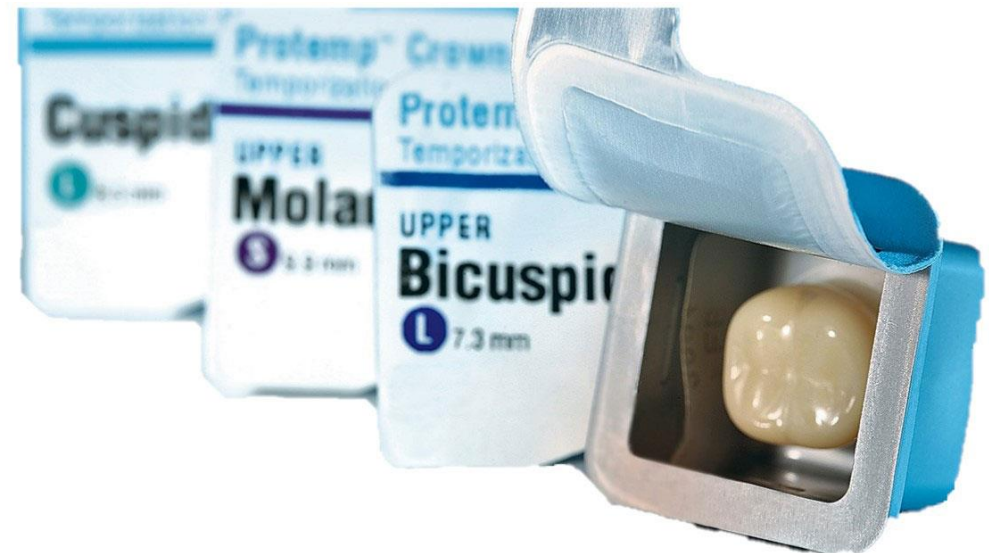
Luxatemp, Tuff-temp plus, Structur 3, and Structur Premium



1. ADVANCEMENTS IN PROVISIONAL RESTORATIONS

Protemp crowns (3M)

They are malleable, adjustable and with exceptional compressive strength of 395.6 MPa. The complete kit consists of 42 crowns in nine preformed sizes to fit onto canines, premolars, and molars. Main advantage is its fast and simple fabrication process. Excellent strength – also for long-term temporization



1. ADVANCEMENTS IN PROVISIONAL RESTORATIONS

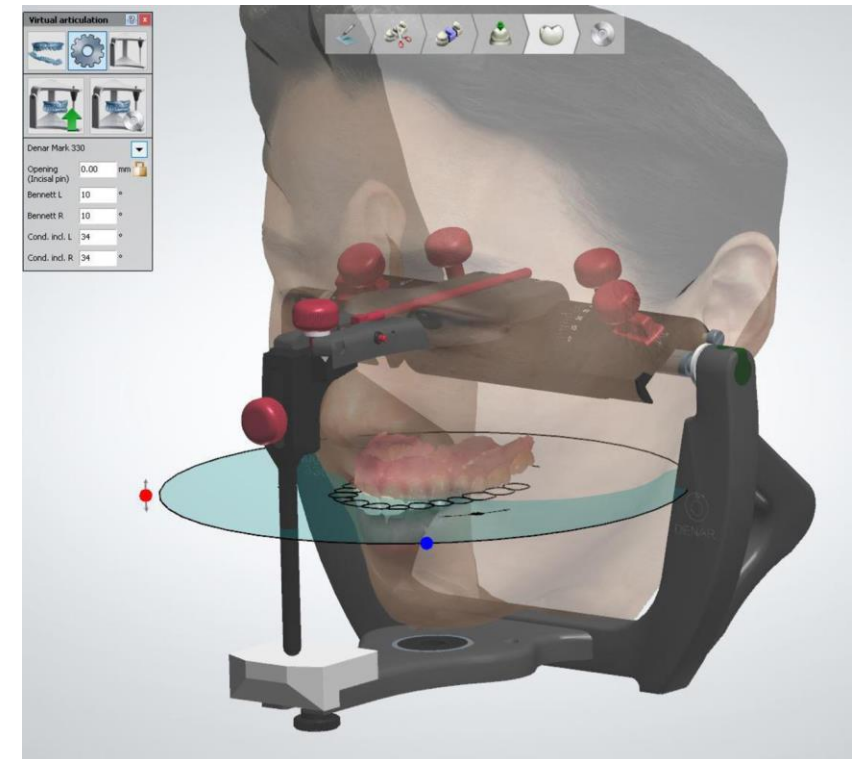
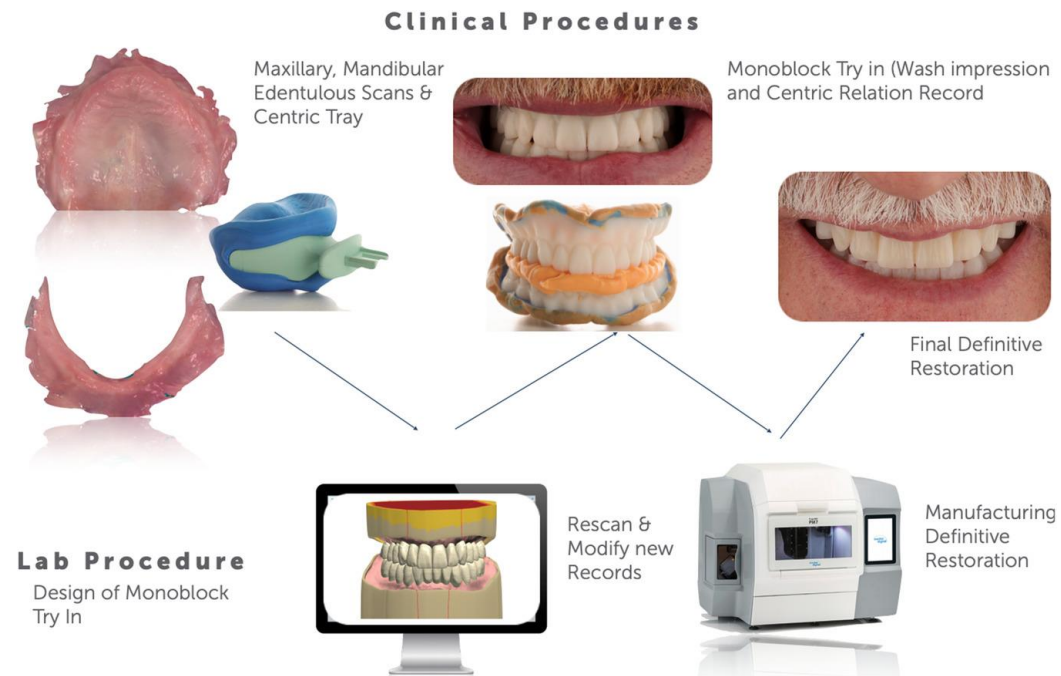
CAD-CAM PMMA provisional restorations

These polymethyl methacrylate provisionals are the recent trends in provisional restorations that provide meticulous anatomic details. These restorations are milled out from dense blocks with reduced porosity compared to traditional materials.



2. DIGITIZATION IN FIXED PROSTHODONTICS

In recent years, digitization has revolutionized the field of prosthodontics. Digital technology can contribute to every procedure in prosthodontics starting from patient education and treatment planning to making impressions, digital shade selection, digital facebow, and virtual articulations.



2. DIGITIZATION IN FIXED PROSTHODONTICS

Digital impressions

High precision impressions are possible now a days within few minutes with the use of optical oral scanners. Instant visualization of preparation from all perspective is possible with the digital scanners.



2. DIGITIZATION IN FIXED PROSTHODONTICS

Shade matching

Digital shade matching eliminates the subjectivity in analysis of color thereby providing an exact color matching for the prosthesis and also reducing the chair side time. Various currently available devices such as Vita Easyshade, Shadescan, and Clear match system provide exact color matching with instant display of color.



2. DIGITIZATION IN FIXED PROSTHODONTICS

Conclusion

With the advancements in digital technologies and latest materials, clinicians have a wide range of treatment options in fixed prosthodontics that will meet the changing demands of esthetics and function. Furthermore, with the latest developments, there is an obvious shift to less invasive dental treatments. Recent innovations such as robotics and lasers have revolutionized the fixed prosthodontics. However, an in-depth clinical knowledge of these developments is crucial to take our specialty to next level.