



# DENBRIGHT™

DENTAL LABS

## A CLINICIAN'S GUIDE TO Atlantis® BridgeBase



Atlantis is a registered trademark of Dentsply Sirona

Utilizing CHROME GuidedSMILE Pat. #11,173,016 and #11,576,755

Dear Doctor,

Digital technology is creating a new world of restorative options for patients and very efficient workflows for today's clinicians. The drive to find a fully digital workflow, with which to restore all-on-x cases has historically been hindered by the analog cementation of the titanium interface. This analog process is required as the final step in the fabrication of a zirconia hybrid.

Once an analog step is introduced into the workflow, the digitally captured data is potentially compromised and the true value of the digital impression is negated.

At Denbright, we define a digital workflow as a "no PVS, fully modelless" fabrication process. This means that the prosthesis will be produced directly from the digital data, with zero analog processing steps during fabrication.

Dentsply Sirona is supporting this digital fabrication process through the Atlantis® BridgeBase system. The BridgeBase is fabricated directly from the digital impression by milling the MUA connections on a Titanium Select Laser Melted support bar. This extremely accurate support structure also acts as a support structure for the zirconia or acrylic overlay.

Denbright Dental Labs is very excited to answer any questions and assist you with your next case!

Kind regards,  
Conrad J Rensburg  
Chief Strategy Officer



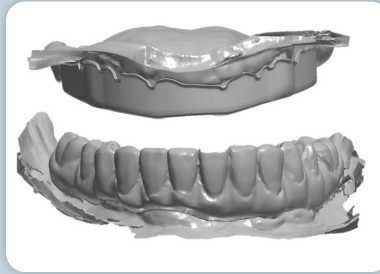
# Atlantis® BridgeBase—Overview

## CLINICAL

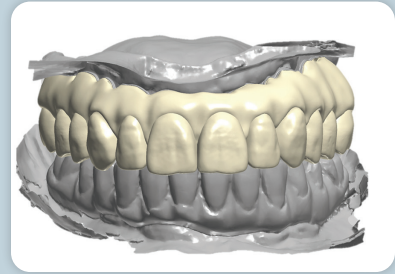


1. DIGITAL IMPRESSION

## DIAGNOSTIC DESIGN



2. BRIDGEBASE DESIGN



3. DIAGNOSTIC DESIGN

## PROCESSING



4. BRIDGEBASE MILLING



5. GREEN-STAGE ZIRCONIA



6. MiYo® SHADE

## DELIVERY



7. BRIDGEBASE AND TOOTH  
MATCHING



8. FINAL DELIVERY



# BridgeBase IO Scanning Protocols

To process an Atlantis BridgeBase case the clinician must capture five STL data sets: Transitional hybrid in the mouth, opposing arch, bite, tissue level scan with the hybrid removed to expose the MUA abutments and the restorative arch with IO Atlantis Flow scan bodies to index the implant positions. Patient must be scanned with a converted temporary hybrid denture. Patient must be at SmartFix® or Multi Unit Abutment (MUA) restorative level – Implant level scanning not accepted. Scanning MUST be done with Atlantis IOS Flow scan flags only. Include diagnostic notes regarding esthetic changes, bite adjustments, tooth shape, etc. to allow for accurate diagnostic design. Include patient pictures: high smile, lips at rest and retracted. Include ears and eyes to facilitate accurate design.



1. SCAN OPPOSING, BITE AND CONVERTED HYBRID



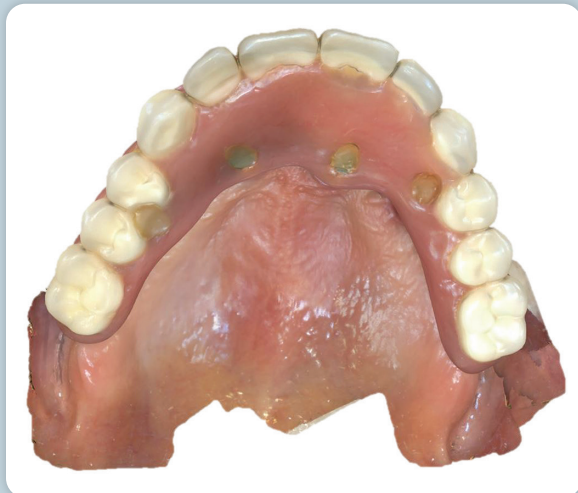
2. REMOVE HYBRID, SCAN TISSUE AND MUA ABUTMENT HEADS



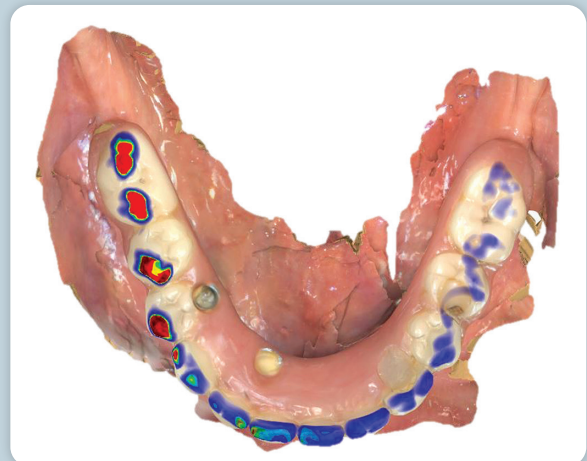
3. PLACE ATLANTIS IOS FLOW SCAN FLAGS, SCAN TISSUE AND FLAGS

## Ludlow Scanning Suggestions

It is crucial to register as many anatomical landmarks as possible (palatal tissue and extend into the tuberosity regions, etc.) when scanning the seated hybrid. These landmarks MUST be scanned in all subsequent scans to allow the laboratory to model match the STL files for BridgeBase processing. Scan the opposing with articulating paper marks to help verify the digital bite registration.



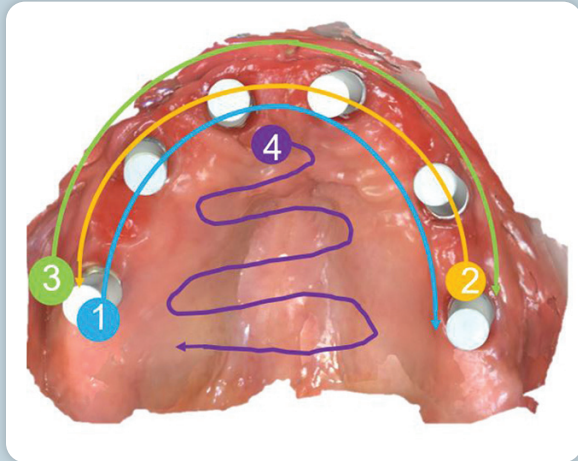
4. INDEX AS MANY ANATOMICAL LANDMARKS WITH THE HYBRID FOR MODEL MATCHING. ALL SCANS MUST HAVE THE SAME LANDMARKS



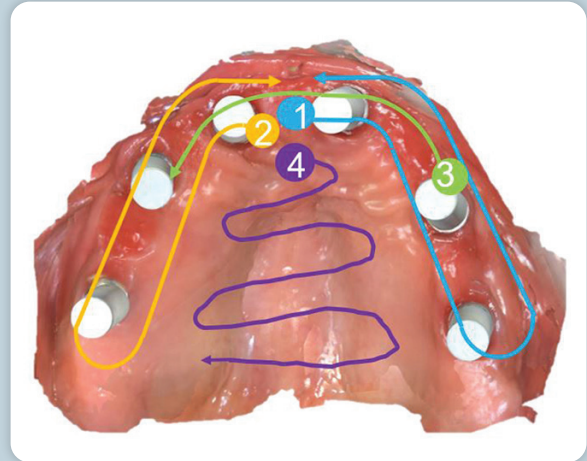
5. MARK OCCLUSION WITH ARTICULATING PAPER BEFORE SCANNING. THIS ALLOWS THE CLINICIAN TO CHECK AND VERIFY THE DIGITAL BITE REGISTRATION



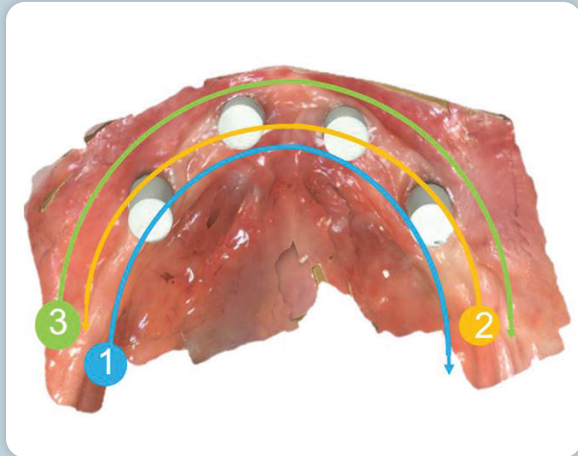
# Suggested Edentulous Scan Path



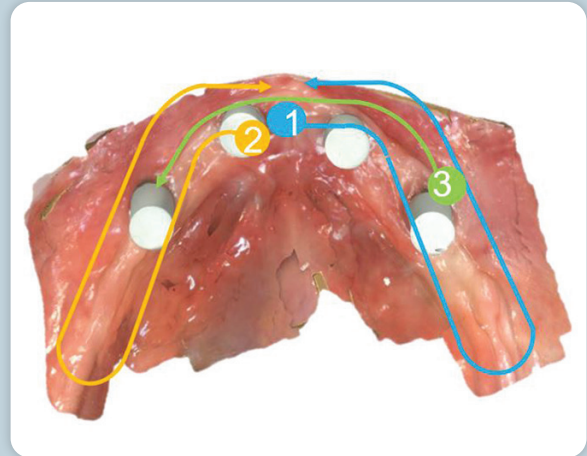
MAXILLARY SCAN PATH OPTION 1



MAXILLARY SCAN PATH OPTION 2



MANDIBULAR SCAN PATH OPTION 1



MANDIBULAR SCAN PATH OPTION 2

The above scan path options for edentulous arch scanning as suggested by Dr Mark Ludlow. Scan options based on the research by Mennito/Ludlow/Renne 2018 as well as Latham/Ludlow/Renne 2019.

## Protocol Case Processing

The Atlantis® BridgeBase case shown in this protocol manual was processed by Dr Mark Ludlow from the University of Utah in collaboration with the Jack Marrano CDT, Director of Signature Prosthetics at Absolute Dental Lab. Jack leads the Advanced Restorative Team (ART team) based in the Triangle Research Area of North Carolina. Clinical photos, scanning protocols, and clinical workflows courtesy of Dr Mark Ludlow.



Dr. Mark Ludlow



Jack Marrano, CDT



*"The strength and beauty of Atlantis® BridgeBase has been a big success in my practice, and I can't thank Jack and the crew at Absolute enough for their expertise and exceptional service"*  
—Dr. Mark Montana







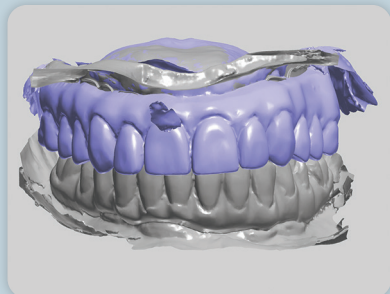
*"There is OK and there is AMAZING!!! If you aren't satisfied with just OK, you Absolutely need to try Absolute Dental Lab and the NavaGation guided workflow. Textbook results every time ..."*

*-Dr. Christian Yaste*

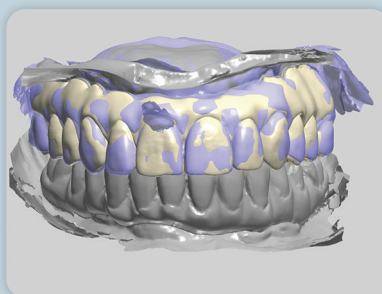




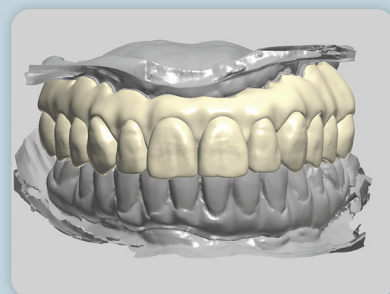
# Diagnostic Design and Planning



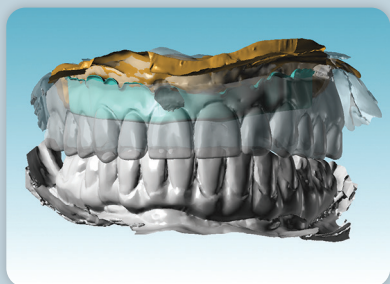
1. INTRA-ORAL SCAN IMPORT



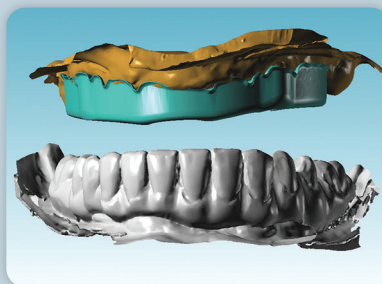
2. DIAGNOSTIC CHANGES IN  
RELATION TO IO SCAN DATA



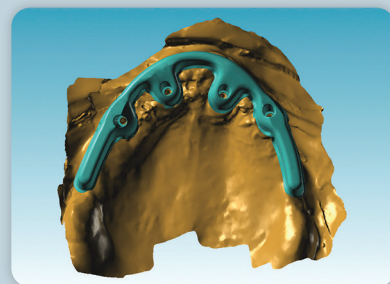
3. DIAGNOSTIC PROPOSAL READY  
FOR REMOTE REVIEW WITH  
CLINICIAN



4. ATLANTIS BRIDGEBASE  
DESIGNED TO SUPPORT APPROVED  
DIAGNOSTIC PROPOSAL



5. BRIDGEBASE SUPPORT  
STRUCTURE



6. BRIDGEBASE DESIGN READY FOR  
TITANIUM SLM AND MILLING OF  
INTERFACES

## Prototyping and Final Try-In

Prototyping remains the most valuable aspect of any digital workflow. This step allows the clinician and patient to evaluate (and adjust if necessary) the proposed final hybrid design. This prosthesis will be printed from a tooth-colored resin and could be worn (under light function) for a limited time. Any adjustments (additive or reductive) must be made to the prototype hybrid and returned for copy-milling of the final. Absolute Dental guarantees a 100% accurate duplication of the approved prototype in the final hybrid. This interim step guarantees a flawless “no adjustment” final delivery and should not be skipped.



7. PROTOTYPE TRY-IN PRINTED WITH  
DENTSPLY SIRONA LUCITONE 3D PRINT  
FROM CORE FILE



8. REQUEST PROTOTYPE FOR FINAL  
TRY-IN AND PATIENT SIGN OFF

# Final Processing



1. APPROVED PROTOTYPE DESIGN MILLED IN MONOLITHIC ZIRCONIA - ALL CONTOURING MADE IN GREEN-STAGE



2. NO ADJUSTMENTS AFTER SINTERING MAINTAINS MATERIAL INTEGRITY



3. MiYo® SHADE APPLIED



4. MiYo® STRUCTURE APPLIED



5. BRIDGEBASE BAR  
READY FOR INTEGRATION



6. BAR INTEGRATED WITH ZIRCONIA FOR CEMENTATION



# Delivery Appointment



*Dr. Mark Ludlow*





The Denbright Dental Lab Group is a full solutions, multi-site US-based dental laboratory company combining some of the most trusted names in the dental lab industry. These labs boast an impressive 300+ years of business experience in the restorative arena. Their combined real-world experience is what truly defines the members of the Denbright group.

This group provides a wide range of high-quality dental prosthetics from single/multi-unit crowns/bridges, world-class veneers to more complex full mouth restorations. Furthermore, the Denbright group consists of highly qualified implant technicians whose combined experience brings many years of implant restorative expertise to the group. Many of these Denbright technicians are actively involved with major implant companies and stay on the cutting edge of today's restorative implant solutions. A number of these technicians also serve as Key Opinion Leaders, researchers and CE accredited speakers to many implant and material companies.

Denbright's surgical division, The NavaGation Precision Guidance team, was established in 2012 and today continues to support world-class surgeons from the US and Europe. This team works closely with national implant companies and their surgical customers to continue innovating new and improved surgical solutions with guided restorative workflows.

With more than 20,000 successful cases delivered, this team is known throughout the industry for their expertise and the support they bring to their surgeons through simple to full-arch latched guides and guided workflow prosthetic solutions.

The fixed and implant teams are supported by a very talented group of specialized removable technicians. These teams focus on digital removable processes and fabricate high-end removable dental prosthetics utilizing the best additive and reductive fabrication techniques available.

Furthermore, the Denbright team members support their customers by offering a full range of restorative solutions and play an integral part by helping these customers identify, understand, and adopt these new world workflows and digital solutions.

The Denbright customer base consists of a loyal and diversified group of discerning clinicians that includes private practices, DSOs, governmental institutions, and multiple universities.

By sharing resources, leveraging each lab's combined expertise, and driving technology adoption, Denbright offers its customers a pathway for accelerated growth through a broader and more diverse set of dental solutions.

*Denbright's founding labs include: Frontier Dental, NuArt Dental, Burbank Dental, Jason J. Kim Dental Aesthetics, D&S Dental, Friendship Dental, Absolute Dental Services and NavaGation Precision Guidance.*





*Jack Marrano & Mark Ludlow*

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