

APRIL 25th 2016

VERSION 6.0

dental wings DWOS INITIAL TRAINING



INITIAL TRAINING

ental wings

DWOSTM PROSTHESIS DESIGN SOFTWARE

DENTAL DESKTOP



DENTAL DESKTOP









TRAINING PROGRAM



- Easy to use
- 2 days
 - How to use digital prostheses
- User's guide
- Work with :
 - Training models
 - Customer's models



SOFTWARE BASIC PRINCIPLES-CONCEPTS

• Scanner: 7SERIES OR 3SERIES

- DWOS prosthesis design software
 - Administration tools
 - Multi-die & Arch Scan Application
 - CAD engine & CAD application
 - Anatomy Editor
 - Anatomy Libraries available at DWOS.com
 - Production manager
 - Optional modules

SOFTWARE BASIC PRINCIPLES - TOOLBAR

- Few drop-down menus
- Mainly toolbar driven





SOFTWARE BASIC PRINCIPLES-WINDOW

- Application window organization
- 3 areas: Resize, sort, arrange





SOFTWARE BASIC PRINCIPLES - MOUSE HANDLING



- <u>Left click:</u> menu, icon selection, point definition
- <u>Right click:</u> definition validation, access to local menu
- <u>Rotating Wheel:</u> zoom in/out
- <u>Press & hold Wheel and mouse dragged:</u> translates the view
- <u>Right click and mouse dragged:</u> rotates the view
- <u>Wheel + CTRL key:</u> cross section of the view
- Double left click: center and resize the view

BASIC SOFTWARE PRINCIPLES-VIEWS HANDLING

• Full 3D display



• Predefined view type

 Predefined cross section (Clip)



SOFTWARE BASIC PRINCIPLES - VIEWS HANLINGS

• Cross section

• Measuring grid

• Measuring tool





SOFTWARE BASIC PRINCIPLES - VISIBILITY

•



- Hide/show clinical preparation
 - Hide/show undercut (scan application)
 - Hide/show friction (scan application)
 - Hide/show antagonist
 - Hide/show anatomies
- Hide/show prostheses (hide also connector)
- Hide/show connectors
 - Hide/show wax-up
 - Transparency





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SOFTWARE BASIC PRINCIPLES-MENU & ASSISTANT

Local menu

• Assistant







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SOFTWARE BASIC PRINCIPLES - PARAMETERS





- Parameters adjustment
 - Local
 - For the lab
 - Customized per dentist

ORDER MANAGEMENT

- Cases identified by order number and order item
 - One order number by model
 - One order item by prosthesis
 - One order number may include several order items
- Data organized on a 3 level architecture
 - Dentist
 - Patient
 - Order
- Process divided in different operation steps
 - Order creation
 - Scanning physical model
 - Designing prosthesis(CAD)
 - Production:in house or outsourced
 - Process divided in different operation steps





| | DWOS Client (adm) - 6.0 0 30472 DWOS Cli | 2 🖻 👤 💿 🎜 💿 | - * × |
|---|--|--|---|
| | Image: Chap & Implants Order CNB & IMPLANTS ORDER Image: Virtual Waxing Order Order ID Image: Virtual Waxing Order Dentset Image: Denture Order Dentset Image: Denture Order Patient Image: Denture Order Patient Image: Denture Order Prosthesis Family Image: Denture Order Prosthesis Family Image: Denture Order Image: DWOS Ceramic Image: Denture Order Image: DWOS Ceramic Image: Denture Order Order Image: Denture Order Image: DWOS Ceramic Image: Denture Order Prosthesis Subtype | P | se Layer + 2 ease click on a tooth to add an item. |
| Order receiving application Order choice — | Lava Order Straumann Order Anatomy Family ATLANTIS" Order Create Bridge | 43 47 46 45 44 43 42 41 31 32 33 | |
| | Create Bar Undo Bridge Cancel Order Route Order Route and Follow | | Attached Documents ⑦ |



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ORDER MANAGEMENT - ORDER CREATION

• Select dentist and patient

| | | | _ | | | | Select dentist and patient | | | | |
|---|----------------------------------|--|--------|-------------------|---|----------|-----------------------------|----------------|--------------|--------------|-----------|
| | | ă 🚳 🗶 📁 🖻 🛆 💩 😑 👤 | . 🖿 🔛 | 🗎 🖻 🔍 🔾 🔾 | | — | ✓ Customers | Cr David Smith | | | |
| | 🗟 Order Creation × 🗵 | Multi-Die Scan × 🕸 Material Management × 🚊 Dentist Manager | ment × | | | | 1a | | | | |
| | CnB & Implants Order | | | | Baselaver + Ø | | 2a | Patient | 🧕 First name | 🧕 Last name | |
| | Virtual Waxing Order | C084-160405-6 | | 12 11 21 22 | Please click on a tooth to add an item. | | 3a | 👤 John Duval, | <u>.</u> | 🧕 John Duval | |
| 0 | Denture Order | | ٩ | 14 24 | | | 4a | + - | | | |
| 7 | Bite Splint | Patient : | ٩ | 15 25 25 | | | | | | | |
| | Orthodontic Order | Prosthesis Farmiy | ~ | 16 26 | | | Dental wings coblagnostix * | | | | |
| | Dartial Order | Material | ~ 7 | | | | Dentist | | | | |
| | Synergy* Order | Color | | 18 28 | | | Dr David Smith | = | | | |
| | coDiagnostiX ^{**} Order | Prosthesis Suntype | ~ | | | | Dr Dentist, My | | | | |
| | Eava Order | Simple Coping | ~ | 48 50 18 | | | Dr1 | | | | |
| | Straumann Order | C DW Kit | ~ | 47 🛃 🕺 | | | Dra Neta | | | | |
| | ATLANTIS* Order | | | 40 20 36 | | | evy nilsson | | | | |
| | | | | 45 0 35 | | | Facioli | | | | |
| | | | | 44 34 | | | tosello | | | | |
| | | | | 43 42 41 31 32 33 | | | | | | | |
| | | Annal Million | | | | | | | | | |
| | | Create Bar | | | | | | ~ | | | |
| | | Undo Bridge | | | | | | | | | |
| | | Cancel Order Noute Order Noute and Po | bliow | | Attached Documents | 0 | | | | | OK Cancel |
| | | | | | | | | | | | |



ORDER MANAGEMENT - ORDER CREATION

| S. | | S | • Pro | osthesis t | ype & mate | erial |
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| | ■ DWOS Client (adm) - 6 0.0 30477 ■ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● | 2 3 🛞 🗶 📁 🝙 💩 | 🛎 👤 🕍 🗖 | DWOS Client (adm) - 6.0.0.30472 DWOS Cli |) 🧶 🖍 💓 🝙 💩 | 😑 👤 占 |
| | CnB & Implants Order | CNB & IMPLANTS ORDER Order ID COM-160405-4 Dentist Dr David Smith | ٩ | CnB & Implants Order | CNB & IMPLANTS ORDER Order ID COM-160405-4 Dentist Dr David Smith | , , |
| 0 | n n orthodontic Order | John Duval Prosthesis Family Crowns Crowns Waxings | <i>م</i> | Grinder | John Duval Prosthesis Family Crowns Material Composed for the second | , c , , , , , , , , , , , , , , , , , , |
| | 📩 coDiagnostiX™ Order 🔜 Lava Order 🎽 Straumann Order | Pontics Abutments Diagnostics Anatomy Family W Kit | 4 | coDiagnostiX [®] Order | Default DWOS Ceramic DWOS Metal DWOS Wax MLava DWOS Wax | |
| | ATLANTIS [™] Order | | | ATLANTIS [™] Order | SM Lava Plus SM Lava Wax | |

| ■ DWOS Client (adm) - 6 0 0 30472 D D C | | | | |
|---|---------------------------|--|--|--|
| CnB & Implants Order | CNB & IMPLANTS ORDER | | | |
| 🕅 Virtual Waxing Order | Order ID COM-160405-4 | | | |
| Denture Order | Dentist Dr David Smith Q | | | |
| Bite Splint | Patient John Duval Q | | | |
| Orthodontic Order | Prosthesis Family | | | |
| 🎾 Partial Order | Material | | | |
| Synergy™ Order | DWOS Ceramic V | | | |
| n coDiagnostiX™ Order | DWOS Ceramic | | | |
| Lava Order | DWOS Metal DWOS Wax | | | |
| 🗾 Straumann Order | SM Lava | | | |
| ATLANTIS [™] Order | an Lava Plus | | | |
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| n coDiagnostiX™ Order | Color | | | | |
| Lava Order | Prosthesis Subtype | | | | |
| 🗾 Straumann Order | Anatomy Family | | | | |
| ATLANTIS™ Order | Anatomy | | | | |
| | Sefault Manufacturer | | | | |
| | | | | | |
| | 💭 DW Kit | | | | |
| | DW Ultra Kit | | | | |
| | 🔬 Merz Dental | | | | |
| | MR DaltaForm® Rostorion | | | | |















• Multi items order definition





ORDER MANAGEMENT - MONITORING

• Administrative application





ORDER MANAGEMENT - ROUTE







MULTIDIE 1

SINGLE COPINGS WITH MULTIDIE



R

MULTIDIE 1: INTRODUCTION



- Single units
- Specific die holder
- 3series 6 & 12 slots 7series
- Multidie application









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MULTIDIE 1: START

- Create an order with several single units
- Start multidie application





MULTIDIE 1: DIES INSTALLATION

- Drag and drop item number
- Install die in corresponding position





Buccal side of the dies should be oriented Towards the front (direction of arrow)



S

MULTIDIE 1: START SCANNING

- 2 ways of scanning
 - •Automated mode
 - •Classical mode





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MULTIDIE 1: MARGIN LINE EDITING

Options

Full Automatic Margin

No Shoulder Optimization

Shoulder & Ditching Optimization

No Dilching Optimization

No optimization (manual)

Use alternate projection

argin Smoothines

aroin Display Size

Set as default design view

Switch design view

stance Between Margin Handle

- Next margin icon
- Automatic proposal for margin
- Manual editing





- Orient the die (occlusal view)
- Select ditching case





- Different useful views
- Define a starting point for an automatic detection





R

- Move points
- Add/remove points





- Also keys left, right, up, down
- SHIFT bigger step + up, down keys
- CTRL smaller step + up, down keys
- DEL key





MULTIDIE 1: PROJECT MARGIN ON SURFACE

- Tools :
 - Flat shading, facilitate the perception of the margin
 - Swiping dot to select more or less margin portion to move

Project Margin on surface
 Automatic Detection
 Flat Shading





MULTIDIE 1: Cut Back





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- Define insertion axis
- Undercuts and helper




R

MULTIDIE 1: MARGIN LINE EDITING

- Automatic proposal for collar line
- Manual editing







R

MULTIDIE 1: MARGIN LINE EDITING

- Computation of the simple coping
- Display





MULTIDIE 1: REPEAT FOR EACH DIE





• Repeat for each die



• All die in green when finished



MULTIDIE 1: EXIT







Route icon

• Summary of orders





PAUSE

Back in **10** minutes

ARCH SCAN 1

SINGLE WITH ADJACENT AND OPPOSING CHECKBITE





ARCH SCAN 1 : INTRODUCTION

- Single units and bridges
- Adjustable standard holder



Arch scan application





ARCH SCAN 1 : START





- Create an order select clinical coping
- Start arch scan application
 & drag order
- Define scan parameters



ARCH SCAN 1 : ORIENTATION

- Video preview
- Orientate the model
- Drag line by moving external green dots



- Place central green dot between two centrals
- Adjust line by left click and mouse wheel
- Rotate scan selection using buccal labels or up, down, right, left arrows keys



ARCH SCAN 1 : Area of interest

- Eliminate useless area
- Define area by moving blue dots



• Start scanning by clicking



ARCH SCAN 1 : TOOTH NUMBER ASSIGNATION











ARCH SCAN 1 : FIRST PRECISE SCAN

- Precise scan area of interest
- Missing cervical area parts on die





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ARCH SCAN 1 : DIE SCAN

- Die only
- Two ways
 - Scan preparation on modelDie on multidie plate







ARCH SCAN 1 : PRECISE DIE SCAN

- Adjust blue line (precise scanning zone) By left click on yellow dots
- Leave or remove adjacent depend of case
- Start precise scan







ARCH SCAN 1 : DIE ON MULTIDIE PLATE

Install die on multidie plate

Buccal in arrow direction



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ARCH SCAN 1 : DIE SCAN



• No missing area





ARCH SCAN 1 : REPOSITIONING

- Potential repositioning error
- Repositioning functions





ARCH SCAN 1 : REPOSITIONING



Good repositioning



Bad repositioning





ARCH SCAN 1 : REPOSITIONING

- Two repositioning functions
 - Simple repositioning





Note the order of definition. The red dot on the die was placed outside the arch



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ARCH SCAN 1 : REPOSITIONING

• Two repositioning functions

• Advanced repositioning









Take care to the order of definition.



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x X

ARCH SCAN 1 : MARGIN LINE

- By local menu
 - By toolbar





ARCH SCAN 1 : CHECKBITE PREVIEW











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ARCH SCAN 1 : CHECKBITE AREA OF INTEREST

- Orient the die
- Orient the checkbite
- Define area of interest
- Start scanning







- Different cleaning tools:
- 2D tools
 Paint
 Spline
 Polygonal
 Rectangular
 elliptical





R

ARCH SCAN 1 : CHECKBITE CLEANING

- Check the view
- Select a zone

don't move checkbite after checking the view





• Confirm zone





• Choose cleaning action:

- Reset the selection
- Delete the selection
- Keep the selection



• Undo redo at this step







• 3D tools:

•Draw the line

•Choose cleaning action



•Undo redo at this step





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ARCH SCAN 1 : ADJUST CHECKBITE POSITION

- Die only
- Check position
- Incremental adjustment
- Adjusting position tool





ARCH SCAN 1 : ADJUST CHECKBITE POSITION

- Auto adjust antagonist position
- Rough, fine and without optimization occlusion





ARCH SCAN 1 : REDO, AD SCANS, EXIT



CAD1

CLINICAL COPING ON SCAN 1









CAD 1: ANATOMY & OVERLAY



• Anatomy: full morphology





• Overlay: framework



CAD 1: ANATOMY & OVERLAY

• Overlay automatically computed from anatomy







• Anatomy not affected by Overlay modification



Q

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CAD 1: ANATOMY & OVERLAY

• Different actions accessible on Anatomy & Overlay






CAD 1: PARAMETERS

- Clinically oriented software
- Two ways
- Parameters tables
- Tools parameters







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CAD 1: REDO & READAPT

- Very flexible software
- Always possible to change







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CAD 1: ANATOMY KIT

- Anatomy kit for automatic proposal
- Several default kits
- Anatomy editor



















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- Different levels
- Whole prosthesis
- Clinical area
- Local



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CAD 1: TRANSFORMS

• Whole prosthesis

Anatomy







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CAD 1: TRANSFORMS

• Multiple possible actions

Translate





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CAD 1: TRANSFORMS

• Multiple possible actions

• Scale





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CAD 1: TRANSFORMS

• Multiple possible actions

• Rotate





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CAD 1: CLINICAL HANDLES

- Clinical area
 - Anatomy & overlay







Å

CAD 1: CLINICAL HANDLES

• Die only

- Move handle line with CTRL
- Add handles

• Area defined by next handles





CAD 1: CLINICAL HANDLES



• Profile management with mouse wheel & left click







CAD 1: CLINICAL HANDLES

Incremental modification

• Specific for overlay

| Anatomy Multi-Designer | | | | | |
|--------------------------|-----|-------|--------|--|--|
| 🎯 🍃 🚺 | 2 | | | | |
| Handles Edition | | | \sim | | |
| Increment | 0.1 | C mm | | | |
| Occlusal | + | - | | | |
| Buccal | + | - | | | |
| Mesial | + | - | | | |
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| Distal | + | - | | | |
| | - | - | _ | | |
| Options | | | \sim | | |
| Handle Size 0.3 🗘 mm | | | | | |
| Global | | Local | | | |
| Force Smooth deformation | | | | | |
| Show Equator Handles | | | | | |
| Show clip view | | | | | |
| Show measures | | | | | |
| Display undercuts | | | | | |
| | | | | | |
| | | | | | |
| • • 0 | ОК | | Cancel | | |

| Overlay Multi-Designer | | | | | |
|--------------------------|-------|-------|-------|--|--|
| S | | | | | |
| Handles Edition | | | ~ | | |
| Increment | 0.1 🗘 | mm | | | |
| Occlusal | + | - | | | |
| Buccal | + | - | | | |
| Mesial | + | - | | | |
| Lingual | + | - | | | |
| Distal | + | - | | | |
| | | | | | |
| Handles Selecti | on | | ~ | | |
| Move on Vector | + | - | | | |
| Clear Handle Selection | | | | | |
| Show Distances | | | | | |
| Options | | | ~ | | |
| Handle Size | 0.3 | C mm | | | |
| Global | | Local | | | |
| Force Smooth deformation | | | | | |
| Show Equator Handles | | | | | |
| Show clip view | | | | | |
| Show measures | | | | | |
| Z Display undercuts | | | | | |
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CAD 1: CLINICAL HANDLES

- Die only
- Move on vector
- Movement with respect to the anatomy
- Select handles with CTRL









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CAD 1: ADD/REMOVE MATERIAL

Local

Anatomy & Overlay



15)

> 📈 Re-Adapt Anatomy

Prosthesis

Anatomy.



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- 5 waxing modes
- Size tools adjustable using mouse wheel







X

0

- 5 waxing tools
- Display modifications





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R

- 5 waxing modes
- Minimal thickness protection





R

- 5 waxing modes
- Global smoothing





• Exit

R



Confirmation





If laser sintering will be used select Merge model surface



dental wings LUNCH BREAK

ARCH SCAN 2

BRIDGE WHITH ADJACENT AND OPPOSING CHECKBITE





ARCH SCAN 2: SUMMARY

- Order creation: clinical coping + pontic + full crown
- Previews & orientation
- Precise scan
- Margin
- Cleaning checkbite
- Adjusting checkbite position



CAD 2

CAD ON SCAN 2



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CAD 2: CLINICAL COPING

- Homothetic reduction
- Anatomy
- Minimal thickness
- Parameters







A

CAD 2: FULL CROWN

- Full crown
- Duplication of anatomy
- No parameters







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CAD 2: PONTIC

- Full, reduced, advanced or ³/₄
- Shape: conical, sanitary, saddle or modified ridge-lap
- Similar as prosthesis
- Parameters







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CAD 2: PONTIC

- Transform
- Handles
- Add/Remove material











• CAD application

Transform

• Clinical handles

• Add/Remove material



CAD 2: ADJUST CONTACT POINTS

• Anatomy

Proximal & Occlusion







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CAD 2: ADJUST CONTACT POINTS

Proximal

-0- -0-Diastema





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X

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CAD 2: OCCLUSION

• Two ways

- Interference colors
- Reduce contacts









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CAD 2: DENTAL BAND

• Two ways







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CAD 2: DENTAL BAND



- Minimal thickness
- ALT key









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CAD 2: DENTAL BAND

- Advanced
- Line editing
- Parameters adjustment









CAD 2: CONNECTOR

- Color information
- Local menu
- Edition



R

You are responsible for the connector design according to material, position of the bridge(front, posterior) and its span





R

CAD 2: CONNECTOR

- Drag handles
- mouse wheel & left click
- Drag handles & CTRL






R

CAD 2: PREHENSION ITEM

- Overlay
 - Parameters
 - Position









ARCH SCAN 3

SINGLE ELEMENT ON VERTEX HOLDER



ARCH SCAN 3: VERTEX HOLDER

- Order creation: simple copin with anatomy
- Specific holder
- Axis-finder patented technique
- First assistant selection







ARCH SCAN 3: SUMMARY



- Preview & Orientation
- Precise scan
- Margin
- Cleaning checkbite
- Adjusting checkbite position



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ARCH SCAN 3: EXPORT SCAN

- STL file
 - Accessible on all scanned elements
 - Specify path





| rders 2 004-160406-4 | HP Status | Customer | | | | | | | | | al a rageron p in 10 | per page 🗸 🗸 |
|------------------------------|-----------|---------------------------------|----------------|----------------|---------------|---------------|-----------------------|----------------|------------|------------|----------------------|-----------------|
| CON1160406-4 | | Contraction of the local sector | Patient | 🕸 Product | 🕈 Implant | 🚨 Scan System | Prosthesis Type | Operation | 💭 Tooth | 📵 Due Date | 🗟 Approval Status | Creation Dat |
| | - | 👷 Dr David Smith | 👤 John Duniel, | CONTRACTOR OF | | | | | | | | 4/6/16/4/51 AM |
| Route Forward | | | | OW05 Ceramic | Variobas. | | Reduced Crown on | Cad completion | | | | 4/6/16/4/53 AM |
| Route Back | | | | DW03 Ceramic | | | d ^o Bridge | Cad completion | | | | |
| Route Back to Scan | | | | DW03 Ceramic | | | 6 ^p Bridge | Cad completion | 10, 12, 11 | | | 4/6/16 4 53 AM |
| Retrieve Manufacturing Files | | - | | DW00 Ceramic | | | B Full Crown | Gad completion | | | | 4/6/16 4:53 AM |
| Retrieve Scan Files | | X or pavie smen | John Duver, | | | 3 GHT HEST | 1 2 | | | | | 4/0/10 2 50 AM |
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| Duplicate Order | | | | OWOS Ceramic | | | Full Crown | Gad completion | | | | 4/6/16 4 00 AM |
| Open Application | | | | | | | | | | | | |
| Archive | | | | | | | | | | | | |
| Save and Purce | | | | | | | | | | | | |
| Purma Deda | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| DWOS Connect > | | | | | | | | | | | | |
| Attached Documents | | | | | | | | | | | | |
| Generate PDF Report | | | | | | | | | | | | |
| Unlock | | | | No comment | | | | | | | | |



dental wings
PAUSE
Back in 10 minutes

ARCH SCAN 4

SCAN WHITH ANTAGONIST POSITIVE MODEL





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ARCH SCAN 4: START

- Standard holder
- First assistant selection
- As usual





ARCH SCAN 4: OCCLUSION KEY

- Install antagonist model
- Rubber Band
- Set Z offset if needed





ARCH SCAN 4: OCCLUSION KEY

- Display
 - Request antagonist or edit margin







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ARCH SCAN 4: DISPLAY

• Visibility button





ARCH SCAN 4: REPOSITION OCCLUSION KEY



• Local menu





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ARCH SCAN 4: OCCLUSION KEY



step if desired



TYPES OF PROSTHESES AND PARAMETERS





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CAD: SIMPLE COPING

- Regular thickness
- No anatomy
- Minimal thickness
- Parameters
- Few actions







CAD: SIMPLE COPING WITH ANATOMY



- Anatomy for overpressed
- Minimal thickness
- No specific parameters
- More actions







R

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CAD: CLINICAL COPING

- Homothetic reduction
- Anatomy
- Minimal thickness
- parameters







A

CAD: REDUCED CROWN

- "Small" reduction for Veneering
 - Anatomy
 - Minimal thickness
 - Parameters







- Vestibular reduction for Veneering
- Anatomy

R

- Minimal thickness
- Parameters









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5

CAD: FULL CROWN

- Full crown
- Duplication of anatomy
- No parameters
- Morphology editing







CAD 3

CAD ON SCAN 3



CAD 3: MODIFY MARGIN

• Margin & cervical lines





CAD 3: RECOMPUTE

- Anatomy, Overlay, connector
- Insertion axis, friction parameters

| Prosthesis 11 | | COM-160406-2 🗯 🍰 💭 🂭 👼 🐉 | ·- = ₩ 📀 |
|---|--|--|-------------------------|
| Insertion Adis Coping Parameters Reduction Parameters Prosthesis Type | | | |
| Coping Parameters | | | |
| Parameters | Oceneni Gap 0.03 C Extra Vertical Gap 0.08 C Extra Horizontal Gap 0.03 C Collar position 0.08 C Margin Thickness 0.5 C Margin Thickness 0.25 C Emergence Angle 0.0 C Emergence Offset 0.1 C Margin CutBack Type Nome Elock out undercuts Apply Tool Compensation | Prodhesis | Ceuga 2 Are retar |
| Reset Set As Default | (2) OK Cancel | age dat | Definition |



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CAD 3: RE-ADAPT ANATOMY

- Tooth number
- Anatomy kit
- Preposition Anatomy(NEW)









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CAD 3: RECOMPUTE OVERLAY

• Prosthesis type

parameters







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CAD 3: OVERPRESSED

- For pressed porcelain
- For the anatomy
- Parameters







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CAD 3: OVERPRESSED



Local menu



15

Prosthesis

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Compute OverPress

EXIT & SHUTDOWN





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EXIT FROM DWOS CLIENT

- To close all the applications
- Two ways possible with

| | 1 # # A 11 | | K Q | | | | | | | | Page 1 of 1 🕨 🌗 50 per g | bage 🗸 (3 total |
|----------|------------------|---------------|----------------|------------|---------------|------------------------|--------------------|------------|------------|-----------------|--------------------------|-----------------|
| ₩ Status | Q Customer | 👤 Patient | 🗱 Product | 🗑 implant | 🚨 Scan System | 🛅 Prosthesis Type | Operation | 💭 Tooth | 🔳 Due Date | Approval Status | Creation Date | 🖀 Remote ID |
| | 💂 Dr David Smith | 👤 John Duval | | | 3Series+ | | | | | | 4/6/16 5.50 AM | |
| | | | 🗇 DWOS Ceramic | 🔏 Variobas | | Reduced Crown on |)II(Scan | | | | 4/6/16 5:50 AM | |
| | | | 🗂 DWOS Ceramic | | | 🔗 Bridge |))) Scan | 24, 25, 26 | | | 4/6/16 5 50 AM | |
| | | | 🗂 DWOS Ceramic | | | 🔗 Bridge |)III Scan | 13, 12, 11 | | | 4/6/16 5:50 AM | |
| | | | 🗇 DWOS Ceramic | | | Full Crown |]]][Scan | | | | 4/6/16 5 50 AM | |
| | 💂 Dr David Smith | 🔔 John Duval. | | | 3Series+ | | | | | | 4/6/16 4.53 AM | |
| | | | 🗂 DWOS Ceramic | 🔏 Variobas | | Reduced Crown on | Cad completion | | | | 4/6/16 4:53 AM | |
| | | | 🗂 DWOS Ceramic | | | & Bridge | Gad completion | 24, 25, 26 | | | 4/6/16 4:53 AM | |
| | | | 🗇 DWOS Ceramic | | | & Bridge | Cad completion | 13, 12, 11 | | | 4/6/16 4:53 AM | |
| | | | 🗂 DWOS Ceramic | | | Full Crown | Cad completion | | | | 4/6/16 4:53 AM | |
| | 💂 Dr David Smith | 🔔 John Duval. | | | 3Series+ | | | | | | 4/6/16 3.58 AM | |
| | | | DWOS Ceramic | | | Simple Coping With An_ | (a) Cad completion | | | | 4/6/16 7 26 AM | |
| | | | 🗂 DWOS Ceramic | 🔏 Variobas | | Reduced Crown on | G Cad completion | | | | 4/6/16 4:00 AM | |
| | | | 🗂 DWOS Ceramic | | | & Bridge | Cad completion | 24, 25, 26 | | | 4/6/16 4:00 AM | |
| | | | 🗂 DWOS Ceramic | | | 🔗 Bridge | 🗃 Cad completion | 13, 12, 11 | | | 4/6/16 4:00 AM | |
| | | | 🗂 DWOS Ceramic | | | Clinical Coping | 🗃 Cad completion | | | | 4/6/16 4:00 AM | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| é | | | | | | | | | | | | |



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CLOSE DWOS SERVER

- Close all DWOS server
- Server icon (left click)

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QUESTIONS & ANSWERS





INITIAL TRAINING – DAY 2

🥭 dental wings

DWOStm PROSTHESIS DESIGN SOFTWARE



MULTIDIE 2

ADVANCED USE



MULTIDIE 2: ADVENCED



• CAD design tool accessible





R

MULTIDIE 2: REDO AND CHANGE

Local menu

- Rescan
- Edit margin
- Edit cad



CAD ON SCAN 4


CALIBRATION





CALIBRATION: INTRODUCTION

- Ensure accuracy
- Every two weeks





R

CALIBRATION: 3SERIES

• Full automatic

• 10 minutes

| Scanner managem | Occlusor mana | agement | | | | | | |
|------------------------|---------------|-----------------|-----------------|--------------------------|---------|-------------------|----------|-------|
| Serial Number: 4002 | Name | | | Occlusor Details Name | Defaul | It Articulator | | |
| Scanner Type: | SAM® SE | | | Description | Statist | tical Articulator | | |
| Calibration date: | | | | Virtual Articulator | | | | |
| 6 Apr 16 03:56 | | | | Calibration | | | | |
| Calibration version: | | | | | | | | |
| | | | | Condular Plana | | Right | | . ^ |
| Sast Calibration | | | | Condynar Slope | | | ° ↓ ♠ | • ~ |
| | | | | Bennett Angle | | | 5 💭 | 5 💭 |
| Load Calibration File | | | | Immediate Side Shift | | | 0.2 🗘 | 0.2 🗘 |
| | | | | Symmetrical | | | | |
| Axis recalibration | | | | Incisal Height Increm | nent | | | ≎ ٥ |
| | | | | Incisal Slope | | | | 20 🗘 |
| Transat Desition | Add occlusor | Import Occlusor | Delete occlusor | | | | | |
| Transport Position | | | Launch occ | lusor calibration scan | 2 | Save | | |
| | | | | | | | | |





CALIBRATION: PLATE







Surface plate is fragile





• Several automatic step

• Message when done



Anatomy kit editor





ANATOMY EDITOR: REMINDER









ANATOMY EDITOR: REMINDER



CNB & IMPLANTS ORDER

| COM-160406-7 | | |
|------------------------|--------|-------|
| | | |
| Dr David Smith | ٩ | |
| | | 14 |
| John Duval, | ٩ | 15 🦳 |
| | | |
| Crowns Crowns | ~ | 16 |
| | | |
| 🗁 DWOS Ceramic | ~ 7 | |
| Color | | 10 |
| | ~ | 10 |
| Prosthesis Subtype | | - |
| 🔔 Simple Coping | ~ | 48 |
| | | |
| DW Kit | \sim | 47 55 |
| 🦳 DW Kit | | |
| DW Ultra Kit | | 46 |
| 읊 Merz Dental | | |
| 🚥 DeltaForm® Posterior | | 45 |
| 💷 Polystar® Selection | | |
| 💷 artegral® BM | | 44 |
| 👜 artegral® CM | k | 4 |
| 🏧 artegral® IM | | |





ANATOMY EDITOR: INTRODUCTION

- Create kits
- Import kits(.waflib files)
- Anatomy kit= morphology + clinical points
- Three Ways





ANATOMY EDITOR: KIT MANAGEMENT

Rename anatomy kit

Edit

Duplicate Kit

Delete Anatomy Kit

Set as Default Kit

Disable Auto-Scale

Export Anatomy Kit

Share Anatomy Kit

×

DW Hi Res Kit

DW HiRes set-up

🛨 DW Kit

DW Kit set-up

DW Ultra Kit

DeltaForm® Posterior

Polystar® Selection artegral® BM artegral® CM artegral® IM

VPH Typ T3M-L3M VPH Typ T5M-L3M VPH Typ Z2S-L5M Vitapan Typ T76-L7 Vitapan Typ X77-L11

T44-L33-21L S T44-L33-21L_M R47-L37-22L_M Y





ANATOMY EDITOR: EDIT





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ANATOMY EDITOR: ADD/REMOVE MATERIAL





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ANATOMY EDITOR: CLINICAL HANDLES









ANATOMY EDITOR: RELOAD & SAVE





Cancel



ANATOMY EDITOR: USING STL

Load STL

Open Preparation Scan File

Look In: 🛛 🚺 STL for partial

📕 My_Laboratory_Dr_Dentist_My_My_Patient_Inférieur.stl 🛛 📕 My_Labora 📕 My_Laboratory_Dr_Dentist_My_My_Patient_single_11.stl 📕 My_Labora 📕 My_Laboratory_Dr_Dentist_My_My_Patient_single_12.stl 퉞 My_Labora 📕 My_Laboratory_Dr_Dentist_My_My_Patient_single_13.stl 矏 My_Labora 📕 My_Laboratory_Dr_Dentist_My_My_Patient_single_14.stl 📕 My_Labora My_Laboratory_Dr_Dentist_My_My_Patient_single_15.stl Ky_Laboratory_Dr_Dentist_My_My_Patient_single_16.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_17.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_21.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_22.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_23.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_24.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_25.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_26.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_27.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_31.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_32.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_33.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_34.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_35.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_36.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_37.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_41.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_42.stl My_Laboratory_Dr_Dentist_My_My_Patient_single_43.stl

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Preview Options Rotate Y on Z Invert normals Flip around X Optimize mesh



Center on Model



File Name: My_Laboratory_Dr_Dentist_My_My_Patient_single_14.stl

Files of Type: All Files

Open Cancel

2---



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15

ANATOMY EDITOR: USING STL

• Orientate & scale







ANATOMY EDITOR: USING STL

Adapt anatomy to wax-up







PAUSE

Back in **10** minutes

ADMINISTRATIVE FONCTIONS





- Overview
- Production steps
- Retrieve files
- Import/Export orders
- Archives
- Purge



Orders & item

| | DETAN | | ± ۹ | | | | | | | | 4 4 Pages of 1 > > 50 | bei baða 🦟 🦰 |
|----------------|----------|------------------|---------------|--------------|-----------|---------------|------------------------|-----------------|------------|----------|-------------------------|----------------|
| as | ₩ Status | Q Customer | 👤 Patient | 🕸 Product | 📱 Implant | 🧕 Scan System | Prosthesis Type | Operation | 🗂 Tooth | Due Date | 📓 Approval Status | Creation Da |
| COM-160406-5 | | 💂 Dr David Smith | 👤 John Duval, | | | 3Series+ | | | | | | 4/6/16 5:50 AM |
| CON-160406-5-4 | | | | DWOS Ceramic | Variobas | | Reduced Crown on |)II (Scan | | | | 4/6/16 5:50 AM |
| CON-160406-5-3 | | | | DWOS Ceramic | | | 6 ⁹ Bridge |)) (Scan | 24,25,26 | | | 4/6/16 5:50 AM |
| CON-160406-5-2 | | | | DWOS Ceramic | | | & Bridge |)II (Scan | 13, 12, 11 | | | 4/6/16 5:50 AM |
| COM-160405-5-1 | | | | DWOS Ceramic | | | Full Crown |)II (Scan | | | | 4/6/16 5:50 AM |
| COM-160406-4 | | 👷 Dr David Smith | 👤 John Duval | | | 3Series+ | | | | | | 4/6/16 4 53 AM |
| CON-150405-4-4 | | | | DWOS Ceramic | heriobas_ | | Reduced Crown on | Production | | | | 4/6/16 4 53 AM |
| COM-160405-4-3 | | | | DWOS Ceramic | | | P Bridge | Production | 24, 25, 26 | | | 4/6/16 4 53 AM |
| CON-160405-4-2 | | | | DWOS Ceramic | | | 6 Bridge | Production | 13,12,11 | | | 4/6/16 4 53 AM |
| COM-160406-4-1 | | | | DWOS Ceramic | | | Full Crown | Production | | | | 4/6/16 4 53 AM |
| COM-160406-3 | | 👷 Dr David Smith | 👤 John Duval, | | | 35kries+ | | | | | | 4/6/16 4:00 AM |
| CON1160406-3-4 | | | | DWOS Ceramic | | | Simple Coping Wit | 1 Scan | | | | 4/6/16 7:35 AM |
| COM-160406-3-3 | | | | DWOS Ceramic | | | Simple Coping Wit. |)III, Scan | | | | 4/6/16 7 35 AM |
| CON-160405-3-2 | | | | DWOS Ceramic | | | 🗿 Simple Coping Wit |)II (Scan | | | | 4/6/167:35 AM |
| CON-160406-3-1 | | - markener | | DW09 Ceramic | | | Simple Coping Wit |)II (Scan | 15 | 100 | | 4/6/167:35 AM |
| | = | 🧟 Or David Smith | 👤 John Duval, | | | | | | | | | |
| COM-160406-2-5 | | | | DWOS Ceramic | | | Simple Coping With An. | Cart completion | | | | 4/5/16 7:26 AM |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |



• Orders actions



• Different according to operation step







• Items orders actions



Different according to operation step

| Cc | DM-160414-2 | | |
|----|------------------|------------------------|--------------------------|
| ĺ | COM-160414 | 🗎 Reduced Crow | 🛄 Scan |
| | DWOS Connect 🕉 | 🔗 Bridge | 🂵 Scan |
| | Annotate item | ℰ Bridge | 🛄 Scan |
| Ū | Send to milling | 📜 Full Crown | 🗐 Scan |
| ٩ | Open Application | | |
| 0 | Export item | Reduced Crow Pridge | Production Production |





A

- Retrieve scan files
- Order level
- Data selection



| | Save | | × |
|-------|----------------|----------------|--|
| | Save In: 🛛 🚺 | New Folder (2) | A G C |
| Files | | | Options Include Anatomies Include Manufacturing Include Antagonist Include Scan Data |
| > | File Name: | COM-160406-5 | |
| | Files of Type: | STL files | ~ |
| | | | Save Cancel |



- Export order
- Order level
- All data: clinical + administrative





- Import order: DWOS order third party order
- All data: clinical + administrative







- Archive
- Order level
- Remove from current list
- Always accessible







- Save and purge
- Order level



- Export order & Remove from DWOS system
- Always accessible by Import order





- Purge only
- Order level
- Remove from DWOS system
- confirmation

Confirm

Are you sure you want to completely purge all the archived orders from the database ? The information will be definitively deleted from the system.



Data is permanently deleted



Yes

No



Help database





- All the parameters related to material
- Customize for your lab





• Elements available

| DWUS Ceramic | | | _ |
|--|---|--|--------------------------------------|
| Elements Available | ~ | Virtual Die Spacer | < |
| Units 16 | ¢ | Minimum Thickness | < |
| Crowns Pontics Inlays Abutments Waxings Diagnostics Others | Simple Coping Clinical Coping Simple Coping With Anatomy Reduced Crown Full Crown Telescopic Coping 3/4 Crown Post & Core Full Crown on Post & Core Reduced Crown on Post & Core | Inlay/Onlay Adaptation Reduction Overpress Full Denture Parameters Pre Nesting | < < < < < < < < |
| | ✓ Infix® Crown | Output Formats | < |
| Manufacturing | | | |
| Telescopic | < | | |
| Dental Band | (| | |
| Custom Abutment | < | | |
| Material Display | (| | |
| Implants Bar | (| | |
| Connectore | · · · · · · · · · · · · · · · · · · · | 🔺 🔍 🔼 | ā |



• Virtual die spacer







A

MATERIAL MANAGEMENT

• manufacturing

| | Manufacturing | | \sim |
|---|---|----------------------------------|--------|
| | Cylinder Radius | Elliptic Vertical | |
| | 0 mm | 0.6 mm | |
| | Elliptic Radial | Additional Vertical | |
| No. of the second se | 0.6 mm | 0.1 mm | |
| | Apply Tool Compensation | | |
| | Compensation On Whole Surface | | |
| | Enforce 3-Axis Milling | | |
| | Allow 3.5 Axis Milling | | |
| | Max Angle between telescopic and insertion axes | Max Angle between insertion axes | |
| | 20 ° | 20° | |
| | Merge Surfaces | | |
| | Max Attachments | | |
| | 2 I | | |
| | Apply Overlay Surface Compensation | | |
| | Inner Compensation Tool Radius | Outer Compensation Tool Radius | |
| | 0.5 mm | 0.5 mm | |
| | Compensation Distance | | |
| | -1 mm | | |
| | | | ? |







| Prosthesis 11 | | |
|--|--|---|
| nsertion Axis Coping Parameters Reduction Parameters Prosthesis Type | | |
| Coping Parameters | | |
| Parameters | Cement Gap Extra Vertical Gap Extra Horizontal Gap Collar Position Minimum Thickness Margin Thickness Emergence Angle Emergence Offset Margin Cutback Type Block out undercuts Apply tool compensation | 0.03 \$ 0.08 \$ 0.03 \$ 0.03 \$ 0.03 \$ 0.05 \$ 0.25 \$ 0.1 \$ 0.1 \$ None \$ |
| Reset Set as default | ⑦ ОК | Cancel |

| Minimum Thickness | ~ |
|---------------------------|-----------------|
| Emergence Offset | Emergence Angle |
| 0.1 mm | 65 ° |
| Minimum Thickness | Smooth Distance |
| 0.5 mm | 0.5 mm |
| Control Angle with Normal | |



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Dental band



A

Dental Band

-0- «S

| Height | Start Angle |
|-------------------------|-------------------------|
| 1 mm | 180° |
| End Angle | Emergence Angle |
| 360 ° | 65° |
| Minimum Thickness | External Surface Offset |
| 0.1 mm | 0.05 mm |
| Transition Angle | |
| 10° | |
| Use Straight Transition | |



🗹 Allow Dental Band



Adaptation



A

| Adaptation | ~ |
|--------------------------------|----------------|
| Occlusion Thickness | Diastema Value |
| 0.1 mm | 0.015 mm |
| Gingiva Spacing | |
| 0.02 mm | |
| Use Contact Area | |
| 🗹 Auto Fill Gap | |
| 🗹 Automatic Gingiva Correction | |



Apply Anatomy Precompensation


T

R

MATERIAL MANAGEMENT

Reduction



| Reduction | ~ |
|---------------------------|--------------------------|
| Reduction Occlusal | Reduction CUSP Mesial |
| Reduction CUSP Buccal | Reduction CUSP Distal |
| 1 mm | 1.5 mm |
| Reduction CUSP Lingual | Reduction Equator Mesial |
| Reduction Equator Buccal | Reduction Equator Distal |
| 1 mm | 1 mm |
| Reduction Equator Lingual | Reduction Cervical |
| Imm | 0.5 mm |



MATERIAL MANAGEMENT

Connectors



Connectors

R

Edit Shapes

Default Anterior Shape:

-0- «S



Default Shape

Default Posterior Shape:

Default Shape

| apo | - | | |
|-----|---|--|--|
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| Use natural connect | ors |
|---------------------|--------------|
| Maximum Area | Minimum Area |
| 10 mm² | 9 mm² |
| Maximum Area | Minimum Area |
| 10 mm² | 9 mm² |
| | |



MATERIAL MANAGEMENT

Output formats

| Output Formats | |
|----------------------------------|----------------------------------|
| ZENOTEC CAM v3.0 | ZENOTEC CAM v3.2 |
| ZENOTEC CAM v4.0 | 🗹 Katana |
| STL | STL non-oriented |
| ✓ STL simple name | CADesthetics |
| ✓ Delcam | ☑ DWOS Generic Integral |
| VorkNC® | ✓ Lyra |
| ✓ MaykaDental® | ☑ DWOS Generic Pre-Milled |
| ✓ DWOS Generic Pre-Milled X Axis | ☑ DWOS Generic Pre-Milled Z Axis |
| ✓ hyperDENT® | ✓ Core3D [®] |
| Go2CAM® | ✓ ModelBuilder |
| ✓ ModelBuilder (Oriented) | ✓ ModelBuilder (Milling) |
| ✓ ModelBuilder (Zeno) | ✓ ModelBuilder (Zimo) |
| ModelBuilder (Witlaken) | CISLA80 |
| 🗹 Unique CAD CAM | ✓ Sum3D (MillBox) |



In relation with manufacturing solution



MATERIAL MANAGEMENT

• Add new material



Add material Create manufacturer Import material Import AG material

• Coping existing material

| ∽ 🗇 Default | \$ |
|------------------|-----------------|
| 🖈 DWOS Ceramic | |
| DWOS Metal | Rename Material |
| DWOS Wax | Copy Material |
| > 🗉 Instradent | Delete Material |
|) am Lava | Set As Default |
| 🔪 💋 Straumann | Export Material |



DENTIST PREFERNCES

- Customize per dentist
- Supersede material parameter

| | 🍽 🗅 🛆 🛎 🖳 ha 🕅 🔳 🔍 🎯 🎜 🔘 | |
|--|--|--|
| ich | Dr Dentist, My Parameters for : DWOS Ceramic | |
| Dentist Dr Dentist, My JCB | Virtual Die Spacer | |
|)r David Smith | Minimum Thickness | |
| Material | Telescopic | |
| DWOS Ceramic DWOS Metal DWOS Wax | Dental Band | |
| ava DVS .ava Wax .ava Zirconia | Adaptation | |
| ava Plus | Custom Abutment | |
| | Reduction | |
| | | |
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| | | |



DENTIST PREFERNCES



| Qearch | Dr Dentist, My Parameters for : DWOS Ceramic | |
|----------------------------|--|--|
| Dentist | Virtual Die Spacer | |
| 로 JCB 로 Dr David Smith | Cement Gap 0.03 mm | |
| | Extra Vertical Gap 0.08 mm | |
| | Extra Horizontal Gap 0.03 mm Margin Thickness 0.25 mm | |
| Material | Collar Line Position 0.8 mm | |
| DWOS Ceramic DWOS Metal | Block Out Undercuts | |
| DWOS Wax | Allow Margin CutBack 🔽 | |
| 🛁 Lava DvS | Margin Cutback Type None | |
| Lava Zirconia | No Screw Channel | |
| . 100 | Minimum Thickness | |
| | Telescopic | |
| | Dental Band | |
| | Adaptation | |
| | | |



DENTIST MANAGEMENT

• Organize dentist

| DWOS Client (adm) - 6.0.0.30487 | | | | _ a × |
|---------------------------------|----------------|--------------|-------------|----------|
| 📘 🔁 🛣 🎑 🧐 🛃 🌘 | 🎽 🧥 🙈 | 🗯 👤 🖬 🗖 | 📄 🚊 🐵 🎜 🔿 | — |
| 👤 Dentist Management × | | | | |
| ✓ Customers Dr David Smith | Dr Dentist, My | | | |
| Dr Dentist, My 🗮 | Patient | Ω First name | ♀ Last name | |
| JCB | Patient, My | 👤 My | Patient | |
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DENTIST MANAGEMENT

- Country
- Clinic or unaffiliated
- Search
- Add







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USER MANAGEMENT

- Manage user account
- Define rights of use



| Users | User | | |
|---------|--|-----------------|--|
| | Username adm | Change Password | |
| 🚯 adm 🔤 | User Privileges | | |
| | Order Creation Application | | |
| | Scan Import Application | | |
| | Scan Multi Die Application | | |
| | Scan Arch Application | | |
| | Scan Calibration | | |
| | CAD Engine Application | | |
| | CAD Application | | |
| | Production Application | | |
| | Company Management | | |
| | User Management | | |
| | Dentist Management | | |
| | Dentist Preference Management | | |
| | Material Parameters Management | | |
| | Administrative Application | | |
| | Partial CAD Application | | |
| | Patient-Centric Management Application | | |
| | | | |
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USER MANAGEMENT



User creation

• Username



• password



Add



USER MANAGEMENT

Privilege



| जेser | | |
|--------------|-----------------------------|-----------------|
| Username | adm | Change Password |
| User Privile | jes | |
| Order Creati | on Application | ~ |
| Scan Import | Application | ~ |
| Scan Multi [| Die Application | ~ |
| Scan Arch A | pplication | ~ |
| Scan Calibra | ation | ~ |
| CAD Engine | Application | ~ |
| CAD Applica | ation | ~ |
| Production | Application | ~ |
| Company M | lanagement | ~ |
| User Manag | ement | ~ |
| Dentist Man | agement | ~ |
| Dentist Pref | erence Management | ~ |
| Material Par | ameters Management | ~ |
| Administrat | ive Application | ~ |
| Partial CAD | Application | ~ |
| Patient-Cen | tric Management Application | |



PRODUCTION MANAGEMENT



• Local or subcontract (DHS)



| 🟉 DWOS Client (adm) - 6.0.0.3 | 30487 | | | | | | | _ 🗆 × |
|-------------------------------|--|-------------|------------------|----------------------|--------------|----------|-----------------------|--------------|
| 🔁 🔲 🛧 🗀 | S 🐼 🖌 🝏 | 🙆 👜 🧰 | 💻 🖬 🗖 🛛 | 🗐 🤶 🧿 🔁 | 5 🔿 | | | |
| | | | | | | | | |
| Production Managem | ent 🛛 🗉 Order Mana | agement | | | | | | |
| All D B D | a , | | | | | | | |
| Orders | 🖿 🛱 Status | 🗟 Remote ID | 🗢 Remote St 👤 Cu | stomer 👤 Patient | 🗰 Product | 🕏 Impla | 🖾 Prosthesis T | Creation |
| COM-160406-2 | | | 💂 Dr D | avid S 👤 John Duval, | | | | 4/14/16 8:48 |
| COM-160406-2-1 | Production cho | oice | | | DWOS Ceramic | | 3/4 Crown | 4/14/16 8:48 |
| COM-160406-2-2 | Production cho Production cho Production cho | Dice | | | DWOS Ceramic | | P Bridge | 4/14/16 8:48 |
| COM-160406-2-3 | Production cho | bice | | | DWOS Ceramic | 🍰 Variob | Reduced Crow | 4/14/16 8:48 |
| | | | | | | | | |
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| A V Preview | | Comments | •••••• | | Files | | | |
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PRODUCTION MANAGEMENT

• Actions at order and item levels



| COM-160406-2 | | | 💂 Dr David S | 👤 John Duval, | | | | 4/14/16 8:48 |
|--------------------|--------------|--|--------------|---------------|----------------|----------|----------------|--------------|
| 🚽 Subcontract Job | \boxtimes | | | | 🗇 DWOS Ceramic | | 🔊 3/4 Crown | 4/14/16 8:48 |
| 6 Local Production | \mathbf{X} | | | | 🗇 DWOS Ceramic | | 🔗 Bridge | 4/14/16 8:48 |
| Customer Details | \mathbf{X} | | | | 🗇 DWOS Ceramic | | 🔗 Bridge | 4/14/16 8:48 |
| COM-160406-2-4 | \mathbf{X} | | | | 🗇 DWOS Ceramic | 💩 Variob | 🕅 Reduced Crow | 4/14/16 8:48 |

| COM-160406-2 Image: Comment of the set of the | on Date 🛛 💭 Tooth 🛛 🖓 Tooth Color | Creation Date | 🖾 Prosthesis T | 🛢 Impla | 🗰 Product | 👤 Patient | 👤 Customer | ≈ Remote St | 🖀 Remote ID | ₩ Status | ini | Orders | |
|---|-----------------------------------|-----------------|----------------|----------|----------------|---------------|--------------|-------------|-------------|---------------------|------------|-------------------------|------------|
| Image: COM-160406 Image: COM-160406 <td< th=""><th>48 AM</th><th>4/14/16 8:48 AM</th><th></th><th></th><th></th><th>👤 John Duval,</th><th>💂 Dr David S</th><th></th><th></th><th></th><th></th><th>COM-160406-2</th><th>Ш</th></td<> | 48 AM | 4/14/16 8:48 AM | | | | 👤 John Duval, | 💂 Dr David S | | | | | COM-160406-2 | Ш |
| Image: Subcontract Job Image: Production choice Image: Production | 48 AM 15 | 4/14/16 8:48 AM | 🔊 3/4 Crown | | 🗇 DWOS Ceramic | | | | | ? Production choice | | 🧷 COM-160406 | |
| Icoal Production Production choice Production choice Production choice Order Item Production Finished Production choice DWOS Ceramic Produced Crow 4/14/16 8:48 AM 24, 25, 26 | 48 AM 13, 12, 11 | 4/14/16 8:48 AM | 🔗 Bridge | | 🗇 DWOS Ceramic | | | | | ? Production choice | | Subcontract Job | |
| 🔗 Order Item Production Finished 😯 Production choice 🧊 WOS Ceramic 🔬 Variob 🗊 Reduced Crow 4/14/16 8:48 AM 22 | 48 AM 24, 25, 26 | 4/14/16 8:48 AM | 🔗 Bridge | | 🗇 DWOS Ceramic | | | | | ? Production choice | | Local Production | \bigcirc |
| | 48 AM 22 | 4/14/16 8:48 AM | 🕅 Reduced Crow | 💩 Variob | 🗇 DWOS Ceramic | | | | | ? Production choice | Finished | Order Item Production F | \bigcirc |
| S Cancel Order Item Production | | | | | | | | | | | uction | Cancel Order Item Produ | 8 |
| Preview Model | | | | | | | | | | | | Preview Model | 0 |



PRODUCTION MANAGEMENT

• Actions at order and item levels

• If local production



| ~ | | | | | | | | | |
|---|--------------------|--------------|--|--------------|---------------|----------------|----------|----------------|--------------|
| | COM-160406-2 | | | 💂 Dr David S | 👤 John Duval, | | | | 4/14/16 8:48 |
| | 🛒 Subcontract Job | \mathbf{X} | | | | 🗇 DWOS Ceramic | | 🔊 3/4 Crown | 4/14/16 8:48 |
| | 😡 Local Production | \mathbf{X} | | | | 🗇 DWOS Ceramic | | 🔗 Bridge | 4/14/16 8:48 |
| | Customer Details | \mathbf{X} | | | | 🗇 DWOS Ceramic | | 🔗 Bridge | 4/14/16 8:48 |
| | 2 COM-160406-2-4 | \mathbf{X} | | | | 🗇 DWOS Ceramic | 🍰 Variob | 🕅 Reduced Crow | 4/14/16 8:48 |
| | | | | | | | | | |

| | Orders | m | ₩ Status | 🖀 Remote ID | ≈ Remote St | 👤 Customer | 👤 Patient | 🕸 Product | 🛢 Impla | 🛍 Prosthesis T | 🖻 Creation Date | 💭 Tooth | 🕲 Tooth Color | Ξ Qι |
|---|-----------------------------|----------|------------|-------------|-------------|--------------|---------------|----------------|----------|----------------|-----------------|------------|---------------|------|
| I | COM-160406-2 | | | | | 💂 Dr David S | 👤 John Duval, | | | | 4/14/16 8:48 AM | | | |
| | 🖍 COM-160406 📃 | X | 🔒 In House | | | | | 🗇 DWOS Ceramic | | 🕅 3/4 Crown | 4/14/16 8:48 AM | 15 | | |
| 0 | Retrieve Manufacturing File | es | 🔒 In House | | | | | 🗇 DWOS Ceramic | | 🔗 Bridge | 4/14/16 8:48 AM | 13, 12, 11 | | |
| | Order Item Production Finis | shed | 🟫 In House | | | | | 🗇 DWOS Ceramic | | 🔗 Bridge | 4/14/16 8:48 AM | 24, 25, 26 | | |
| > | Cancel In House Productio | n | ♠ In House | | | | | 🗇 DWOS Ceramic | 🔊 Variob | Reduced Crow | 4/14/16 8:48 AM | 22 | | |
| | Preview Model | | | | | | | | | | | | | |

| Please choosg file type. |
|--|
| Please choose a manufacturing file typ |
| STL |
| ZENOTEC CAM v3.0 |
| ZENOTEC CAM v4.0 |
| STL simple name |
| 🔵 Delcam |
| WorkNC® |
| 🔵 MaykaDental® |
| hyperDENT® |
| Go2CAM® |
| Unique CAD CAM |
| ZENOTEC CAM v3.2 |
| 🔵 Katana |
| STL non-oriented |
| CADesthetics |
| 🕒 Lyra |
| Core3D® |
| CISLA80 |
| Sum3D (MillBox) |
| ⑦ OK Cancel |
| |



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PRODUCTION MANAGEMENT

- Items levels
- When local production done















IMPORT SCAN FILES









IMPORT SCAN FILES



| Import scan file | es |
|--------------------------------------|--------------|
| | |
| Load 3D file for clinical definition | x |
| Preparation | ~ |
| Arch Scan File | |
| Antagonist Arch (optional) | |
| Gingiva (optional) | |
| Wax-up (optional) | - |
| [| |
| Abutments | < |
| Occlusion Key Scan file | ~ |
| Occlusion Scan File (optional) | |
| · | |
| | |
| | ?) OK Cancel |





IMPORT SCAN FILES









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IMPORT SCAN FILES

• Define area of interest

- Tooth assignment
- Margin









ARCH SCAN 5

SCAN WITH BRIDGE PREPARATION & WAX-UP

LOAD STL FILE



ARCH SCAN 5: START

• Standard holder

• First assistant selection





ARCH SCAN 5: USE 3D FILE



- Standard holder
- First assistant selection
- Use 3D scan file





ARCH SCAN 5: WAX-UP

- Orient, define area of interest & assign tooth # as usual
 - Wax-up installation requested





ARCH SCAN 5: WAX-UP



- Display
- Usual tools





ARCH SCAN 5: PRECISE SCAN OF DIE

- Precise scan of die
- Margin as usual



CAD 5

WAX-UP ADAPTATION-SCAN 5



CAD 5: INTRODUCTION

- Use wax-up for anatomy
- Automatic proposal as usual







CAD 5: INTRODUCTION



Adapt anatomy on wax-up





Do not rotate the view



ARCH SCAN 6

IMPRESSION SCAN

LOAD STL FILE



ARCH SCAN 6: START

- Impression holder
- First assistant selection





ARCH SCAN 6: IMPRESSION SCAN

- Orient, define area, tooth # assignment precise scan as usual
- Margin particular edition













dental wings



SCAN & CAD

USING YOUR CASES



DHS

SUBCONTRACTING MANAGMENT




- Can subcontract at different operation steps
- Secured data subcontracting
- Fully integrated in DWOS environement



T

DHS: DHS CONNECTION

- Connecting status
- settings

D

A



DHS: SUBCONTRACT

• Design & manufacturing

• Administrative & production







A

DHS: SUBCONTRACT

- Summary
- Production choices



DHS: SUBCONTRACT

- Automatic files transfer
- Status automatically updates
- Updates from production center are automatic

PERFACTORY STATION





PERFACTORY STATION: INTRODUCTION

- Integrate production with perfactory solutions
- Preparation of production plates







PERFACTORY STATION: MACHINE SETTINGS

- Define printer parameters
- Refer to documentation





PERFACTORY STATION: ORDER POSITIONING

- Drag to selected position
- Select move







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PERFACTORY STATION: BUILD SUPPORTS

- Support generation
- Label creation







PERFACTORY STATION: LOAD AND SAVE





• Save plate

| Save output | file | | x |
|----------------|---------------------|--------------|----------|
| Save In: 🛛 🐛 O | S (C:) | - † 🖵 | • |
| 📜 Apps | 📜 Intel | Users | |
| 📜 dell | 📃 NVIDIA | 📒 Windows | |
| 📃 Drivers | 📃 PerfLogs | WNCTRAV | |
| 📃 DWClientTm | p 💦 📃 Program Files | WorkNCDental | |
| DWOS | 📒 Program Files (| x86) | |
| 📙 inetpub | 📕 TMP | | |
| | <mark>C:\</mark> | | |
| Files of Type: | All Files | | ~ |
| | | Save | Cancel |







PAUSE

Back in **10** minutes

IMPLANT MODULE



IMPLANT: INTRODUCTION



- Optional module
- Single customized abutment
- Jig(scan body)
- Implant kit definition
- Implant kit manager
- Order creation
- Scan
- CAD



IMPLANT: IMPLANT KIT

- Define all component
- Dimension and geometry







IMPLANT: IMPLANT KIT IMPORT

- Provided by manufacturer or 3rd party vendor
- IPFLIB file
- Zip file









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IMPLANT: IMPLAN KIT CREATION

| New mar | nufacturer |
|---------|------------|
|---------|------------|

New kit

| New manufacturer | | | | | | | |
|---------------------|----|--------|--|--|--|--|--|
| New manufacturer | | | | | | | |
| Manufacturer Name : | | | | | | | |
| | ОК | Cancel | | | | | |

| New Implant Kit | | |
|---------------------------------------|----|--------|
| New Implant Kit Implant Kit Name : | | |
| | ОК | Cancel |





IMPLANT: ORDER CREATION

- As usual
- Define implant kit
- Came in import order

| 🕤 CnB & Implants Order | CNB & IMPLANTS ORDER | | |
|------------------------|----------------------------|----------------------------|--|
| 🖞 Virtual Waxing Order | Order 10 COM-160418-1 | 12 11 21 22 | Base Layer + Ø |
| Denture Order | Dentist | | Single (22) - DWOS Ceramic |
| Bite Solint | Dr David Smith | Q 14 24 | 22: Custom Abutment, Vanobase⁺⁺ Abutment-KG_3.5, DW Kit |
| | Patient | 15 116 25 25 | |
| Orthodontic Order | John Duvar, | 16 26 | |
| Partial Order | Abutments | | |
| Synergy™ Order | Maternal | 17 27 | |
| - Lava Order | DWOS Ceramic | ✓ ▼ 18 28 | |
| Land order | Color | 0 | |
| Straumann Order | | - 40 🛃 😸 😸 👀 | |
| CATLANTIS™ Order | Implant Kits | 47 | |
| | Variobase* Abutment-RC_3.5 | ~ Y (A) | |
| | Prosthesis Subtype | 46 😥 36 | |
| | 🧮 Custom Abutment | | |
| | Anatomy Family | | |
| | DW Kit | | |
| | | 43 42 41 31 32 | |
| | Create Bridge | | |
| | Create Bar | | |
| | MINING MIN | | |





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R

- Remove gingiva
- Start as usual





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IMPLANT: SCAN OF JIG

- Assign tooth preparation
- Automatic computation









A

IMPLANT: SCAN OF GINGIVA

- Remove abutment
- Replace gingiva





A

IMPLANT: EDIT MARGIN

- Automatic computation
- manual





IMPLANT: END OF SCAN





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S

- Start as usual
- Automatic proposal
- Customized abutment as overlay





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IMPLANT: CAD PARAMETERS

• Define & modify as usual







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IMPLANT: CAD MENUS

- As usual
- New Add Coping







-

IMPLANT: CAD EDITING TOOLS

- Same tools
- Functions associated to













IMPLANT: OVERPRESSED DESIGN



• Parameters as usual







IMPLANT: PRODUCTION FILES

- Several items
- One for customized
- One for coping(if any)
- One for over-pressed (if any)

| 🥭 Client dwos (adm) - 6.0.0.30491 | | | | | | | | | | | | _ 6 |
|-----------------------------------|------------------------|-----------------|----------------|------------------------|--------------|-------------------|----------------|----------------------|-------------|--------|----------------------|-----------------------|
| 🔁 📃 🛧 [| S 💽 🗹 (|) 🙆 🚺 | 🔊 🧟 😇 | 🚊 🖿 🔚 | [📄 🖞 | 2 🝳 🔍 | | | | | | 4 |
| 😼 Création de commandes 🗙 | 🔊 Numérisation de | e modèles 🗡 🚺 🛙 | Modelage × 🙀 G | estion des matériaux × | 🗐 Gestion de | s commandes × | | | | | | |
| ŭ A A 🖥 🖬 🖬 | # 1 A III (# | h t 5 K | K d | | | | | | | | 📢 🖣 Page 1 sur 1 🕨 🌗 | 50 par page 🗸 (1 tota |
| Commandes | ₩ État | 👤 Client | 👤 Patient | 🐺 Produit | 💡 Kits d'im | → Flux de travail | . 🚊 Système de | 🛅 Type de Prothèse | 🕛 Opération | 💭 Dent | Date d'échéance | 🔁 Approval Status |
| COM-160418-1 | | 💂 smith | 👤 john duval, | | | | 3Series+ | | | | | |
| 0 COM-160418-1-3 | ? Choix de fabrication | | | 🗇 DWOS Ceramic | | | | Chape simple avec an | Fabrication | 25 | | |
| 0 COM-160418-1-2 | ? Choix de fabrication | | | 🗇 DWOS Ceramic | | | | 🕅 Chape simple avec | Fabrication | 25 | | |
| 0 COM-160418-1-1 | ? Choix de fabrication | | | 🗇 DWOS Ceramic | 🍰 Variobas | | | 💭 Pilier | Fabrication | 25 | | |
| | | | | | | | | | | | | |





QUESTIONS & ANSWERS