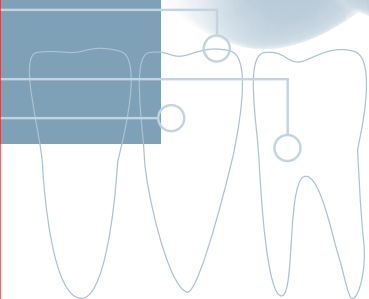


3M ESPE

Lava™ *User Tips*



Lava™ Crowns & Bridges





Lava™ Scan Issues

Causes

Actions

**Frameworks cracks/
chippings during milling**

*Insertion path not in the optimum
Undercut areas*

*Optimize insertion path
Block out the undercut areas
with wax or with the virtual
waxknife on the PC*

*Reduced marginal standard
reinforcement*

*Set marginal standard
reinforcement to 0.35 mm*

**Datahole during modellation
or hole during milling**

*Holes in the plaster surface
Sleek stump surface*

*Fill with wax and matte
Use scanspray for matting*

**Program termination of the
Lava Calc-calculation**

*Minimum distance (reference ≥ 1 mm)
of the stumps is too small
Z-Value too high
Not enough hard disc capacity*

*Reduce marginal reinforcement
post preparation
Z-Value need to be correct
Save old project data and delete
from hard disc*

Crack in the sintered frame

Insertion path badly adjusted

Optimize adjustment

Lava
Scan

Lava
Form

Transport

Prepa-
ration

Lava
Therm

Rerun of
project

Handling



Lava™ Scan Issues

Causes

Actions

Fitting issues

Unfavorable cement gap parameter

Optimize cement gap parameters or set to standard

Scanner not calibrated

Calibrate scanner weekly

The data could not be created with the necessary precision ...

Stump or model moved during scanning

Fix stump or model to the optimum

Universal screw on model holder interferes with scan

Trim the model or use the enclosed screw without wheel

Edges of stump are too sharp ($\varnothing < 0.8$ mm)

Round edges

Sensor adjustments

Adjust the background to blue by means of brightness and set the stump to normal by means of contrast

Model too high

Cover the model base with black adhesive tape

Fracture or crack in veneered crowns & bridges

User error (e.g. frame underdimensioned, or incorrectly processed)

Return to the Complaint handling department

Lava
Scan

Lava
Form

Transport

Preparation

Lava
Therm

Rerun of
project

Handling



Lava™ Form Issues

Causes

Actions

**Frameworks cracks/
chippings during milling**

*Dirty collet or toolcrash
Wrong, used or defect tools were used
Problems with dust exhaust*

*Inspect and clean collet or exchange
Replace tools
Inspect power and/or exchange
vacuum cleaner bag*

Fitting issues

Wrong tools

Use correct tools

**Datahole during modellation
or hole during milling**

*Wrong tools
Dirty collet
Problem with the dust exhaust*

*Use correct tools
Inspect and clean collet or exchange
Exchange vacuum cleaner bag,
inspect power*

Lava
Scan

Lava
Form

Transport

Prepa-
ration

Lava
Therm

Rerun of
project

Handling





Transport and Preparation Issues

Causes

Actions

Frameworks cracks/ chippings during milling

Preparation limit out of tolerance (nominal value: vertical angle $\geq 4^\circ$ horizontal angle $\geq 5^\circ$) step preparation with rounded inner angle or chamfer preparation

Block out problem areas (undercuts or too steep walls) with wax tip (Parallelometer) or block out with the virtual waxknife at the PC

Transport damage

Return to Complaint handling department

Crack in the sintered frame

Preparation guidelines beyond requirements

Replacement on ones best judgement

Excessive air pressure

Reduce air pressure to 30 psi (2.6 bar) and maintain distance of at least 3 in (7.6 cm) between preparation and air nozzle

Fitting issues

Sharp occlusal edges

Rounding edges with wax or with the virtual waxknife

Undercut areas

Block out undercut areas with wax or with the virtual waxknife on the PC

Lava™
Scan

Lava
Form

Transport

Prepa-
ration

Lava
Therm

Rerun of
project

Handling





Lava™ Therm Issues

Causes

Actions

***Color problems
(e.g. discoloration, stains)
of the frames***

Heating elements

Free burning once a week

Fitting issues

Error message on furnace

Re-mill and sinter

*Lava
Scan*

*Lava
Form*

Transport

*Prepa-
ration*

***Lava
Therm***

*Rerun of
project*

Handling





CD running Issue

Causes

Actions

*Rerun of project
from CD ROM*

Documents are write protected

*Remove read only protection in file
properties*

*Lava™
Scan*

*Lava
Form*

Transport

*Prepa-
ration*

*Lava
Therm*

*Rerun of
project*

Handling





Handling Issues

Causes

Actions

Fitting

Wrong sintering positioning

Sinter according to instructions for use and check the honeycomb and sintertray

Framework cracks/chipping in the greenstate or crack in the sintered frame

Damage before sintering at detaching from the holding device

Inspect the handpiece/turbine for unbalance, use new handpiece bur, grind supports pins with recommended rubber polisher and without pressure, use a soft mat (e.g. towel) for detaching the frames

Color issues (e.g. discoloration, stains) of the frames

Handling mistakes

Dry frames immediate after dyeing and place onto sinterholder

Lava Ceram chippings

User error (e.g. frame underdimensioned, wall thickness too thin, preparation with sharp vertical edge, firing fault, use of wrong material)

Return to the Service/Complaint handling department

Crack in green state frame

*Damage due to handling
Damage due to seperation from frame*

Inspect Handpiece/Burrs for imbalances

Lava™
Scan

Lava
Form

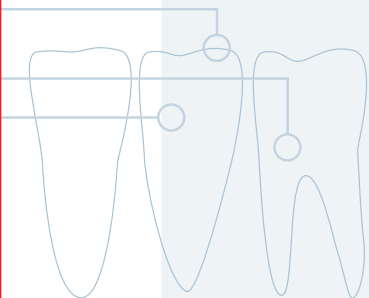
Transport

Preparation

Lava
Therm

Rerun of
project

Handling



If issues are still vague, please contact technical support.

3M ESPE

3M ESPE AG · ESPE Platz
82229 Seefeld · Germany
E-Mail: info3mespe@mmm.com
Internet: www.3mespe.com

3M, ESPE and Lava are trademarks
of 3M or 3M ESPE AG.
©3M 2007. All rights reserved.