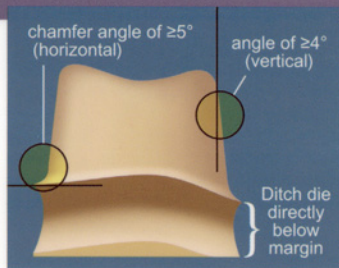


**LABORATORY PREPARATION**

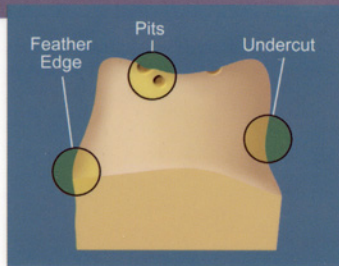
- A light colored type IV or V die stone (white, beige, buff, or green) without plastic additives is recommended. A light, dull (non-reflective) surface works best for the scanning procedure.
- Model bases should be removable from the plaster that is used to attach the model to the articulator. The model bases should be flat, have minimal thickness and size, in order to ensure optical accessibility. A common split-cast system is recommended.
- Attention should be paid to ensure that the base of the model is smooth and flat, without split-cast guides, metal plates or magnets. Overlapping areas should be blocked out with light colored wax after consultation with a dentist, as should defects.
- All segments of the saw-cut model must be removable from the base with double, triple, or block pin die system to prevent rotation or movement of the die(s) and tissue (pontic) areas.
- Vertical walls and sharp line angles are difficult for the scanning process to decipher. Avoid preparations with these situations (see Ideal Die Preparation).
- Copings or frameworks for implant abutment posts should also be pinned, removable, and in die stone or acceptable resin die material. Margins should be ditched according to Ideal Die Preparation example.

1. Dies should be *ditched directly below the margin* – **DO NOT** mark the margins, or use die spacer, or hardener on the die preparation area. This will create a reflective surface on the die that will compromise the scanned data of the die surface. (Note proper angulation of prep area).

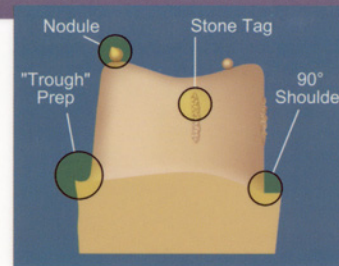


**1. Ideal Die Preparation**

2. Undercuts, occlusal holes, surface defects should be blocked or based-out with a resin block-out material, or a light colored wax. Nodules, stone-tags should be flicked, or scraped off.

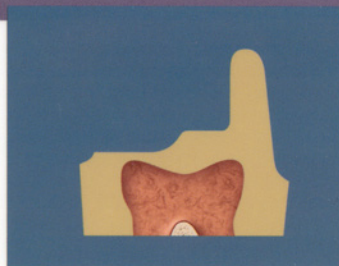


**2a. Contraindications**

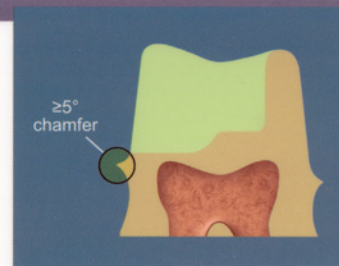


**2b. Contraindications**

3. Severely prepped teeth with missing proximal, buccal, lingual walls should be built-up to adequate or desired clinical prep design with a resin block-out material or light colored wax. The model is now ready to be scanned. If you have any questions call the 3M ESPE Dental Lab Tech Hotline at 1-800-634-2249.



**3a. Before Build-up**



**3b. After Build-up**