

How to Modify a Part with an Irregular Blend in Creo Elements/ Direct Modeling

Product: Creo Elements/ Direct Modeling

Release: 18.1

Overview

Modifying a part that contains blends that are no longer tangential with all adjacent faces may lead to unexpected results. Avoid this by clearing the default **Redo Blend** checkbox in the **Modify > Move > Faces** command.

Description

Typically, when you extend an existing face, you use **Modify > Move > Faces** (Figs. 1 and 2). By default, the check box **Redo Blends** is selected. This is no problem with regular blends. “Regular” means that the blend attributes are correct, and all adjacent faces of the blend are tangential. But if a blend was modified with, for example, a machining command, the transition of the adjacent faces may no longer be tangential (Fig. 3). In this case, the **Modify > Move > Faces** command may not extend the part correctly because the system cannot recalculate the blend anymore (Fig. 4).

To correctly extend the parts, simply clear the **Redo Blends** check box (Fig. 5). Now the correct extension of the faces can be calculated and displayed.

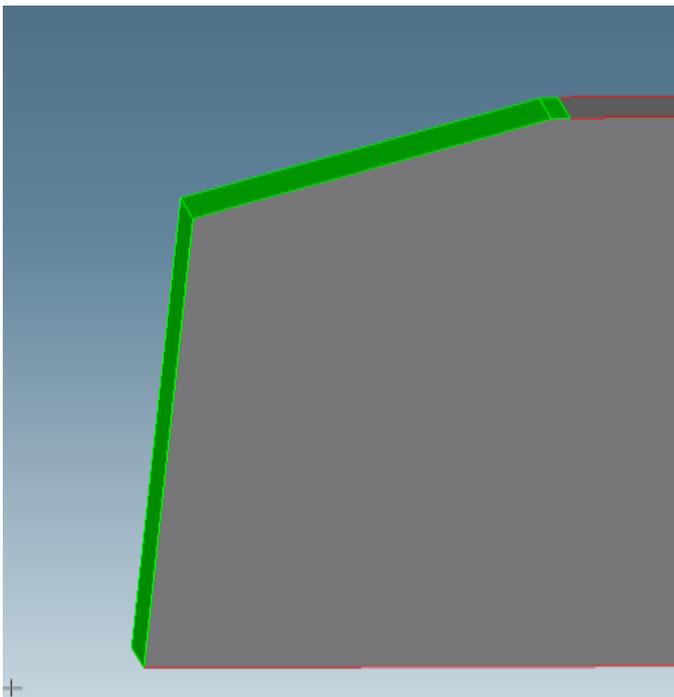


Figure 1. The part to be modified. The faces bordered by the red edges will be extended.

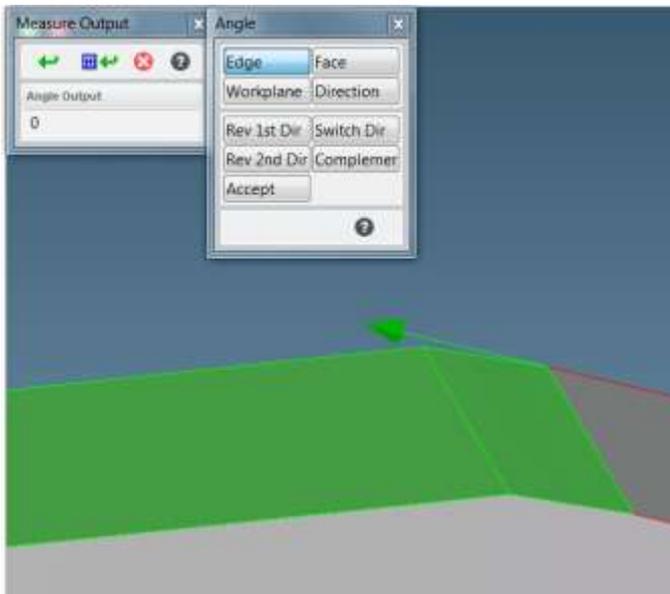


Figure 2. The correct tangential transition to the adjacent face of the blend, angle 0° .

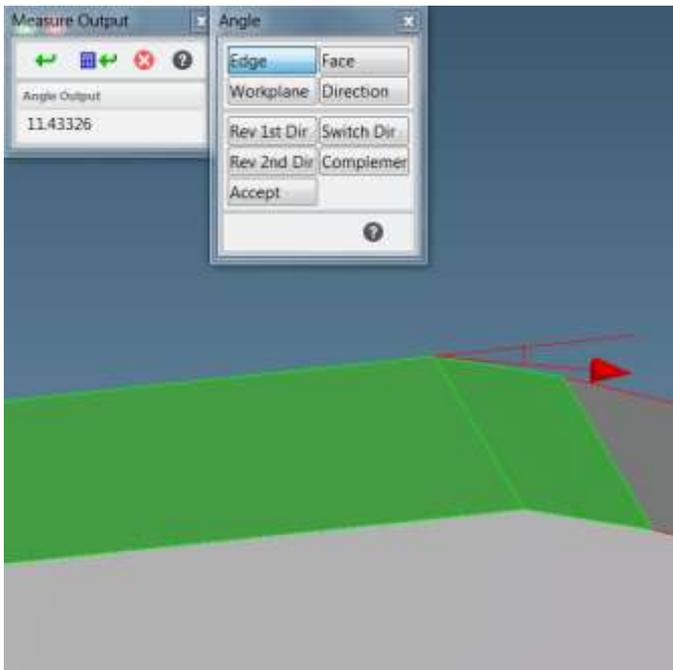


Figure 3. The transition is no longer tangential to the adjacent face of the blend, angle 11.43326° . The blend is no longer regular.

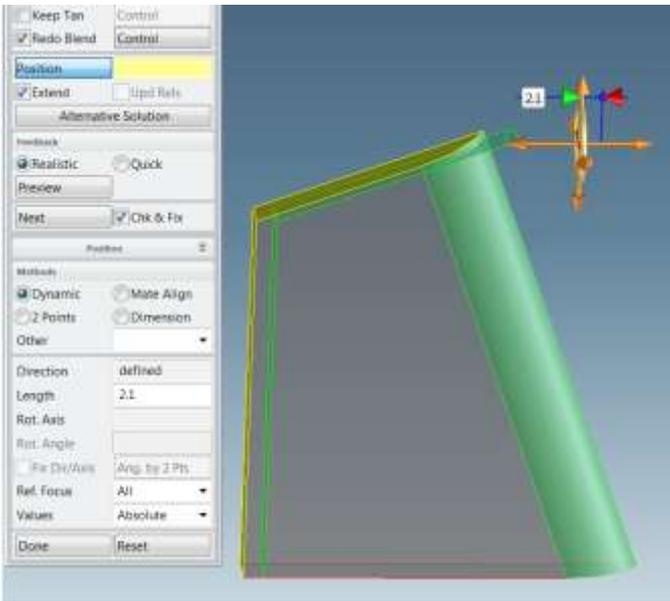


Figure 4. The result with the **Redo Blend** check box selected. The system cannot recalculate the blend. The transition from the blend face to the adjacent faces results in a distorted part.

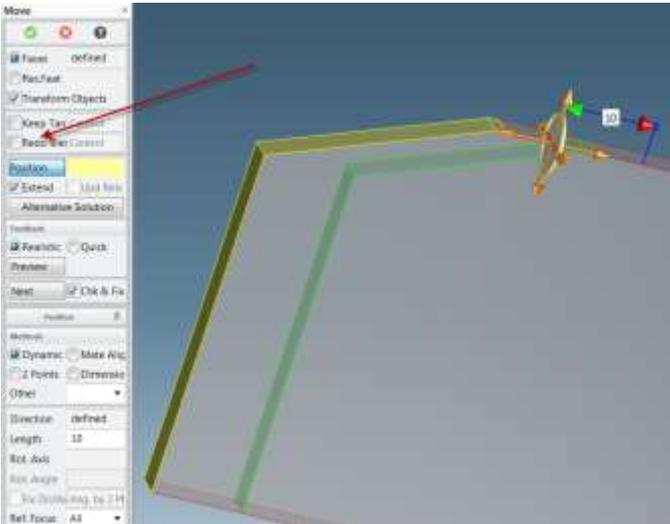


Figure 5. The result with the **Redo Blend** check box cleared. The blend is maintained. The faces bordered by the red edges are extended as desired.