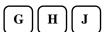
## ClayTools<sup>TM</sup> v1.2 Quick Reference Card



G = "Grab" the model to move and rotate freely

H = Translate and zoom the model without changing the rotation

J = Rotate the modelwith haptic detents along the major screen axes



-/+ = Decrease or increase the size of the sculpting

## **Hotkey Shortcuts**

**F3 F5** 

F1 = Invoke the

online Help





 $\mathbf{P}$  = Equivalent to pressing the

PHANTOM stylus switch

#### Standard Views

F2 = Front viewF3 = Right view

 $\mathbf{F4} = \text{Left view}$ 

F5 = Top view

Side Views

**F6** = Right of main view

F7 = Top of main view

F8 = Left of main view

F9 = Bottom of main view

F10 = Hide Side Views

Ctrl

clay. Hardness of 1 is like rock, 0 butter.

Ctrl+G = Grab and move the

the model are within the

touchable area

Clay Hardness - Adjust the resistance of the

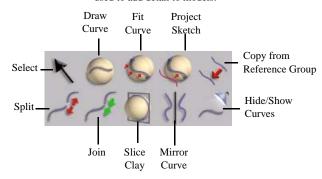
model to change which parts of

**SPACE** 

**Space** = Invoke the Favorites menu

## **ClayTools Commands**

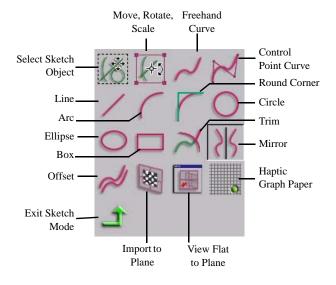
Curves - Use to create and edit 3D curves that can be used to add detail to models.



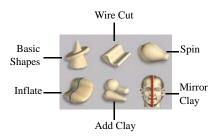
Planes - Use to create and edit planes.



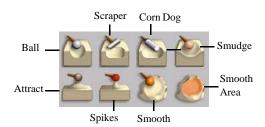
Sketch - Use to sketch on flat 2D drawing planes.



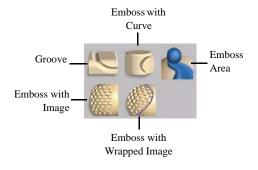
#### Construct Clay - Use to quickly and easily rough-out models.



 $Sculpt\ Clay\ \text{-}\ Use\ to\ modify,\ refine,\ and\ add$ design details to models.



Detail Clay - Use to modify, refine and add design details to a model.

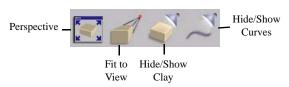


# ClayTools<sup>TM</sup> v1.2 Quick Reference Card

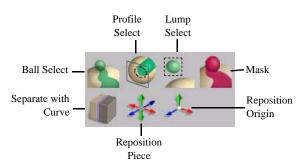
**Deform Clay** - Use to push and pull an area of a model.



Utilities - Use to change your view.



Select/Move Clay - Use to select, move, scale models or parts of models.



## **Key Concepts to Remember**

Work from Coarse to Fine	Read the Status Bar

When creating new models from scratch, it is best to first create a rough shape using a coarse clay setting such as "Rough Shape" or "Refine Shape". Then, use the "Change Clay Coarseness" command for more fine-grained clay settings, such as "Add Detail," as you refine the model.

The status bar, located under the dynabar, contains embedded help. Sometimes it will describe what a tool does or prompt you for the next step in using a particular tool.

#### Let Haptics Guide You to Create 3D Curves

## To trace a surface that is concave, run the tool along the outside of the model. To trace a surface that is convex, run the tool along the inside of the model.

### **Pay Attention to Dynabars**

Many commands have controls that are specific only to them. The bottom toolbar will change dynamically and present the controls for that tool.

### **Sculpt from Inside or Outside**

When sculpting you can work on the outside or inside of the model. Keep in mind that the control of the tool may differ and that sometimes it is more effective to work from inside the model.