Version V1.03   22.06.2011   **MaqueTools toolbar by Mitch Heynick**

Group/**Tool*   ***Explanation

Alignment
Align Bottom to Point   *Aligns lowest point of an object to the Z-level of a picked point*
Match Object Z Level   *Moves object in Z to a picked point*
Object Point to New Z   *Move point on object to new Z Level (keyboard or pick)*
DistributeObjs X-Y-BB   *Distributes objects center to center evenly in X and/or Y (uses bounding box)*
Closest Dist btw Objs   *Iteratively finds the closest distance between 2 surface or polysurface objects*
Stack objects   *Stack objects in Z or along an axis*
Project Volumes   *Projects volumes to surfaces or meshes (objects will be embedded in surface)*
Align bottom to 0   *Aligns bottom of object to world Z0 plane*

BoundingBox
Planar Minimum BB   *Tries to find the closest fit rectangle for a 2D (planar) object*
BoundingBox w/Size   *Creates a bounding box with on-screen dimensions as text dots*
Adjust BoundingBox   *Creates a bounding box with user adjustable dimensions in 3 axes*

Point Functions
Ordered 3D Point Grid   *Generate ordered grid of points in XY or XYZ*
Random 3D Point Dist   *Generate a collection of randomly spaced points in 3D*

Offset Curves
OffsetCrvs2SidesEnds   *Offset multiple curves both sides with end choices*
OffsetClosedCrvsInOut   *Offset multiple closed curves inside, outside or both*
MultiBooleanOffset   *Creates multiple combined offset outlines from a set of closed planar curves*
OffsetObject(s)Outline   *Creates an offset outline of a 3D object*

Curve Functions
BoundaryTrim Crvs   *Trims curves inside or outside a closed boundary*
ScaleCircles   *Scales selected circles by a factor*
Force Crv Direction   *Makes all selected closed planar curves CW or CCW*
Insert PL in Curve   *Insert a polyline into a curve*
PL by Angle+Length   *Create a polyline by inputting successive lengths and relative polar coordinates*

Curve Repair
Rem Short Crv Segs   *Removes segments of curves smaller than file tolerance*
DPRefit Polylines to Tol   *Douglas-Peucker refit polyline to tolerance algorithm*
Remove Xtra PL Pts   *Remove unnecessary polyline points (angle tolerance)*
Reduce Crv Pt Count   *Rebuild curves with less points (reduction factor)*
RebuildReduce PLines   *Fit smooth curves to polylines with reduced point count (reduction factor)*
Rebuild Crvs ByLength   *Rebuild multiple curves with a point count proportional to length*

Surf Functions
Make Quad Srfs   *Make untrimmed quad surfaces from closed 4 sided polylines*
Conv Srfs to Quads   *Make untrimmed quad surfaces from trimmed surfaces if possible*
Multiple Planar Srfs   *Make one planar surface from each selected closed planar curve*
Multiple UnrollSrfs   *Unroll multiple surfaces or polysurfaces*

Curve Piping
MultiRoundPipe   *Make round pipes from a selction of curves*
MultiSquarePipe   *Make sqaure pipes from a selction of curves*
MultiRectPipe   *Make rectangular pipes from a selction of curves*
Profile MultiPipe   *Make profile pipes from a selction of curves (choose profile on Z0 plane)*

Copy/Array
Circles at Points   *Creates a circle of user specified diameter at all selected points*
Spheres at Points   *Creates a sphere of user specified diameter at all selected points*
Copy Object to Points   *Copies one object from one picked point to a group of selected points*
Array Diagonal   *Arrays a set of objects along an XY or XYZ diagonal*
Array Helical   *Arrays a set of objects along a helix (stair-like)*

Transforms
MultiObj FlowCrv   *Flow one object from one base curve to multiple destination curves*
RemapObjs to World   *Remap objects from 3 points to world Z 0*
Comp/Exp Obj Spacing   *Compress or expand the space between objects by scaling their distance from a given point*
                                 * the above does not check for interferences produced by the scaling, objects may overlap
Uniform Scale Objs Ctr   *Scales objects uniformly in 3D about their bounding box center or centroid (LMB/RMB)*
NU Scale Objs Ctr   *Scales objects non-uniformly in 3D about their bounding box center or centroid (LMB/RMB)*
Random Scale Objs Ctr   *Scales objects about their centers randomly in X, Y, and Z (with max and min in each axis)*
Random Rotate Objs Ctr   *Rotates objects about their centers randomly (with angle limitation)*

Sel by Object Type   *All self-explanatory except:*
SelFence   *Use a pre-existing curve fence to select objects*

Sel by Obj Property
Sel by Linetype   *Select curves by linetype*
Sel Crvs by Length   *Select curves by length criteria (greater than, less than, equal to, etc.)*
Sel Crvs by Area   *Select closed planar curves by area (greater than, less than, equal to, etc.)*
Sel Arcs by Radius   *Select arcs or circles by radius (greater than, less than, equal to, etc.)*
Sel Srfs by Area   *Select surfs or polysurfs by area (greater than, less than, equal to, etc.)*
Sel Small Srf+PSrf   *Select surfaces or polysurfaces less than a certain size (area)*
Sel by Z Level   *Selects planar curves and surfaces by Z level (or a range of Z levels)*
                                 *RMB of above isolates the objects found, hiding the rest

SliceNFlat   *Slices objects,numbers slices, and prepares flat layouts for cutting*