

# Shape Interrogation for CAD/CAM

## **focalc.c**

Find a focal curve for an input open NURBS curve by evaluating a focal curve at a specified (nsegs) number of points on the input curve.

Do:

```
prompt> make focalc
```

```
prompt> focalc -i input_curve_file -n number_of_segments_per_knot_span -s  
focal_scale_factor -o output_file
```

Output: Resulting focal curve in .VECT format

Example:

```
prompt> focalc -i c.CURV -n 50 -s 1.0 -o focalc.VECT
```

Note: For the file format of the input curve (c.CURV) and the output (focalc.VECT), see [../README.pdf](http://../README.pdf)

## **focals.c**

Find a focal surface for an input open NURBS surface by evaluating a focal surface at a specified (nsegu x nsegv) number of points on the input surface.

Do:

```
prompt> make focals
```

```
prompt> focals -i input_surface_file -m number_of_segments_per_u-knot_span -n  
number_of_segments_per_v-knot_span -s focal_scale_factor -r  
use_minimum_or_maximum_principal_curvature -o output_file
```

Note: for the minimum (maximum) principal curvature, enter 0 (1) for option -r, respectively.

Output: Resulting focal surface in .VECT format

Example:

```
prompt> focals -i s.SURF -m 20 -n 20 -s 1.0 -r 1 -o focals.VECT
```

Note: For the file format of the input surface (s.SURF) and the output (focals.VECT), see [../README.pdf](http://../README.pdf)