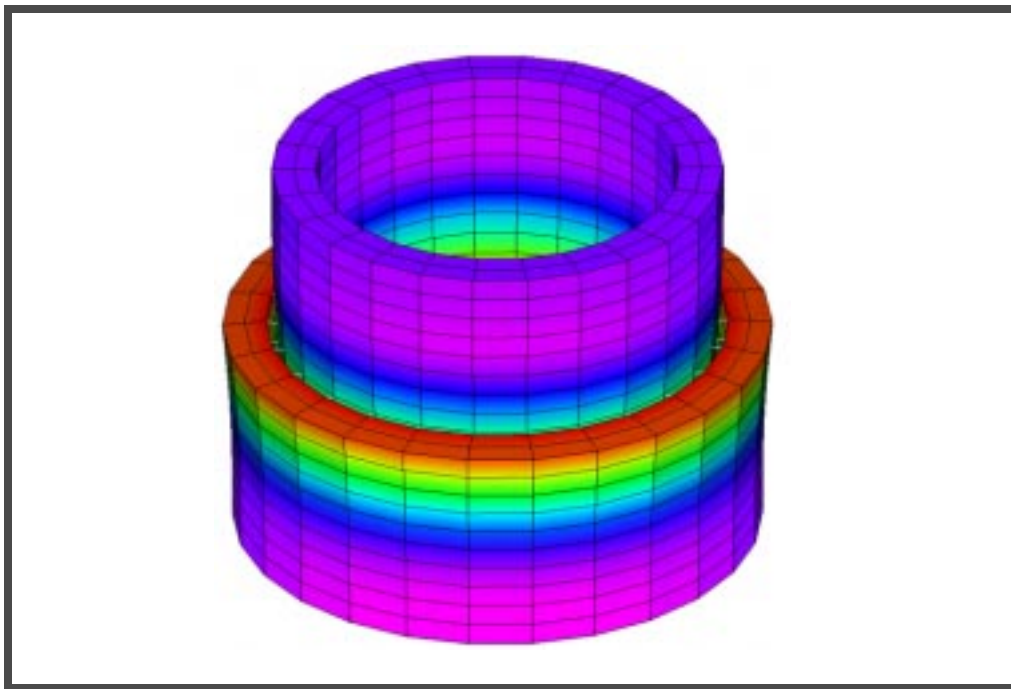

WORKSHOP 12d

Shrink Fit-Modify Gap Properties and Gap Connectivity



Objectives

- Reverse the direction of the gaps in previous exercise to see the effect of element connectivity on the results.
- Submit the model to MSC.Nastran for analysis.

Model Description:

The previous exercise connected the interface nodes with gap elements. The gap elements connected the nodes from the lower ring to the upper ring. Users will delete the original gap elements and re-connect the gap elements in the reverse order to see the effect of the gap connectivity on the model results.

Suggested Exercise Steps:

1. Open the model from the previous exercise.
2. Rename the exercise sfitd.
3. Delete the gap elements.
4. Redefine gap elements in the opposite order of the previous exercise.
5. Submit the model to MSC.Nastran for analysis

Exercise Procedure:

1. Start up MSC.Nastran for Windows 4.0.2 and open an existing model.

Double click on the icon labeled MSC.Nastran for Windows V4.0.2.

On the *Open Model File* form, select **Open Model**.

Open Model File:

Open

2. Delete the original gap elements.

Delete/Model/Element...

ID:

When prompt, OK to delete Elements, choose Yes

3. Create gap elements between the interface nodes.

Mesh/Connection/Closest Link...

Group:

Group:

Connection Type: **Line Elements**

Property:

Coord Sys:

Z Axis

4. Save the model as sfitd.

File/Save As...

File name:

5. Submit the job for analysis.

File/Export/Analysis Model...

Type:

Change the directory to C:\temp.

File name:

 Run Analysis

When asked if you wish to save the model, respond **Yes**.

When the MSC.Nastran manager is through running, MSC.Nastran will be restored on your screen, and the *Message Review* form will appear. To read the messages, you could select **Show Details**. Since the analysis ran smoothly, we will not bother with the details this time.

6. Review the results of the analysis.

View/Select

<F5>

Under the *Deformed Style* window, make the following selection:

Deformed Style:

Deform

Deformed and Contour Data...

Output Set:

2..Case 1 Time 1

Deformation:

1.. Total Translation

OK

OK

What is the maximum deformation?

Value = _____



<i>Displacement</i>	0.0684
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