

```
*Heading
** Job name: Job-1 Model name: Model-1
** Generated by: Abaqus/CAE 6.10-EF1
** Preprint, echo=NO, model=NO, history=NO, contact=NO
**
** PARTS
**
*Part, name=Part-1
*NODE
13,0,0
14,3.3333,0
15,3.3333,5
16,3.3333,5
17,0,5
18,0,0
19,3.3333,0
20,6.6667,0
21,6.6667,5
22,6.6667,5
23,3.3333,5
24,3.3333,0
25,6.6667,0
26,10,0
27,10,5
28,10,5
29,6.6667,5
30,6.6667,0
31,0,5
32,3.3333,5
33,3.3333,10
34,3.3333,10
35,0,10
36,0,5
37,3.3333,5
38,6.6667,5
39,6.6667,10
40,6.6667,10
41,3.3333,10
42,3.3333,5
43,6.6667,5
44,10,5
45,10,10
46,10,10
47,6.6667,10
48,6.6667,5
*ELEMENT,TYPE=CPS3,ELSET=PLASTIC_TOOTH
13,13,14,15
14,16,17,18
15,19,20,21
16,22,23,24
17,25,26,27
18,28,29,30
19,31,32,33
20,34,35,36
21,37,38,39
22,40,41,42
23,43,44,45
24,46,47,48
*ELEMENT,TYPE=CPS4,ELSET=CDM_TOOTH
26,13,15,18,16
27,15,14,23,24
28,17,16,31,32
```

```

29,19,21,24,22
30,21,20,29,30
31,23,22,37,38
32,25,27,30,28
33,29,28,43,44
34,31,33,36,34
35,33,32,41,42
36,37,39,42,40
37,39,38,47,48
38,43,45,48,46
**
*Nset, nset=_PickedSet2, internal, generate
  13, 24, 1
*Elset, elset=_PickedSet2, internal, generate
  13, 24, 1
** Section: Section-1
*Solid Section, elset=_PickedSet2, material=Material-1
1.,
*End Part
**
**
** ASSEMBLY
**
*Assembly, name=Assembly
**
*Instance, name=Part-1-1, part=Part-1
*End Instance
**
*Nset, nset=_PickedSet4, internal, instance=Part-1-1, generate
  21, 24, 1
*Elset, elset=_PickedSet4, internal, instance=Part-1-1, generate
  20, 24, 2
*Nset, nset=_PickedSet5, internal, instance=Part-1-1, generate
  13, 17, 1
*Elset, elset=_PickedSet5, internal, instance=Part-1-1, generate
  13, 18, 1
*End Assembly
**
** MATERIALS
**
*Material, name=Material-1
*Elastic
20000., 0.2
**
** BOUNDARY CONDITIONS
**
** Name: BC-1 Type: Displacement/Rotation
*Boundary
_PickedSet4, 1, 1
_PickedSet4, 2, 2
_PickedSet4, 6, 6
** -----
**
** STEP: Step-1
**
*Step, name=Step-1, nlgeom=YES, inc=1000
*Static, stabilize=0.0002, allsdtol=0.05, continue=NO
1., 1., 1e-09, 1.
**
** BOUNDARY CONDITIONS
**
** Name: BC-2 Type: Displacement/Rotation

```

```
*Boundary
_PickedSet5, 1, 1, 0.2
_PickedSet5, 2, 2, -0.2
**
** OUTPUT REQUESTS
**
*Restart, write, frequency=0
**
** FIELD OUTPUT: F-Output-1
**
*Output, field, variable=PRESELECT
**
** HISTORY OUTPUT: H-Output-1
**
*Output, history, variable=PRESELECT
*End Step
```