

Table 36 Input data, *.DEC, for "DECIDE" for the **isogrid-stiffened equivalent ellipsoidal shell**. This file is called "eqellipse.stiffened.DEC". In the directory, /home/progs/genopt/case/torisph, the input file name is "eqellipse.stiffened.DEC". Copy this file to /home/progs/genoptcase and change the case name from "eqellipse.stiffened" to "eqellipse" before processing. (/home/progs = the directory where the GENOPT system is stored on the writer's computer).

NOTE: In the case of an **unstiffened, imperfect** shell, the optimization problem as formulated here leads to a severely under-designed shell, as is demonstrated by the results shown in Fig. 94. A much better formulation of the optimization problem for **unstiffened, imperfect** shells is listed in Table 77, in particular, see Section 9.3 where the lower bound of THKSKN(1) = 0.6 inch and where THKSKN(2) is linked to THKSKN(1). **THIS NOTE APPLIES ONLY TO UNSTIFFENED, IMPERFECT SHELLS.**

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n          $ Do you want a tutorial session and tutorial output?
  1         $ Choose a decision variable (1,2,3,...)      THKSKN( 1)
0.1000000  $ Lower bound of variable no.( 1)
1.0000000  $ Upper bound of variable no.( 1)
  y         $ Any more decision variables (Y or N) ?
  2         $ Choose a decision variable (1,2,3,...)      THKSKN( 2)
0.1000000  $ Lower bound of variable no.( 2)
1.0000000  $ Upper bound of variable no.( 2)
  y         $ Any more decision variables (Y or N) ?
  3         $ Choose a decision variable (1,2,3,...)      THKSKN( 3)
0.1000000  $ Lower bound of variable no.( 3)
1.0000000  $ Upper bound of variable no.( 3)
  y         $ Any more decision variables (Y or N) ?
  4         $ Choose a decision variable (1,2,3,...)      THKSKN( 4)
0.1000000  $ Lower bound of variable no.( 4)
1.0000000  $ Upper bound of variable no.( 4)
  y         $ Any more decision variables (Y or N) ?
  5         $ Choose a decision variable (1,2,3,...)      THKSKN( 5)
0.1000000  $ Lower bound of variable no.( 5)
1.0000000  $ Upper bound of variable no.( 5)
  y         $ Any more decision variables (Y or N) ?
  6         $ Choose a decision variable (1,2,3,...)      THKSKN( 6)
0.1000000  $ Lower bound of variable no.( 6)
1.0000000  $ Upper bound of variable no.( 6)
  y         $ Any more decision variables (Y or N) ?
  7         $ Choose a decision variable (1,2,3,...)      THKSKN( 7)
0.1000000  $ Lower bound of variable no.( 7)
1.0000000  $ Upper bound of variable no.( 7)
  y         $ Any more decision variables (Y or N) ?
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8	\$ Choose a decision variable (1,2,3,...)	THKSKN(8)
0.1000000	\$ Lower bound of variable no.(8)	
1.000000	\$ Upper bound of variable no.(8)	
y	\$ Any more decision variables (Y or N) ?	
9	\$ Choose a decision variable (1,2,3,...)	THKSKN(9)
0.1000000	\$ Lower bound of variable no.(9)	
1.000000	\$ Upper bound of variable no.(9)	
y	\$ Any more decision variables (Y or N) ?	
10	\$ Choose a decision variable (1,2,3,...)	THKSKN(10)
0.1000000	\$ Lower bound of variable no.(10)	
1.000000	\$ Upper bound of variable no.(10)	
y	\$ Any more decision variables (Y or N) ?	
11	\$ Choose a decision variable (1,2,3,...)	THKSKN(11)
0.1000000	\$ Lower bound of variable no.(11)	
1.000000	\$ Upper bound of variable no.(11)	
y	\$ Any more decision variables (Y or N) ?	
12	\$ Choose a decision variable (1,2,3,...)	THKSKN(12)
0.1000000	\$ Lower bound of variable no.(12)	
1.000000	\$ Upper bound of variable no.(12)	
y	\$ Any more decision variables (Y or N) ?	
13	\$ Choose a decision variable (1,2,3,...)	THKSKN(13)
0.1000000	\$ Lower bound of variable no.(13)	
1.000000	\$ Upper bound of variable no.(13)	
y	\$ Any more decision variables (Y or N) ?	
14	\$ Choose a decision variable (1,2,3,...)	HIGHST(1)
0.5000000	\$ Lower bound of variable no.(14)	
3.000000	\$ Upper bound of variable no.(14)	
y	\$ Any more decision variables (Y or N) ?	
15	\$ Choose a decision variable (1,2,3,...)	HIGHST(2)
0.5000000	\$ Lower bound of variable no.(15)	
3.000000	\$ Upper bound of variable no.(15)	
y	\$ Any more decision variables (Y or N) ?	
16	\$ Choose a decision variable (1,2,3,...)	HIGHST(3)
0.5000000	\$ Lower bound of variable no.(16)	
3.000000	\$ Upper bound of variable no.(16)	
y	\$ Any more decision variables (Y or N) ?	
17	\$ Choose a decision variable (1,2,3,...)	HIGHST(4)
0.2000000	\$ Lower bound of variable no.(17)	
3.000000	\$ Upper bound of variable no.(17)	
y	\$ Any more decision variables (Y or N) ?	
18	\$ Choose a decision variable (1,2,3,...)	HIGHST(5)
0.2000000	\$ Lower bound of variable no.(18)	
3.000000	\$ Upper bound of variable no.(18)	
y	\$ Any more decision variables (Y or N) ?	
19	\$ Choose a decision variable (1,2,3,...)	HIGHST(6)
0.2000000	\$ Lower bound of variable no.(19)	
3.000000	\$ Upper bound of variable no.(19)	
y	\$ Any more decision variables (Y or N) ?	

20	\$ Choose a decision variable (1,2,3,...)	HIGHST(7)
0.2000000	\$ Lower bound of variable no.(20)	
3.000000	\$ Upper bound of variable no.(20)	
y	\$ Any more decision variables (Y or N) ?	
21	\$ Choose a decision variable (1,2,3,...)	HIGHST(8)
0.2000000	\$ Lower bound of variable no.(21)	
3.000000	\$ Upper bound of variable no.(21)	
y	\$ Any more decision variables (Y or N) ?	
22	\$ Choose a decision variable (1,2,3,...)	HIGHST(9)
0.2000000	\$ Lower bound of variable no.(22)	
3.000000	\$ Upper bound of variable no.(22)	
y	\$ Any more decision variables (Y or N) ?	
23	\$ Choose a decision variable (1,2,3,...)	HIGHST(10)
0.2000000	\$ Lower bound of variable no.(23)	
3.000000	\$ Upper bound of variable no.(23)	
y	\$ Any more decision variables (Y or N) ?	
24	\$ Choose a decision variable (1,2,3,...)	HIGHST(11)
0.2000000	\$ Lower bound of variable no.(24)	
3.000000	\$ Upper bound of variable no.(24)	
y	\$ Any more decision variables (Y or N) ?	
25	\$ Choose a decision variable (1,2,3,...)	HIGHST(12)
0.2000000	\$ Lower bound of variable no.(25)	
3.000000	\$ Upper bound of variable no.(25)	
y	\$ Any more decision variables (Y or N) ?	
26	\$ Choose a decision variable (1,2,3,...)	HIGHST(13)
0.2000000	\$ Lower bound of variable no.(26)	
3.000000	\$ Upper bound of variable no.(26)	
y	\$ Any more decision variables (Y or N) ?	
27	\$ Choose a decision variable (1,2,3,...)	SPACNG
1.000000	\$ Lower bound of variable no.(27)	
3.000000	\$ Upper bound of variable no.(27)	
y	\$ Any more decision variables (Y or N) ?	
28	\$ Choose a decision variable (1,2,3,...)	THSTIF
0.5000000E-01	\$ Lower bound of variable no.(28)	
1.000000	\$ Upper bound of variable no.(28)	
n	\$ Any more decision variables (Y or N) ?	
n	\$ Any linked variables (Y or N) ?	
n	\$ Any inequality relations among variables? (type H)	
y	\$ Any escape variables (Y or N) ?	
y	\$ Want to have escape variables chosen by default?	

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