ANSYS

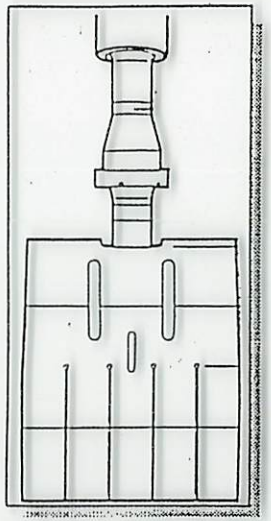
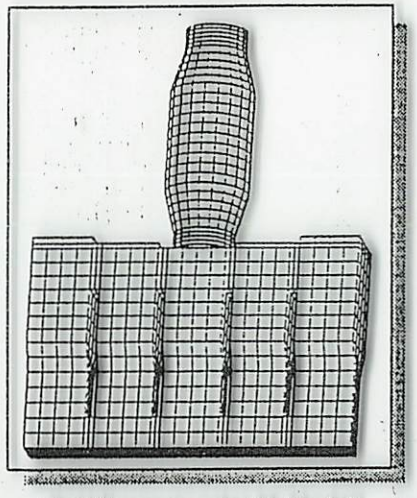
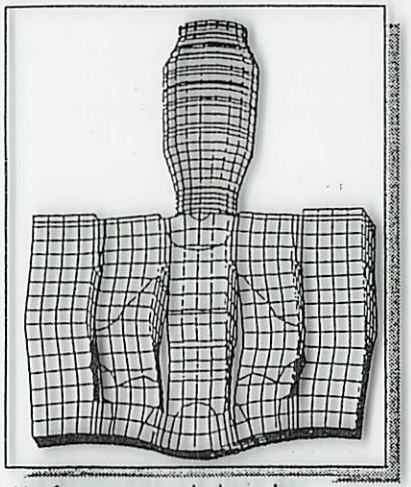


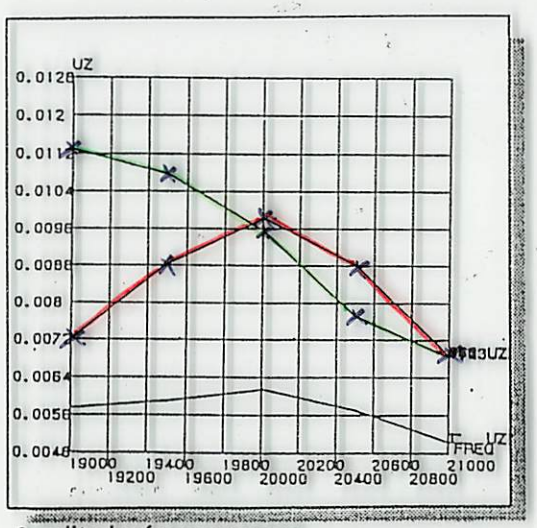
Bild 1 Ultraschall Schwingergebilde



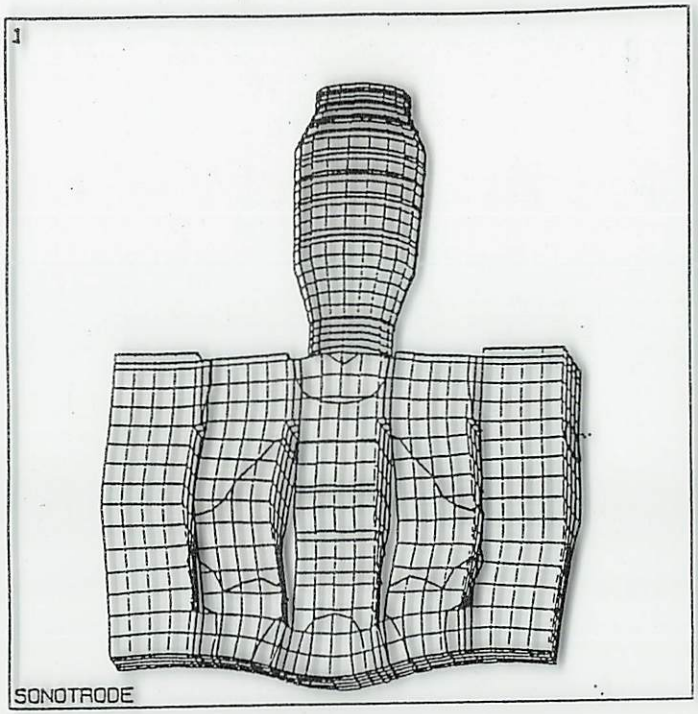
Dreidimensionales FE-Modell Bild 2



Verformungsverhalten der Gesamtstruktur bei 20000 Hz Bild 3



Amplitudenfrequenzgang Bild 4




```
ANSYS 4.4
AUG 22 1989
10:16:30
PLOT NO.  1
POST1 STRESS
STEP=1
ITER=3
FREQ=20000
UZ
D GLOBAL
DMX =0.010061
SMN =-0.01
SMX =0.007084

XV  =-0.2
YV  =1
ZV  =-0.3
DIST=147.941
XF  =100
ZF  =132.45
ANGZ=32
PRECISE HIDDEN
A   =-0.009051
B   =-0.007153
D   =-0.003356
E   =-0.001458
G   =0.002339
I   =0.006135
```

Problemgröße: 5856 Knotenpunkte
4932 8-knotige Solidelemente
17565 aktive Knotenfreiheitsgrade
RMS-Wavefront: 447

Problemlösung: Frequenzganganalyse
von 19000 bis 21000 Hz
in 5 Iterationen

Rechenzeit: CRAY-2 2383 CP-Sekunden (40 min)

DS 3100 : ca. 4 std
PC 386 : ca. 25 std

Frequenzganganalyse (Piezoelement)