

UNIVERSITATEA "POLITEHNICA" TIMISOARA
FACULTATEA DE MECANICA

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180 C

inginer Adriana Minerva MOTICA

Teza de doctorat

**"OPTIMIZAREA STRUCTURILOR DE REZISTENȚA ALE MASINILOR UNELTE
PRIN PROIECTAREA ASISTATA DE CALCULATOR CU METODE NUMERICE
APLICATII PE STRUNGURI NORMALE"**

Anexa B3

BIBLIOTECA CENTRALA
UNIVERSITATEA "POLITEHNICA"
TIMISOARA

Conducator stiintific Profesor dr.ing Ionel DOBRE

1996

CUPRINS

Calculul vibratiilor fortate-Program MARC-MENTAT II	
Varianta stru_f4(n=800rpm;p₀=0,2p_{0,nod};amortizare structurala)	
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Deplasari dir.Y-10 incrementi	B449-B459
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Acceleratii dir.X,Y,Z	B471-B473
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Deplasari nod 863 comparativ cu nodurile684 si 963(dir.x,y,z)	B475-B477
Acceleratii nod 863(dir.x,y,z)	B478
Acceleratii nod 863 comparativ cu nodurile684 si 963(dir.x,y,z)	B479-B481
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Acceleratii nod 822(dir.x,y,z)	B555
Acceleratii nod 822 comparativ cu nodurile657 si 941(dir.x,y,z)	B556-B558
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Deplasari nod 219 comparativ cu nodurile141 si 302(dir.x,y,z)	B560-B562
Acceleratii nod 219(dir.x,y,z)	B563
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Deplasari nod 186 comparativ cu nodurile108 si 265(dir.x,y,z)	B565-B567
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Deplasari nod 1495(dir.x,y,z)	B642
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Deplasari nod 1066(dir.x,y,z)	B644
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Deplasari nod 1697(dir.x,y,z)	B650
Deplasari nod 1700(dir.x,y,z)	B651

CALCULUL VIBRATIILOR FORTATE pentru:

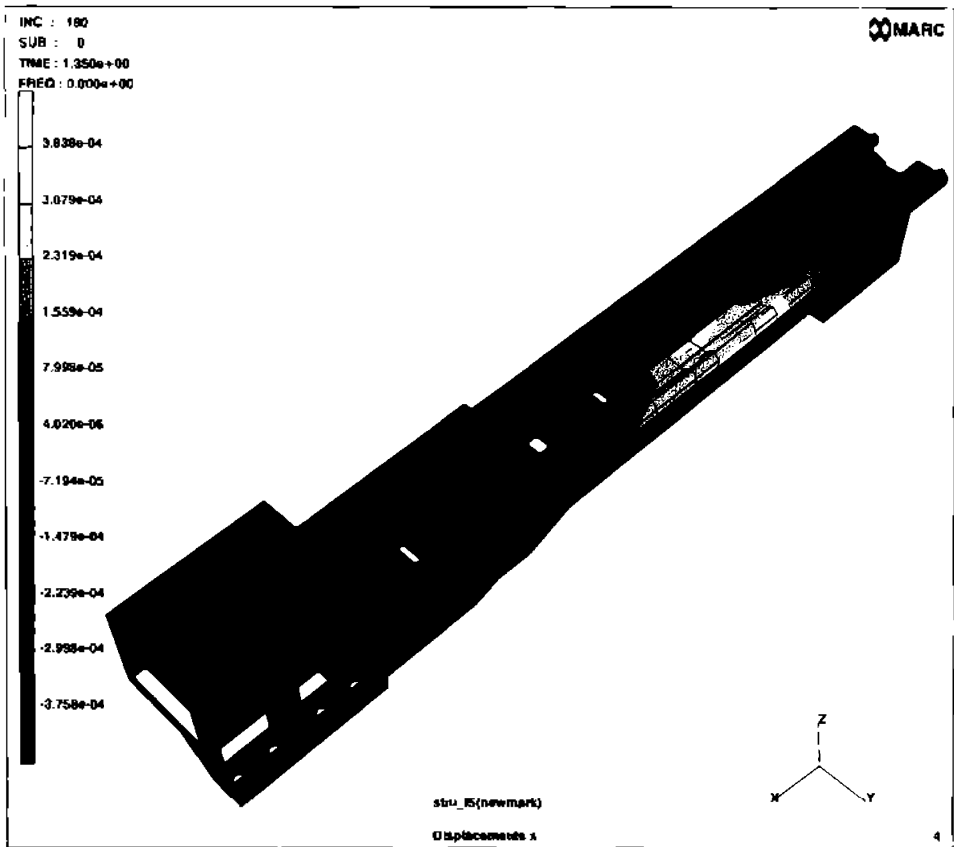
$n=800$ rpm

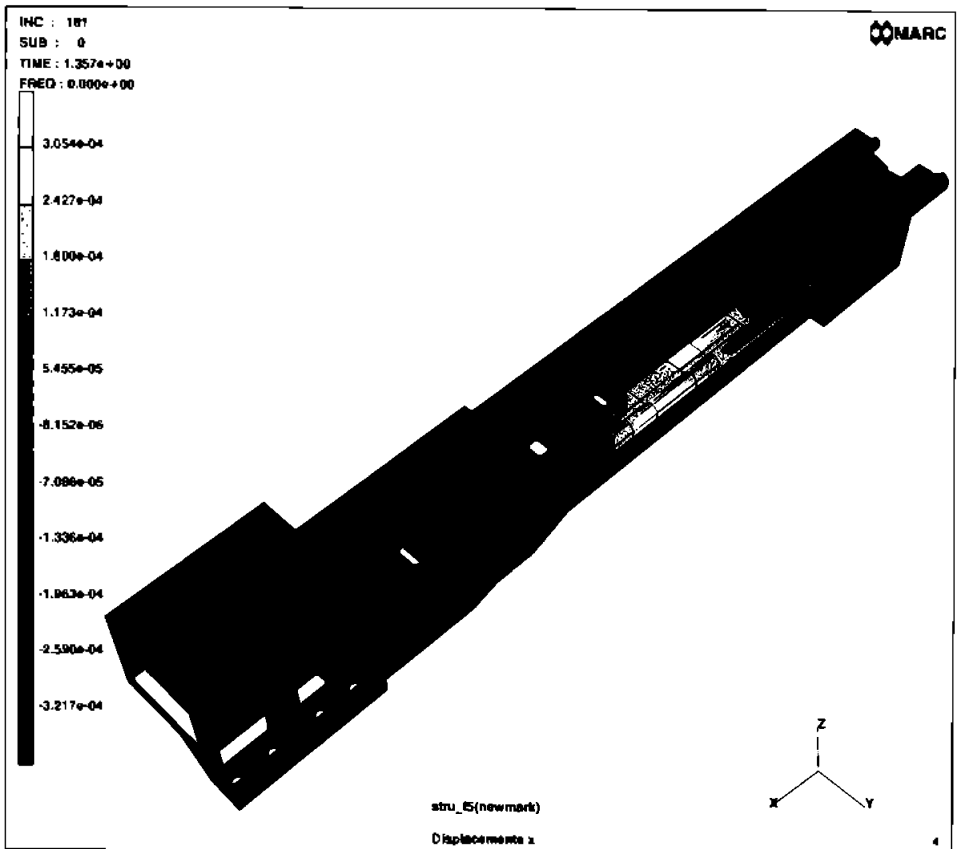
$t=1.5$ s ; $\Delta t=0.0075$ ms

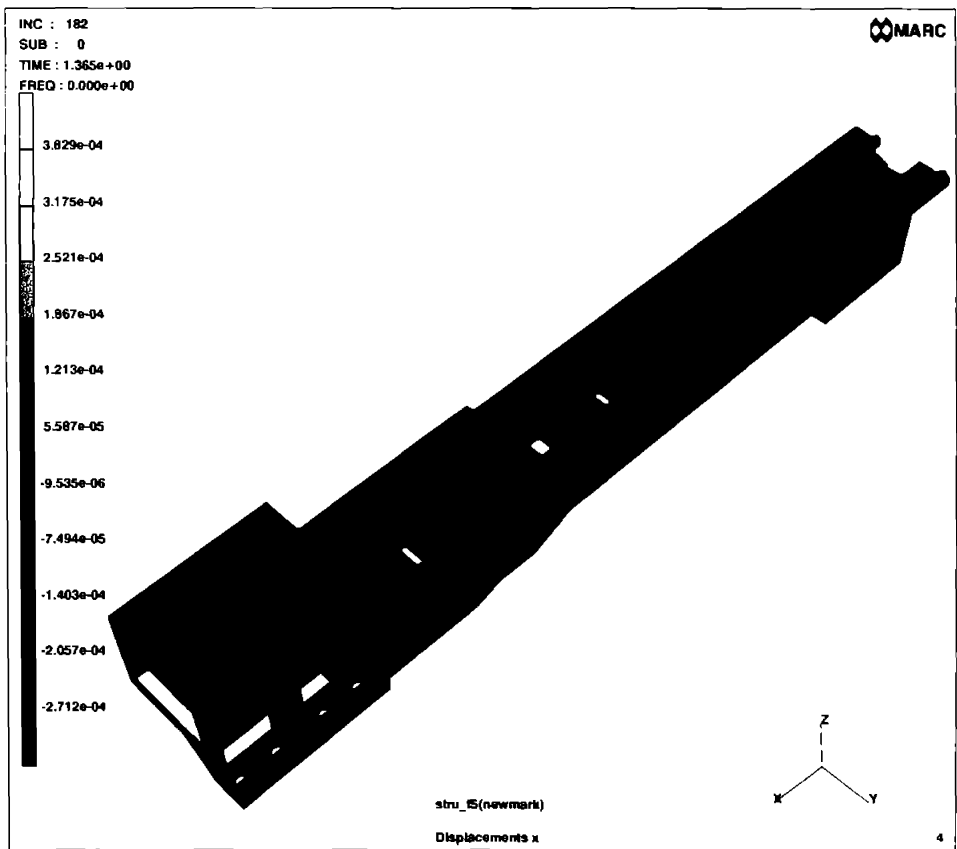
$p_{nod} = \bar{p}_{o,nod} + p_o \cos \omega t$

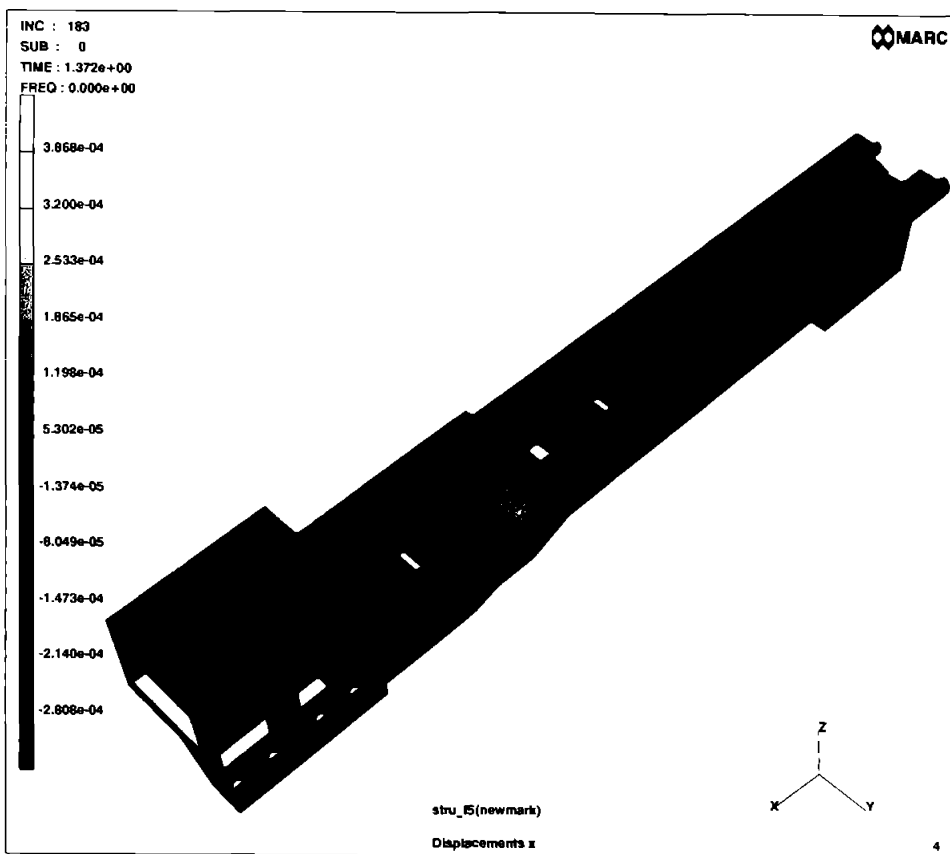
$p_o = 0.2 \bar{p}_{o,nod}$

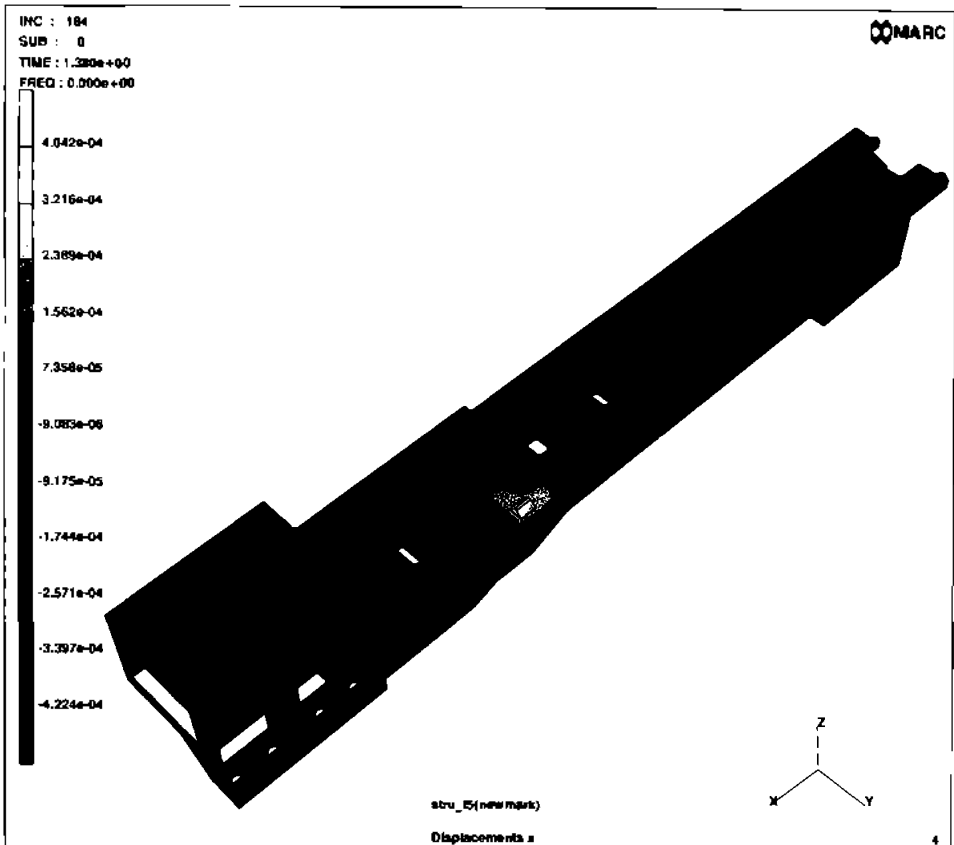
amortizare structurala

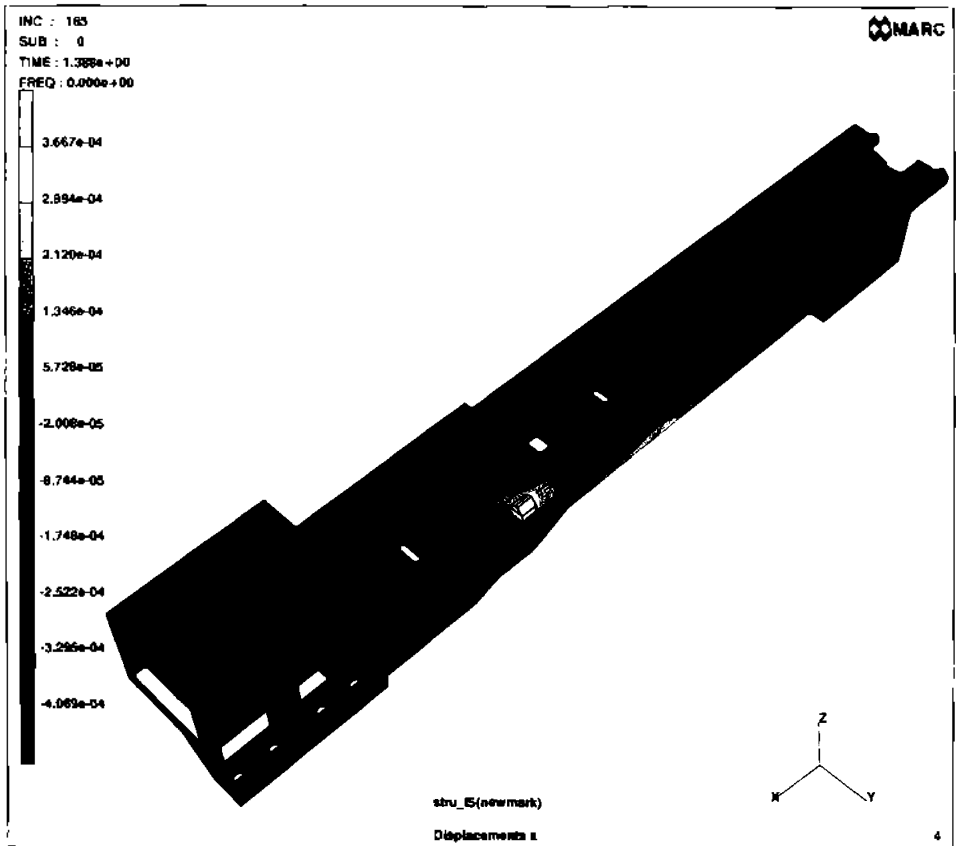


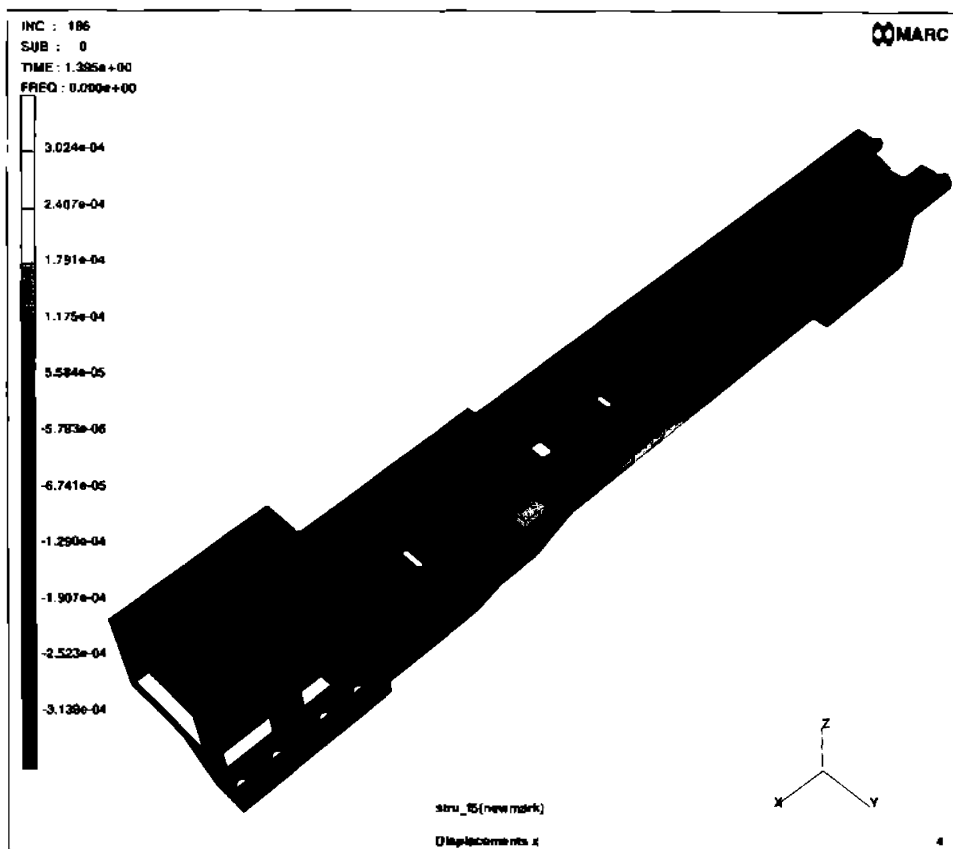


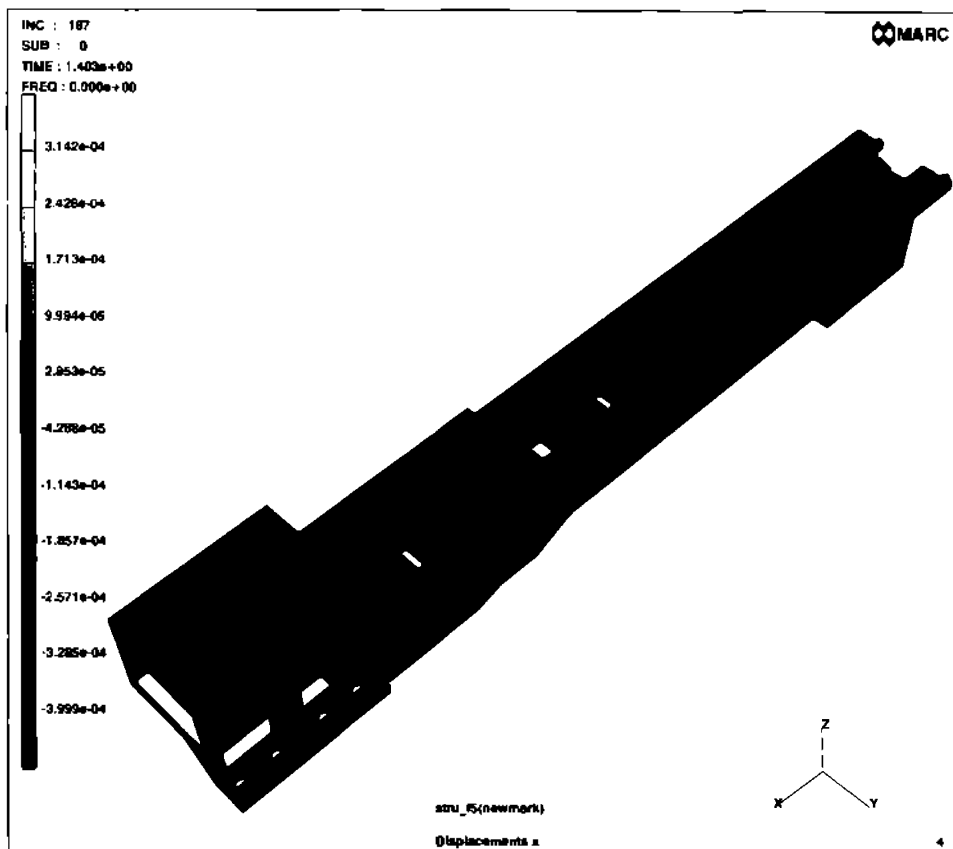


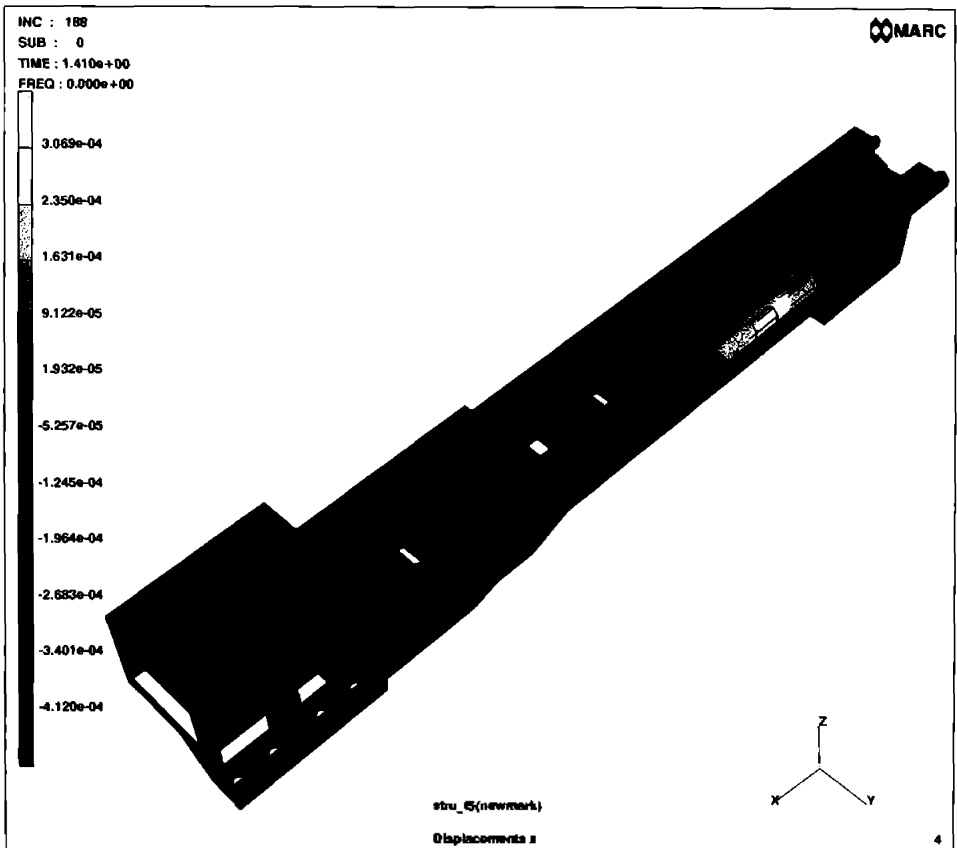


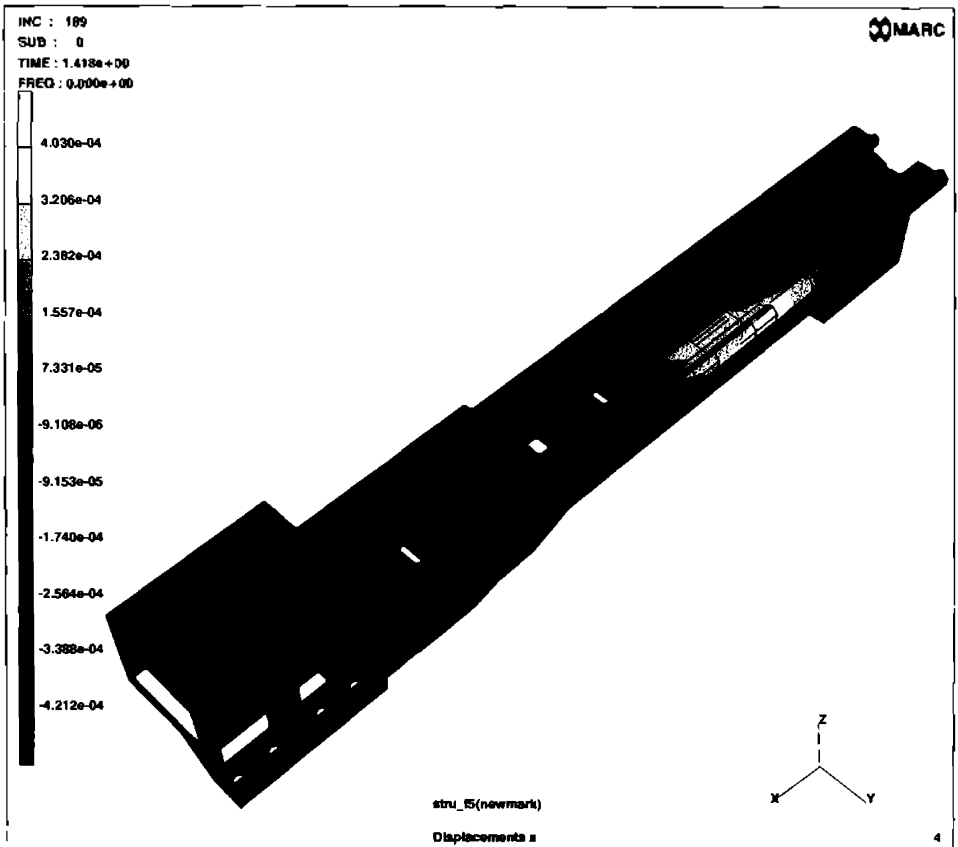


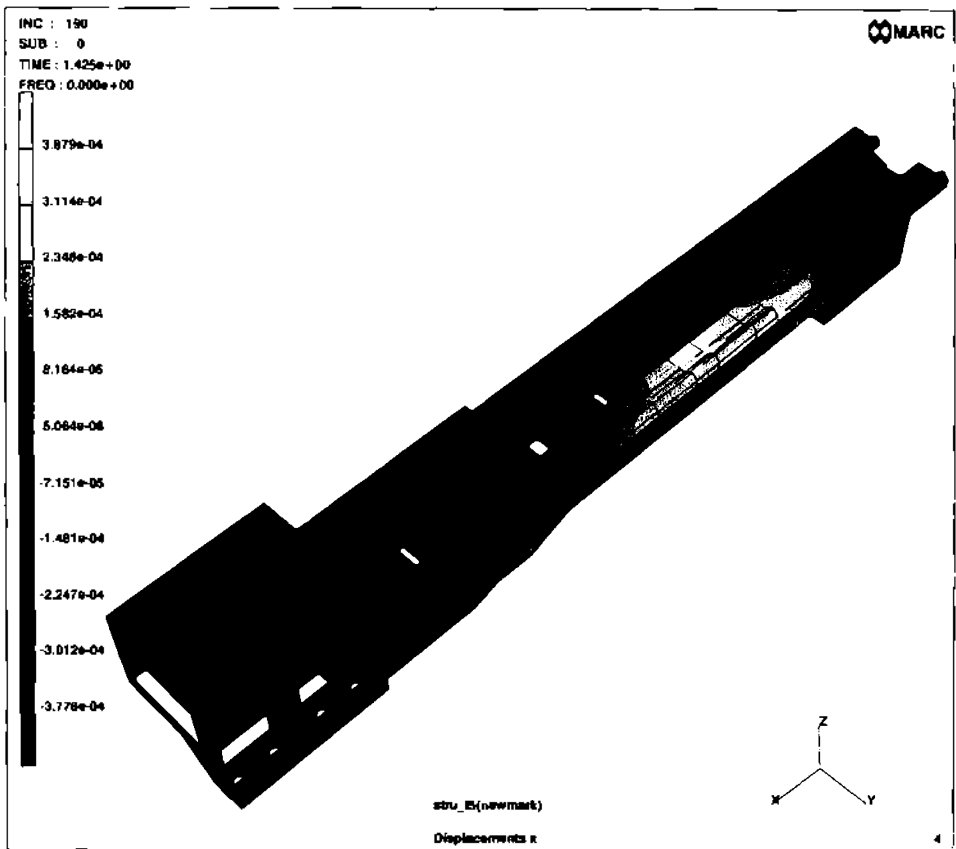


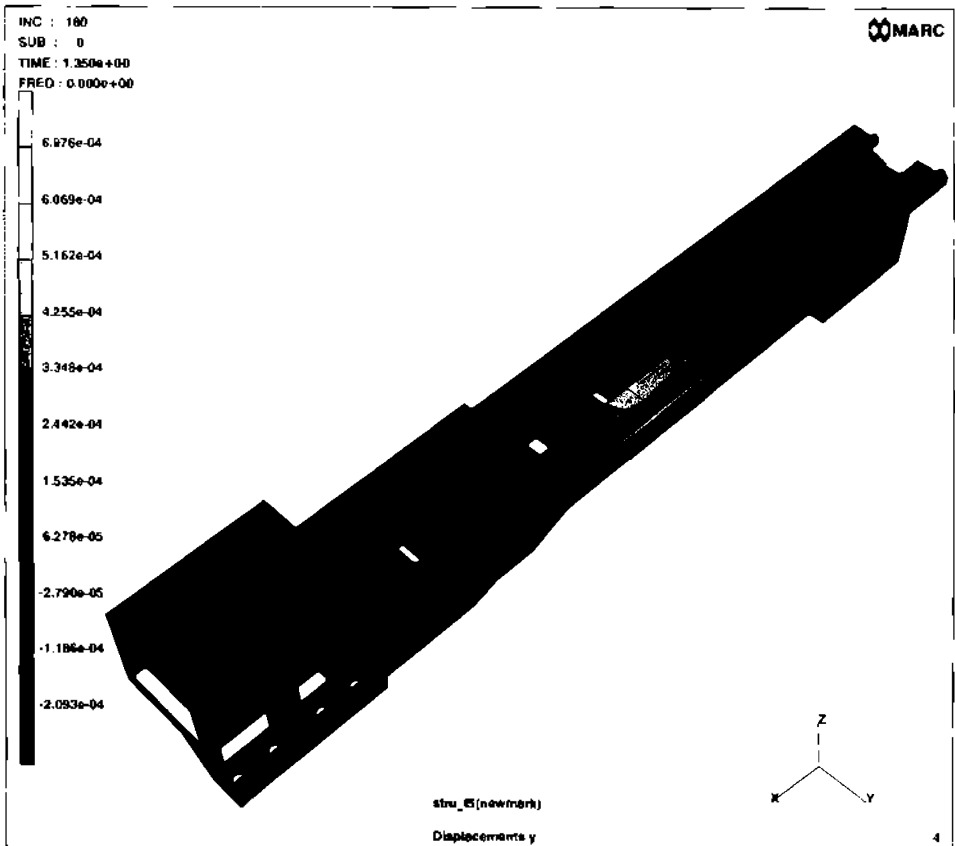


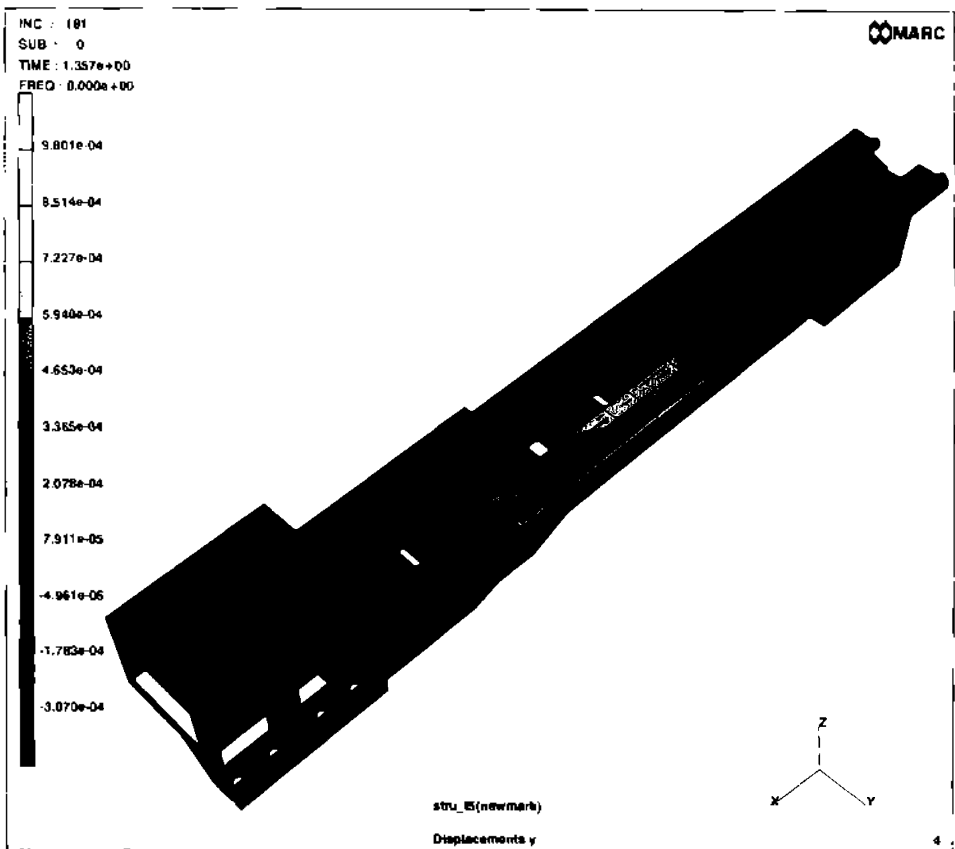


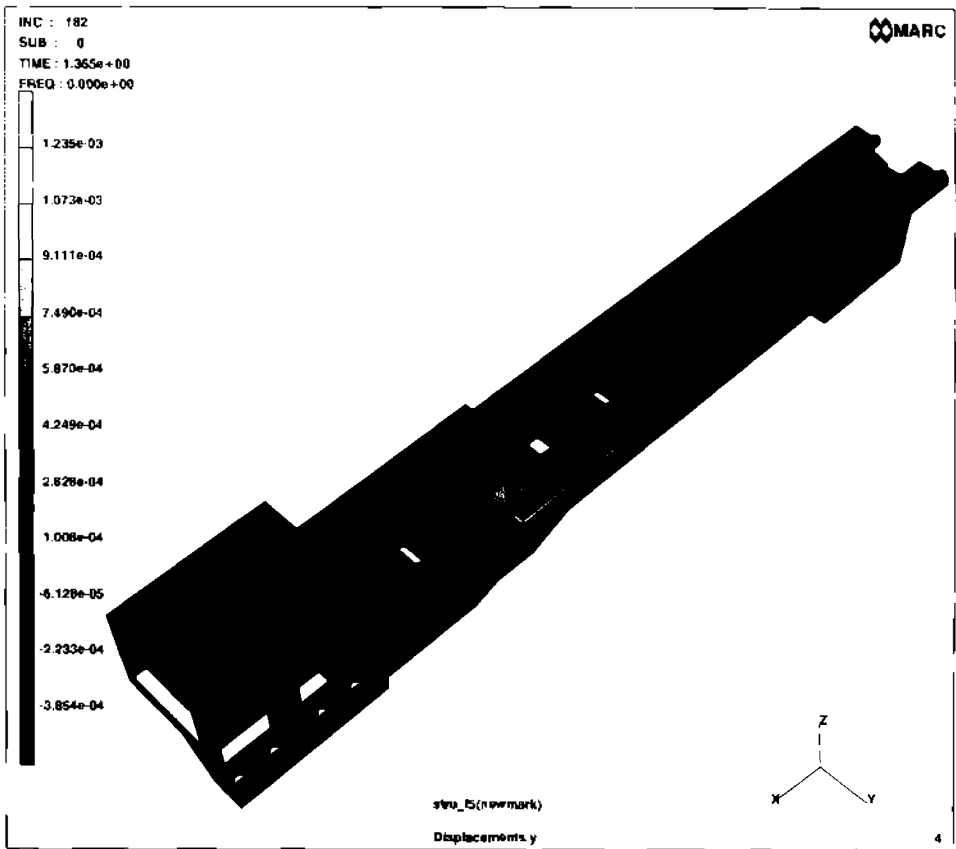


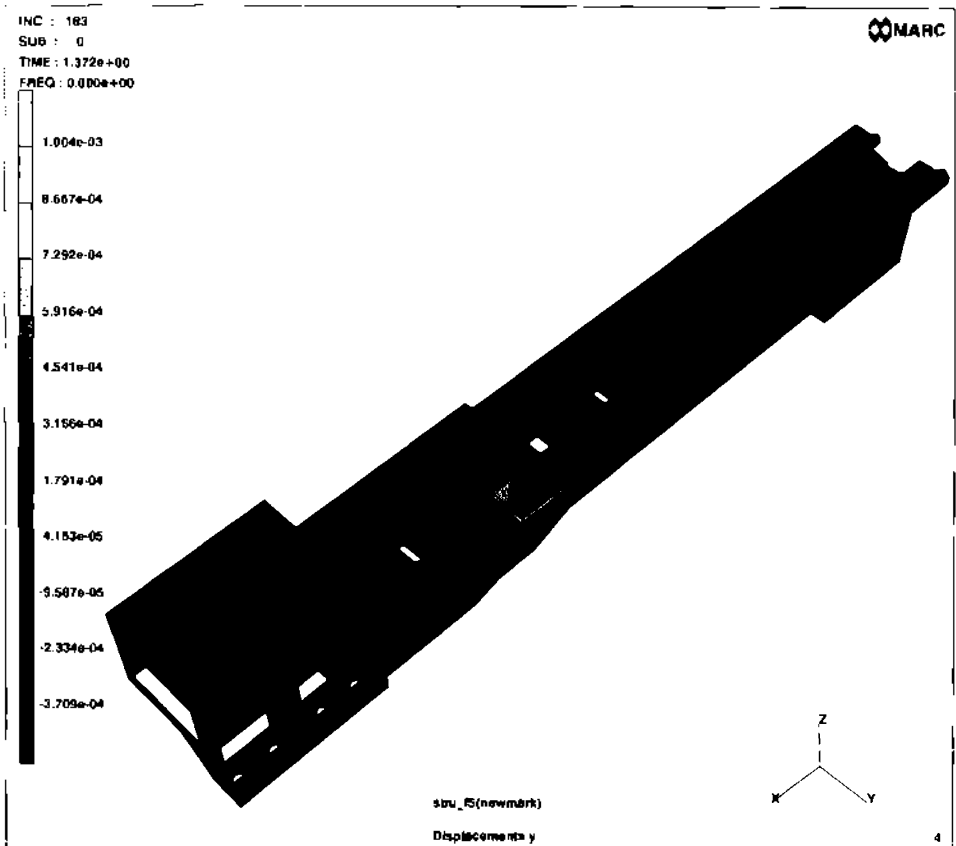


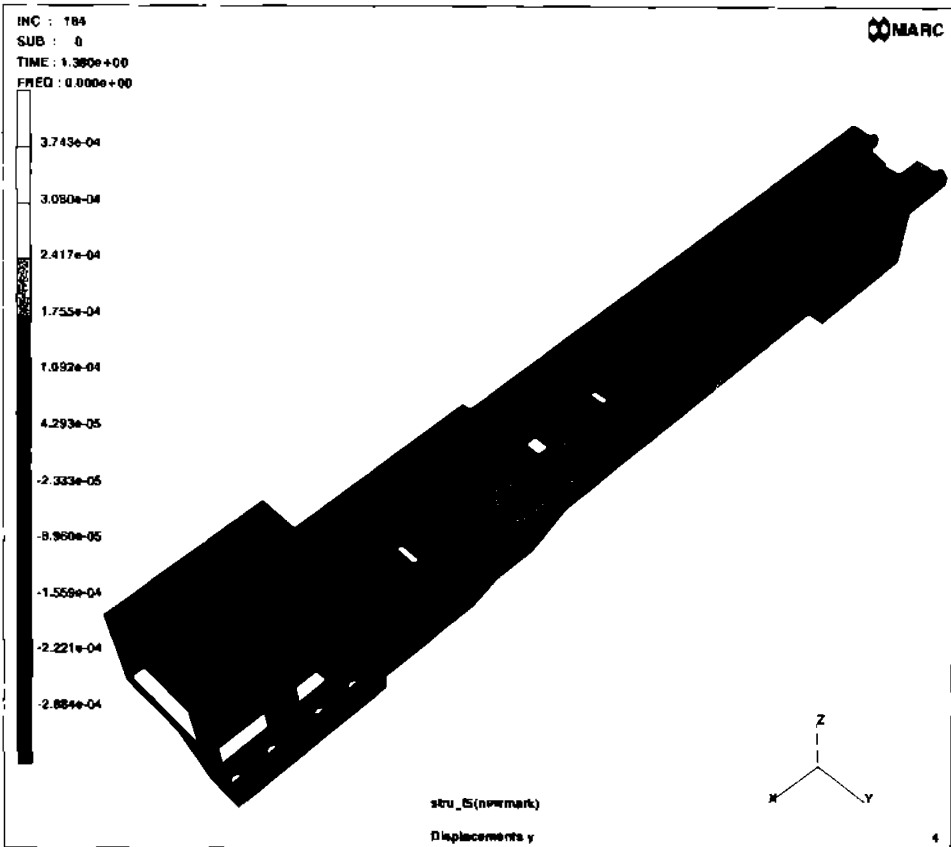


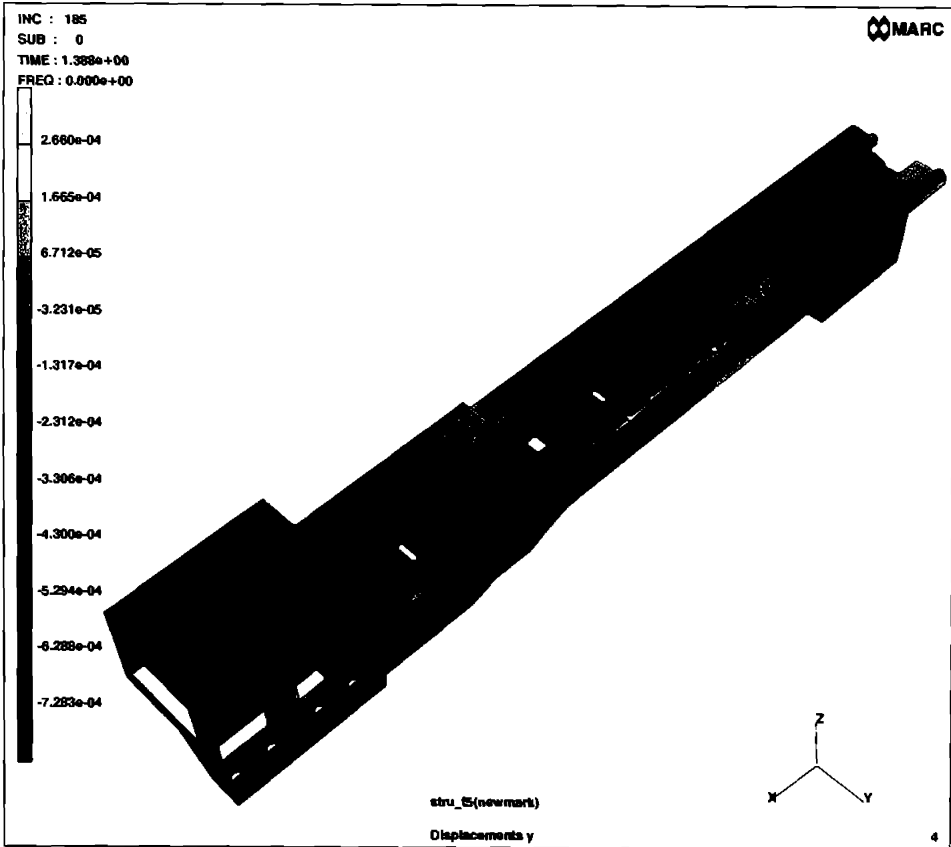




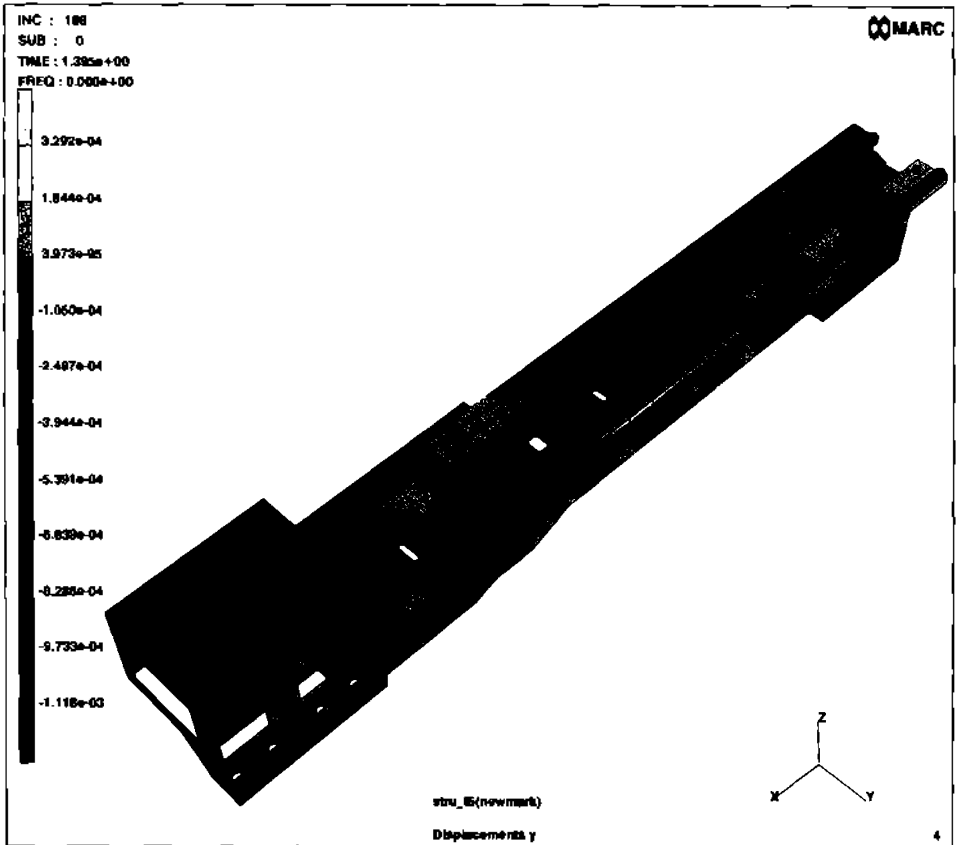


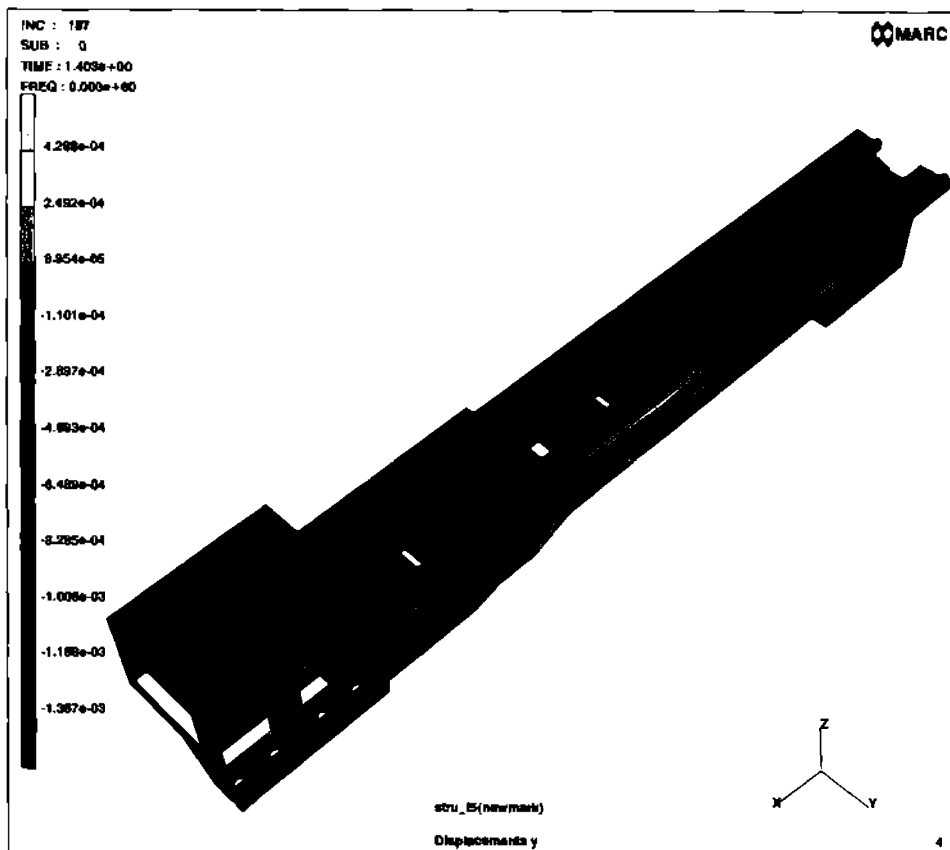


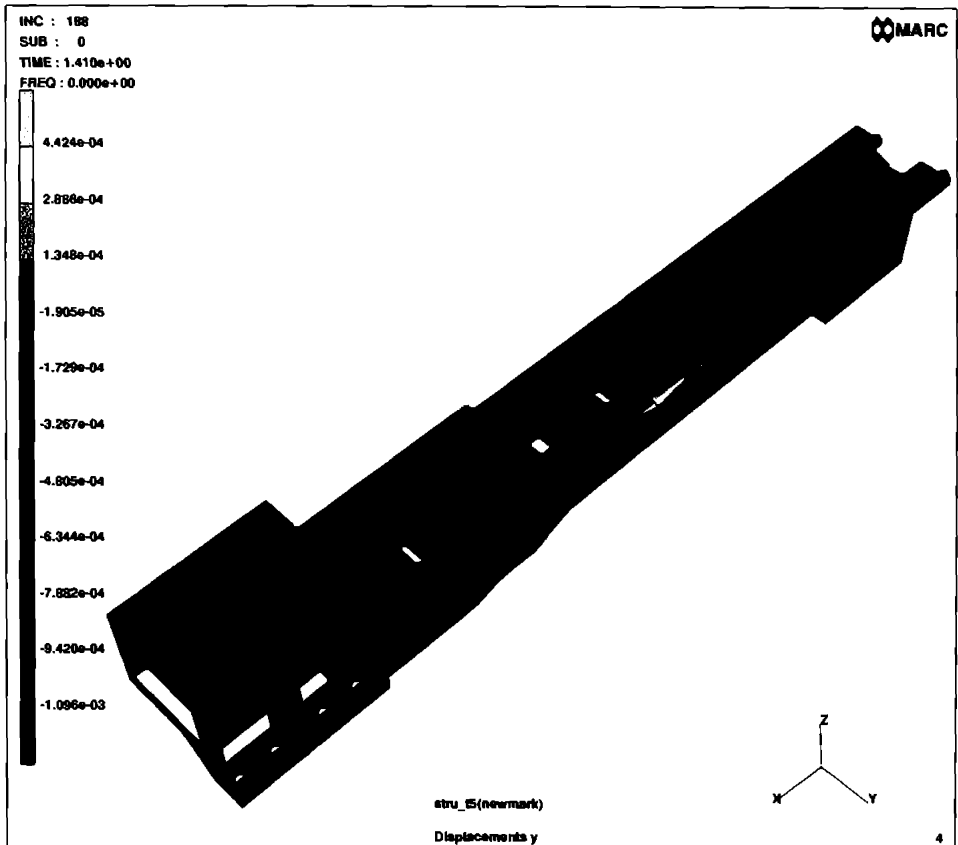


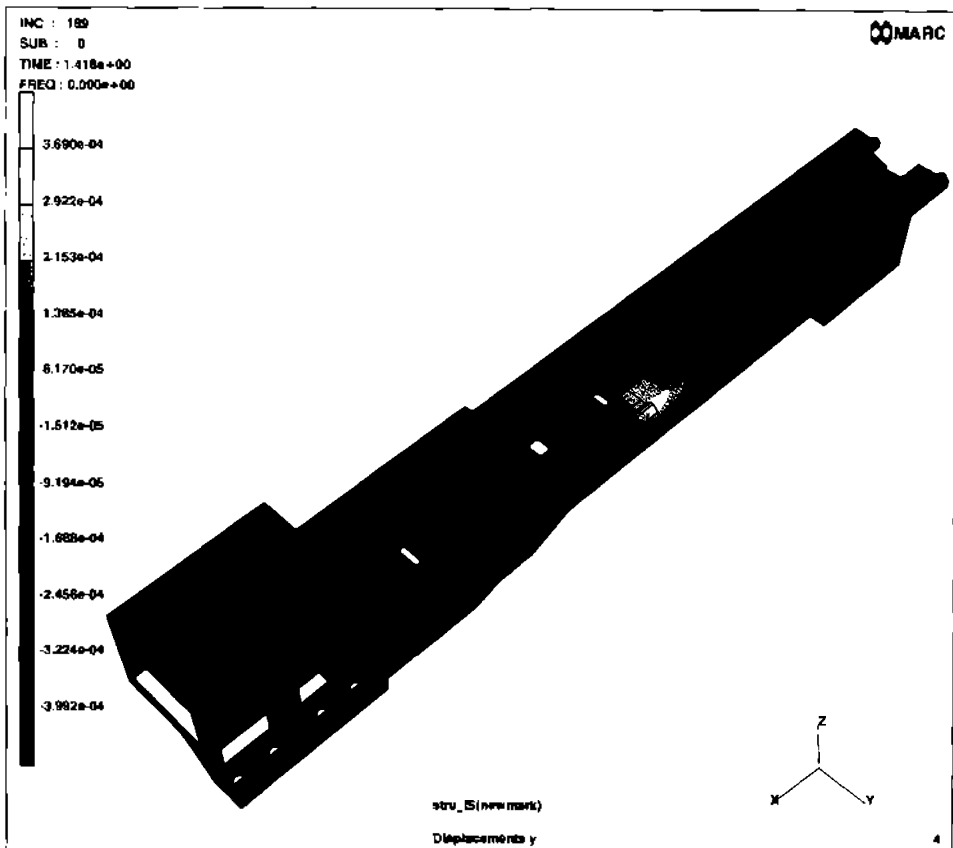


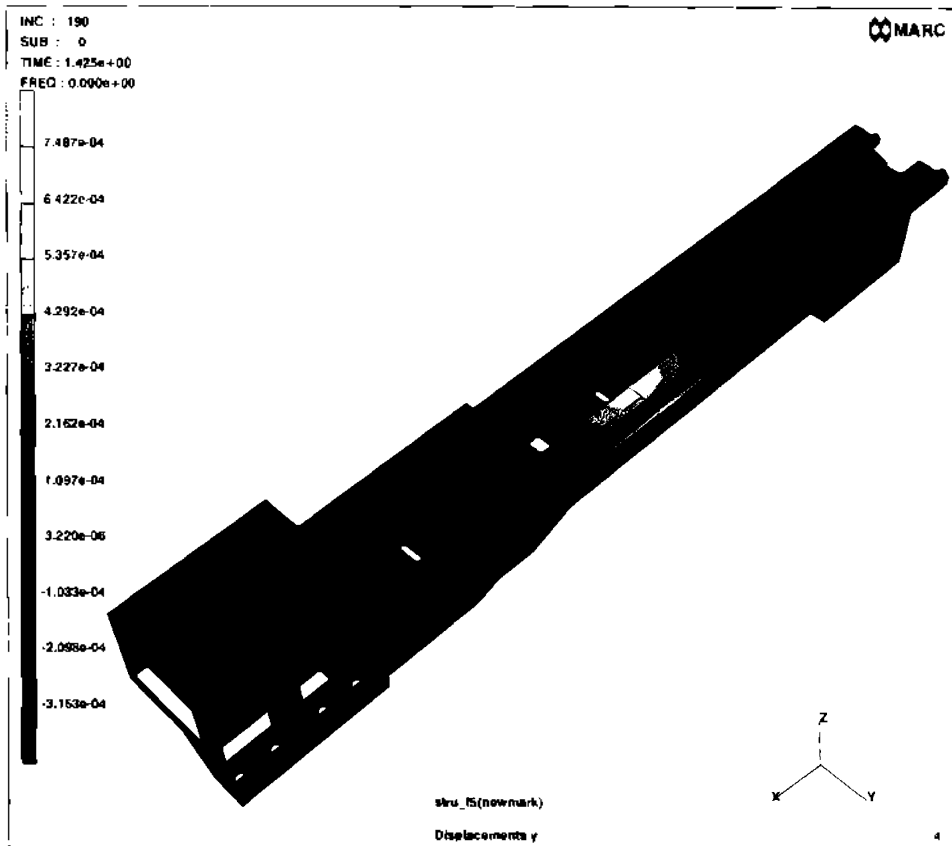
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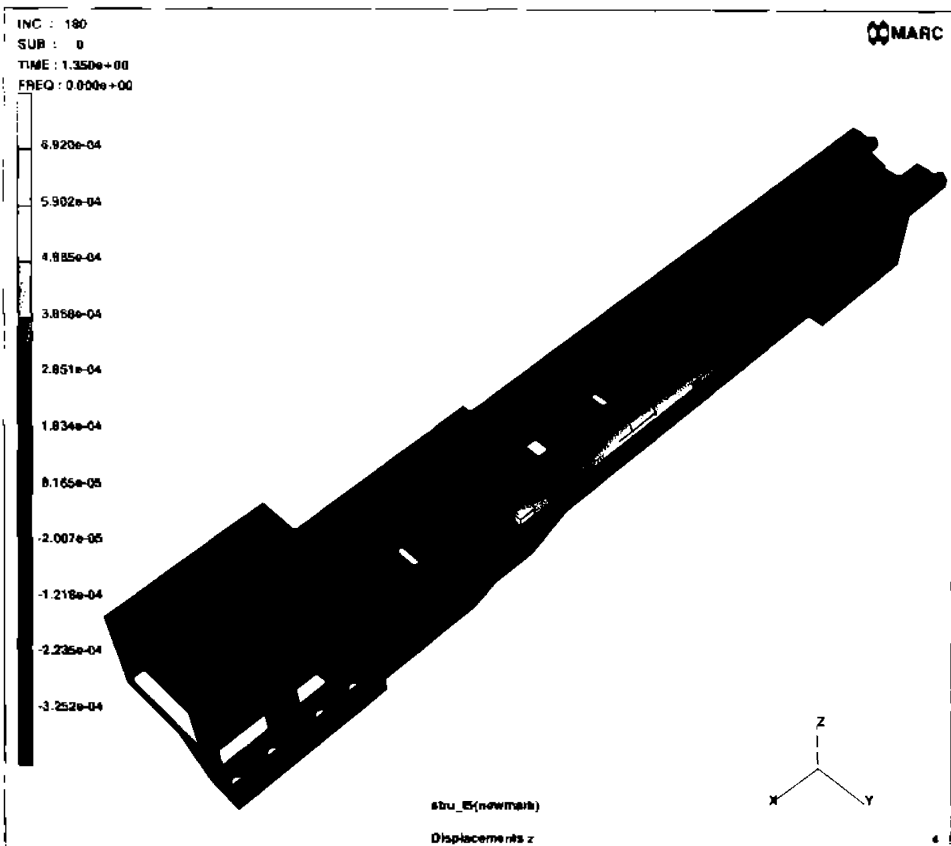


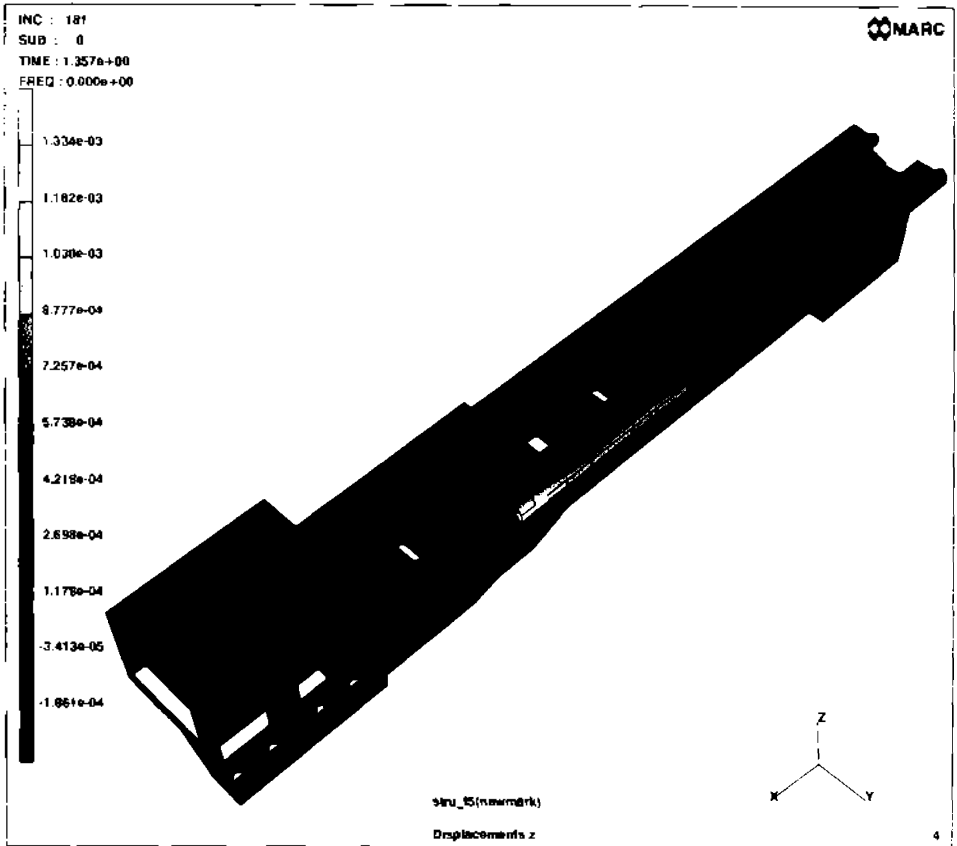


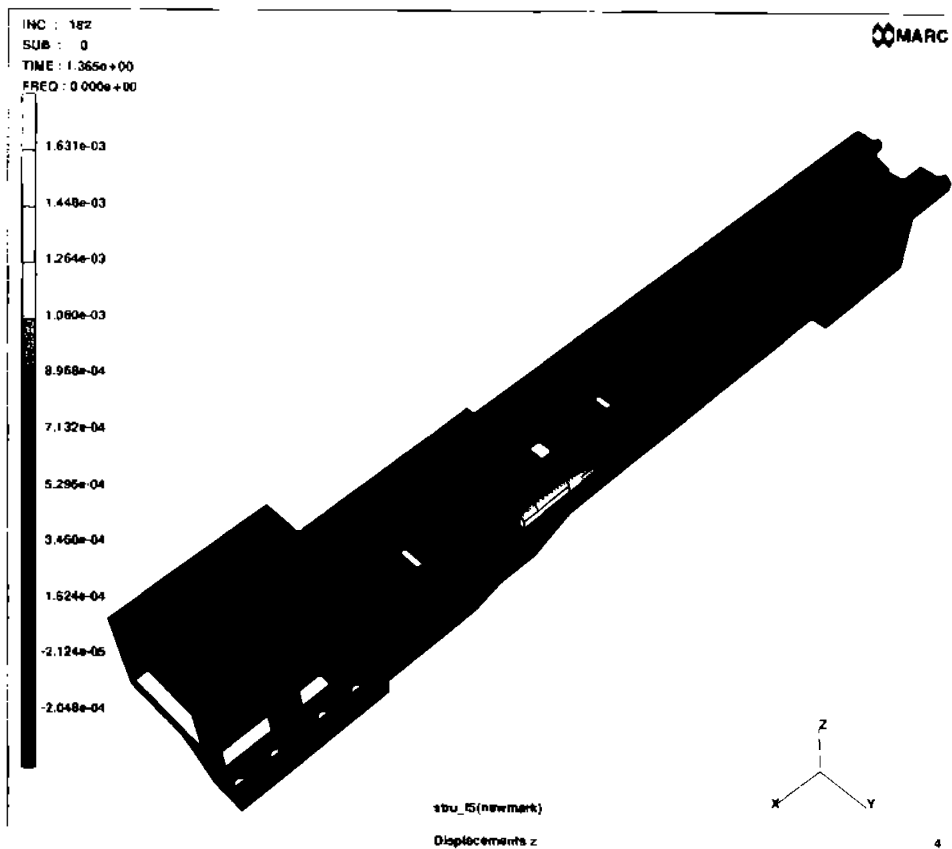


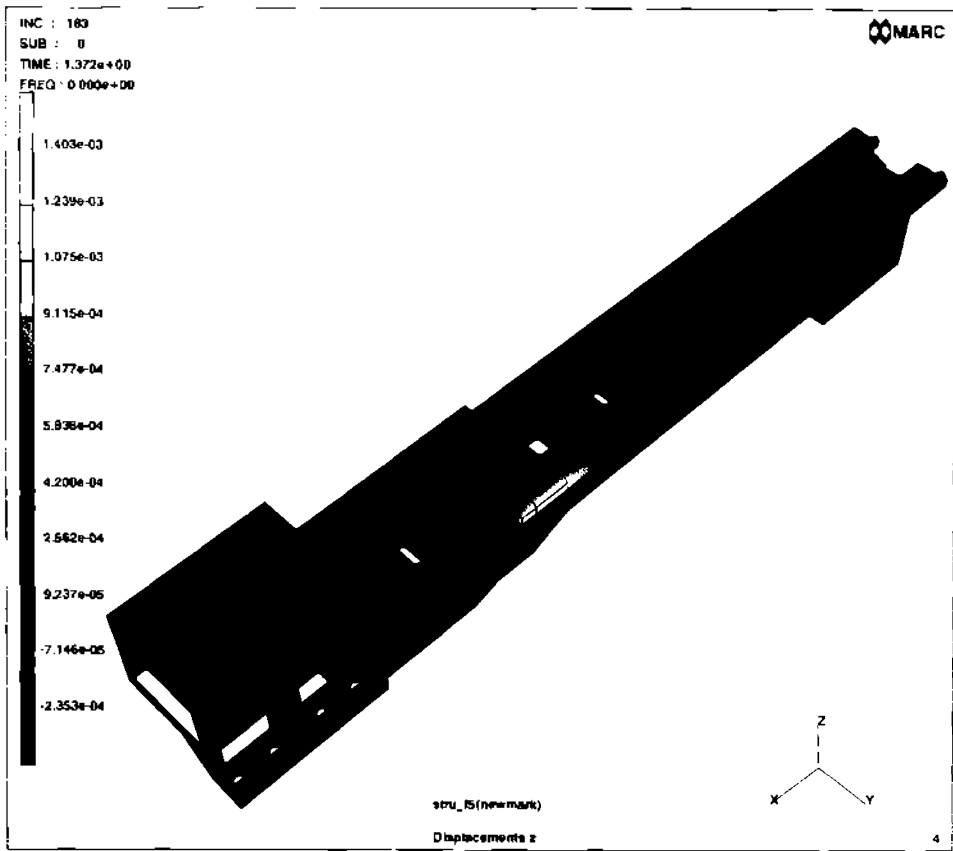


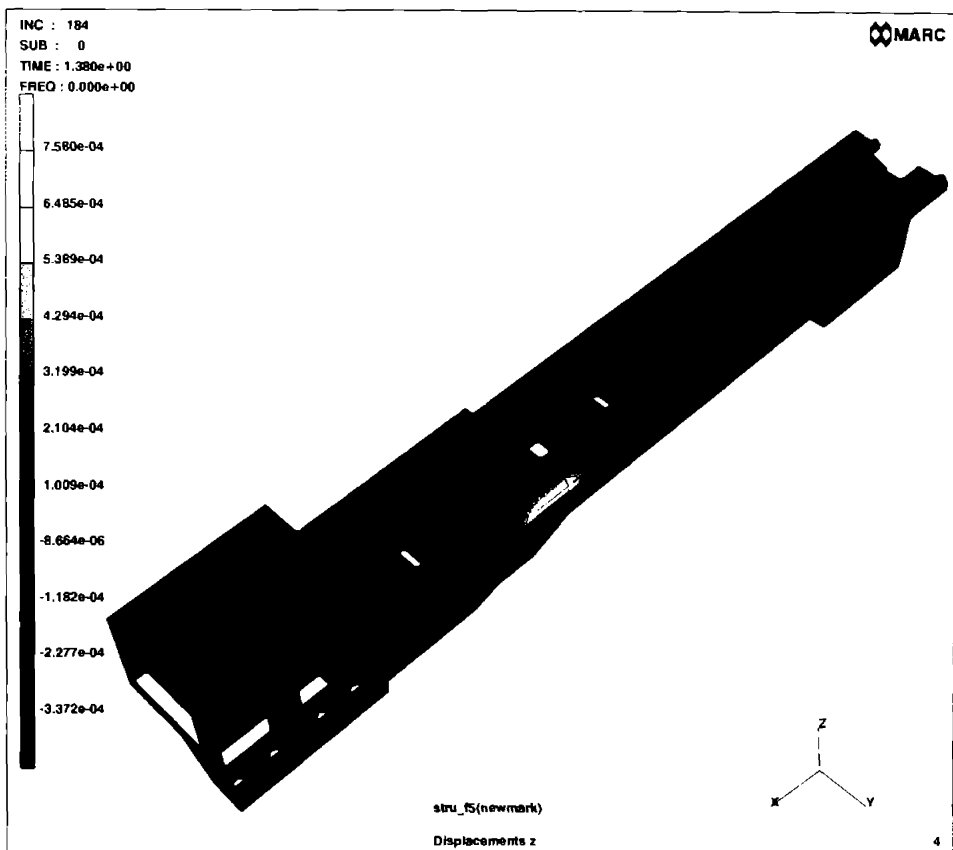


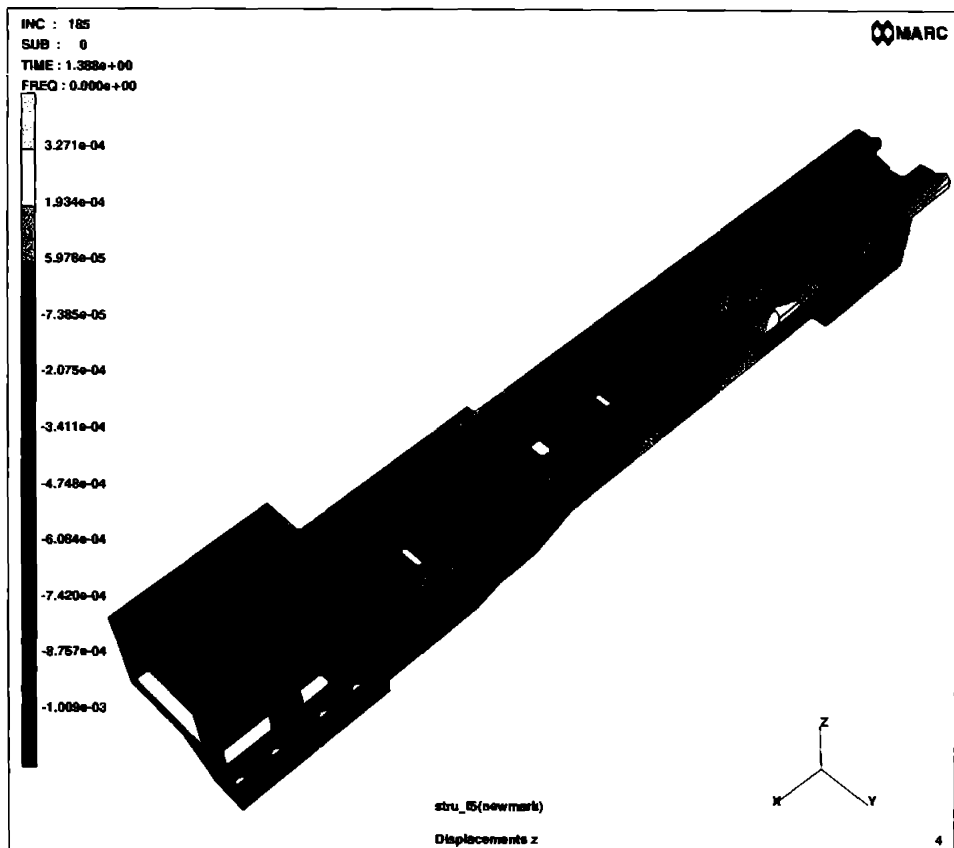


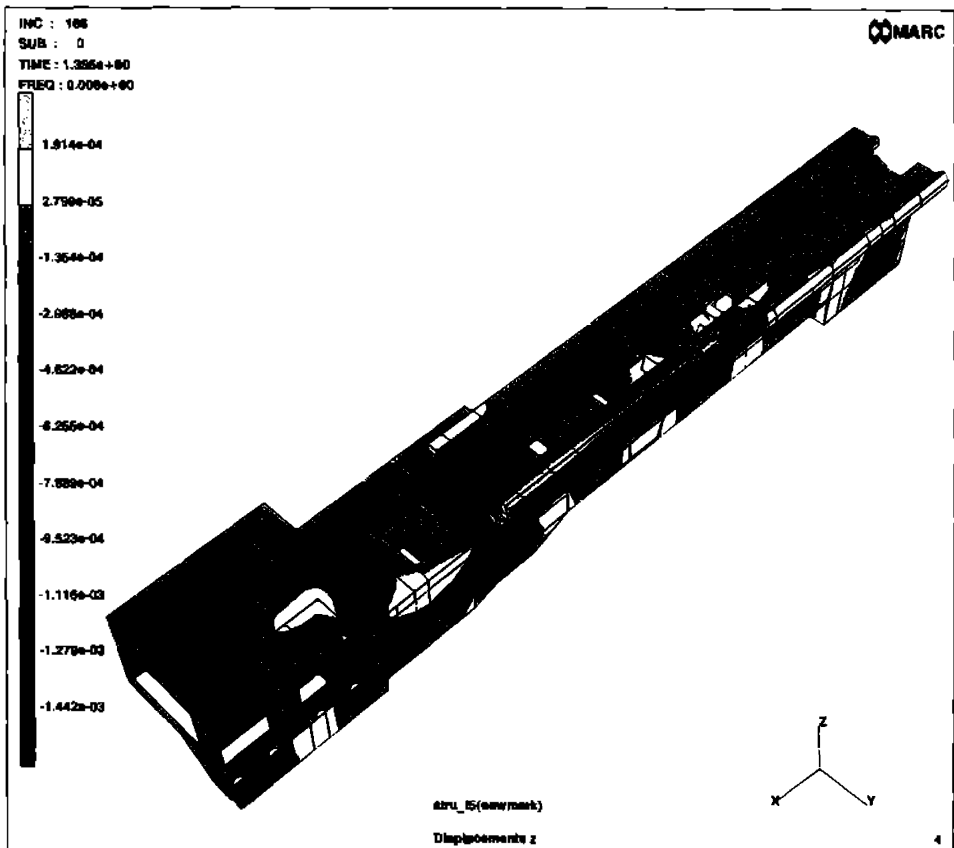


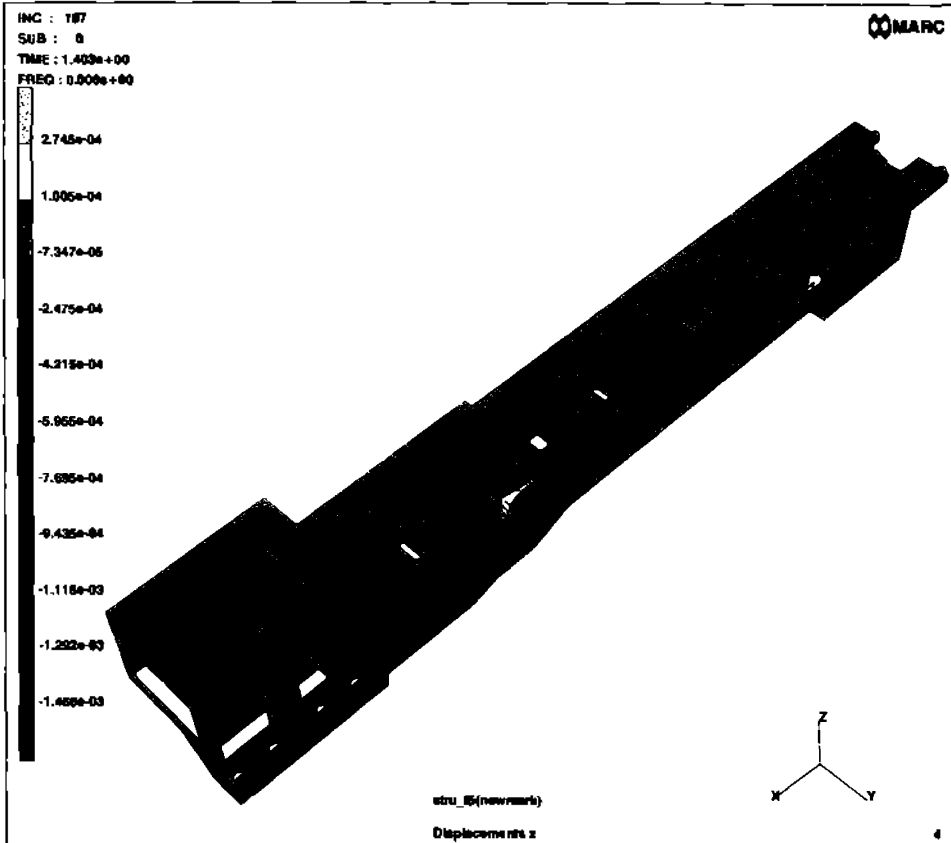


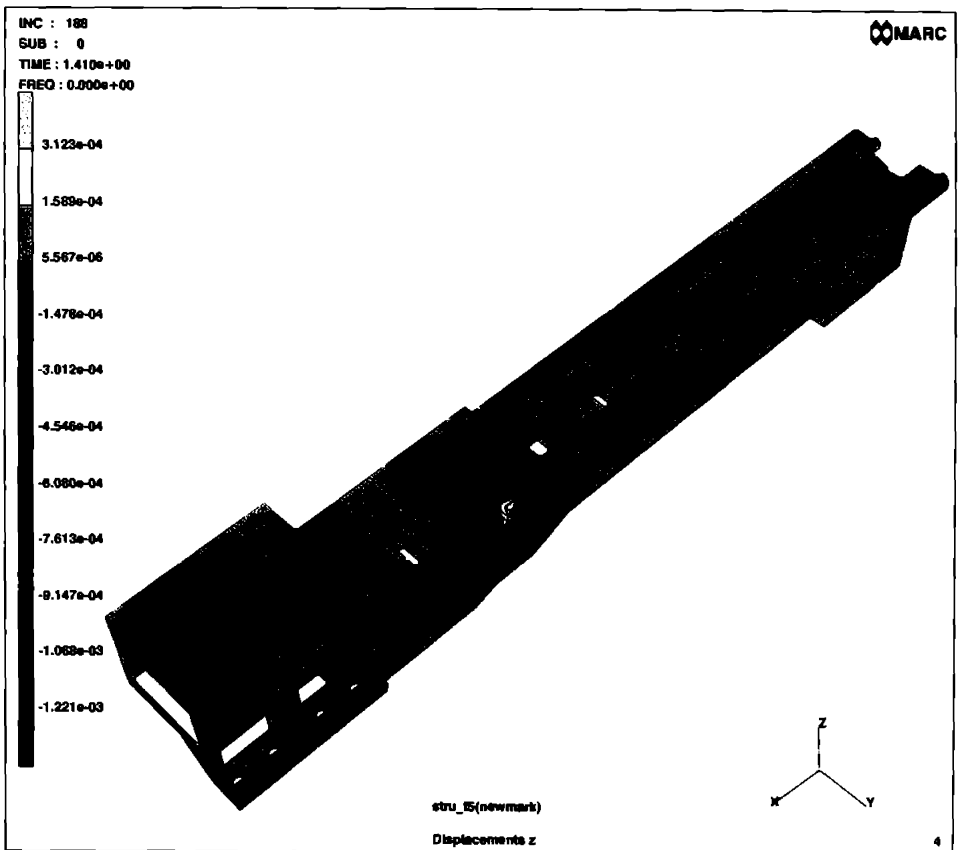


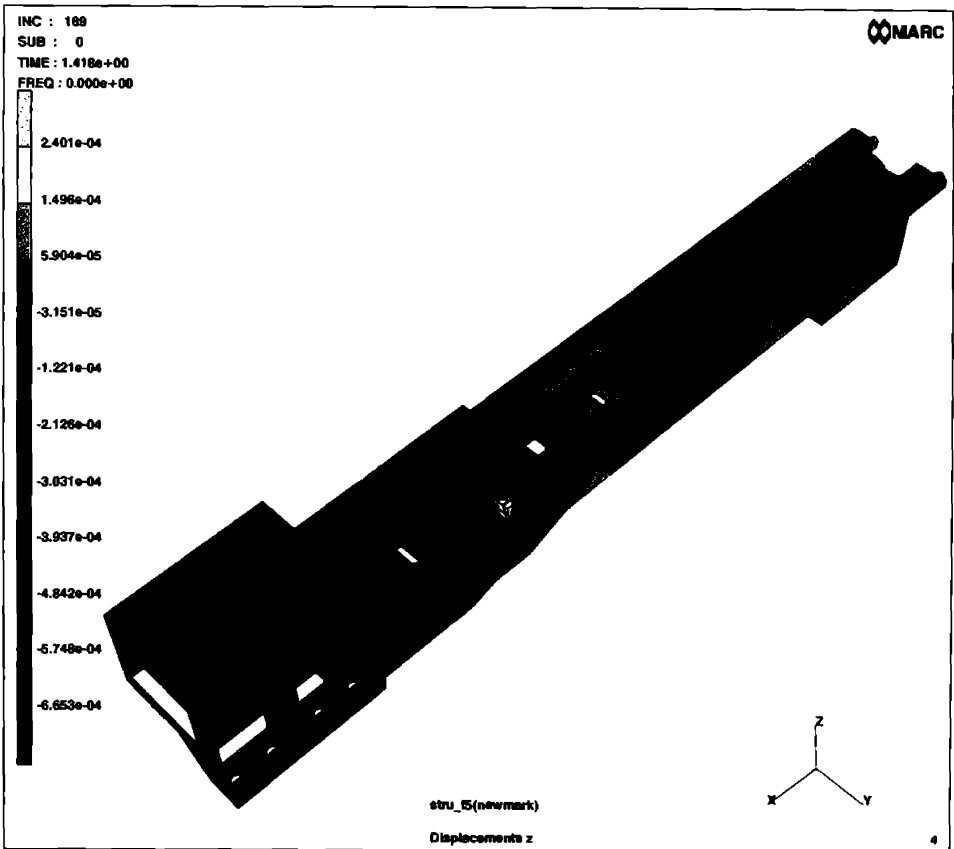


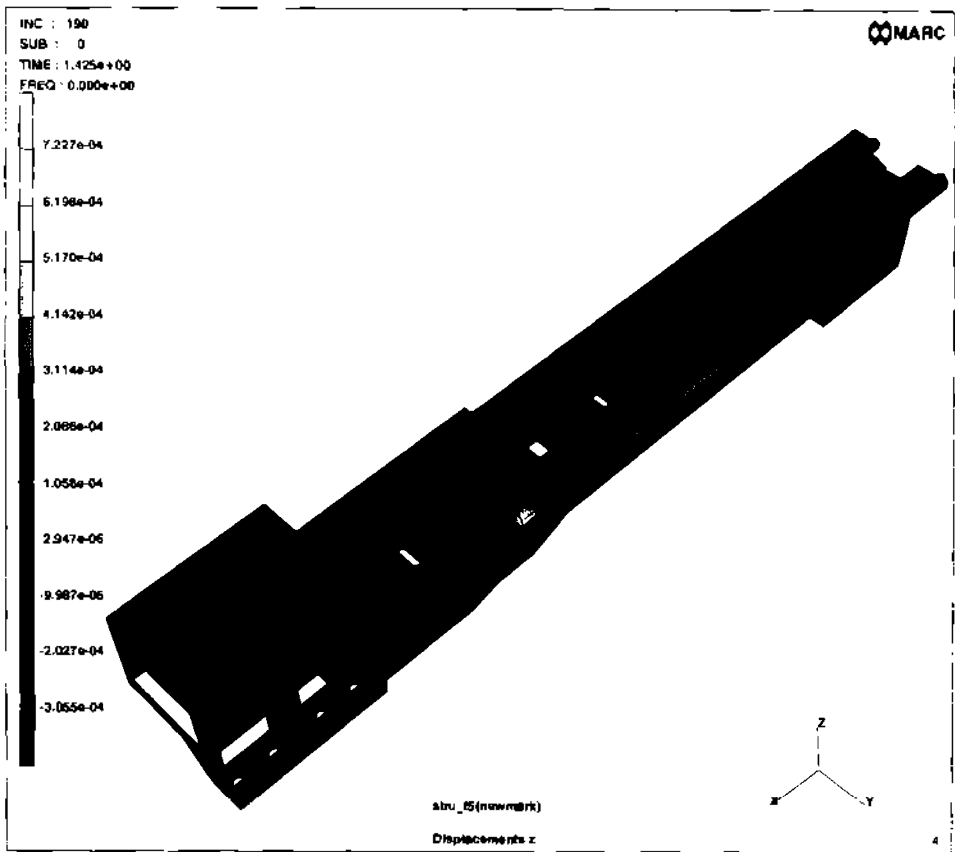


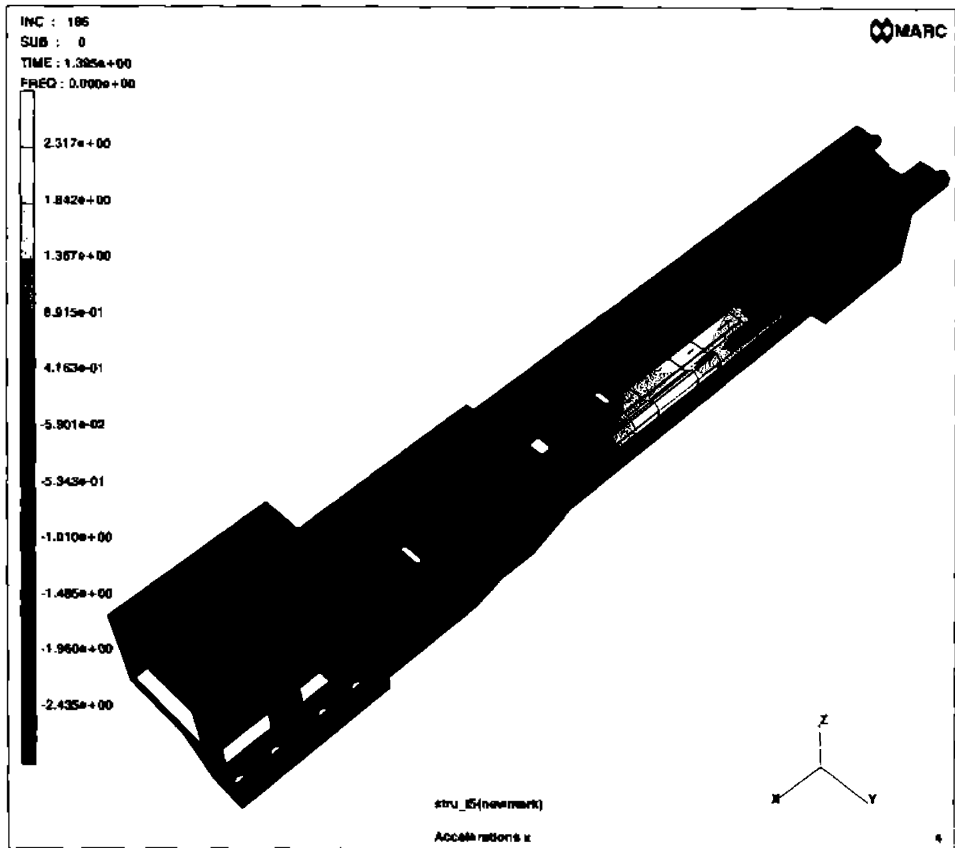


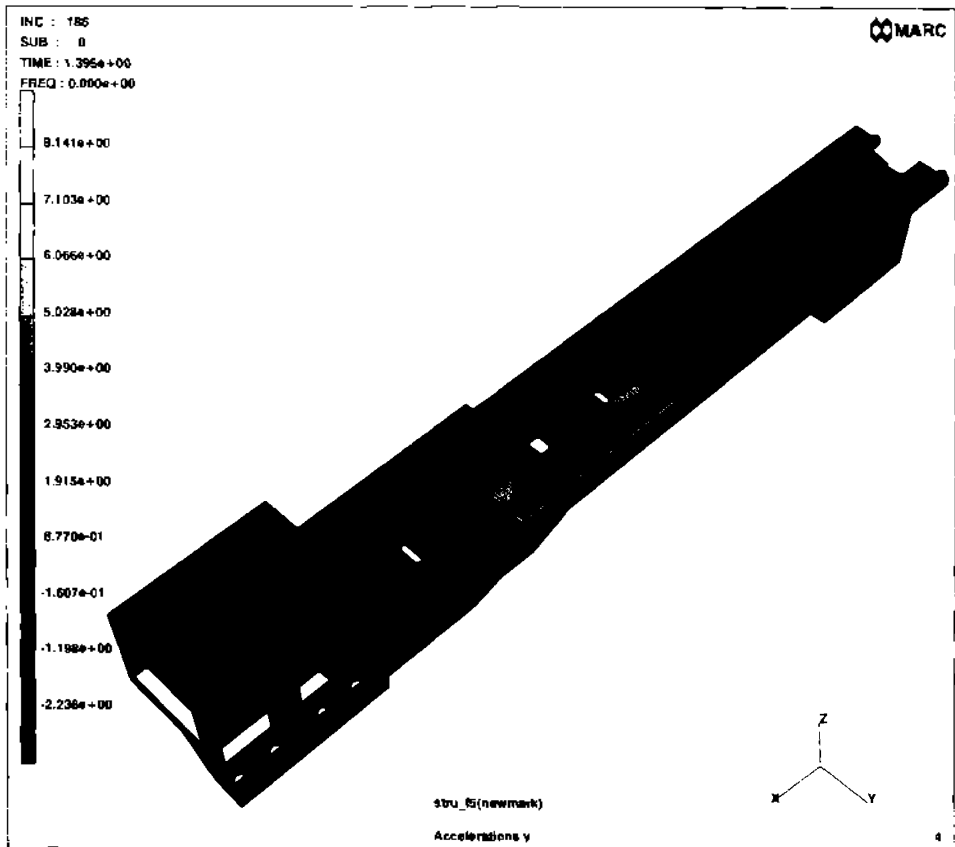


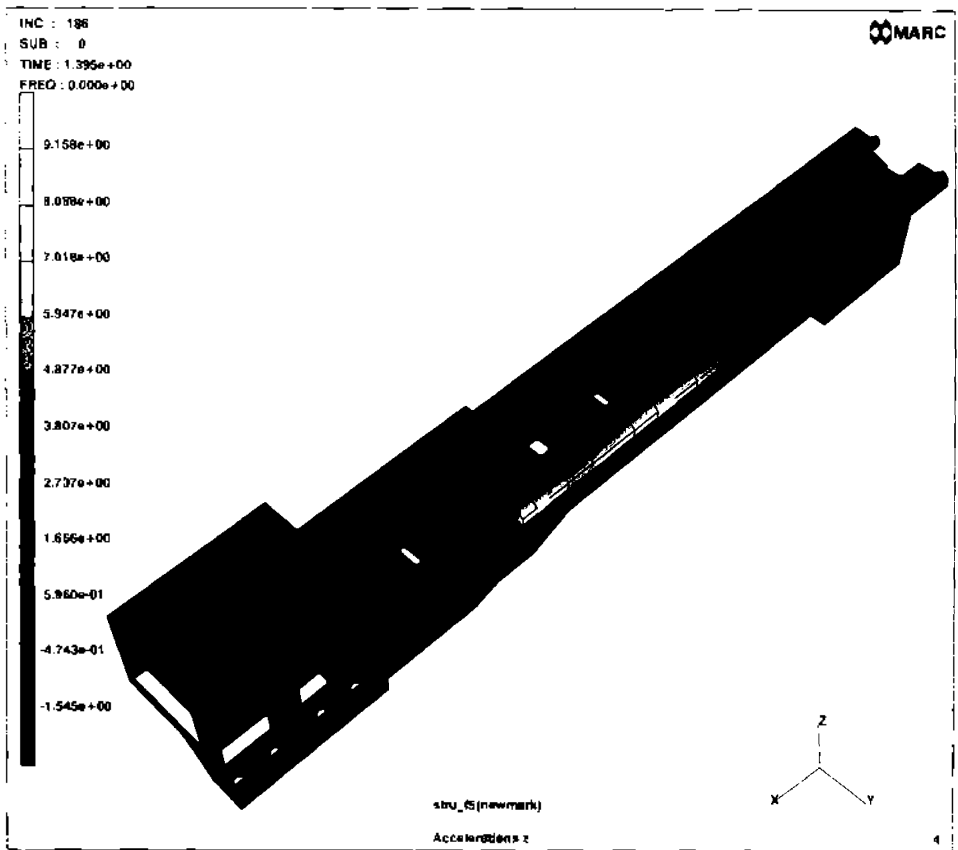


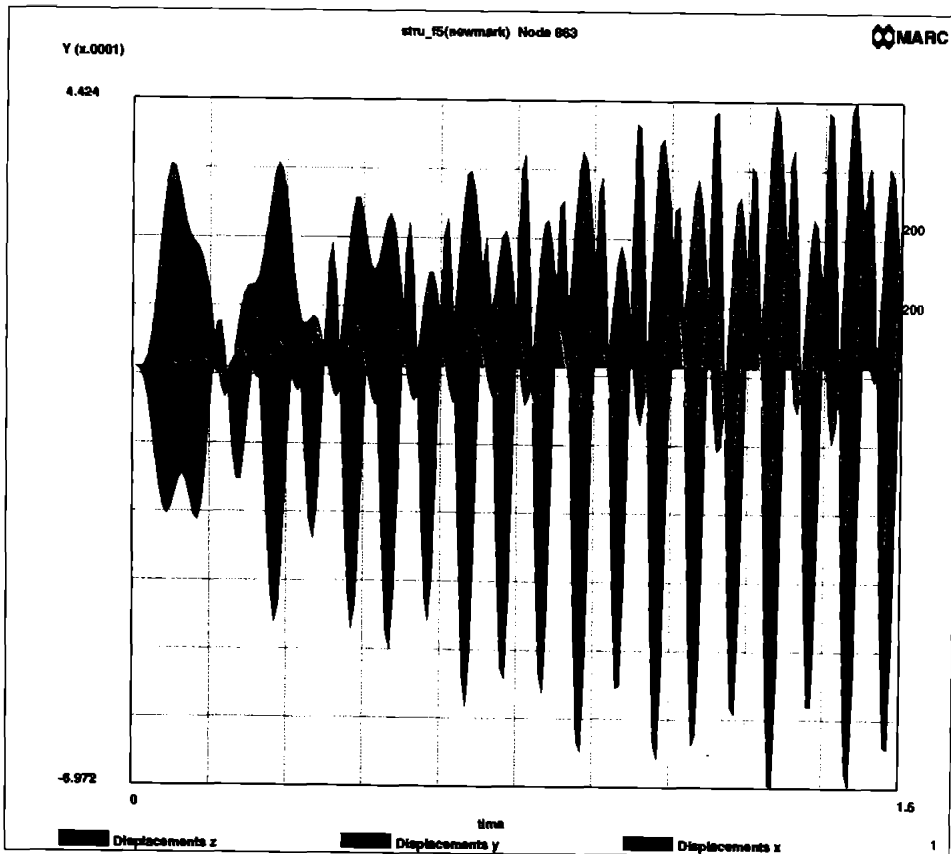


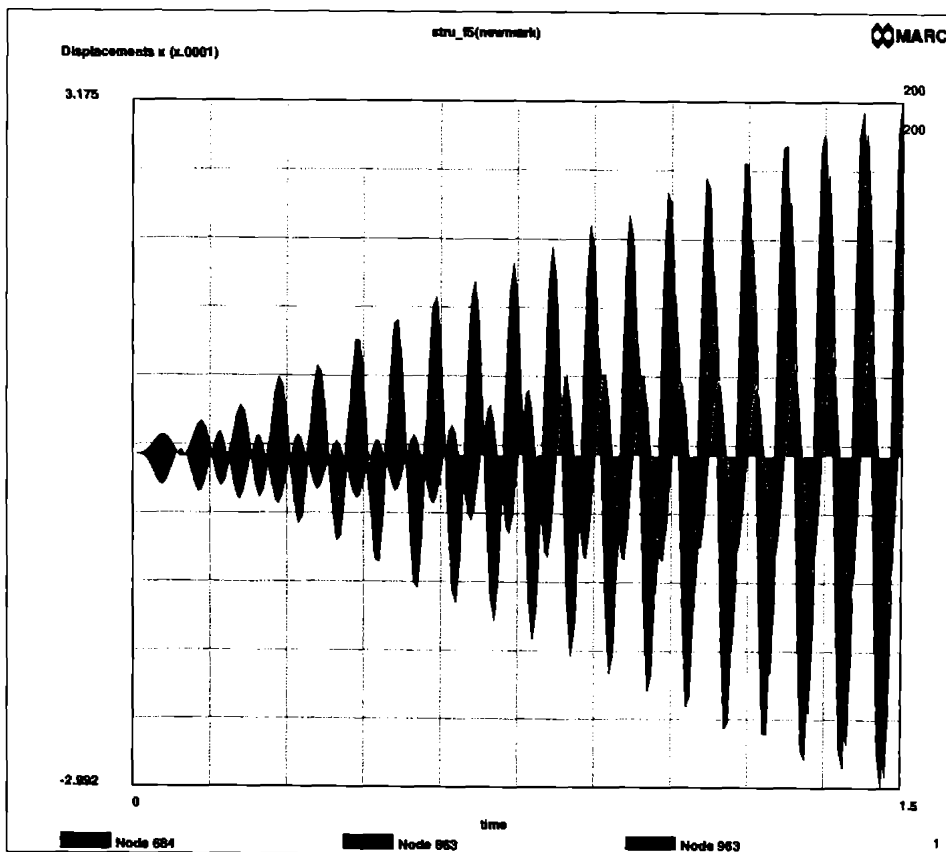


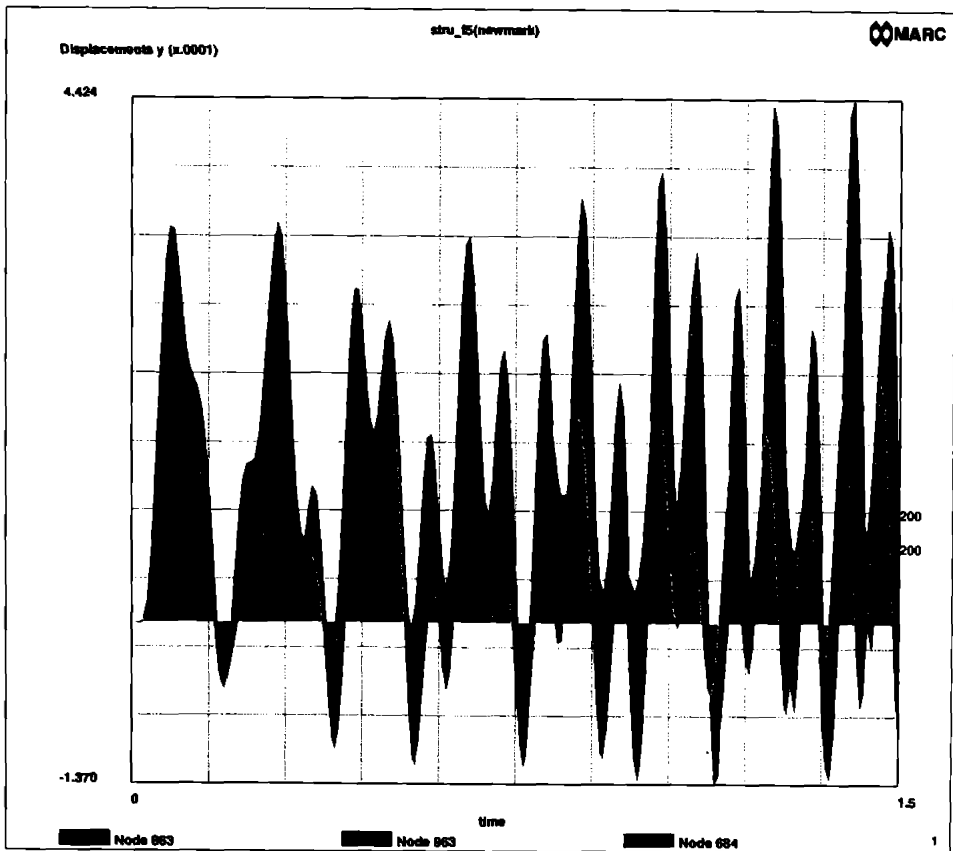


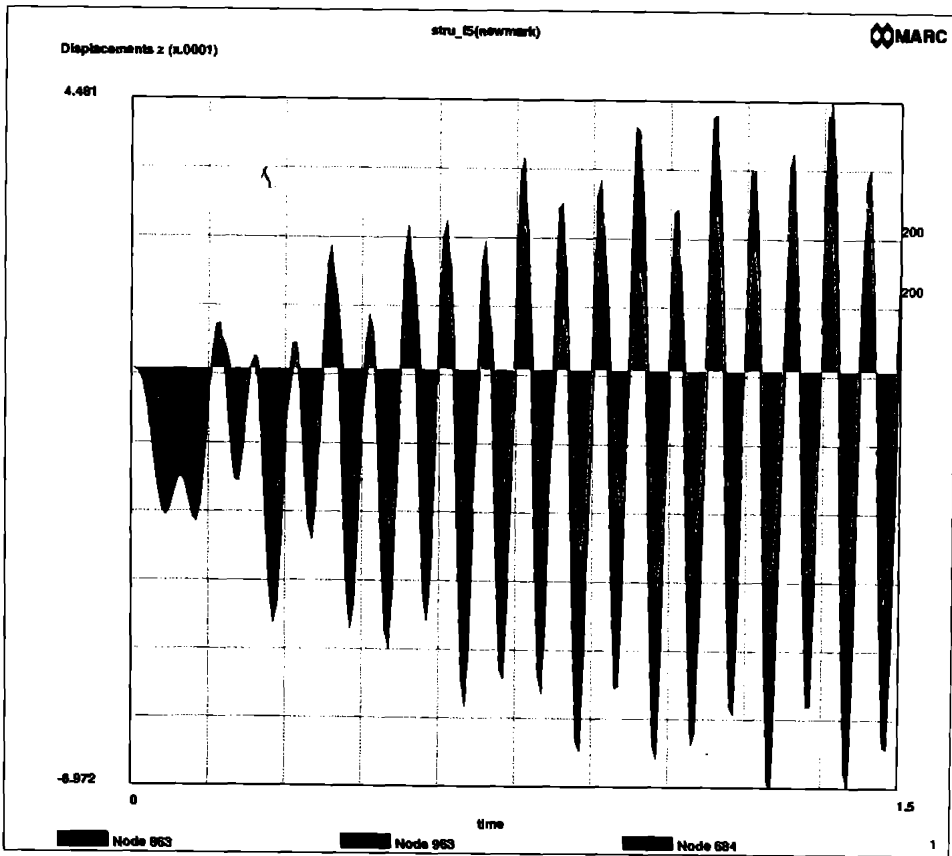


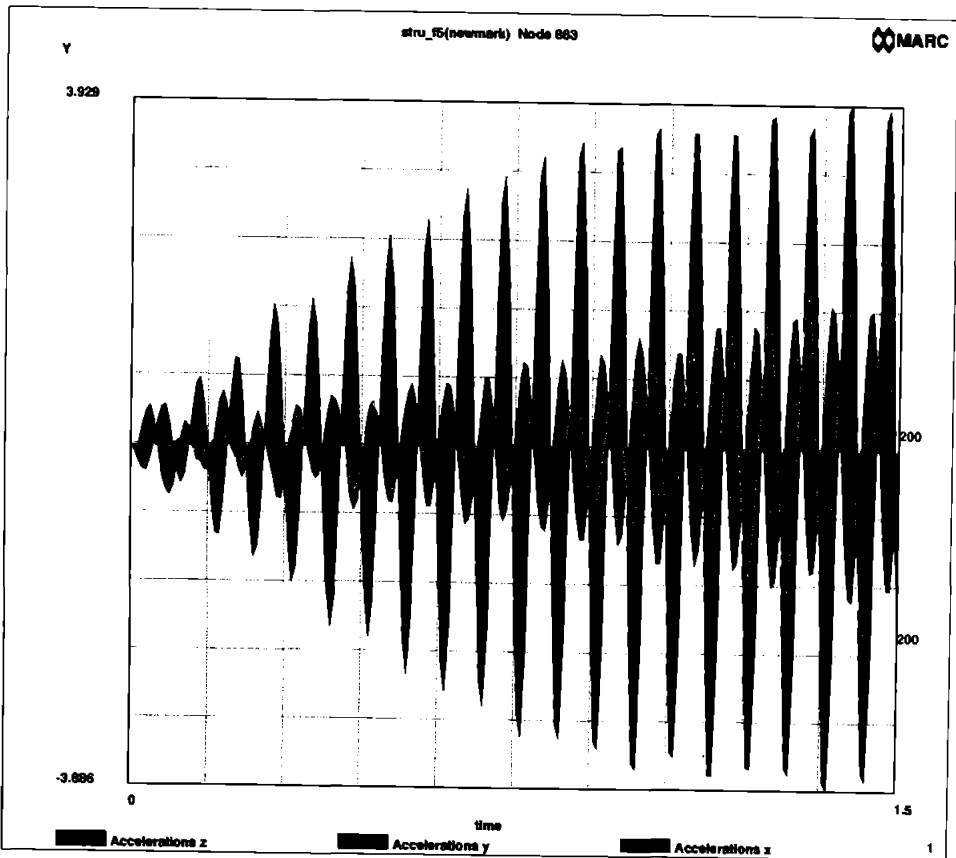


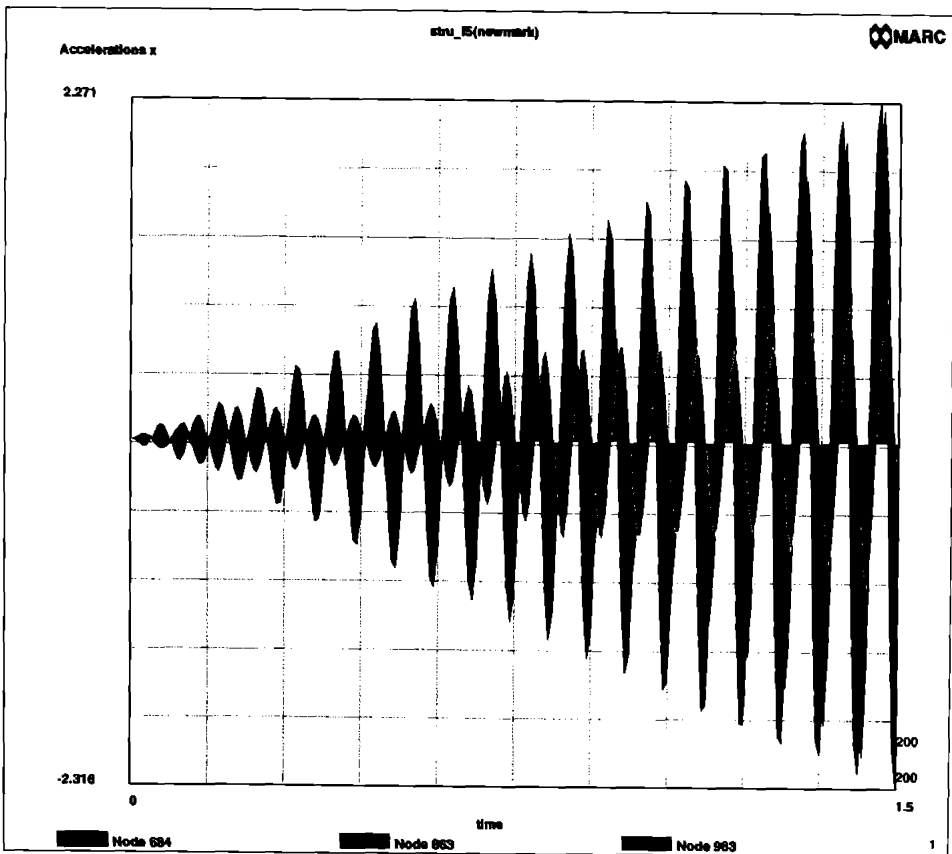


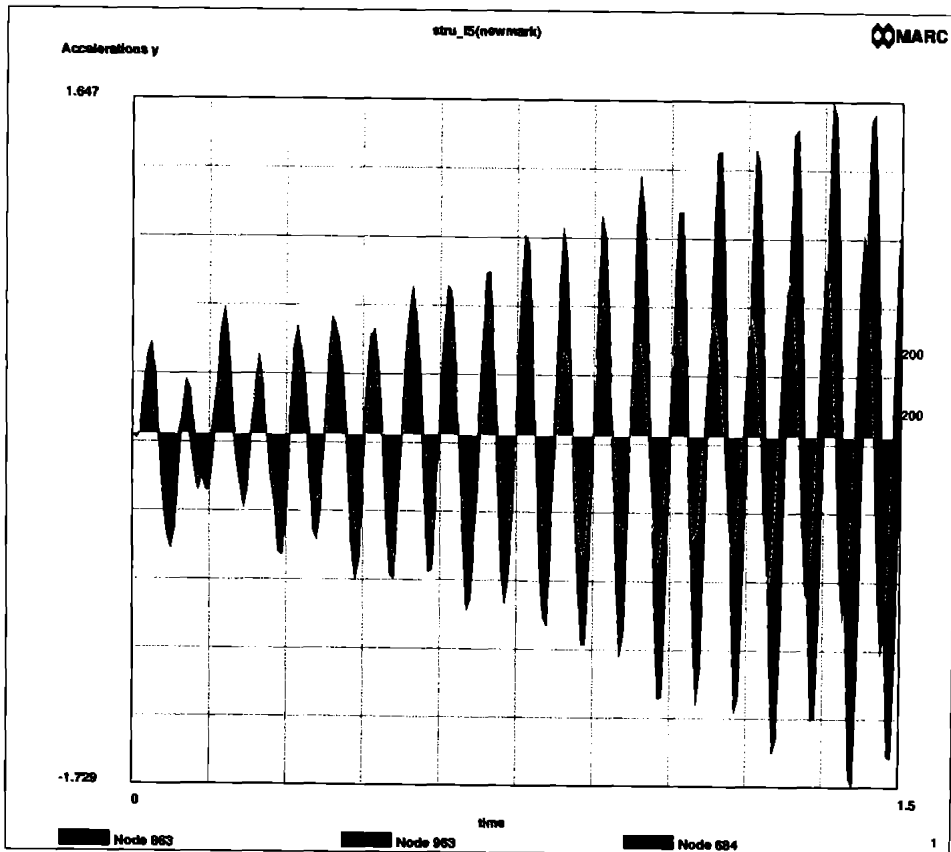


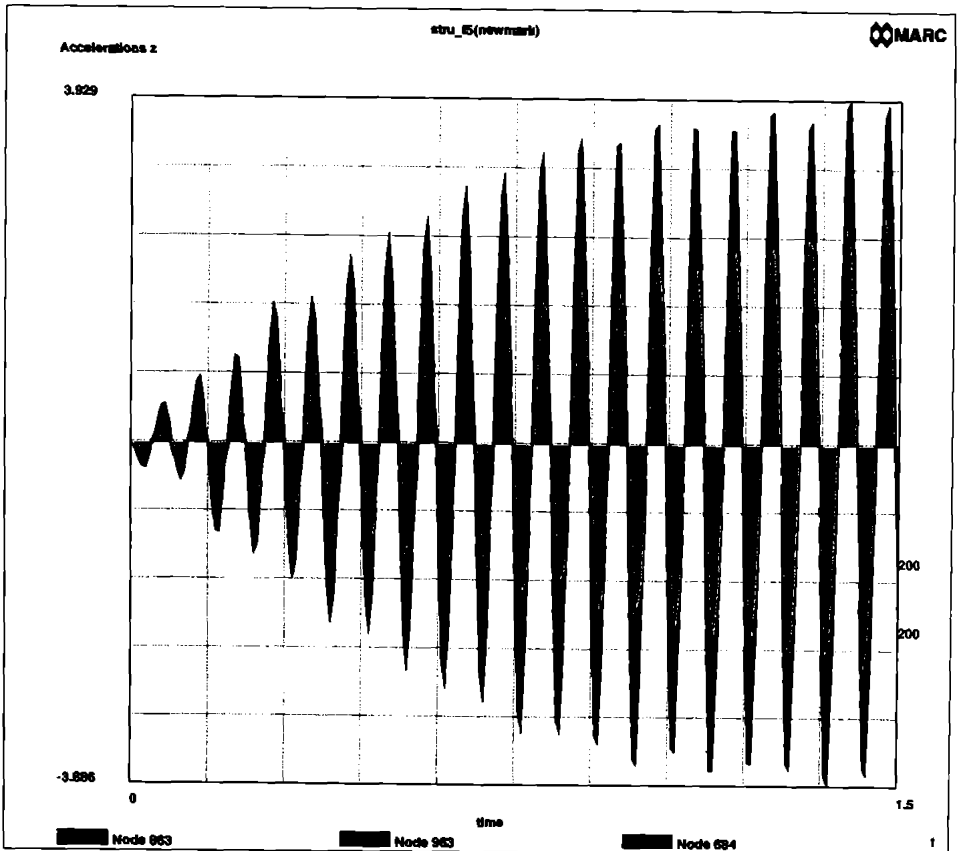


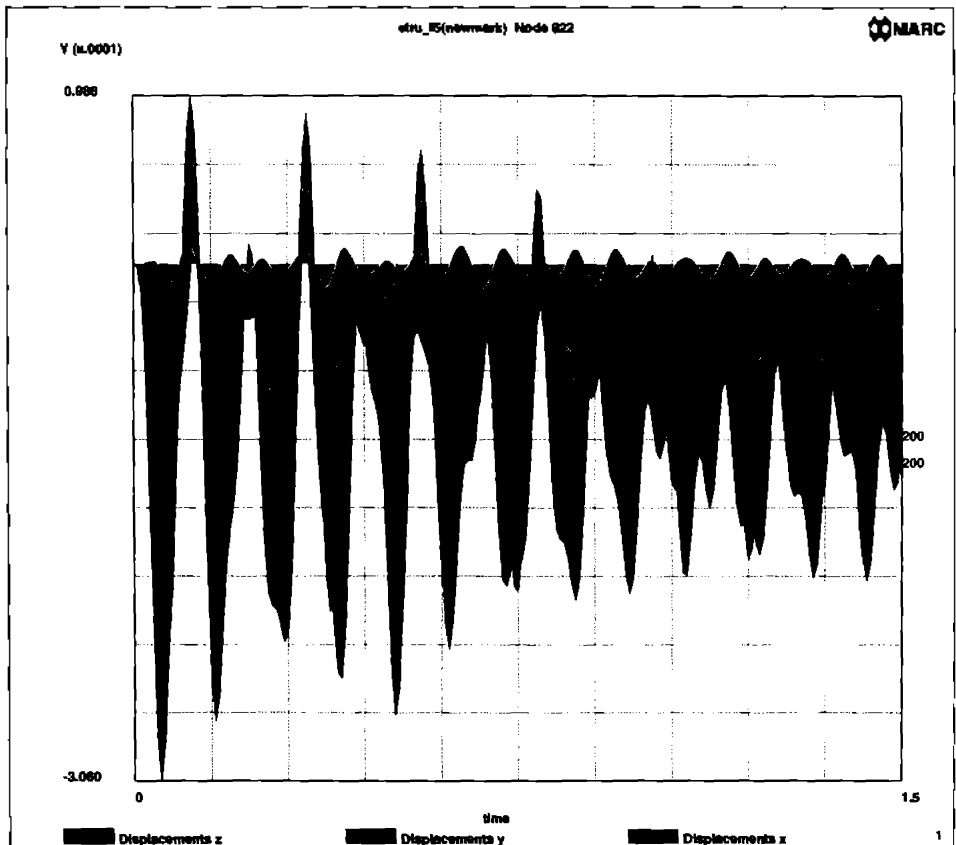


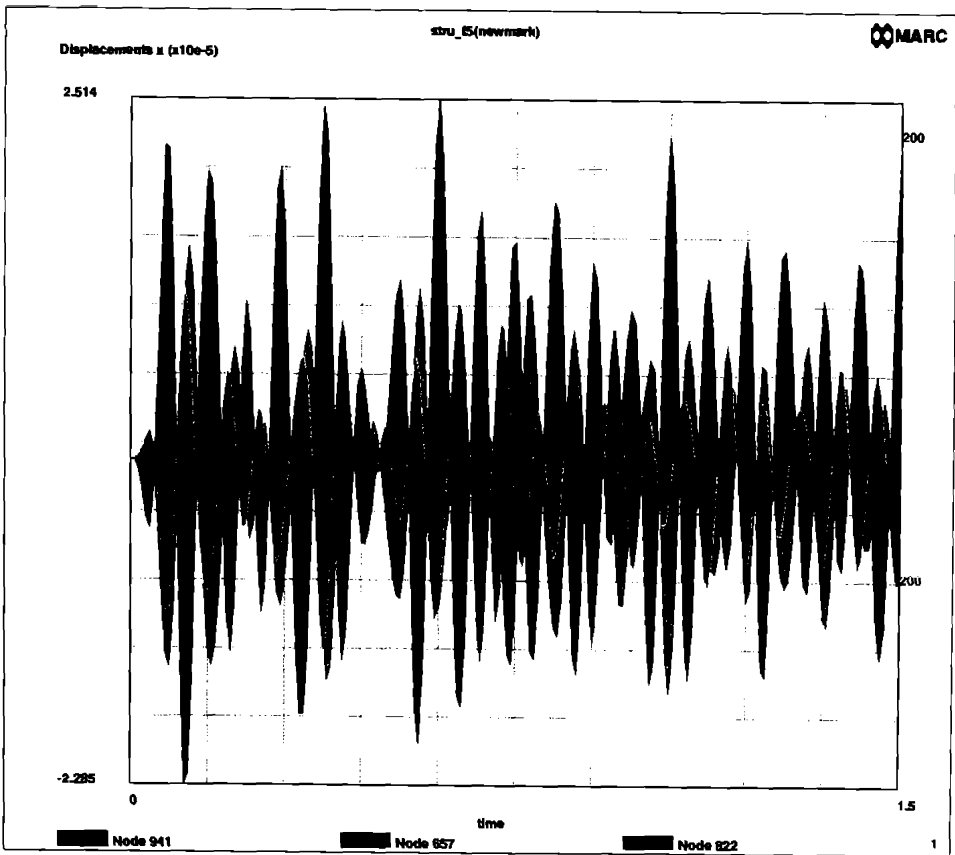


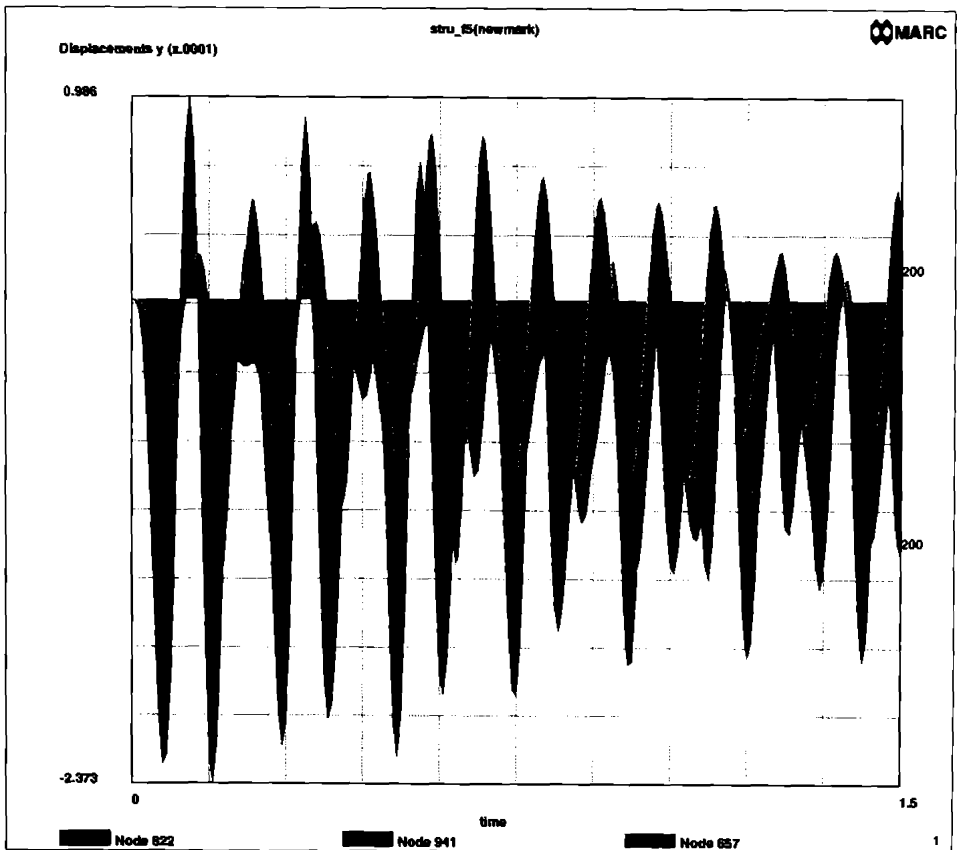


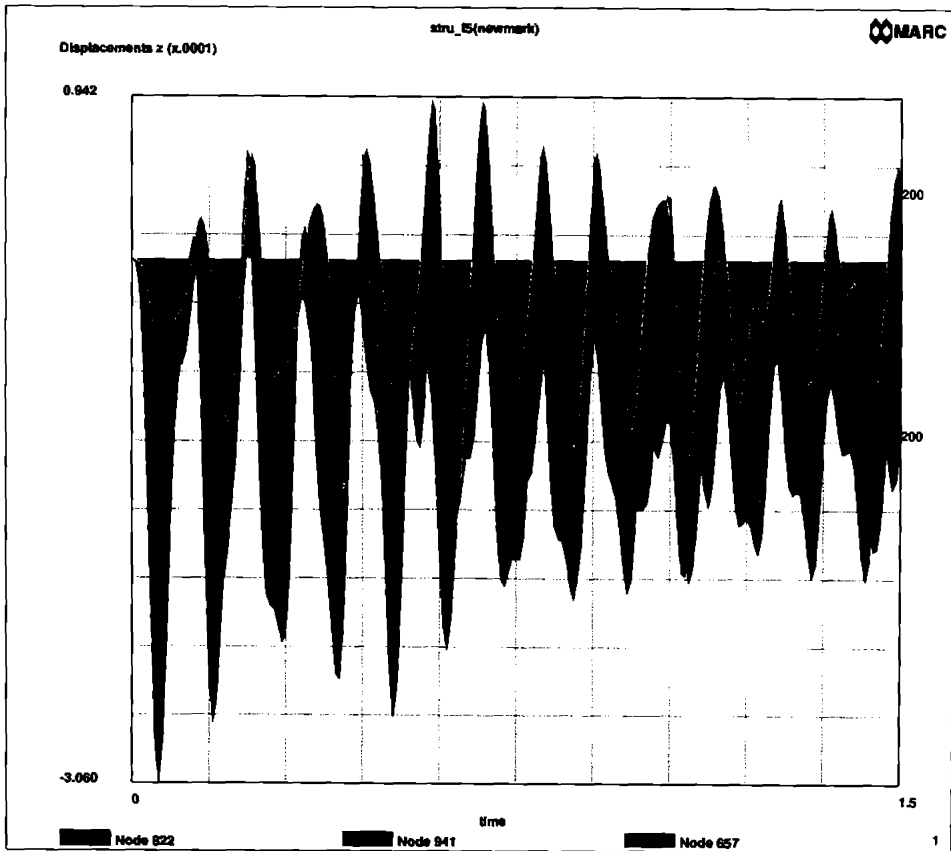


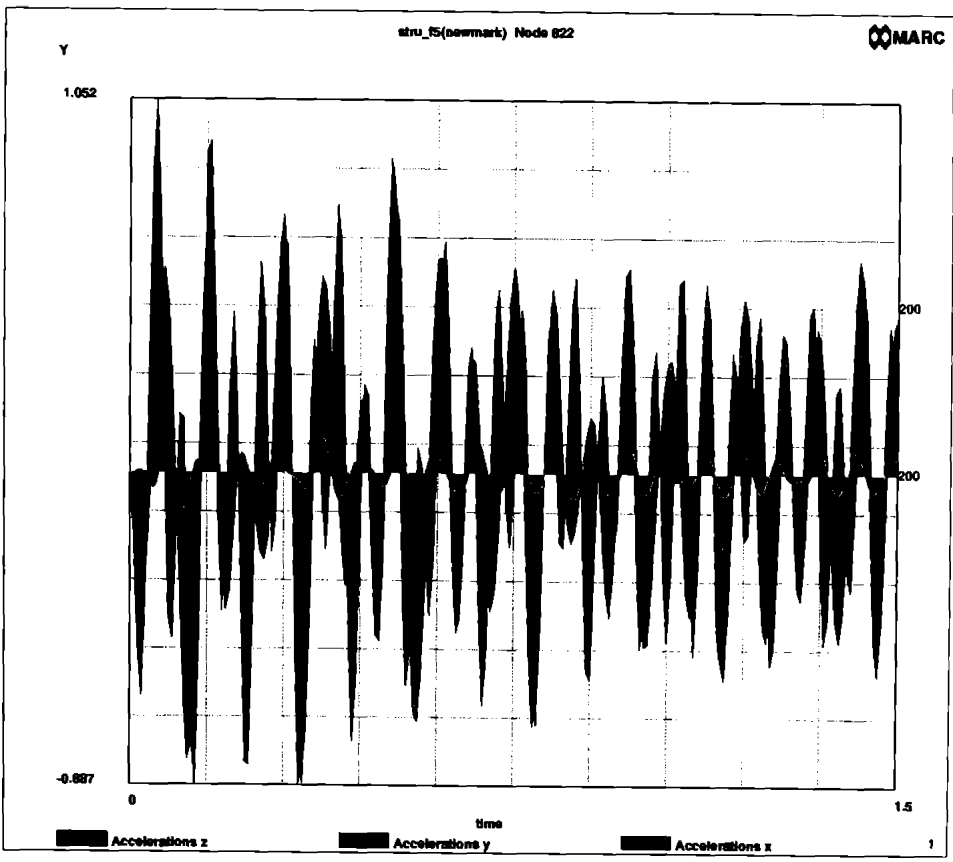


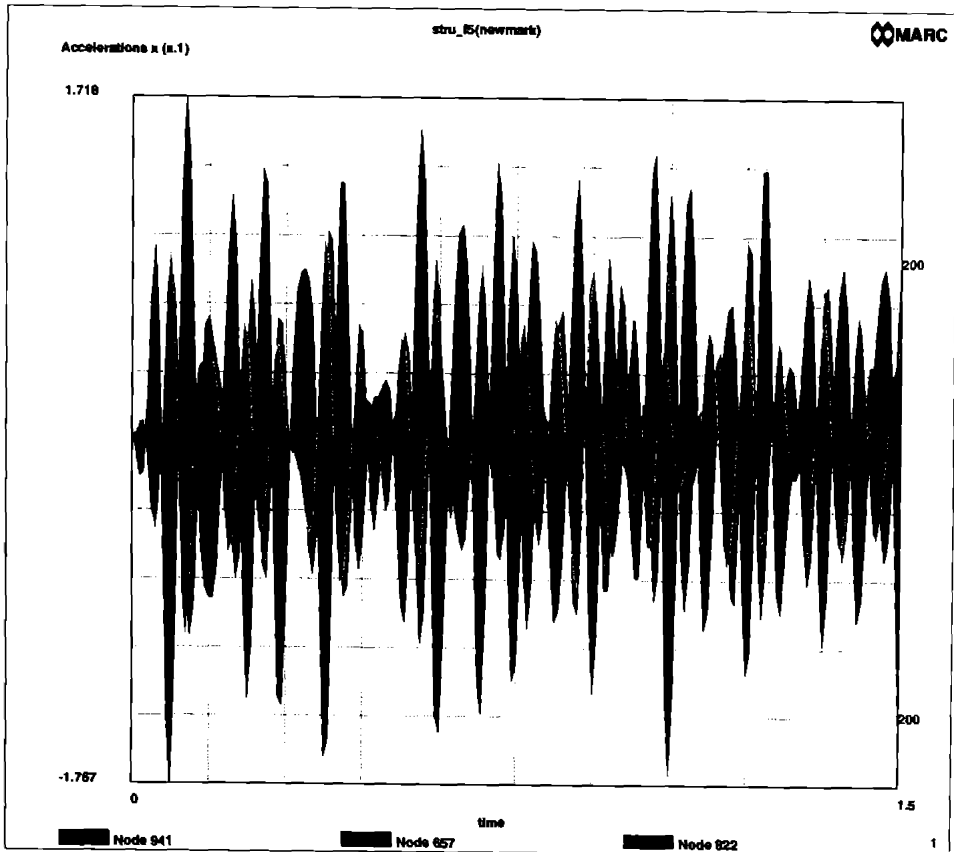


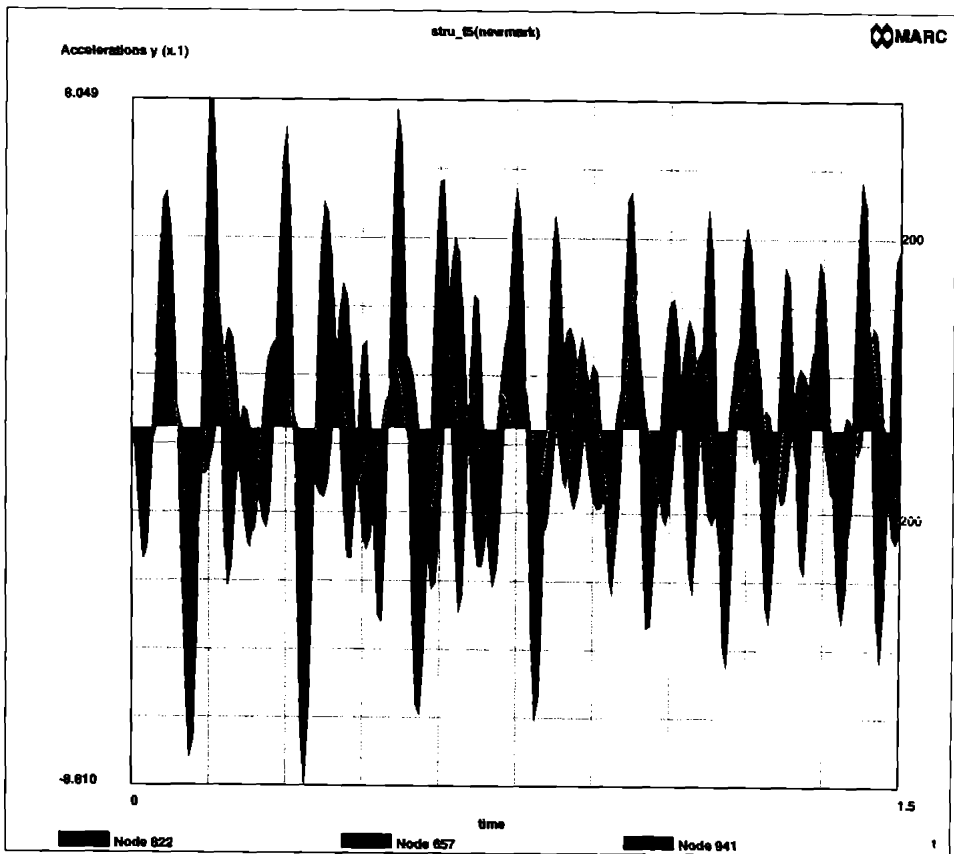


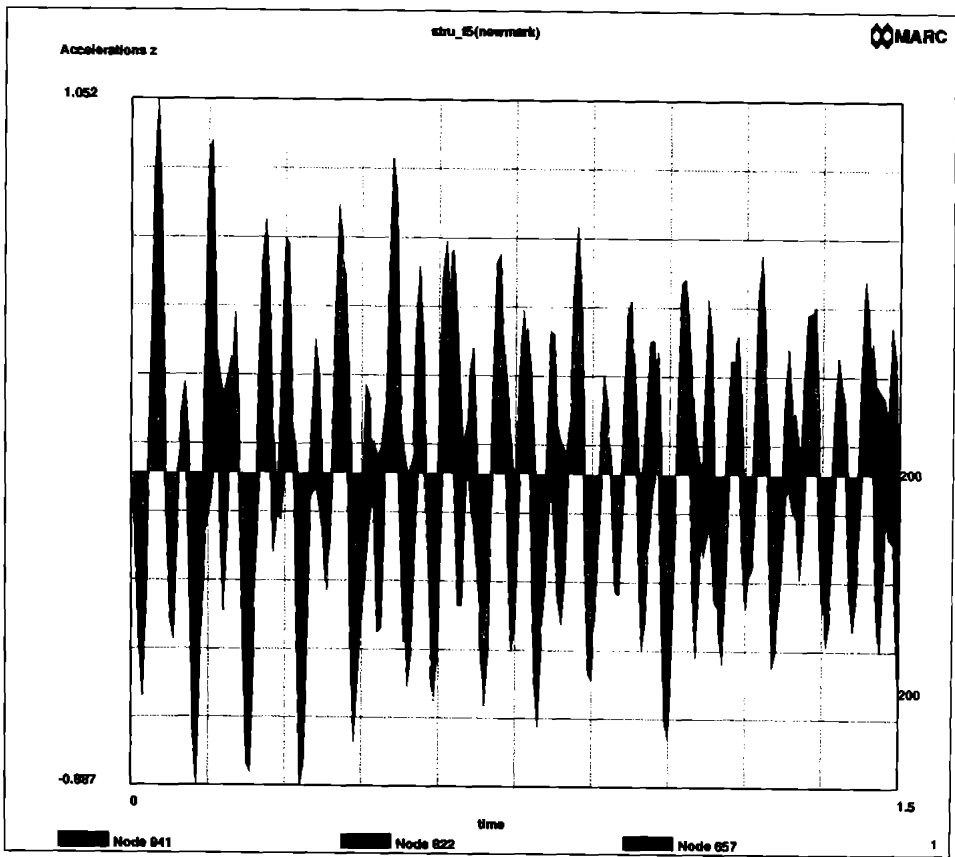


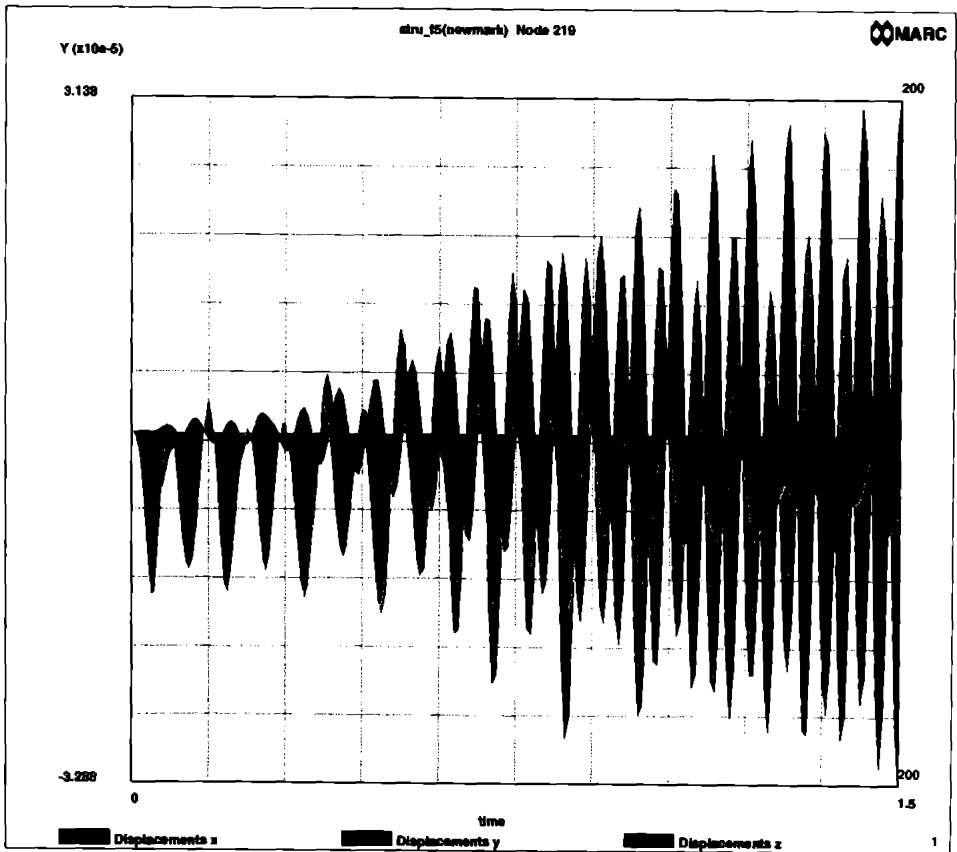


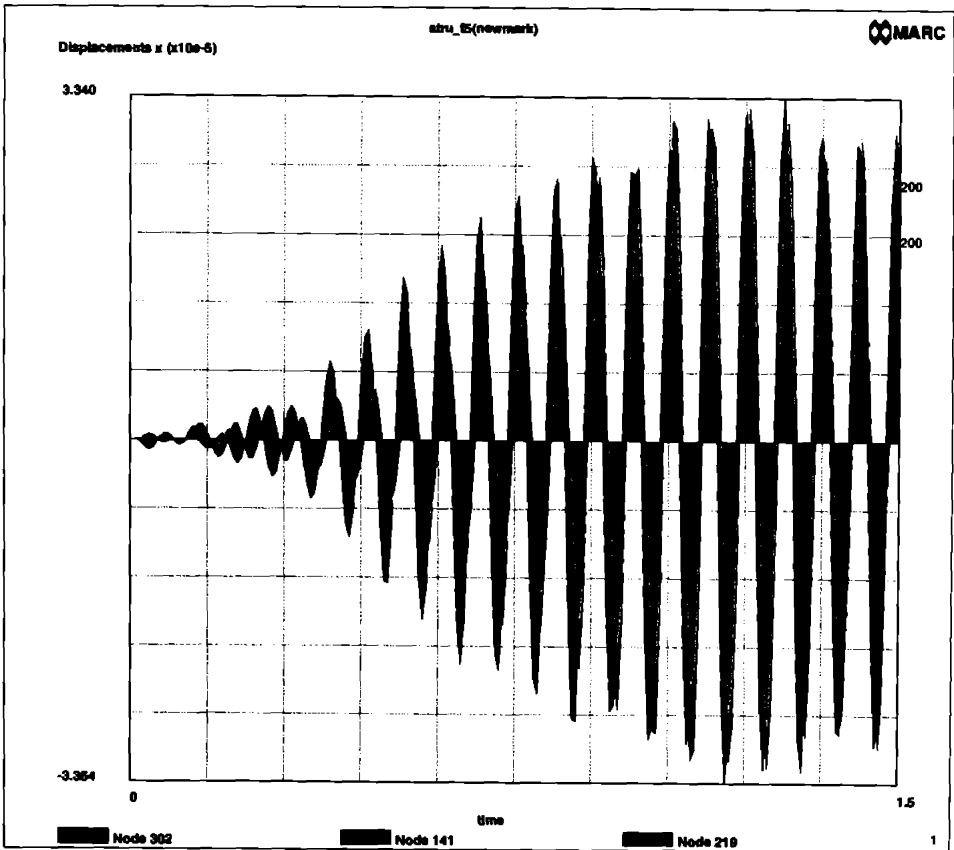


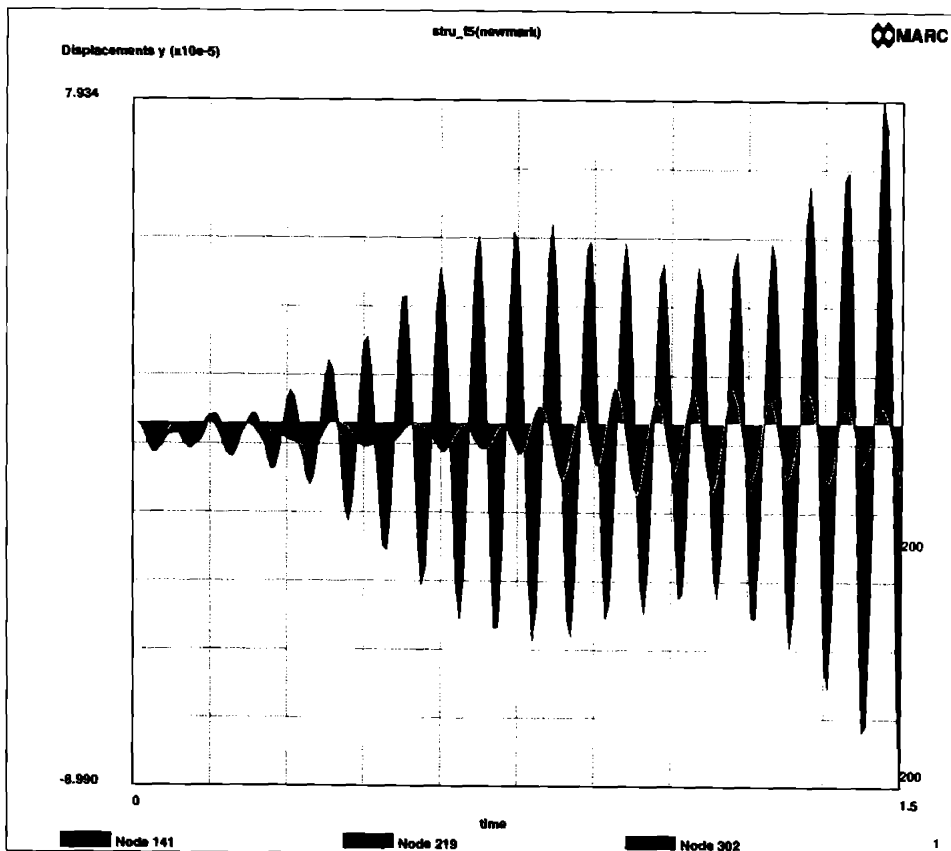


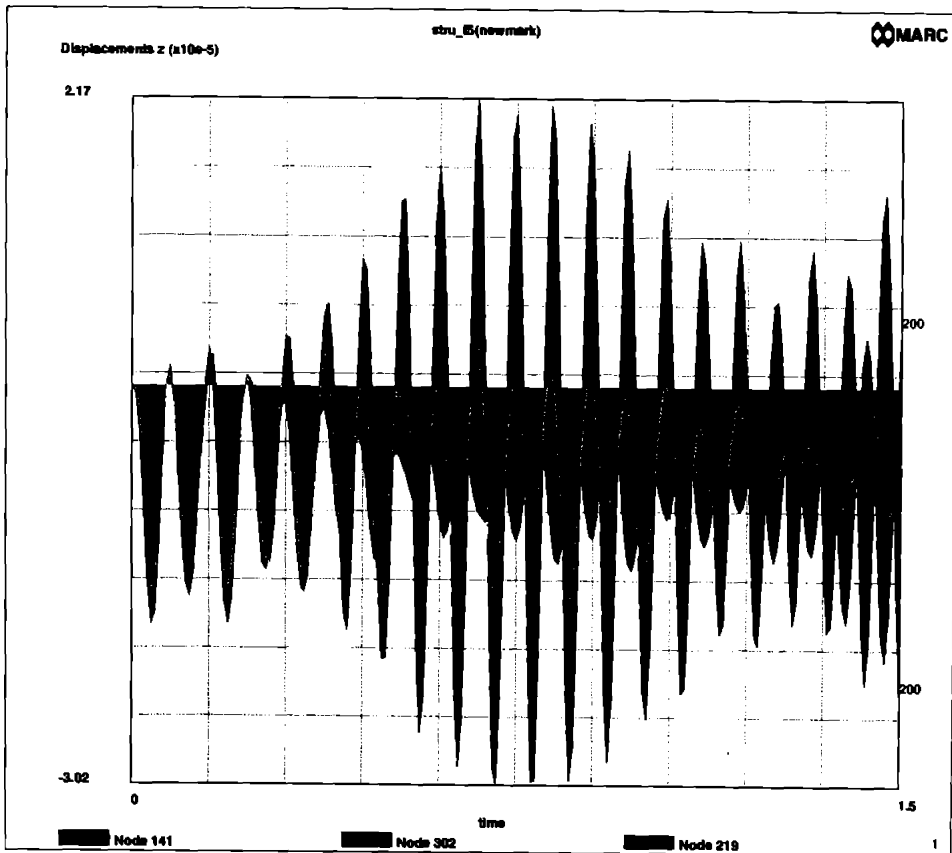


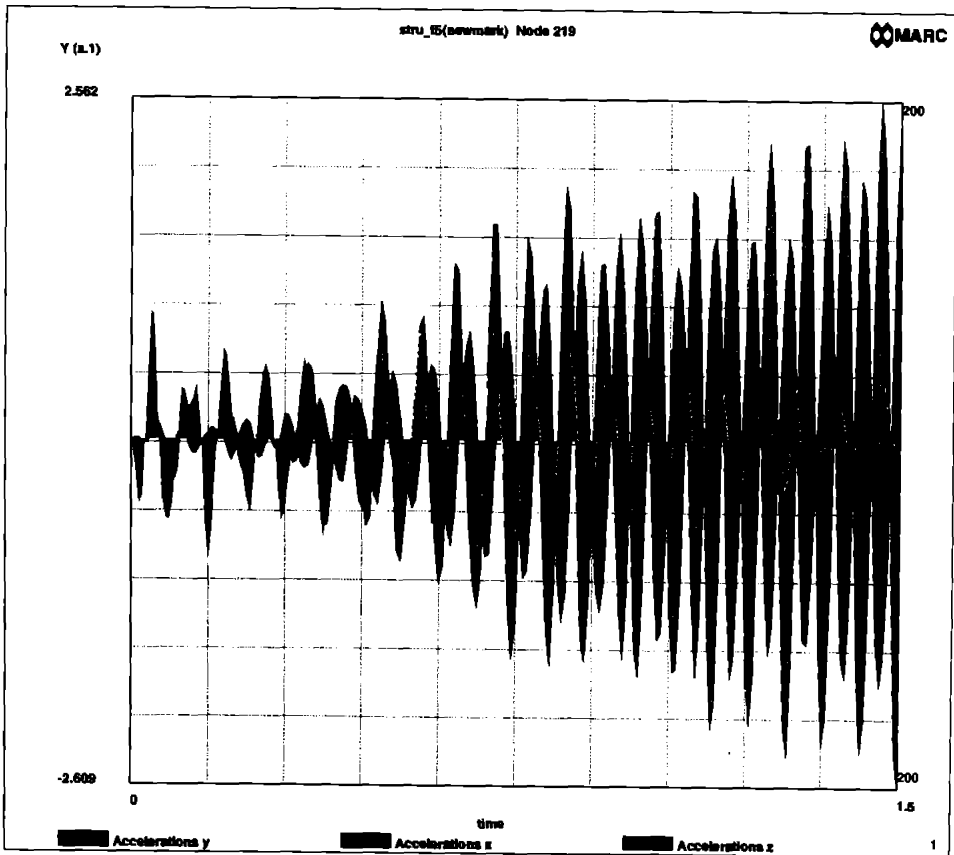


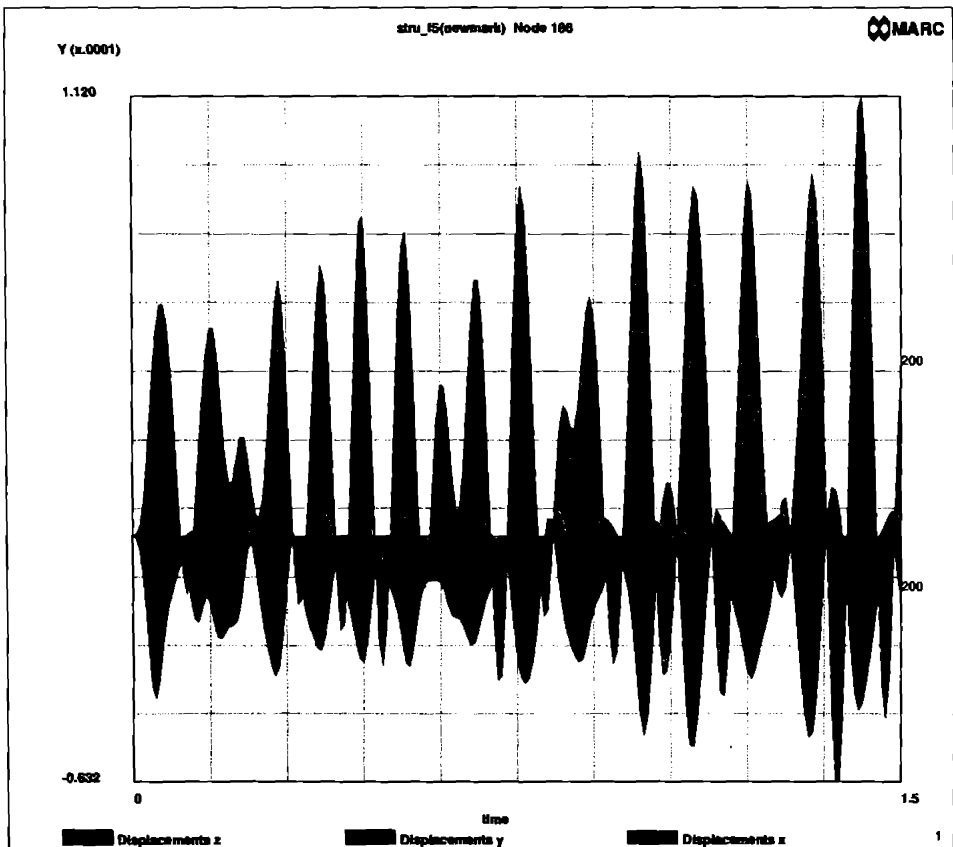


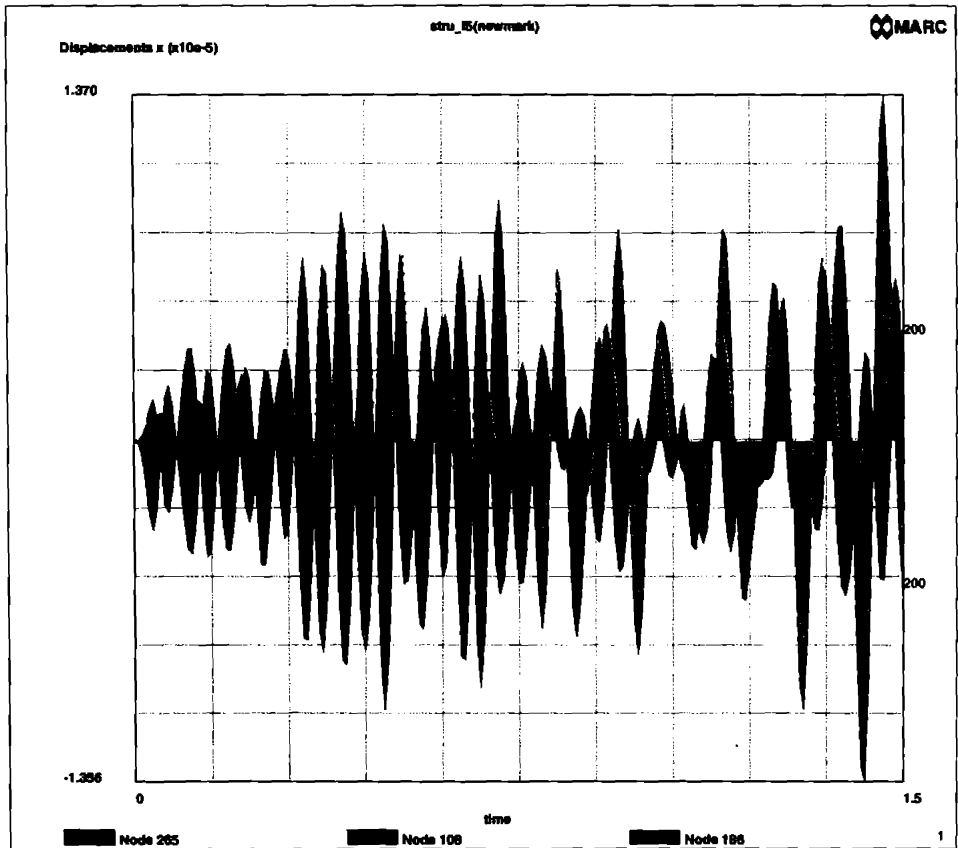


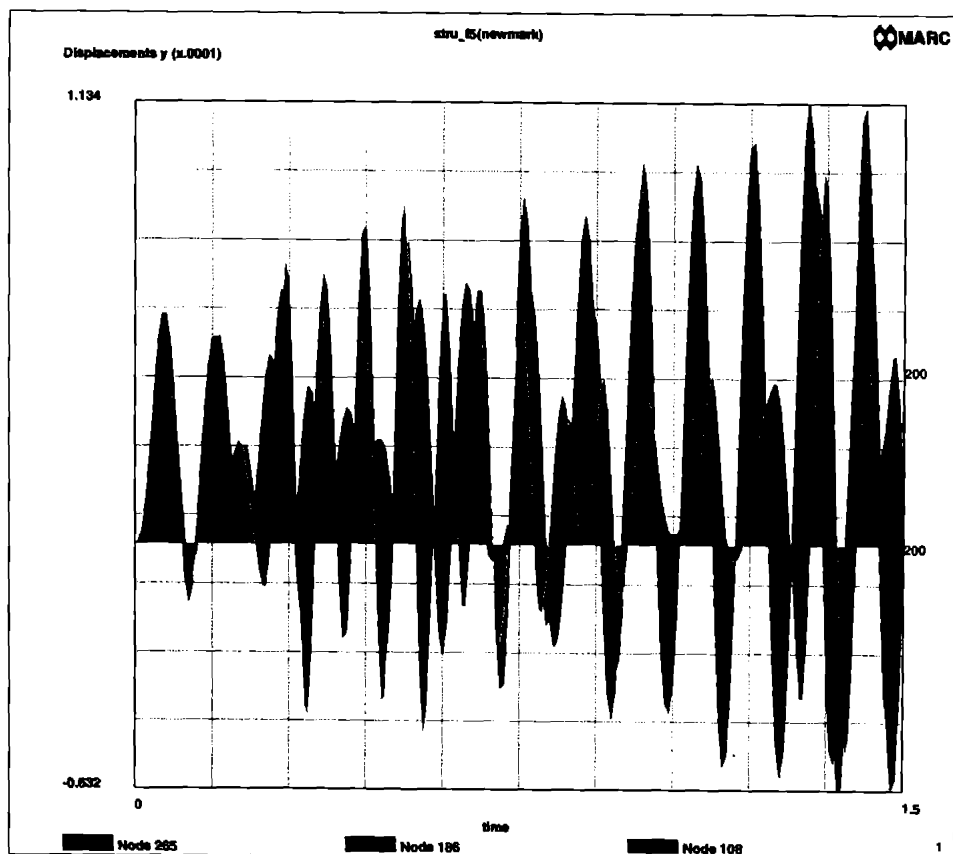


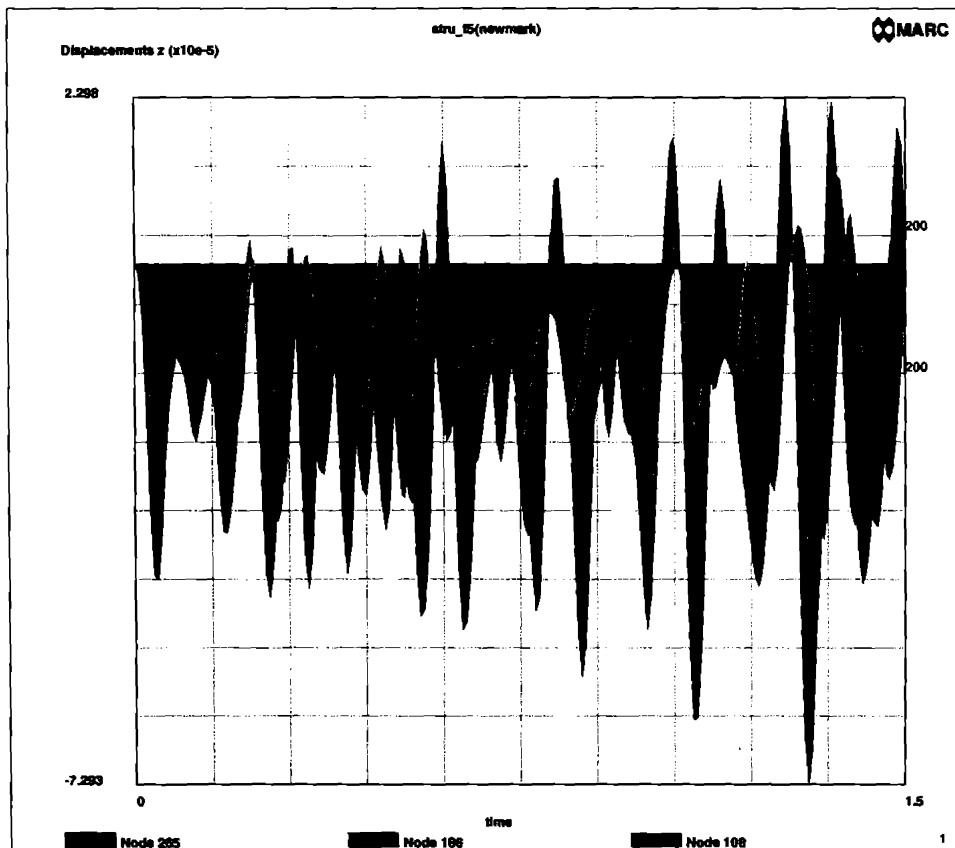


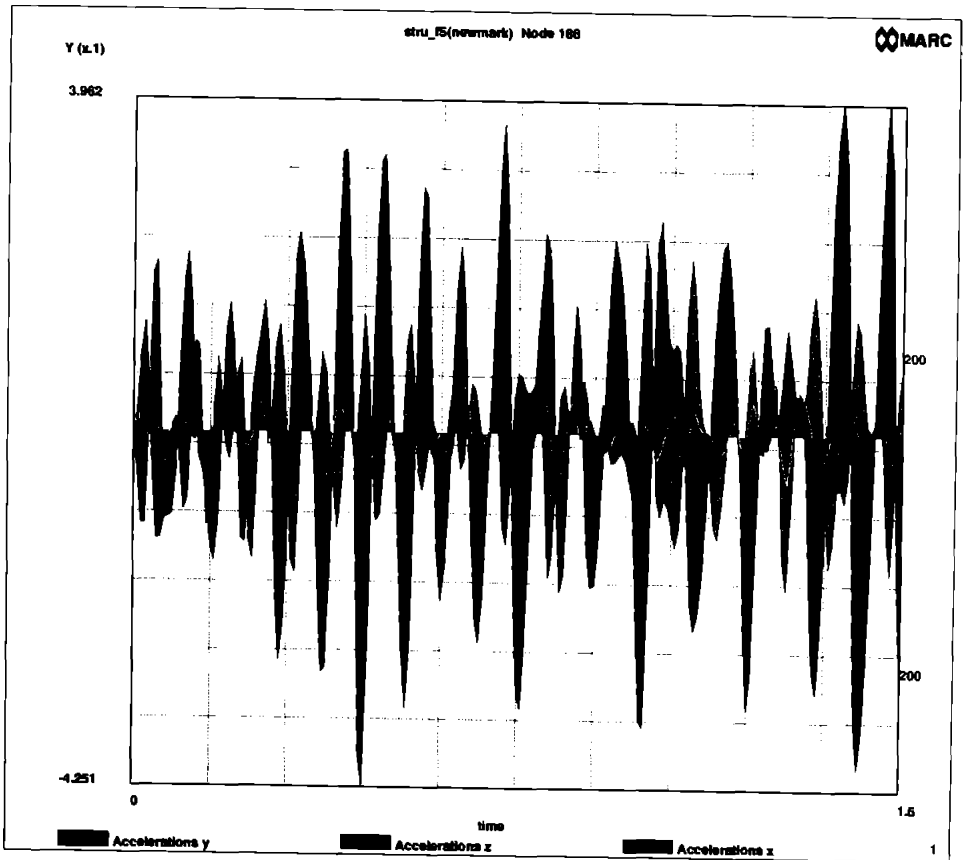


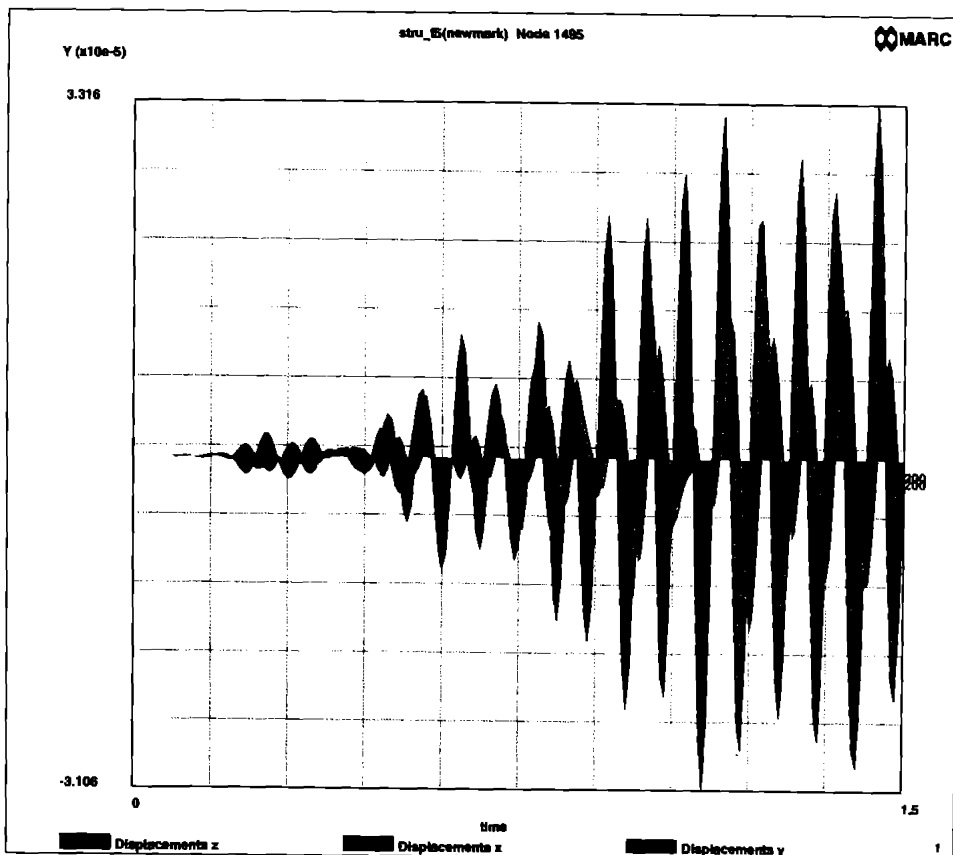


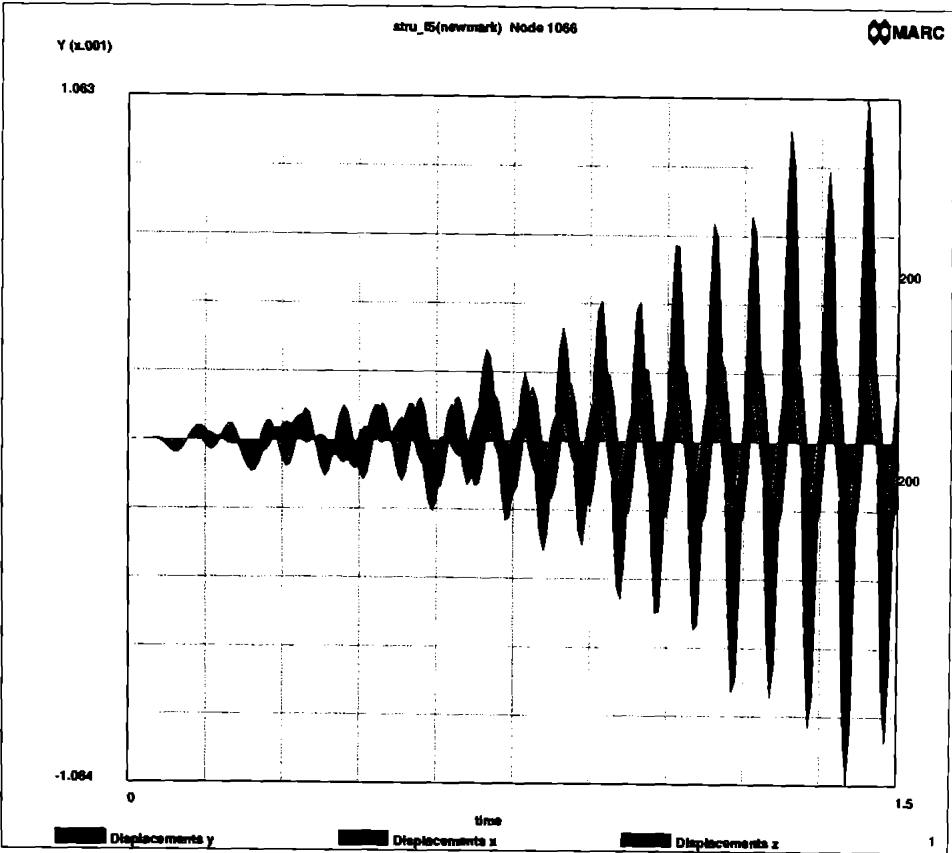


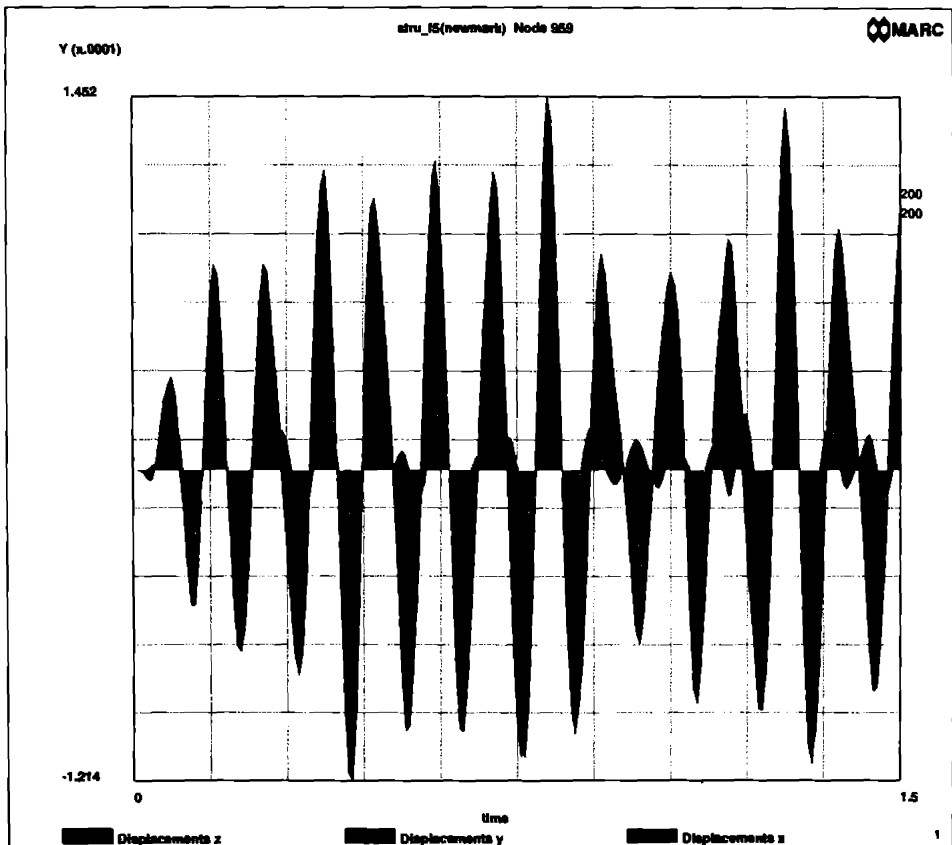


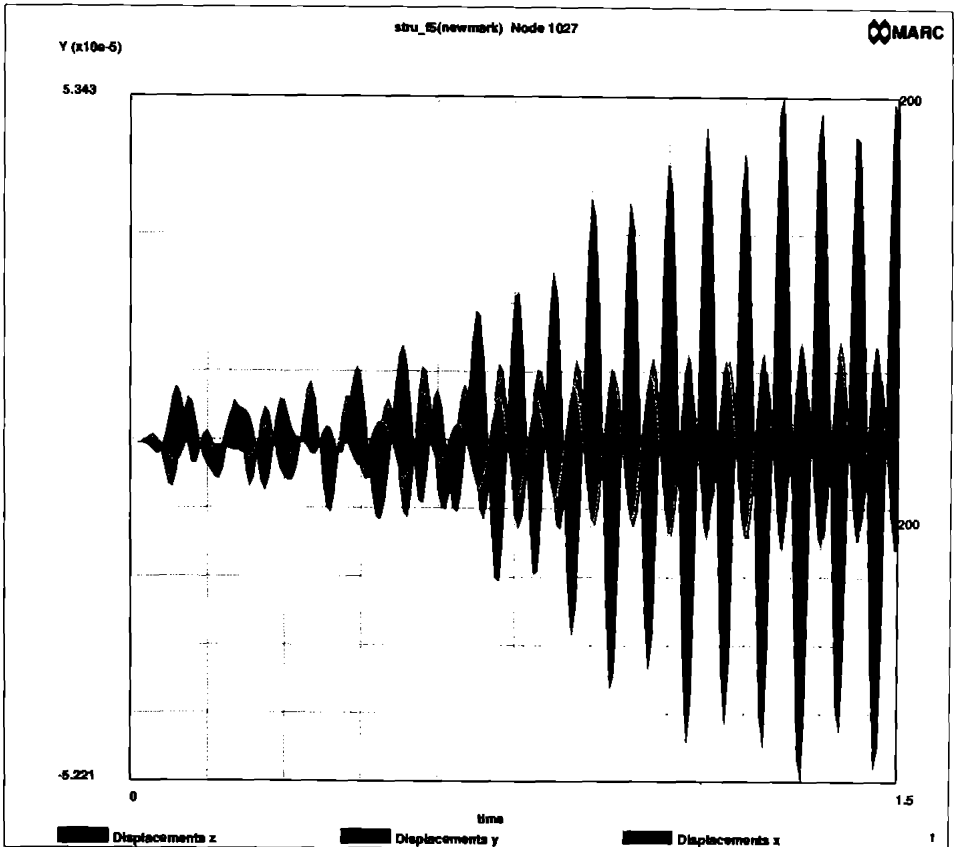


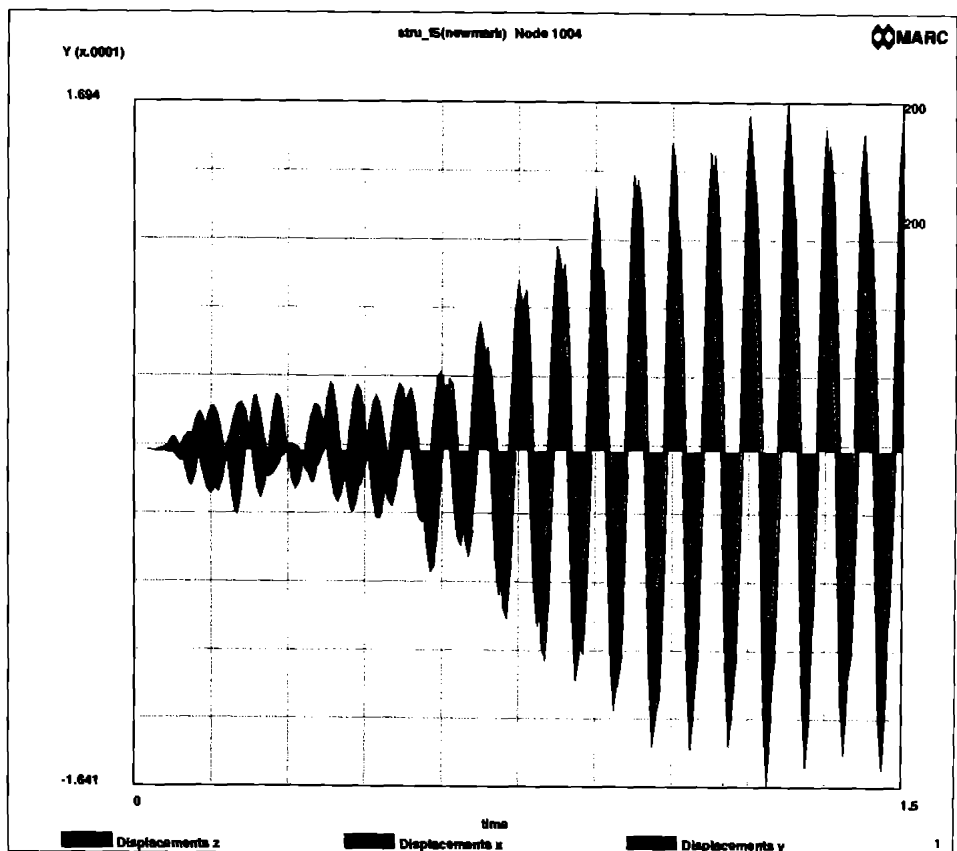


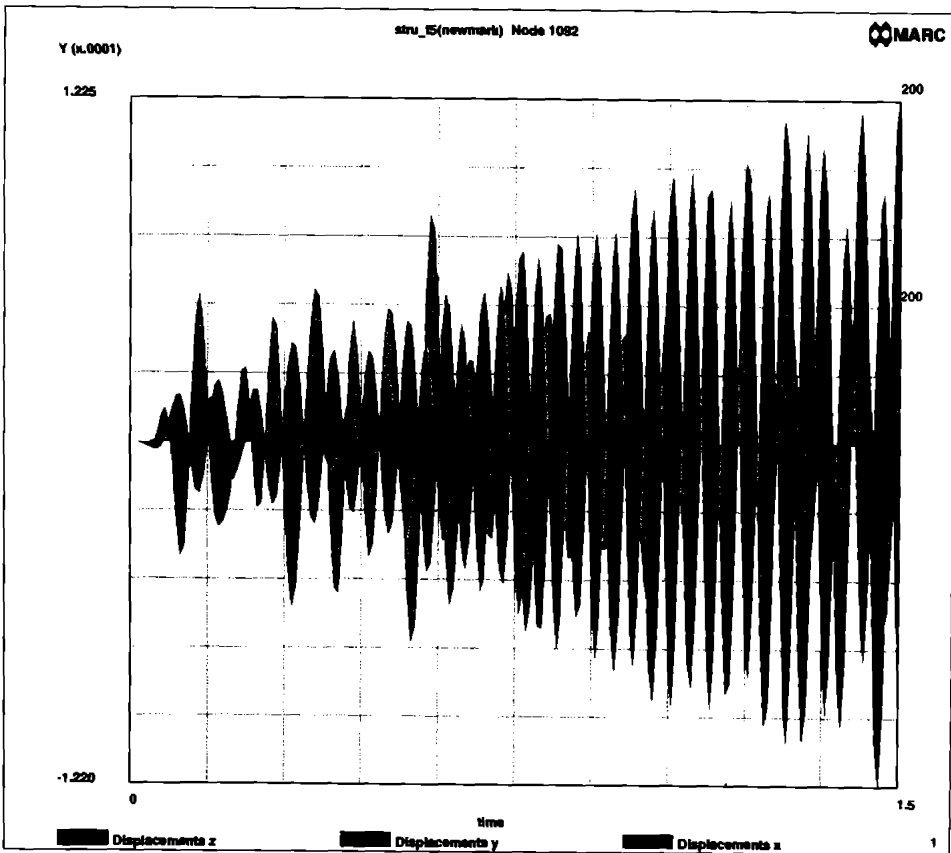


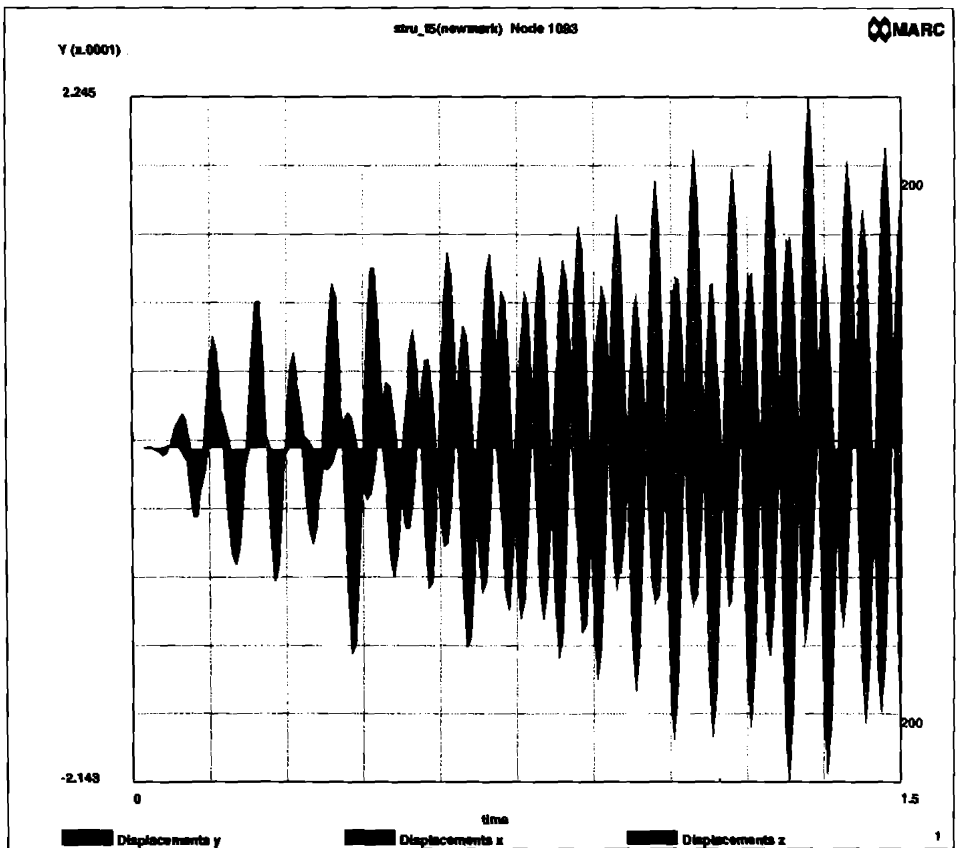


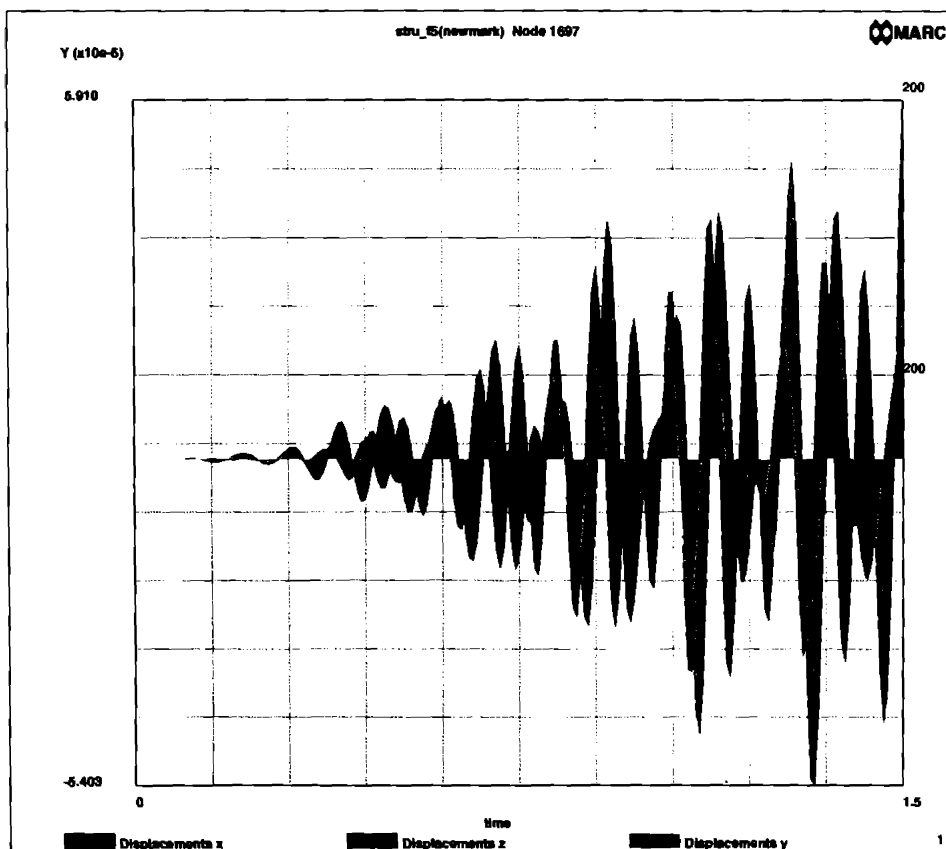


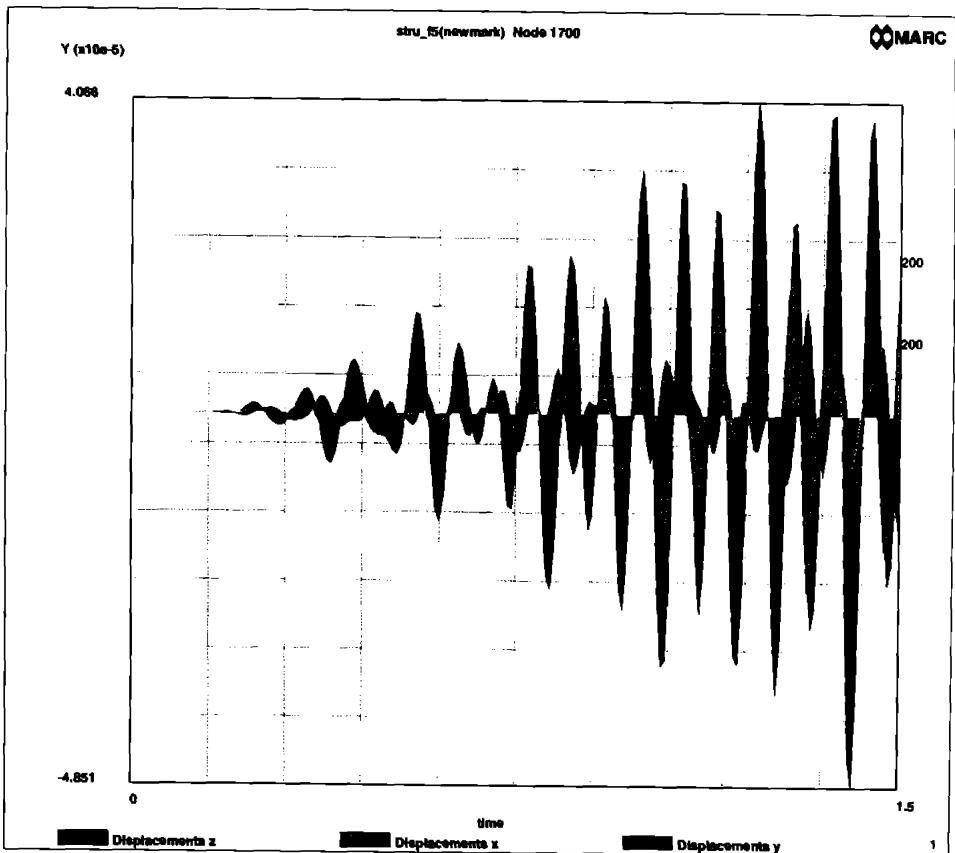












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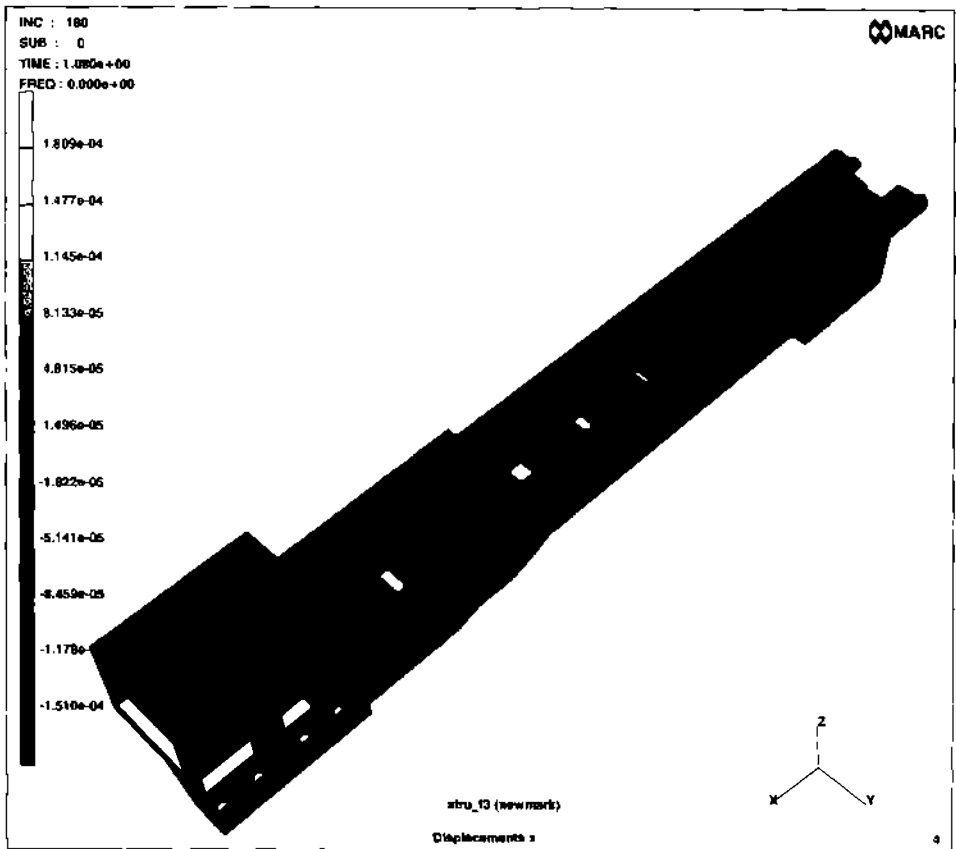
$$n=1000 \text{ rpm}$$

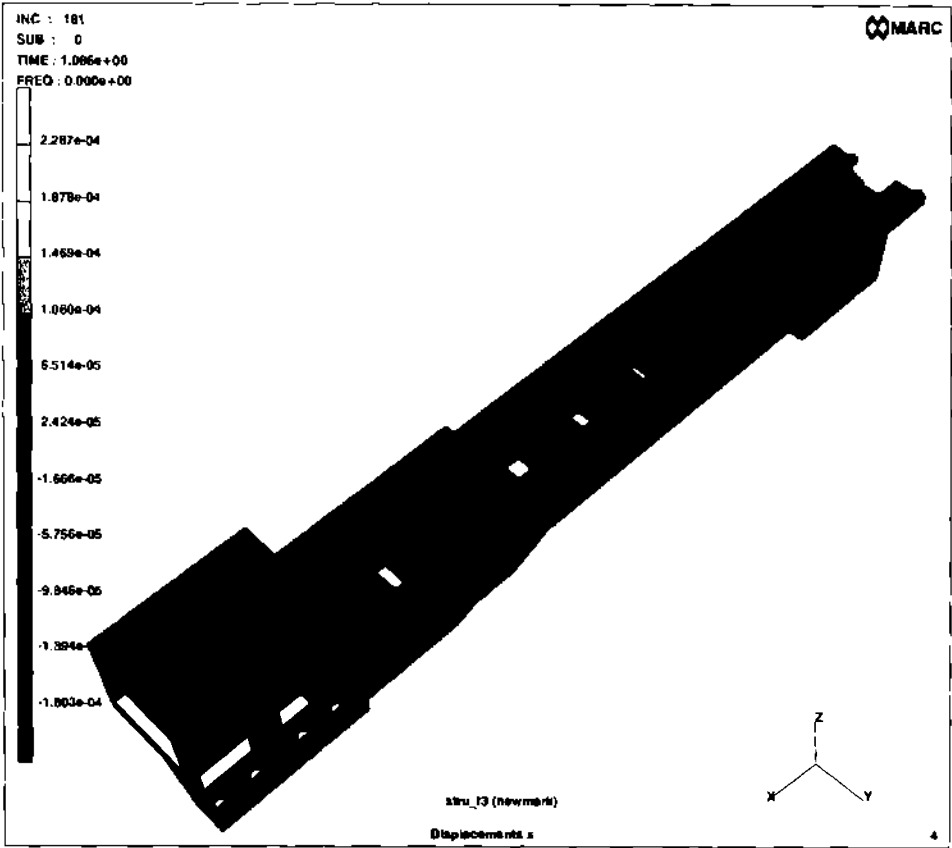
$$t = 1.5 \text{ s} ; \Delta t = 0.006 \text{ ms}$$

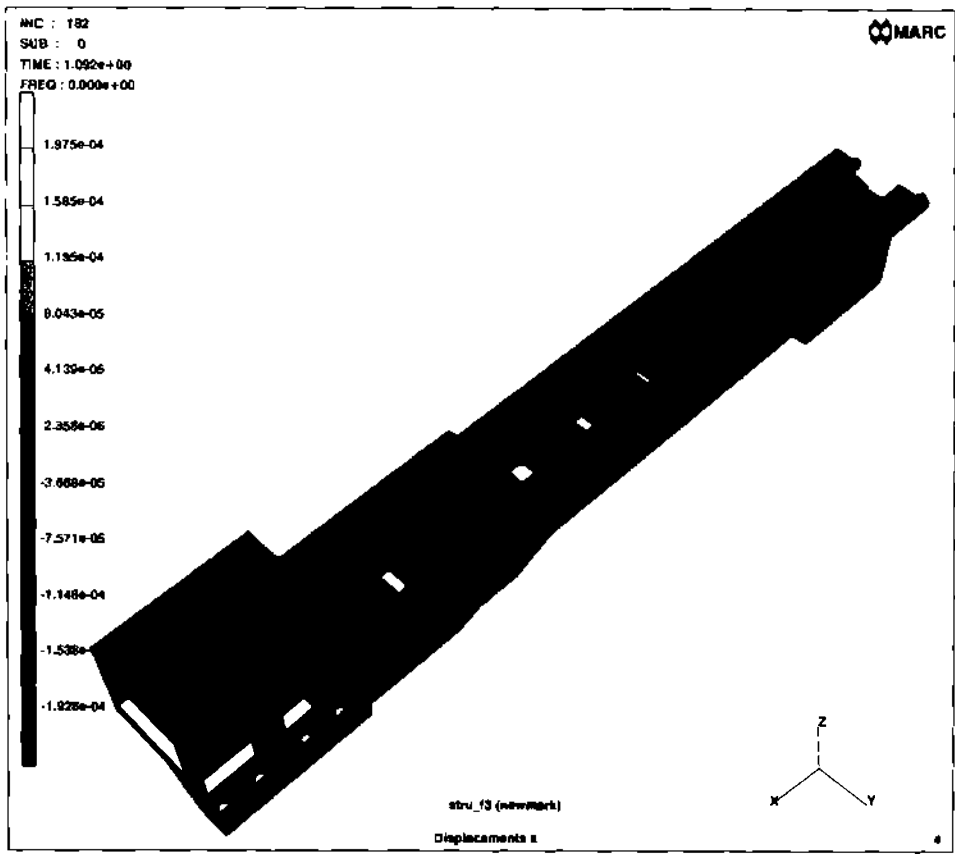
$$p_{nod} = \bar{p}_{o,nod} + p_o \cos \omega t$$

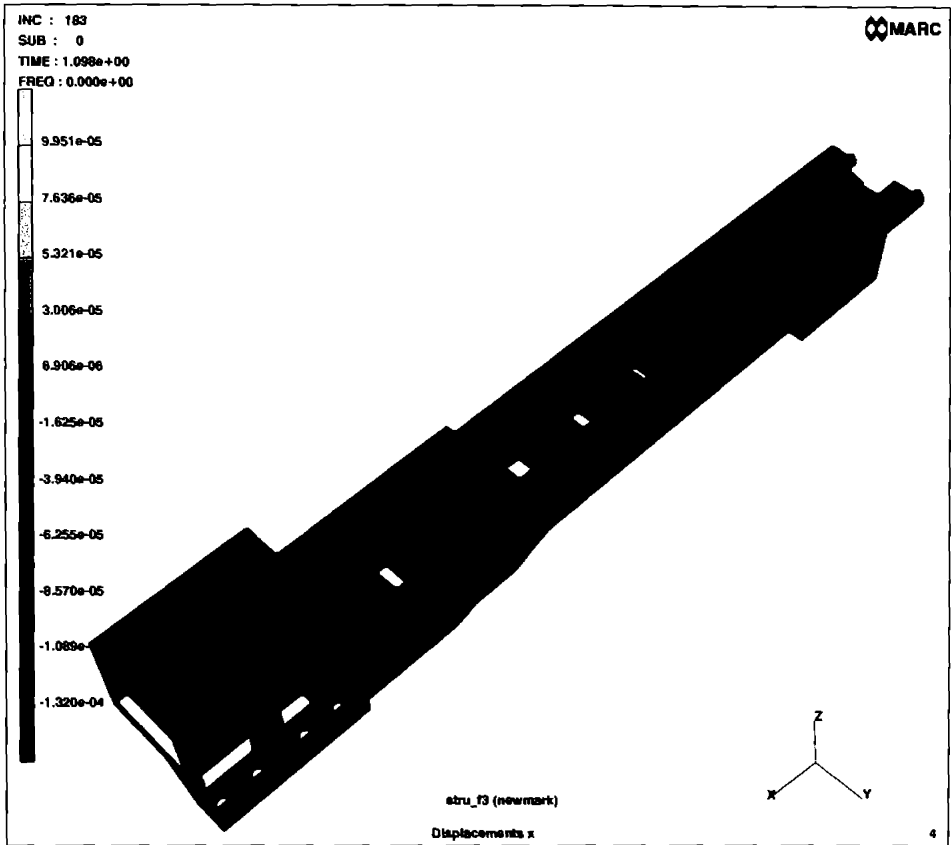
$$p_o = 0.2 \bar{p}_{o,nod}$$

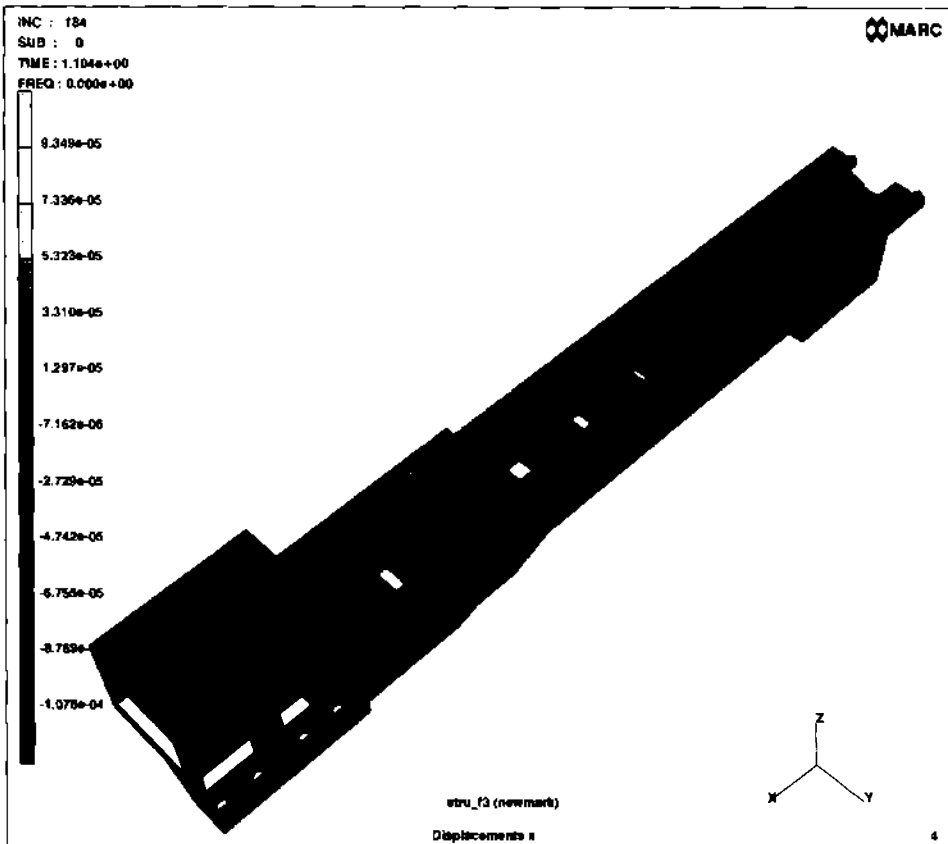
amortizare structurala

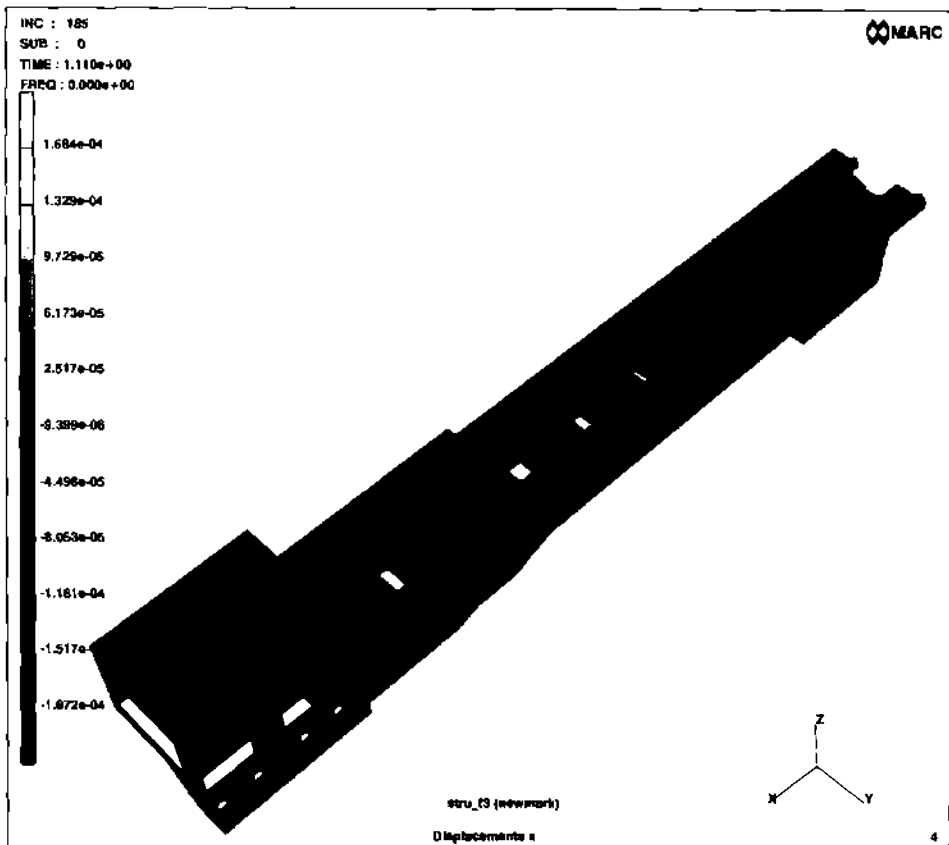


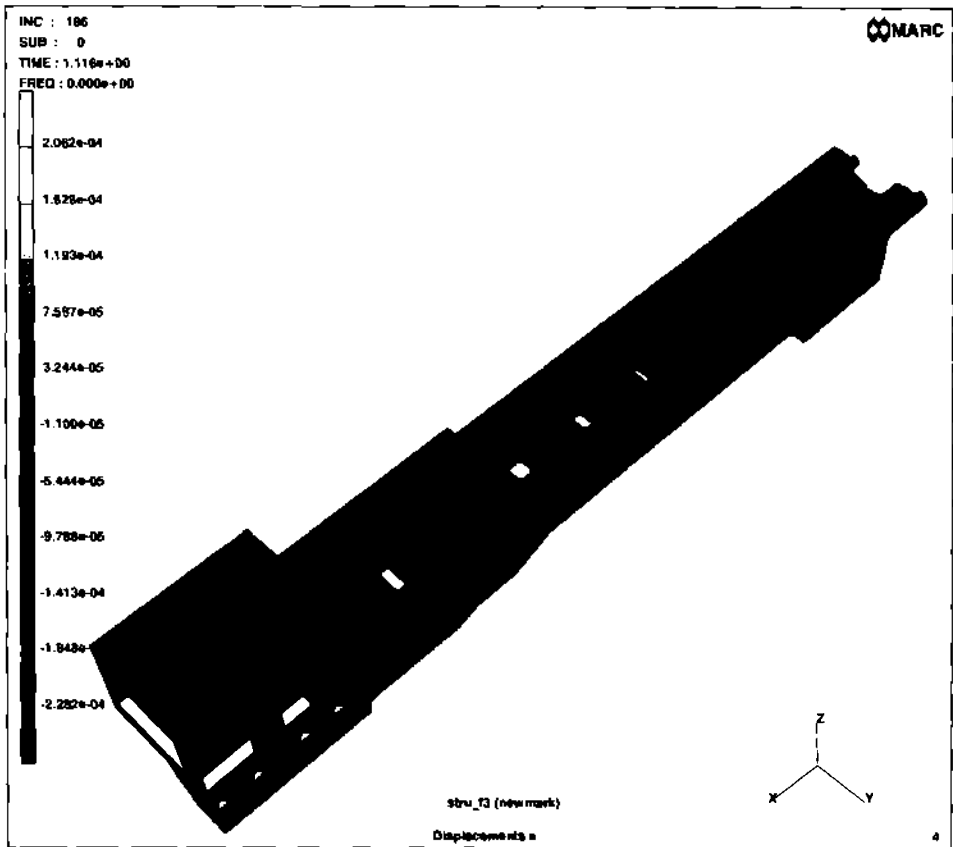


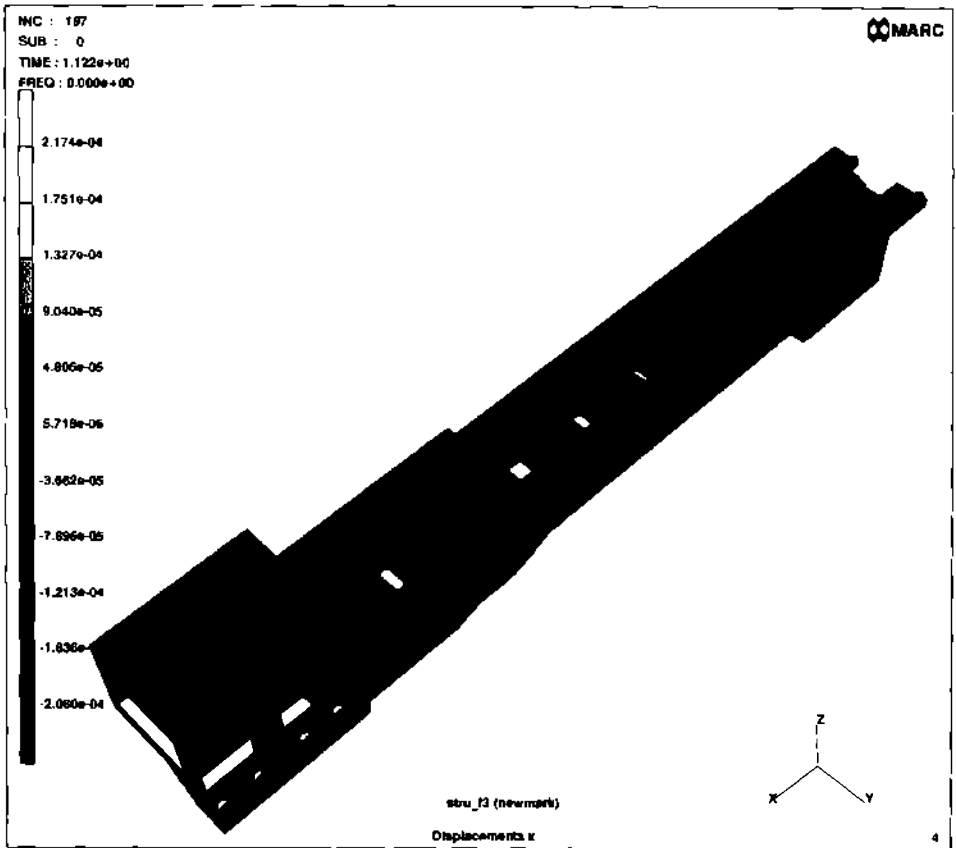


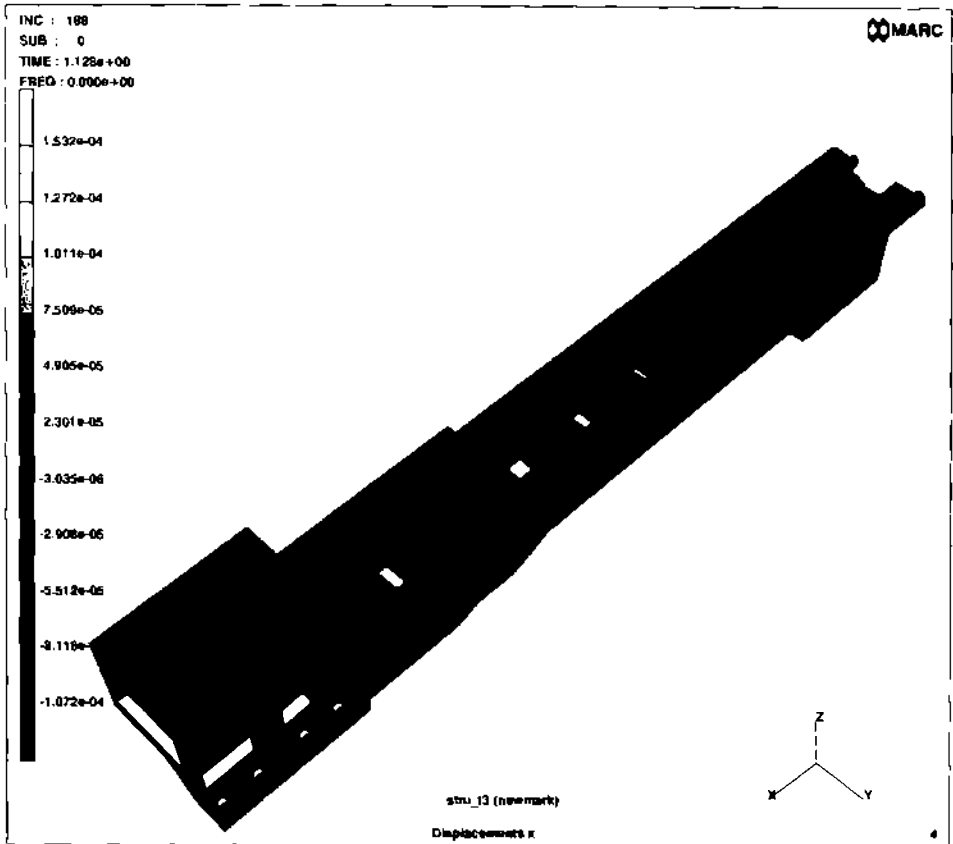


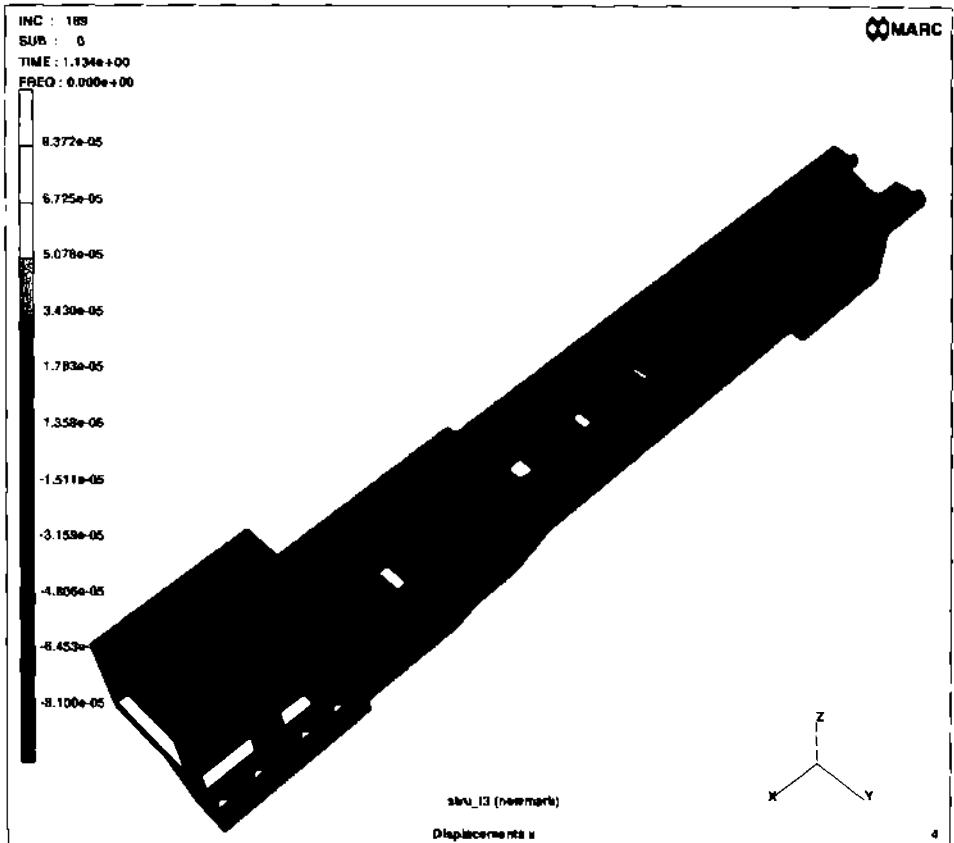


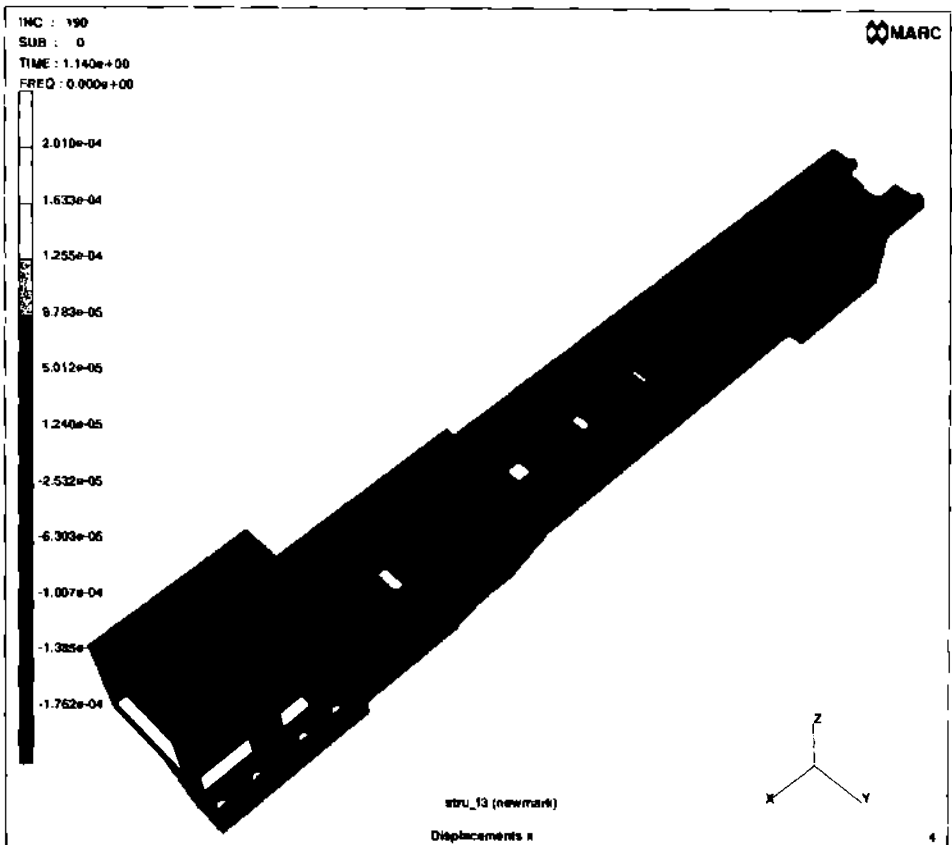


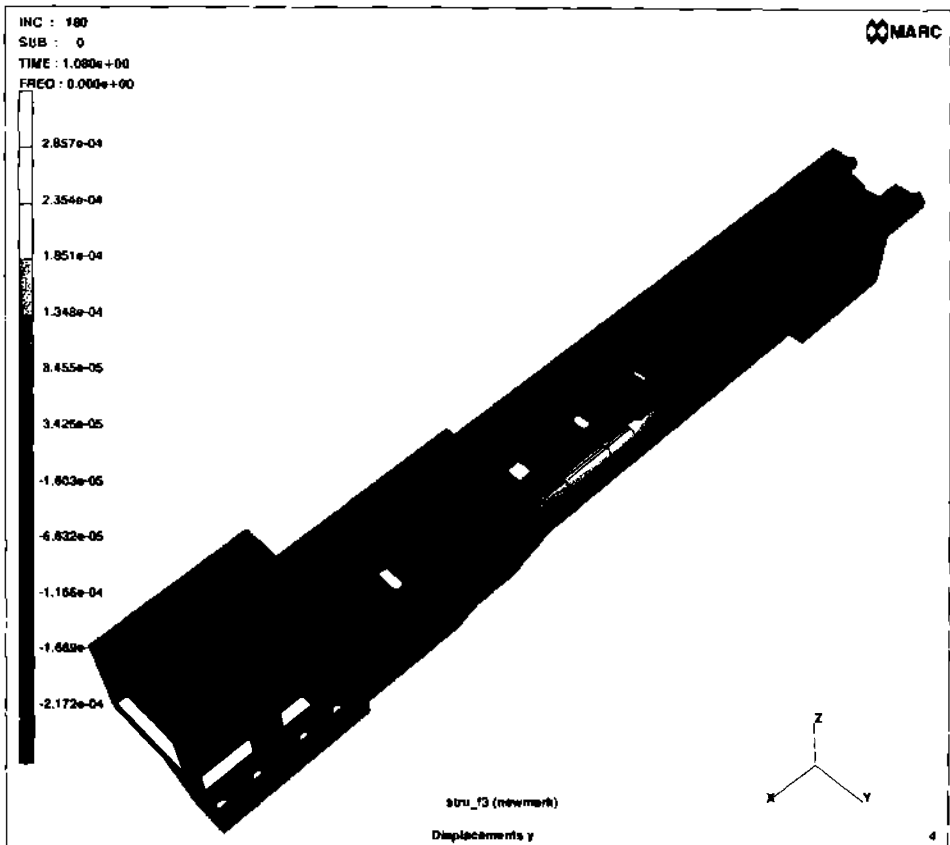


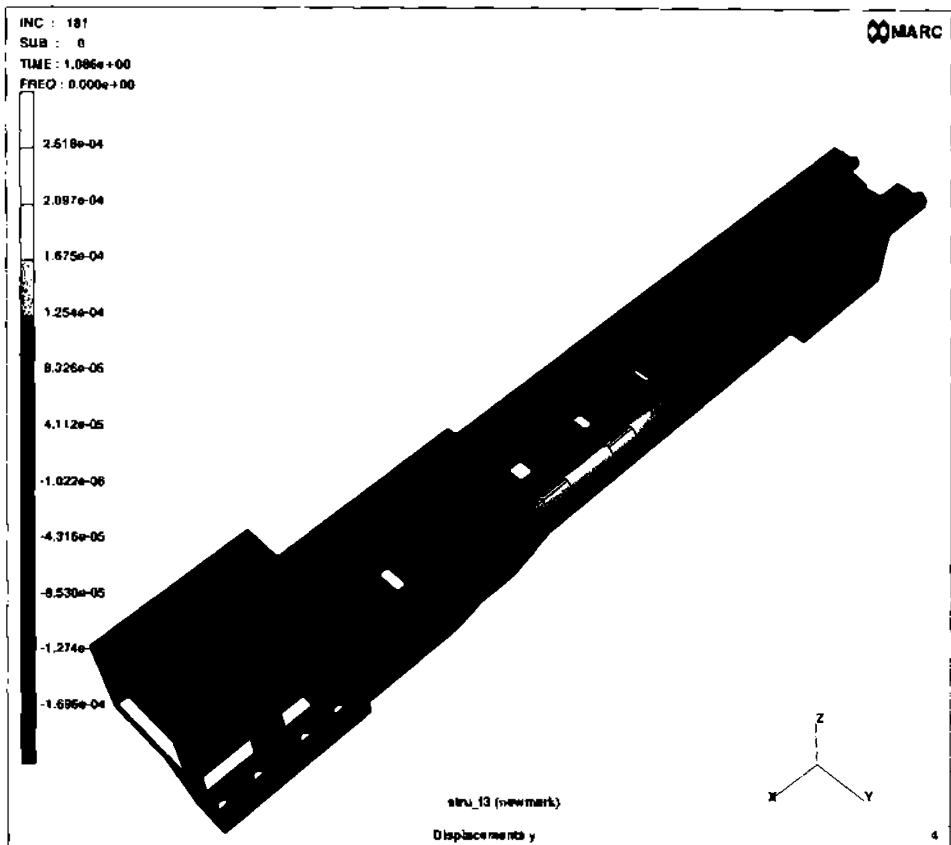


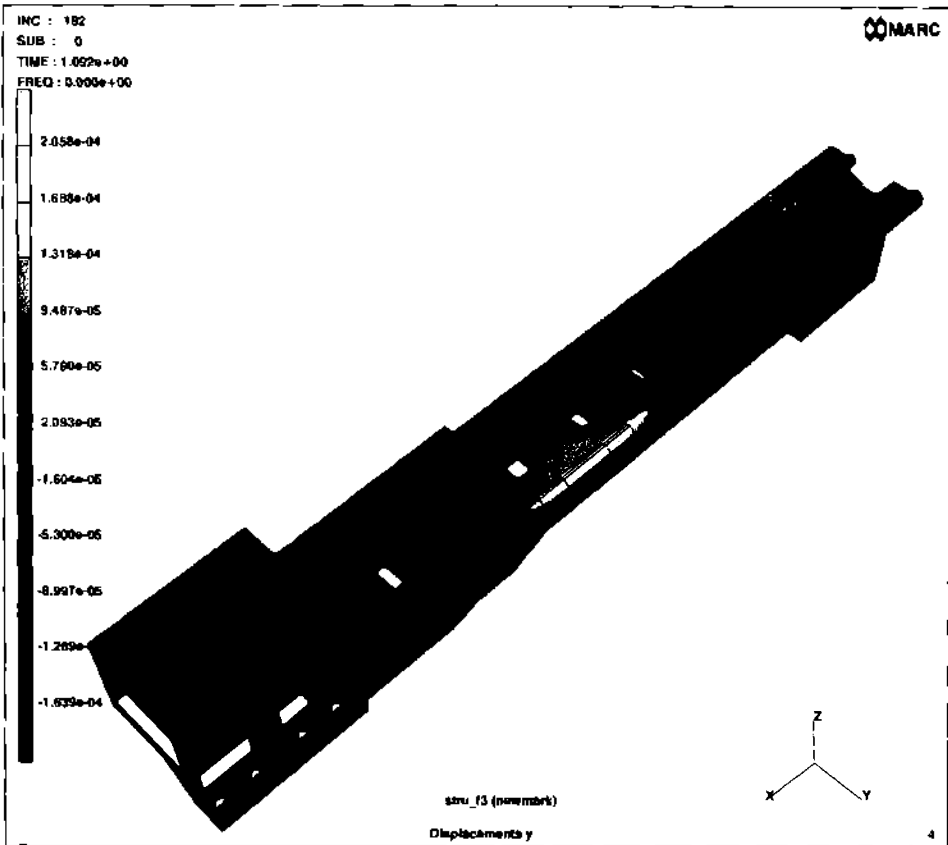


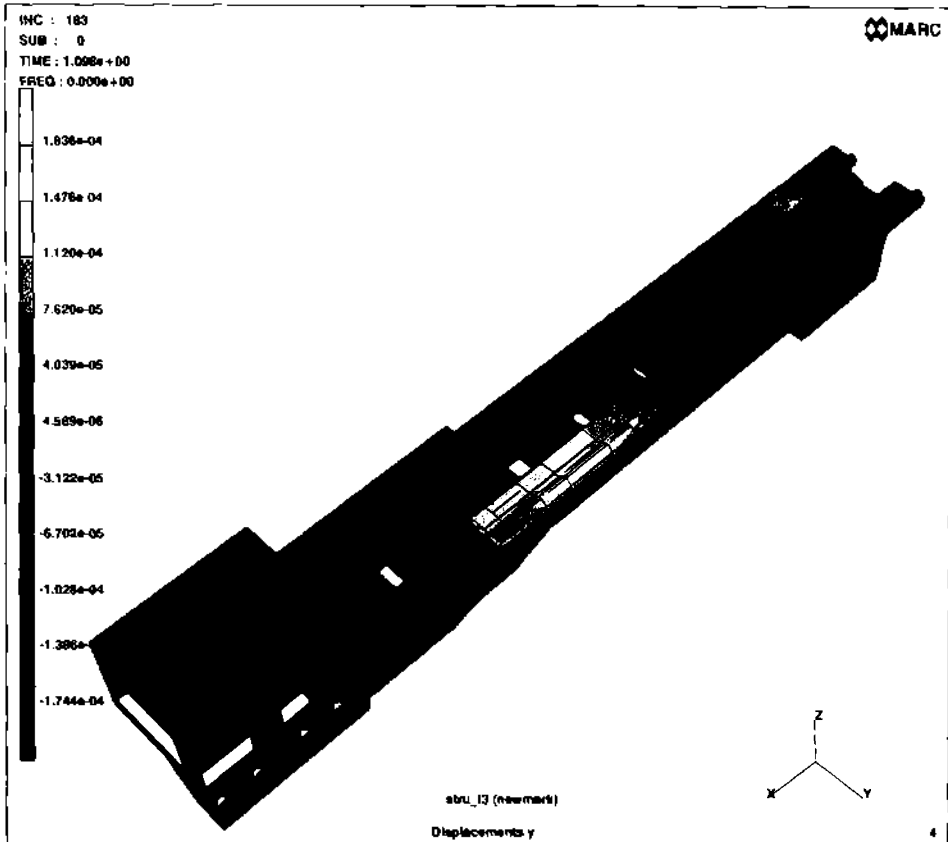


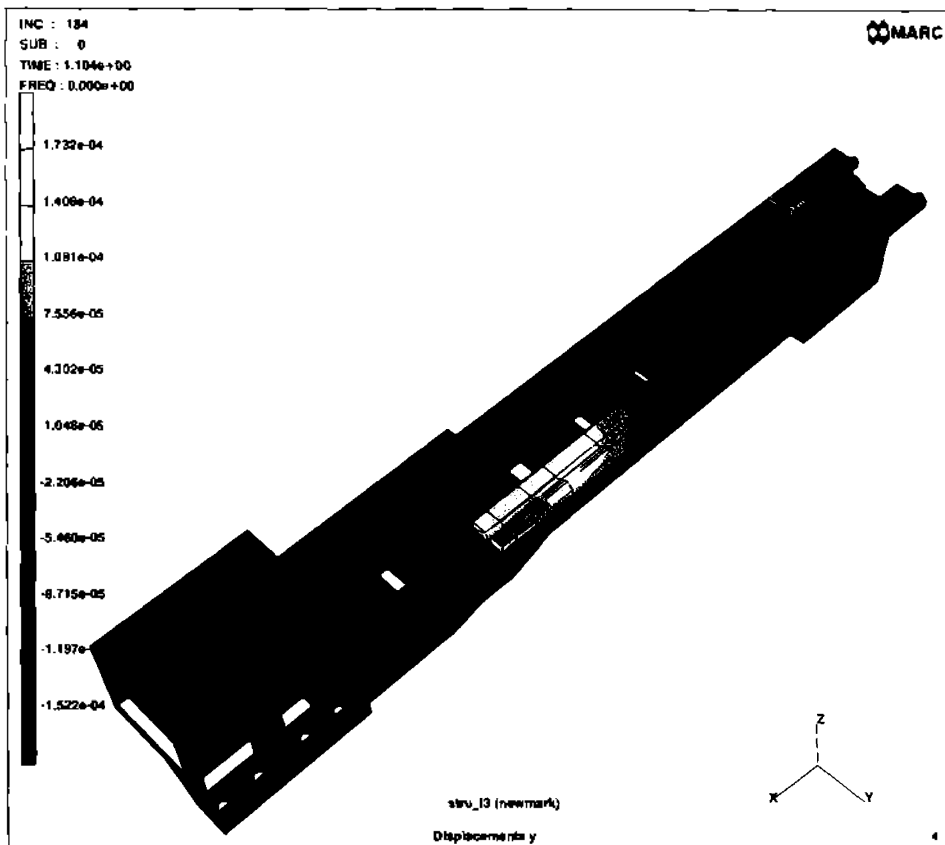


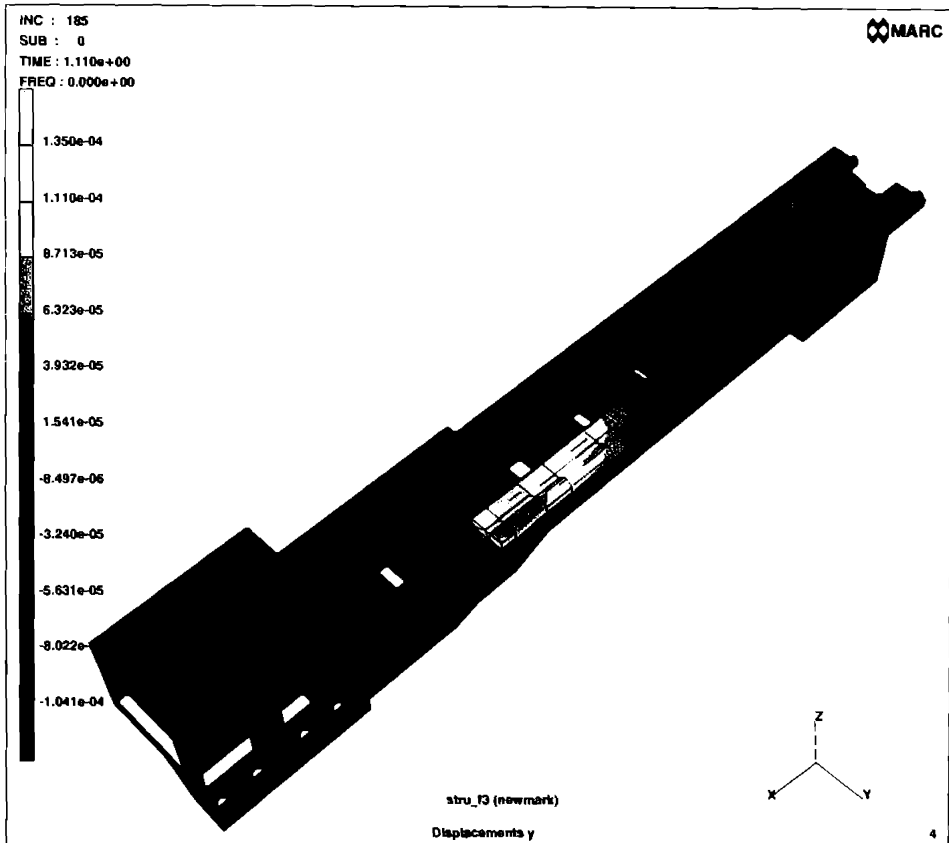


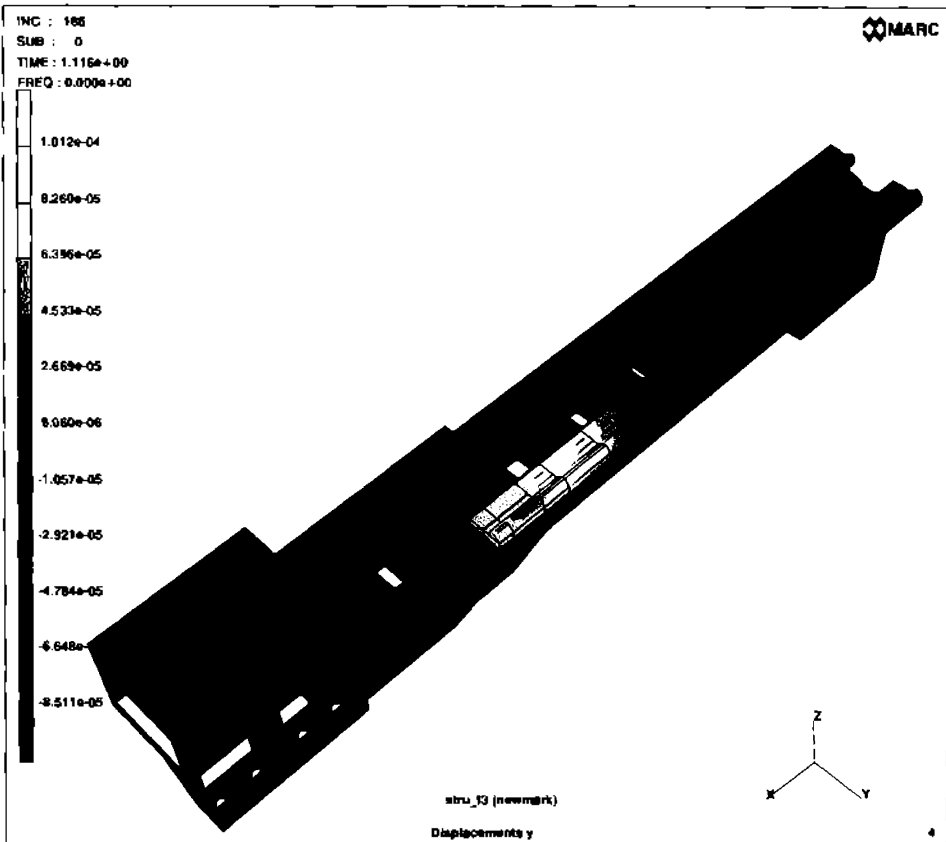


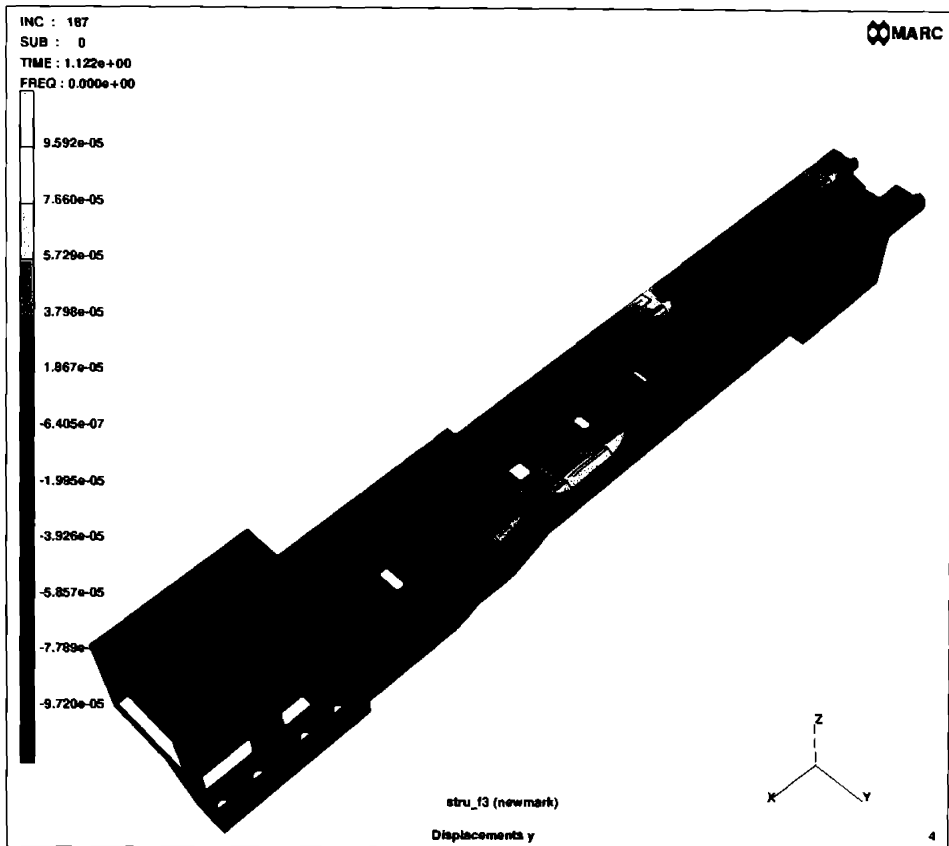


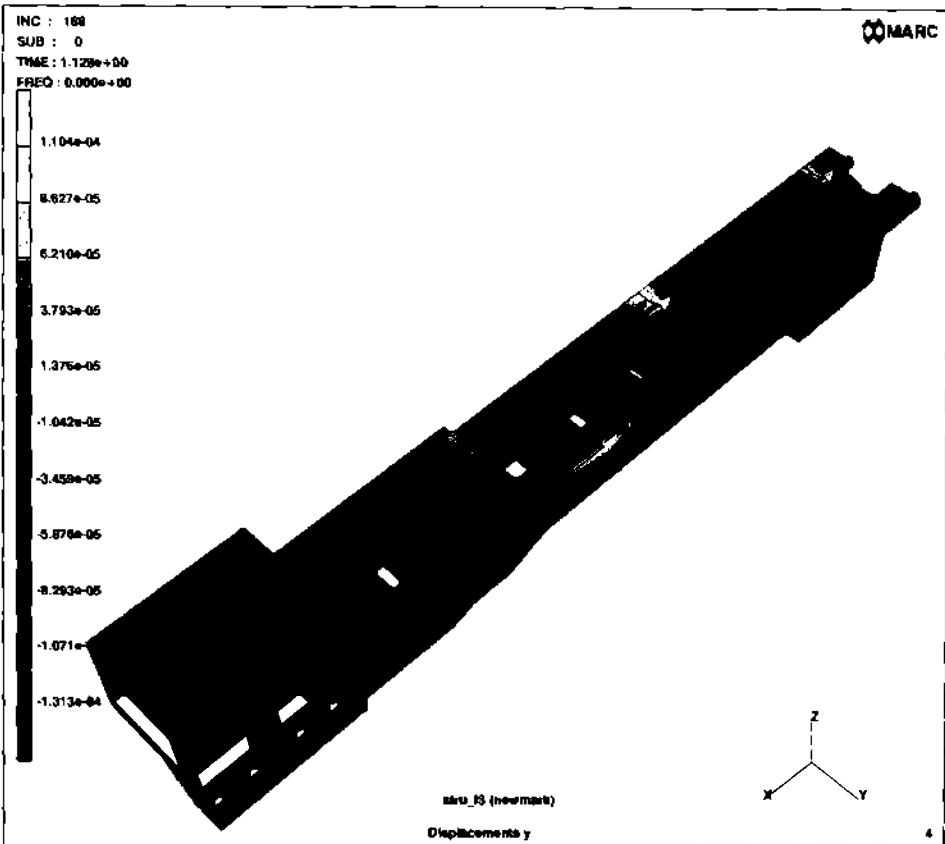


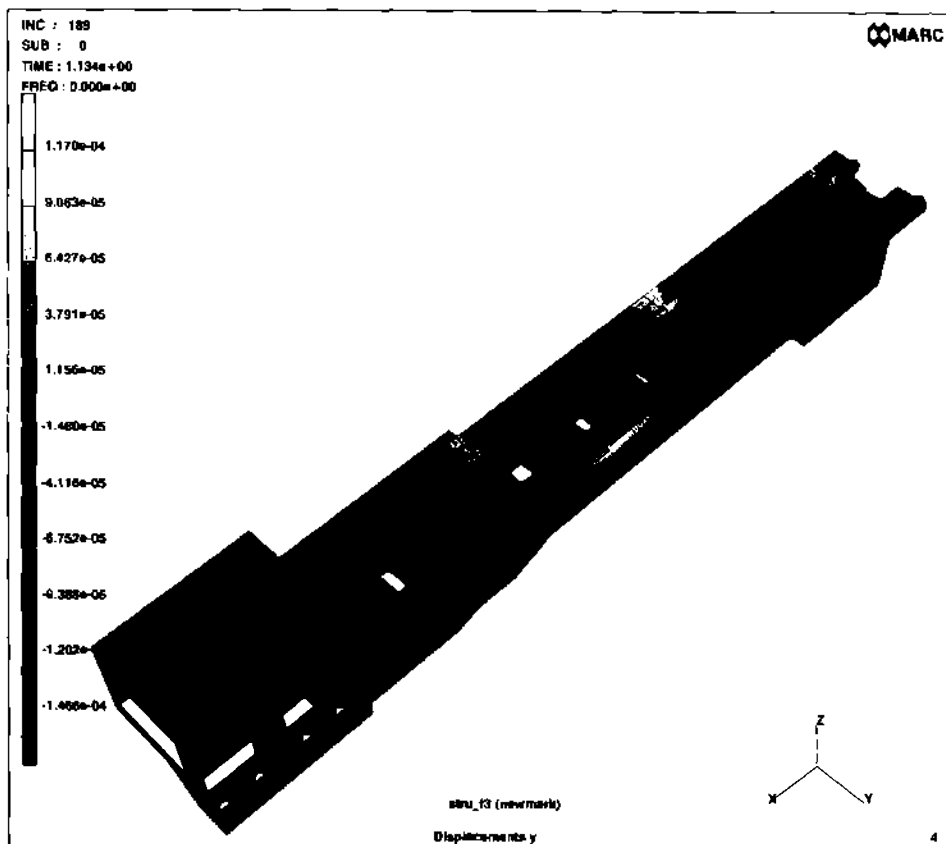


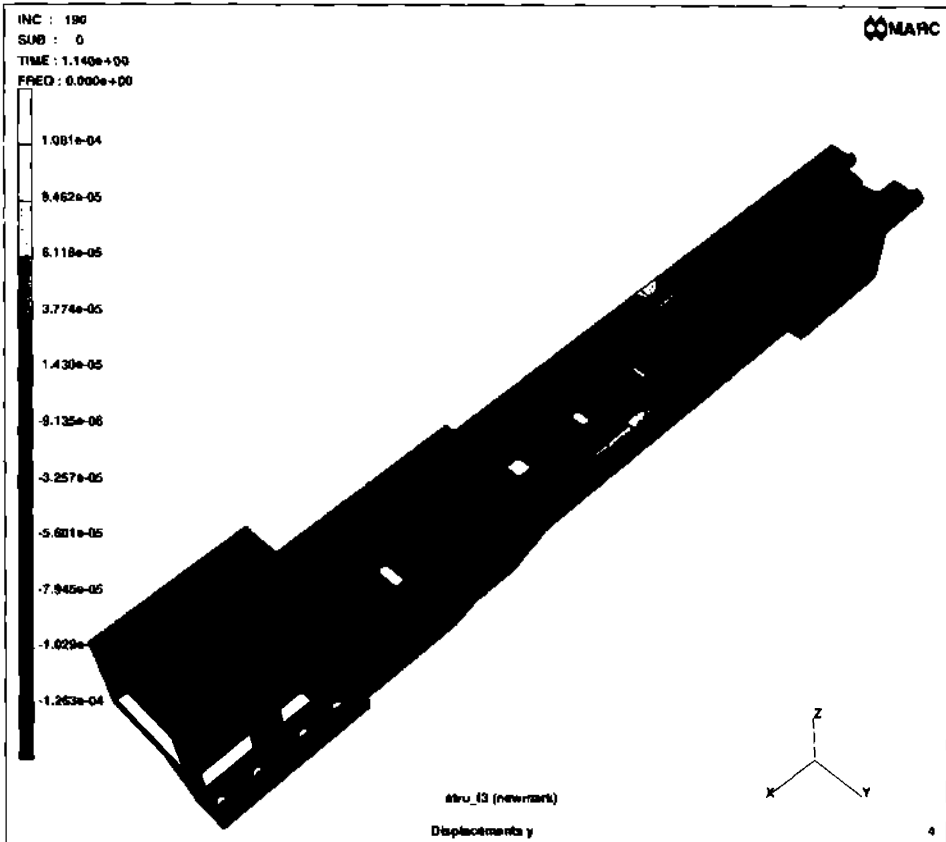


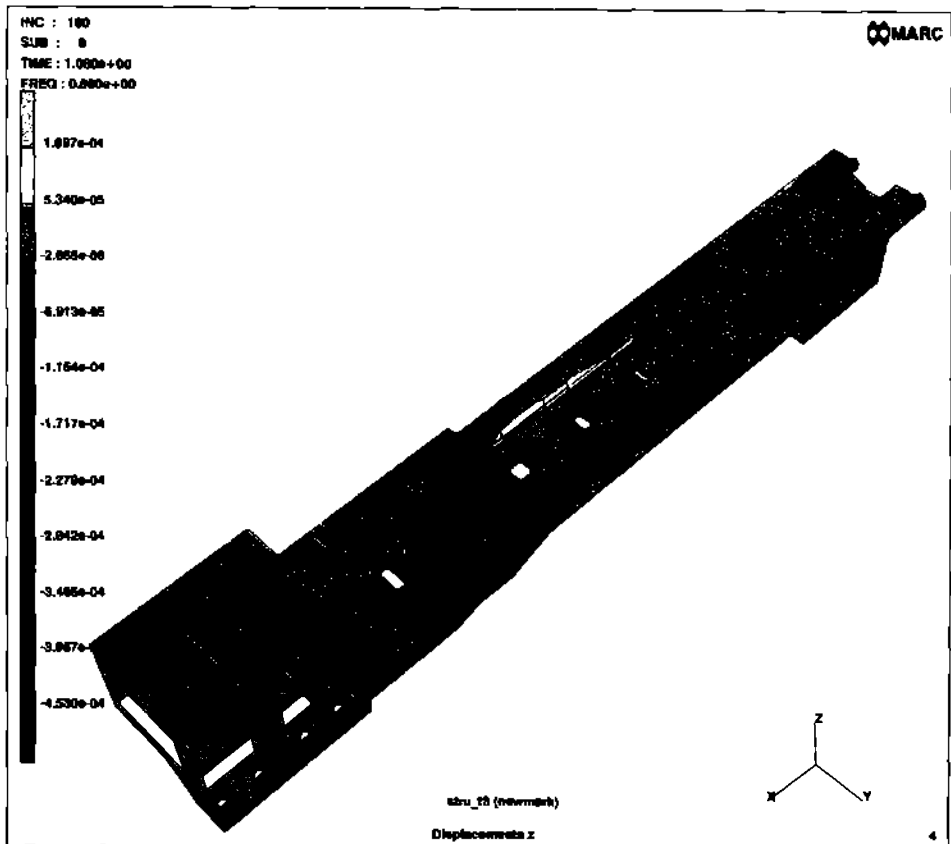


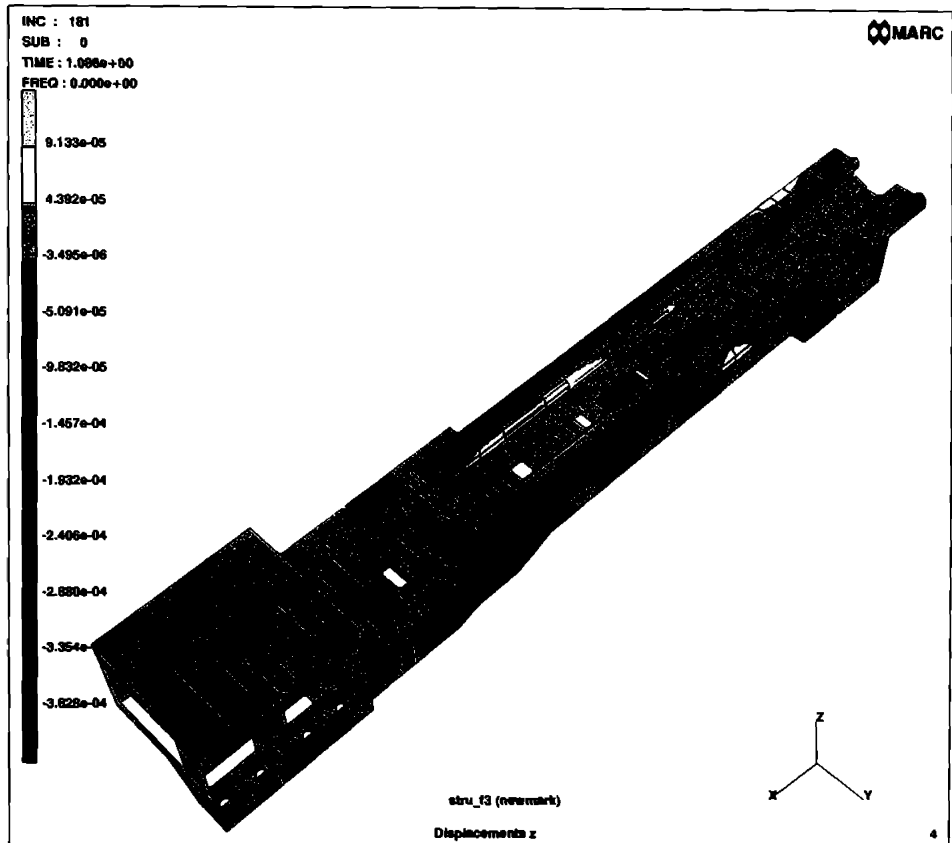


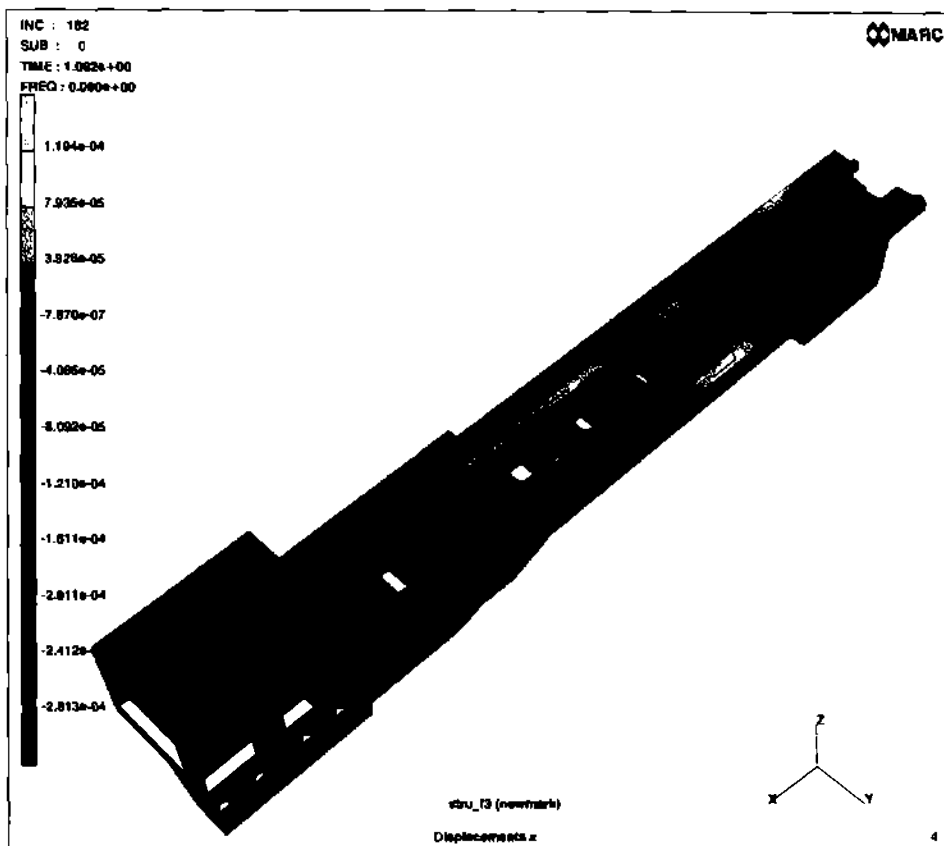


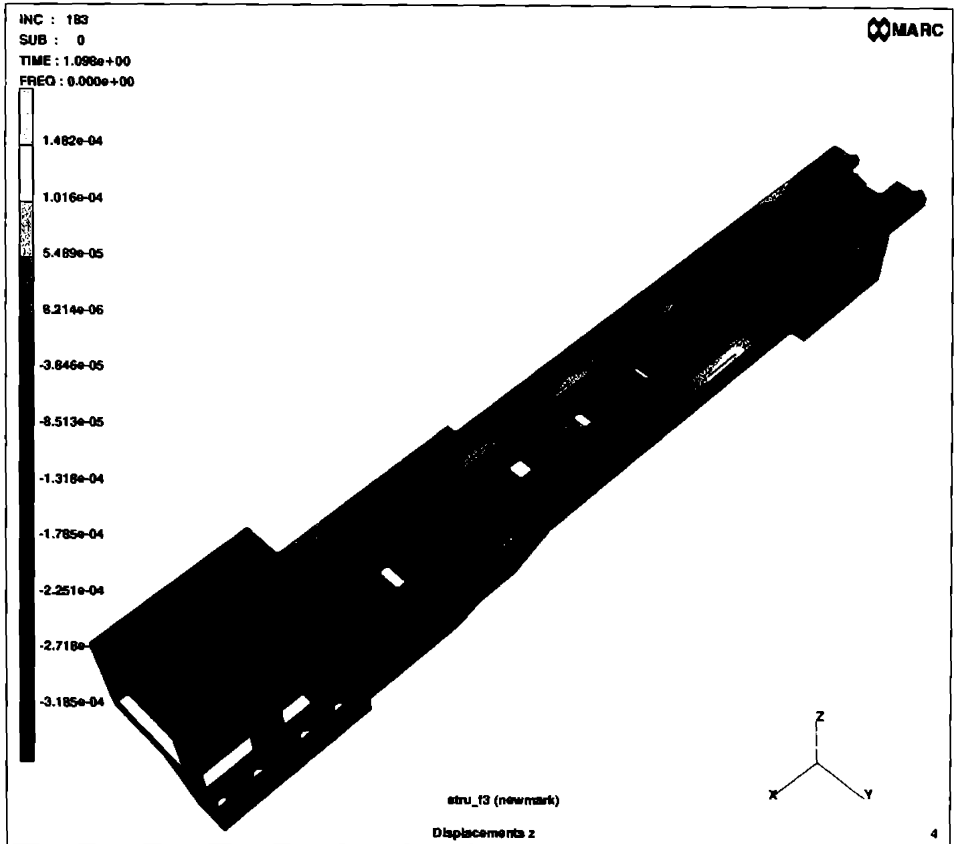


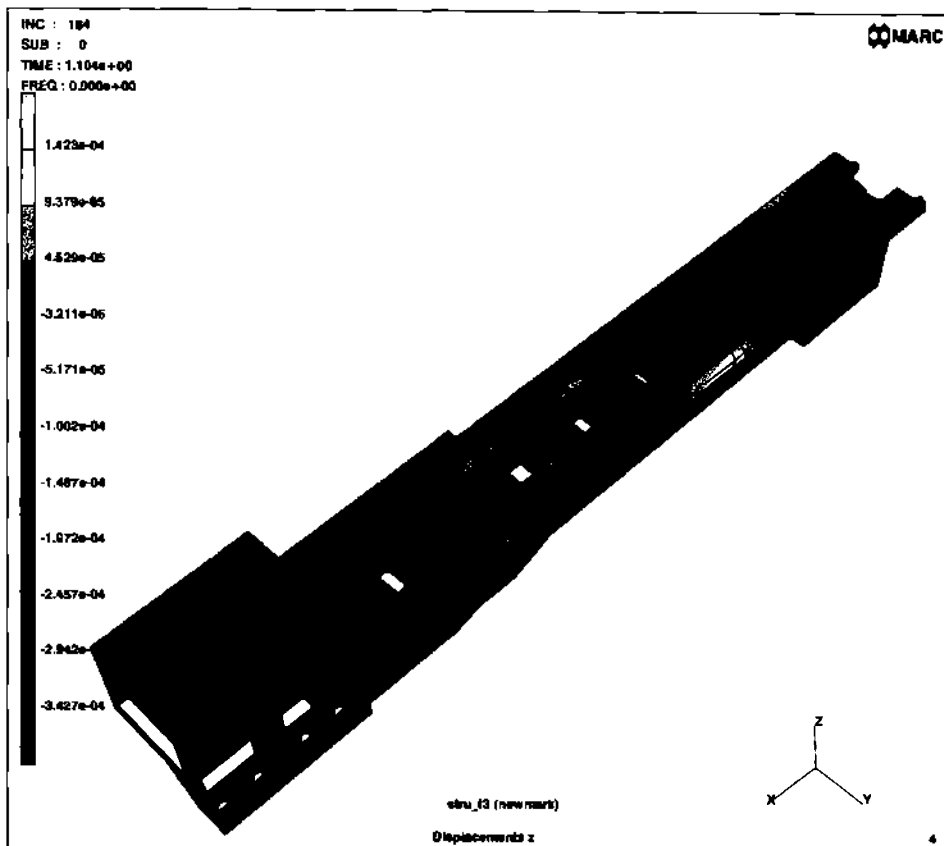


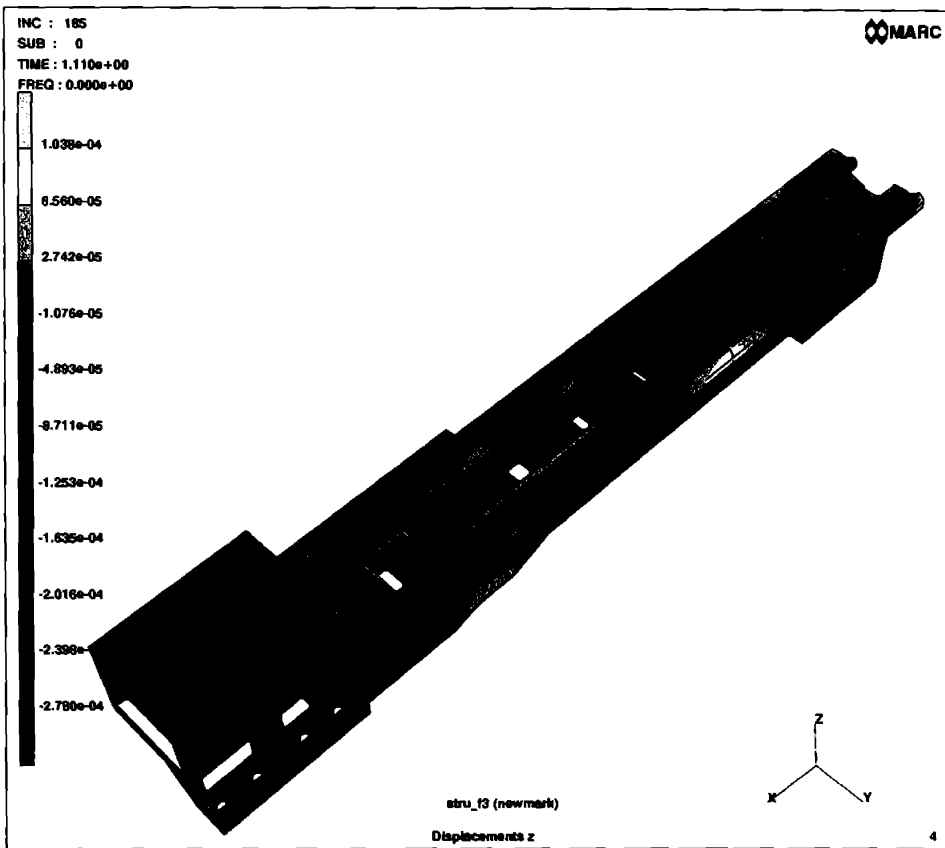


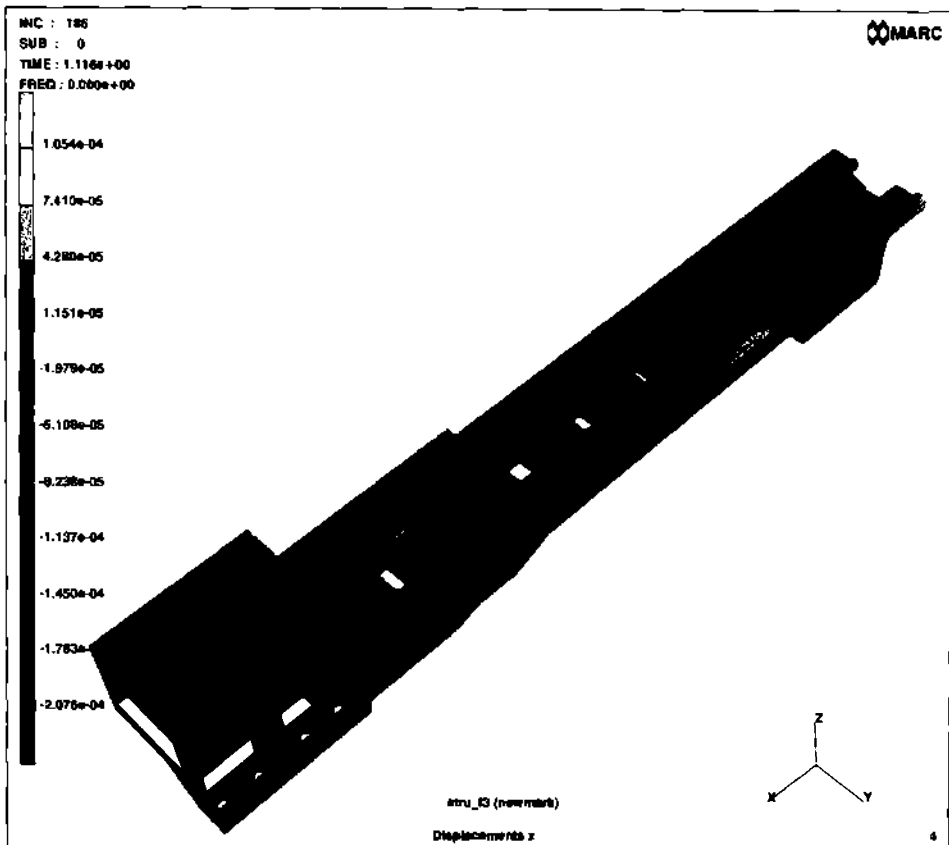


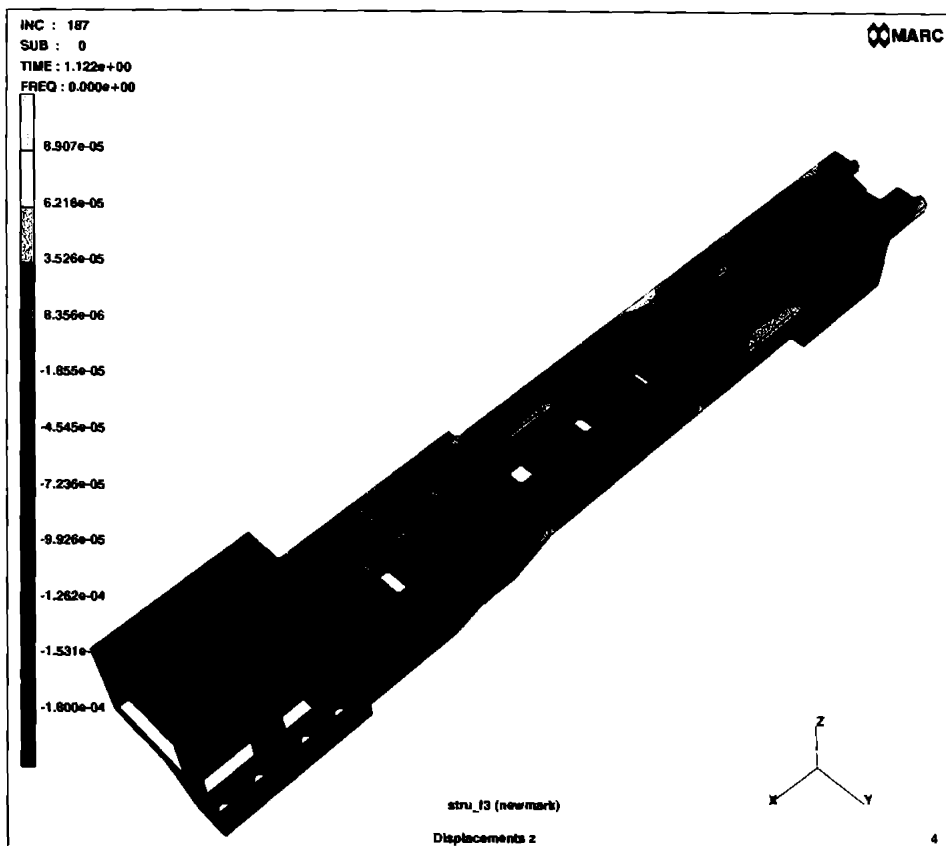


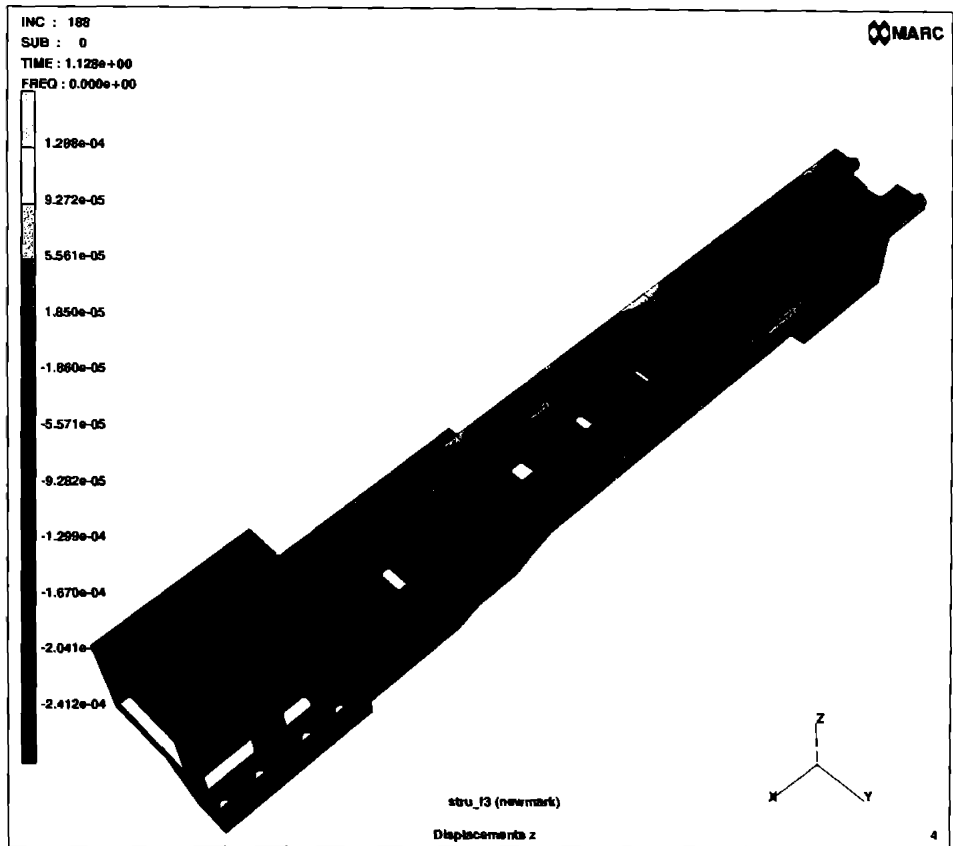


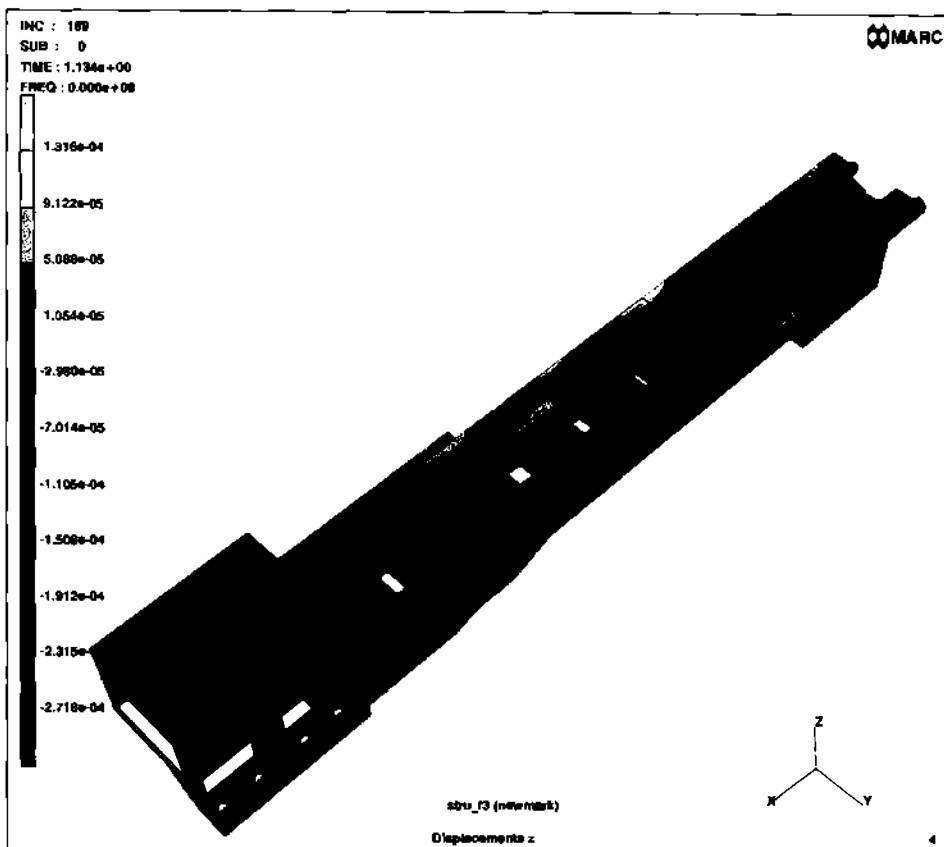


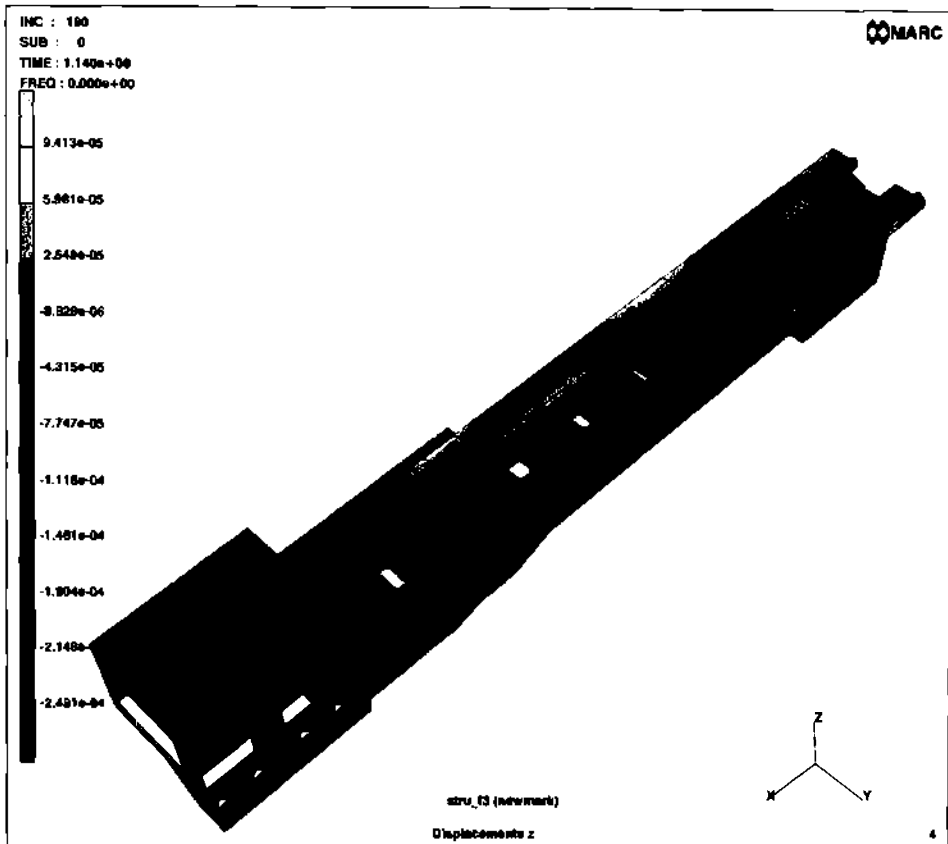


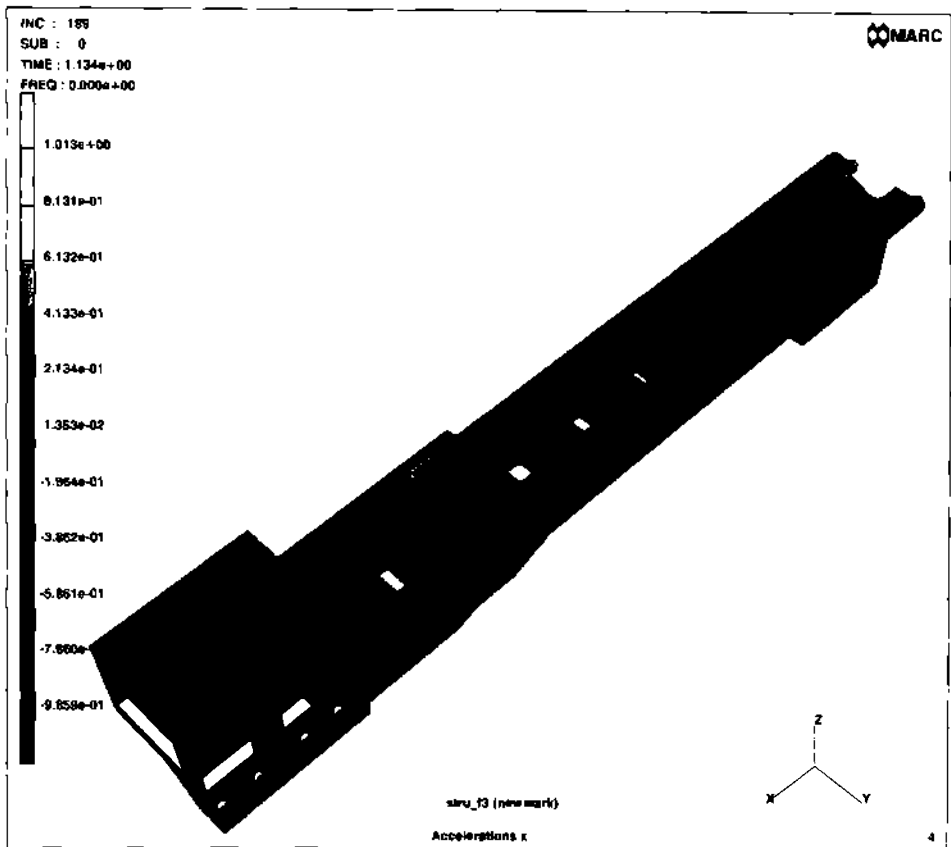


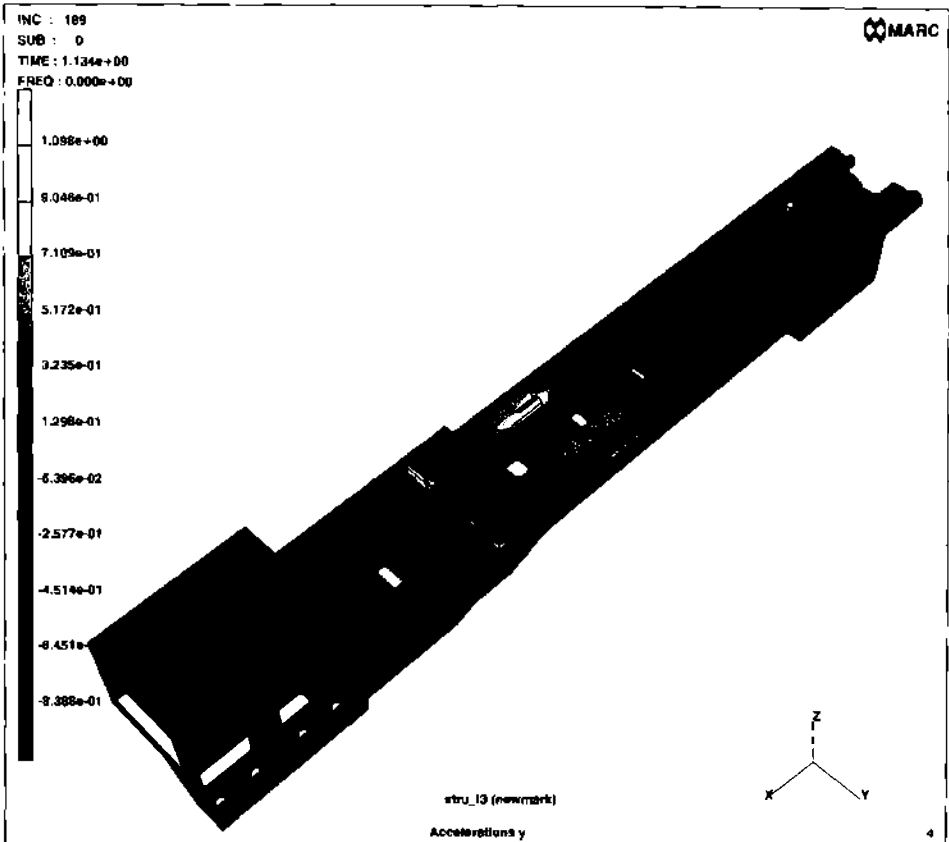


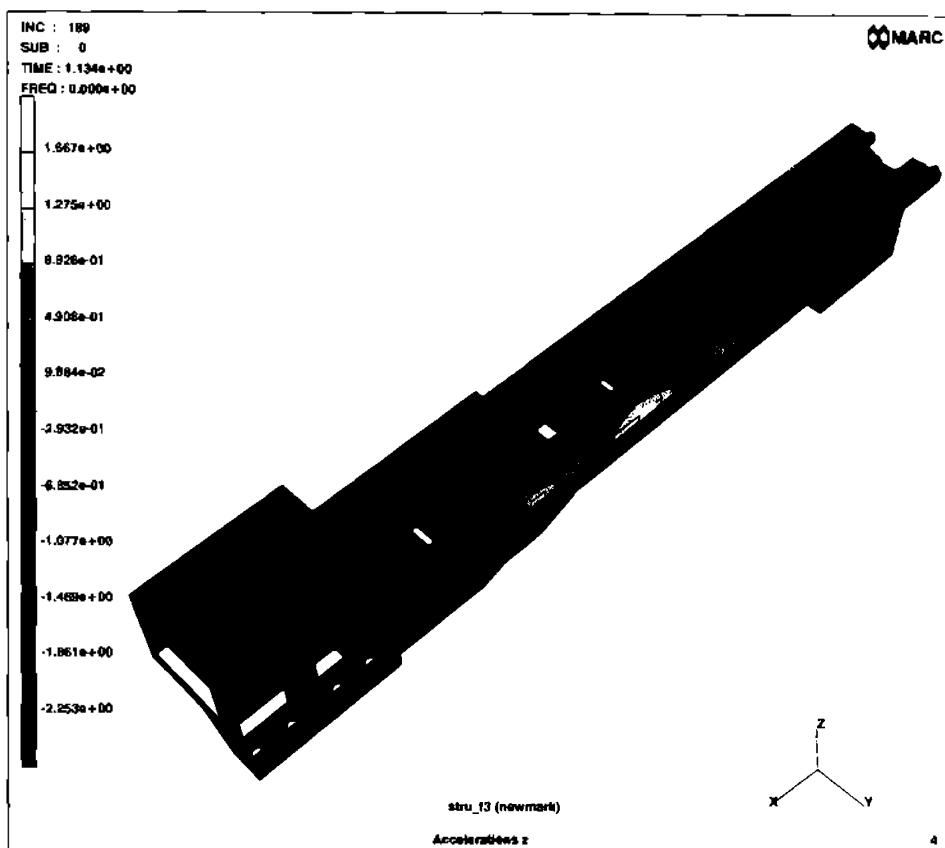


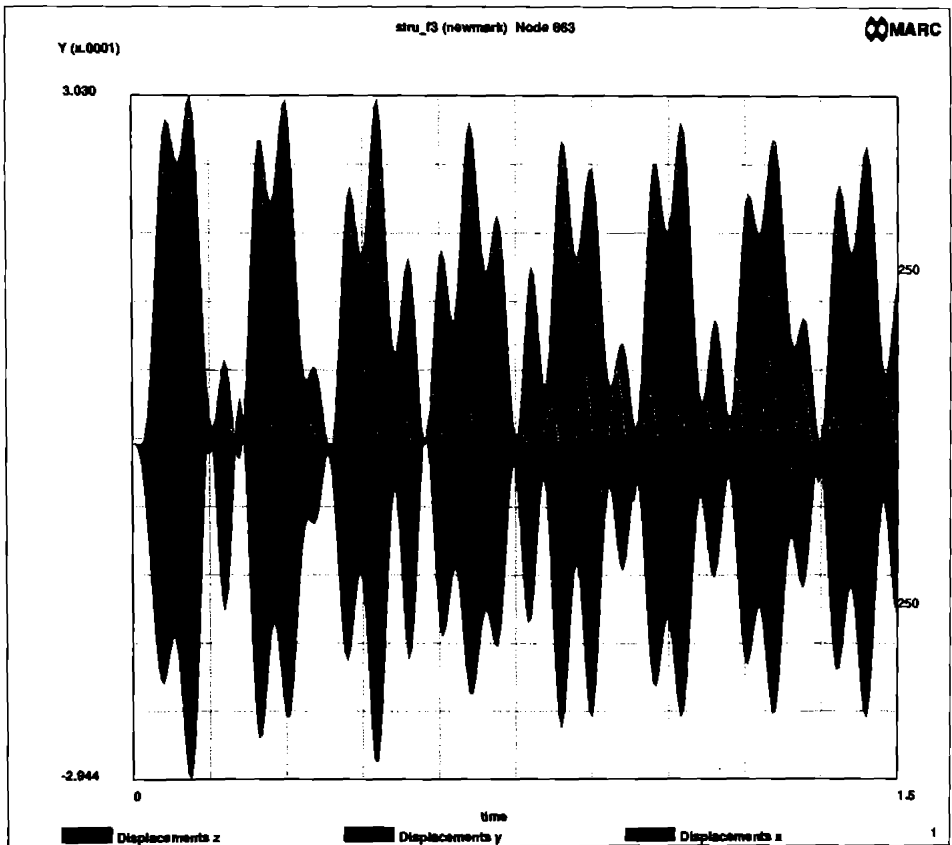


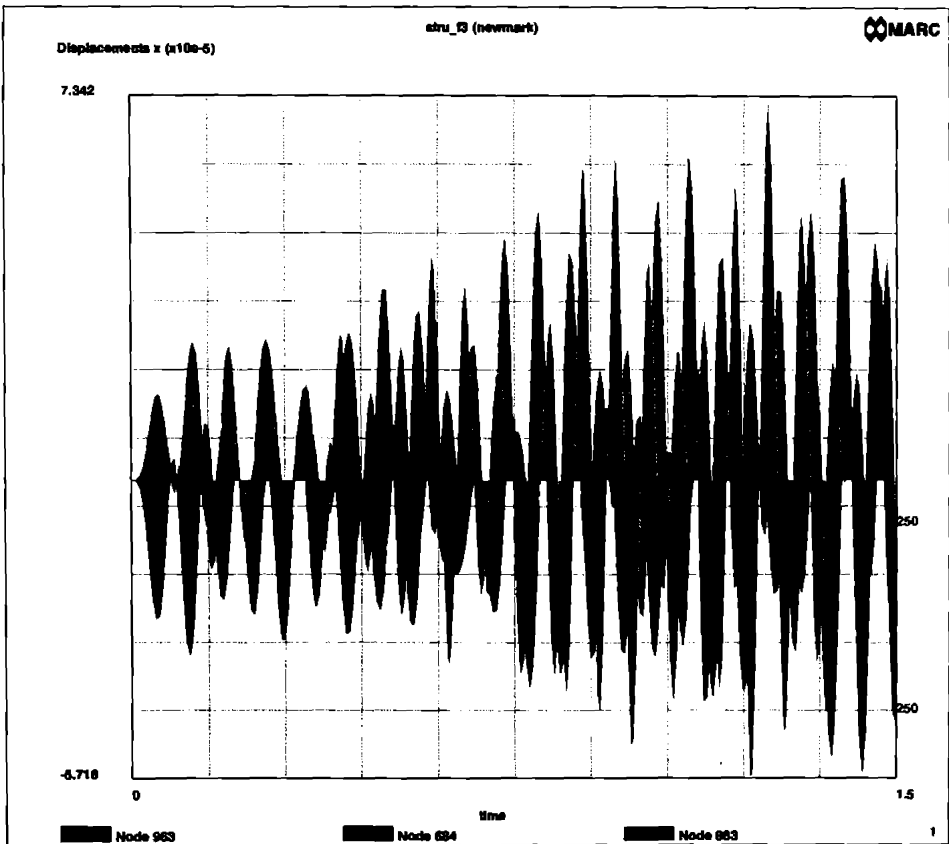


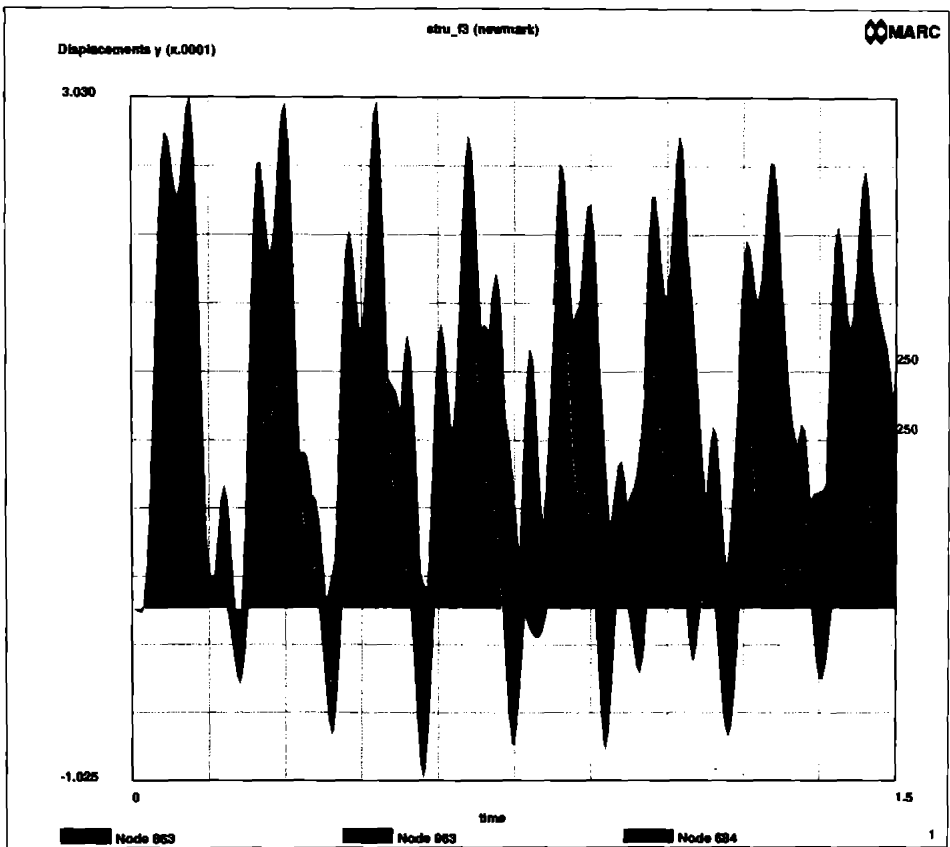


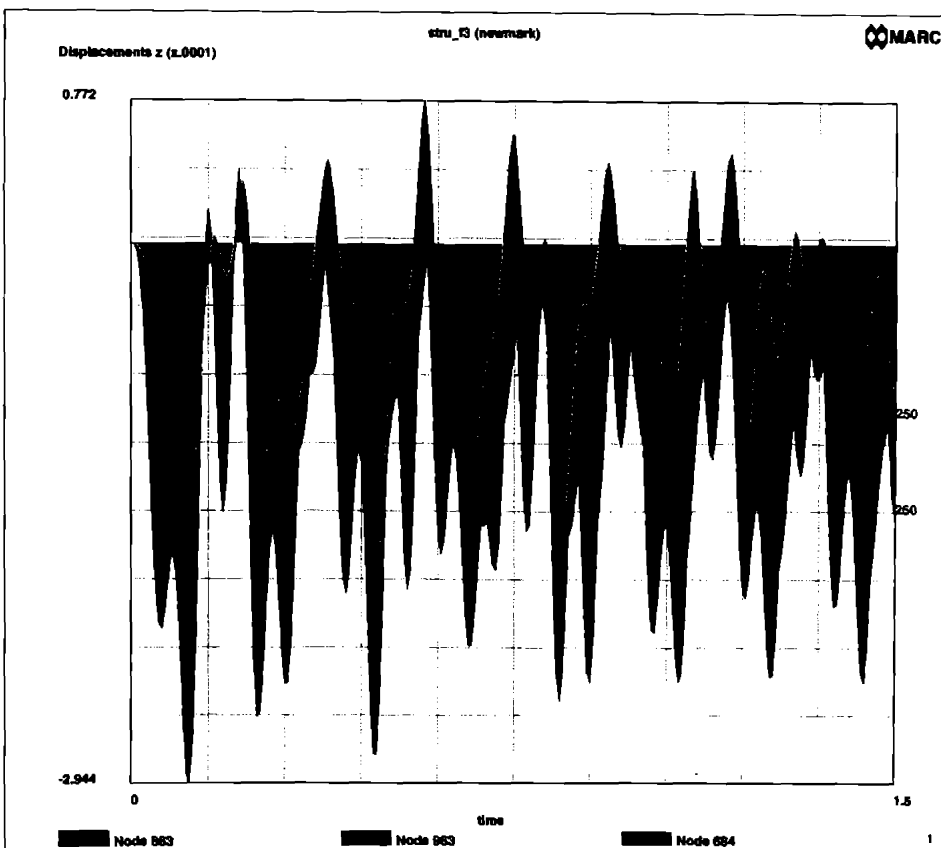


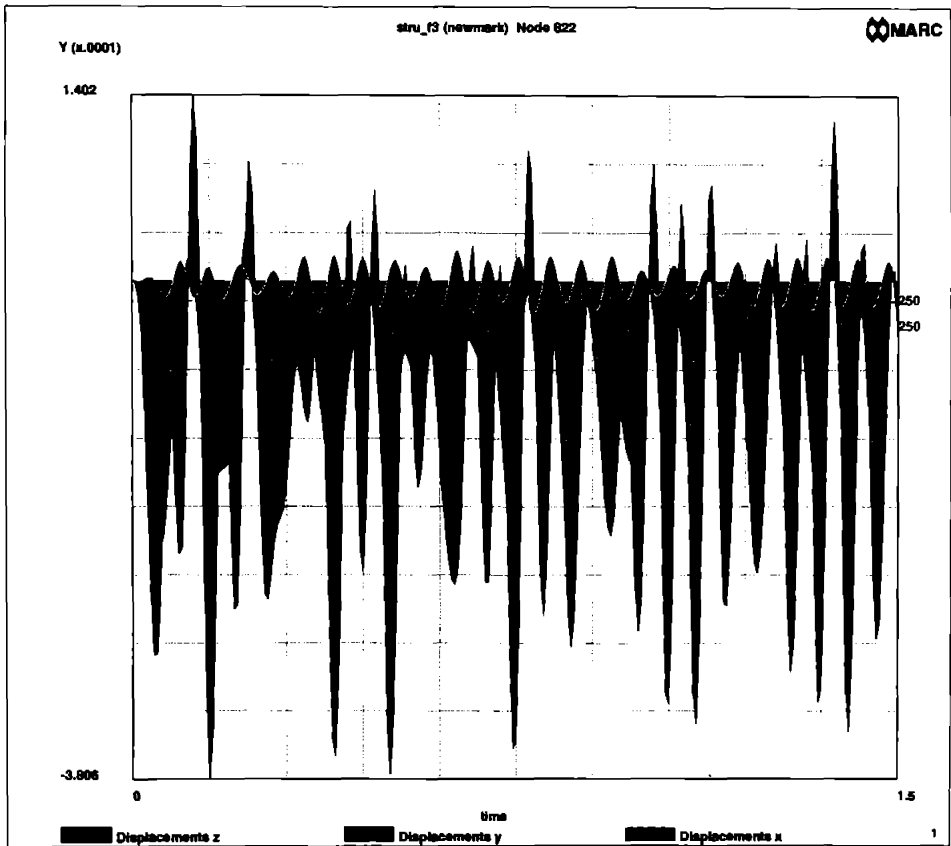


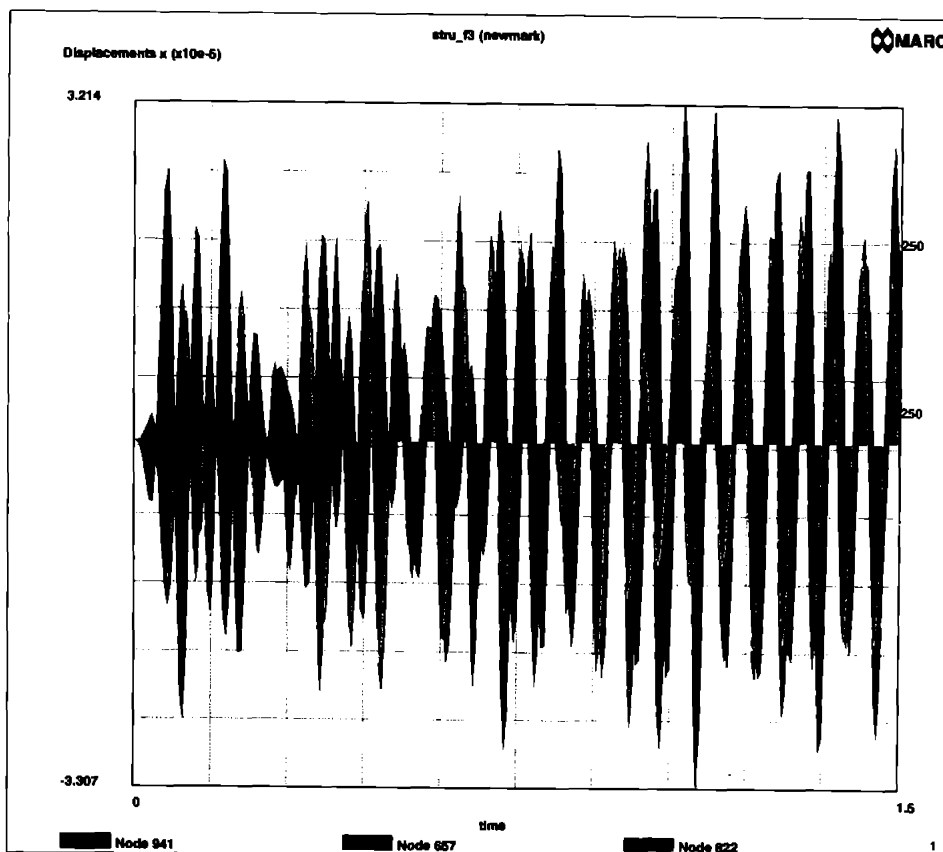


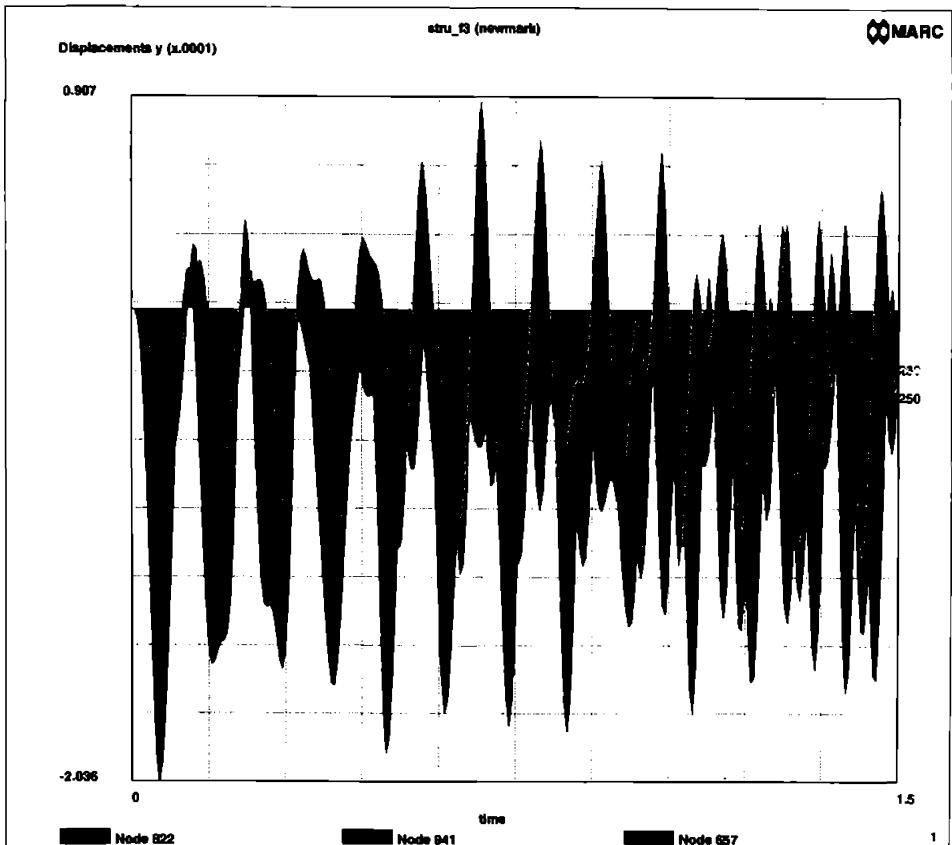


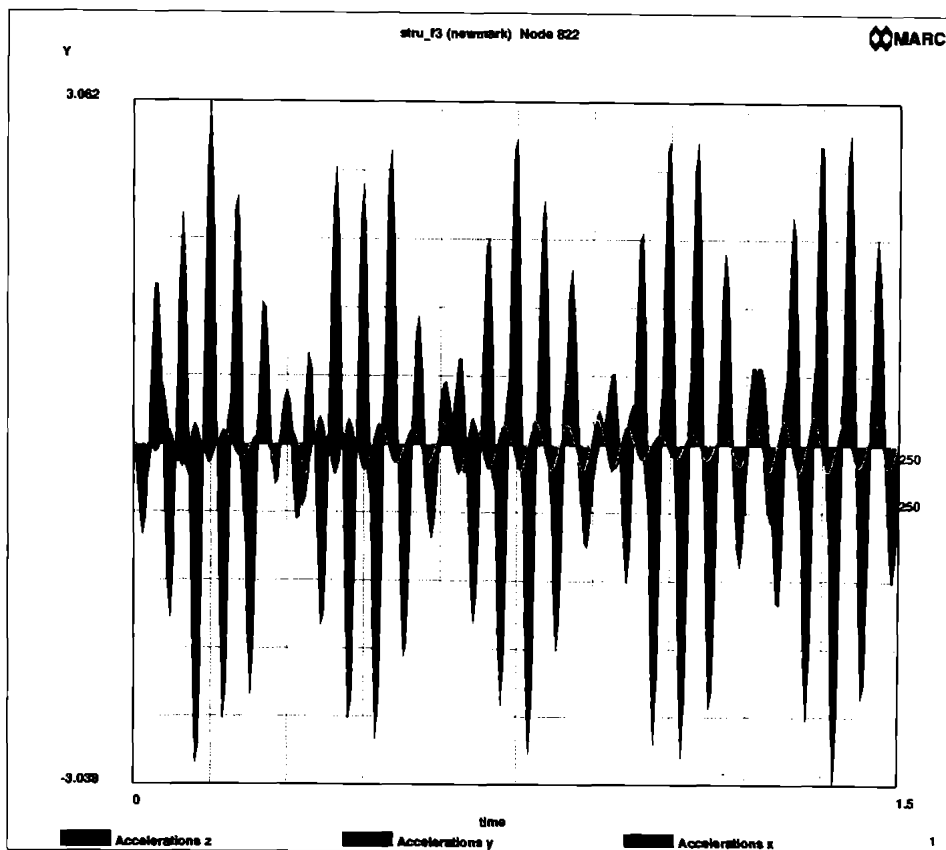


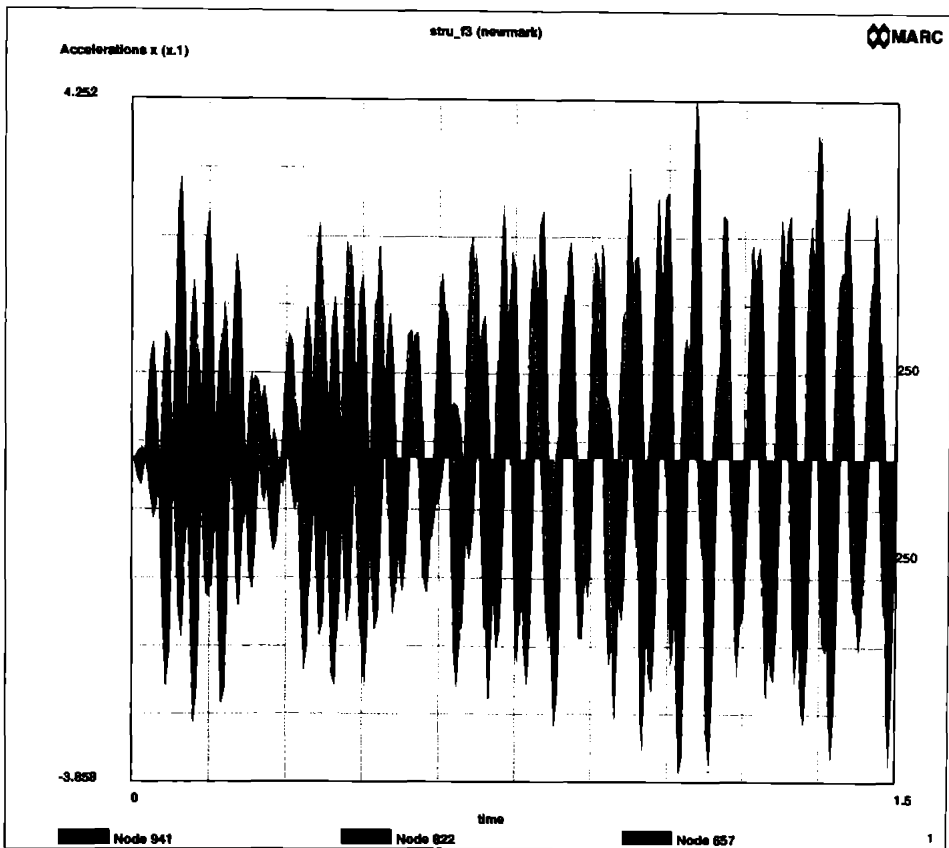


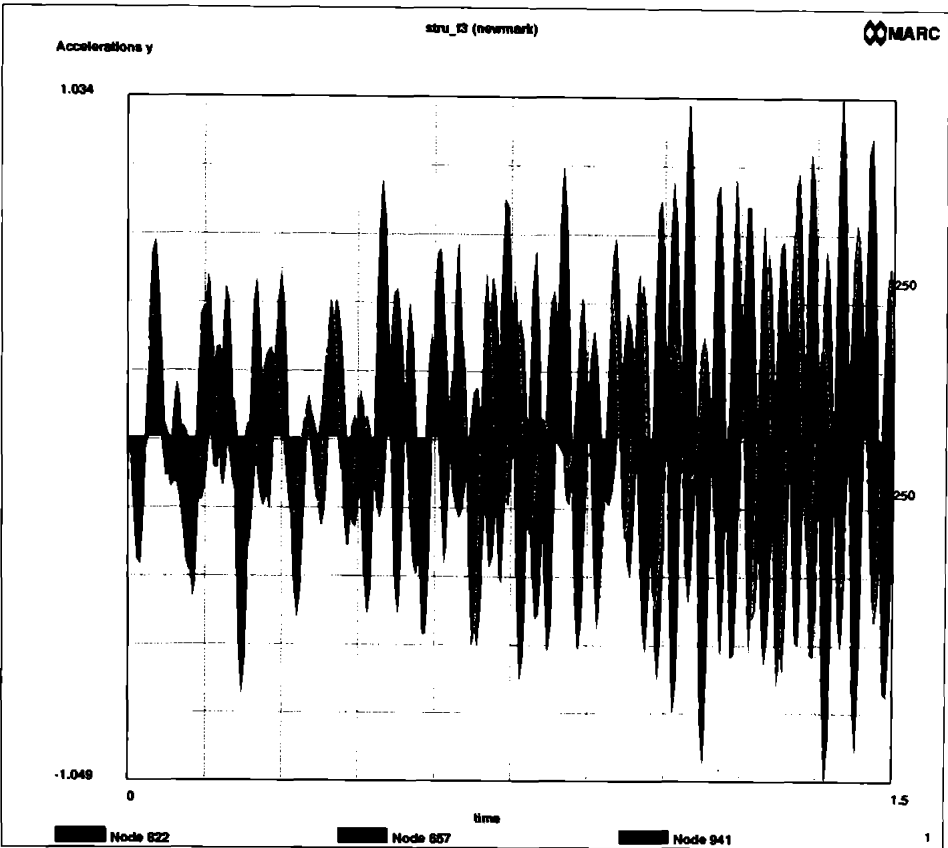


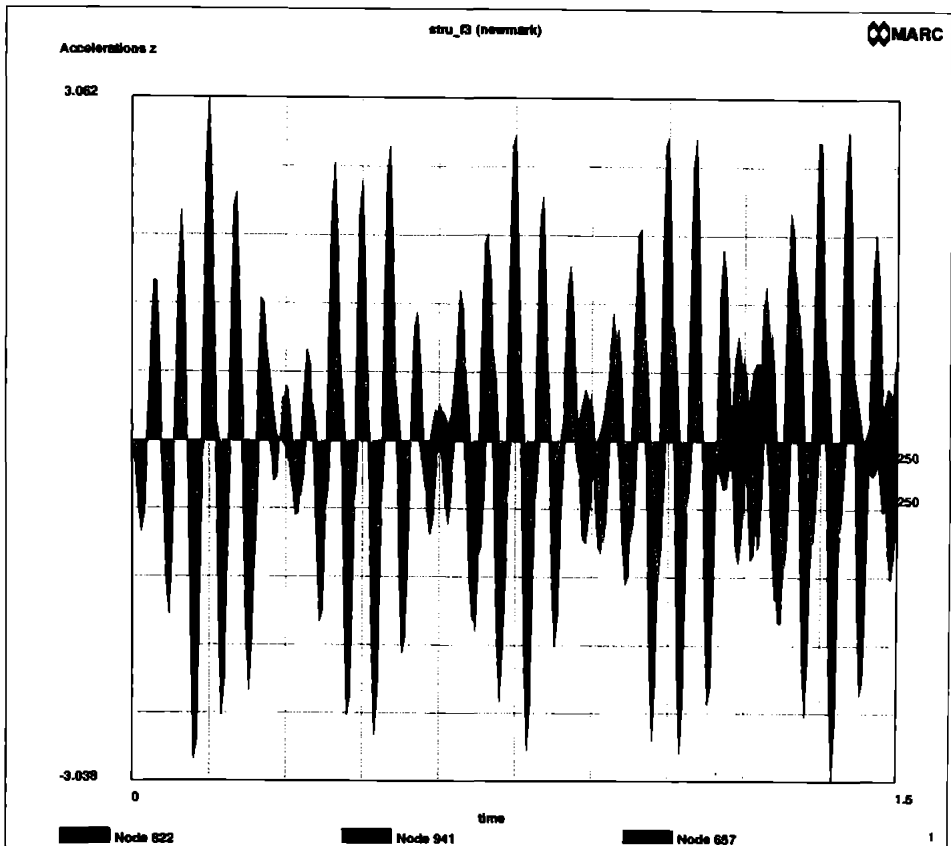


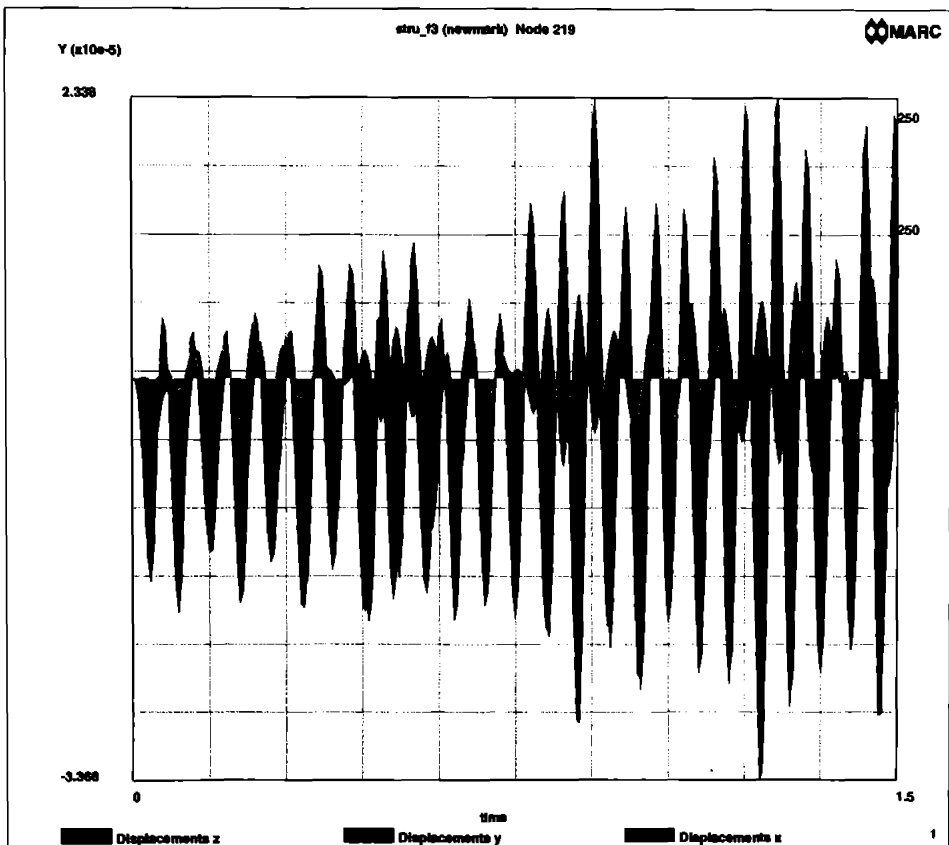


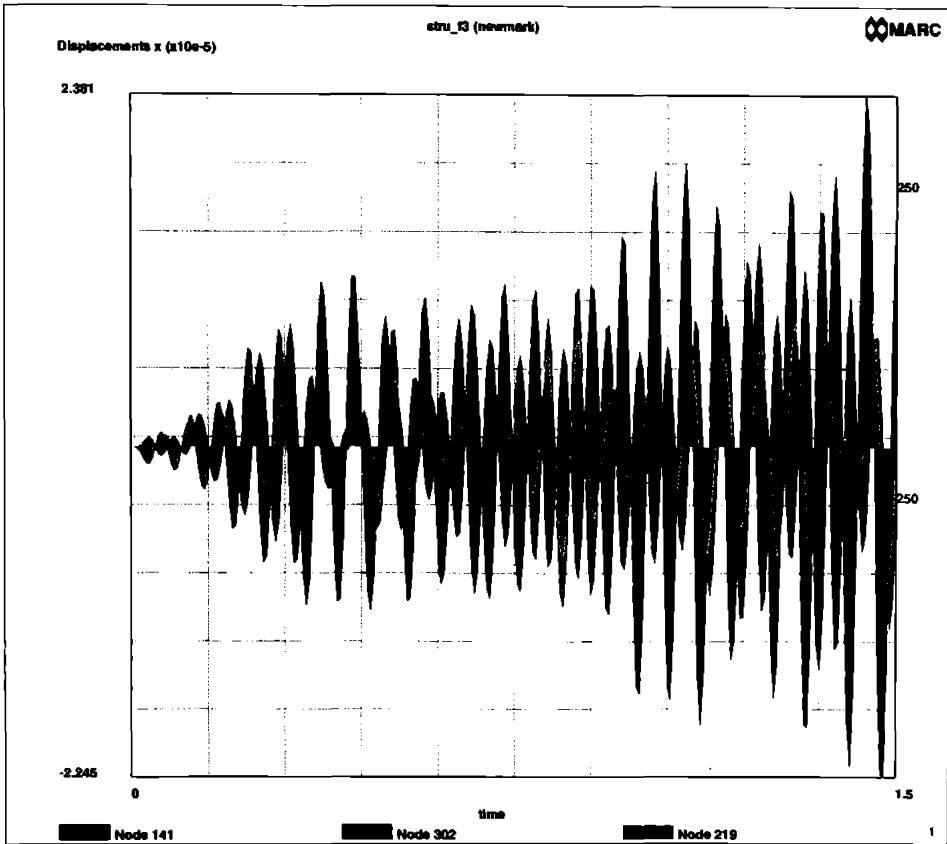


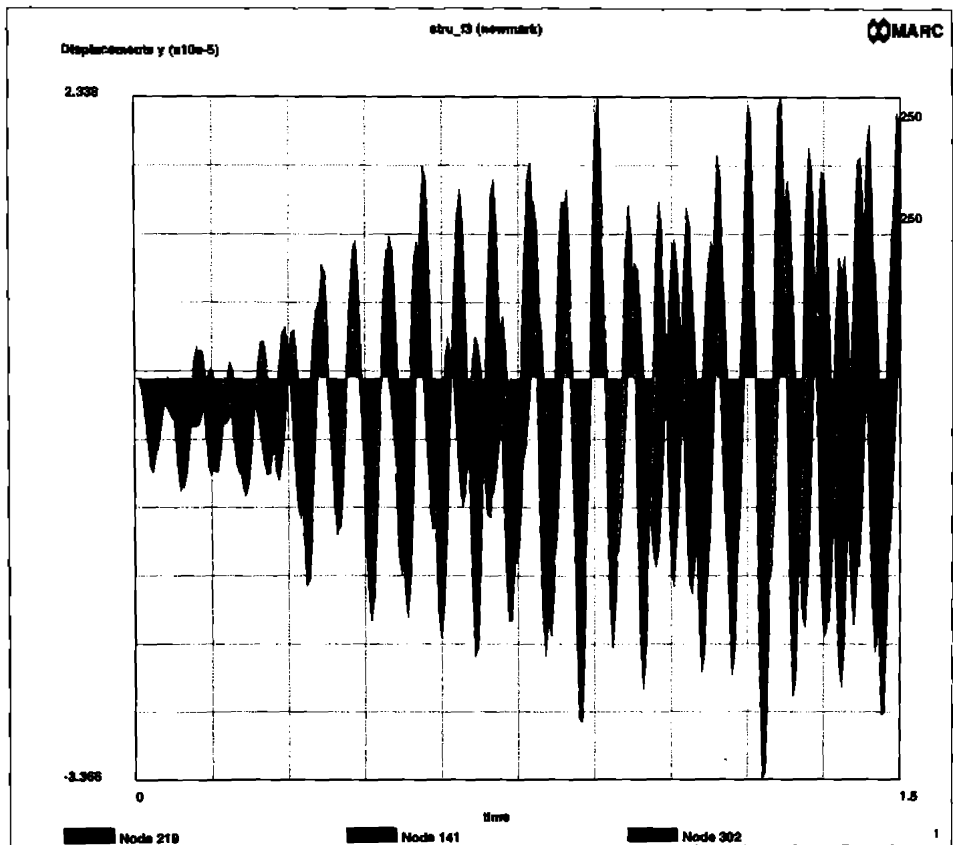


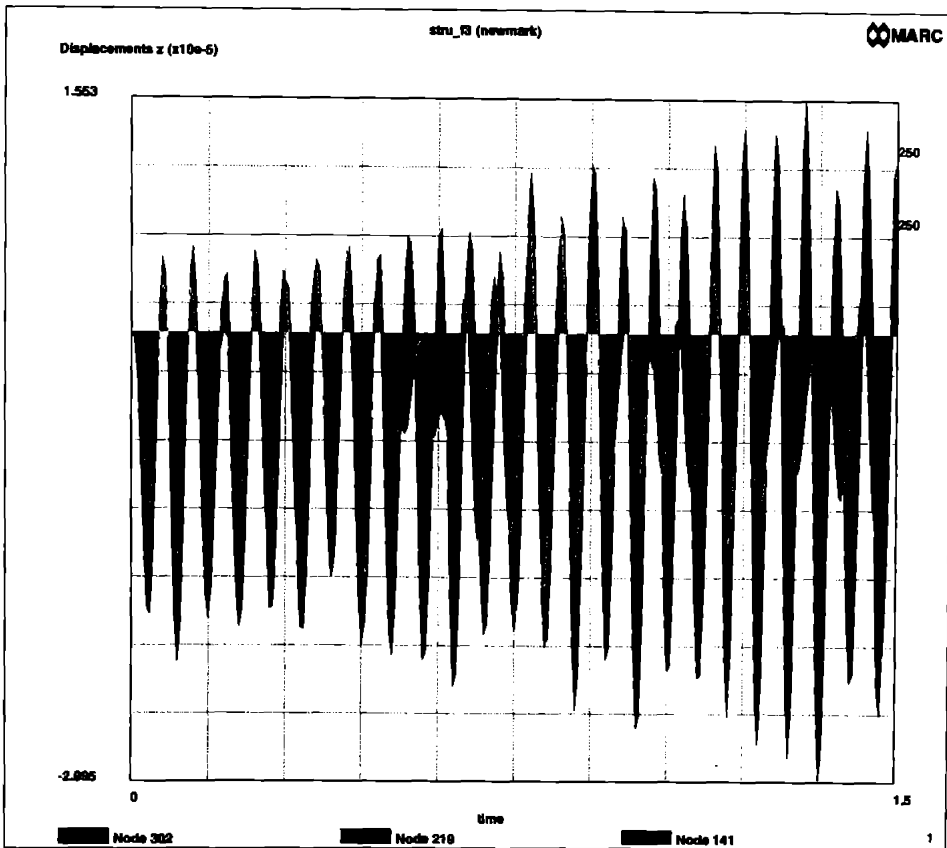


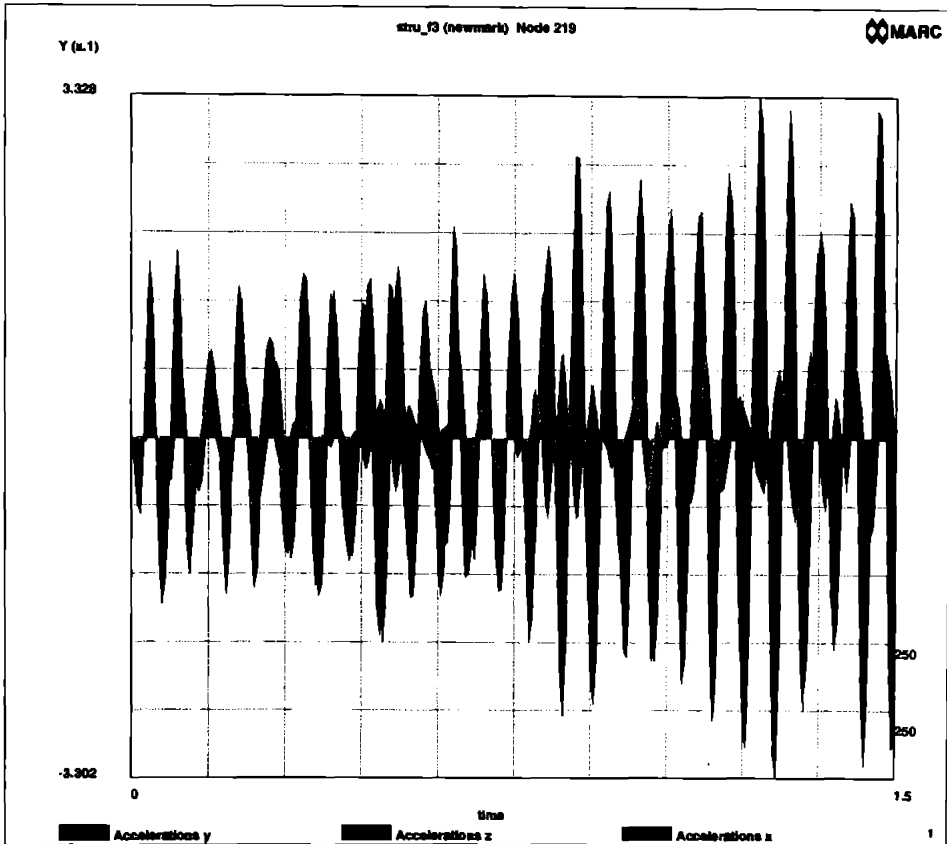


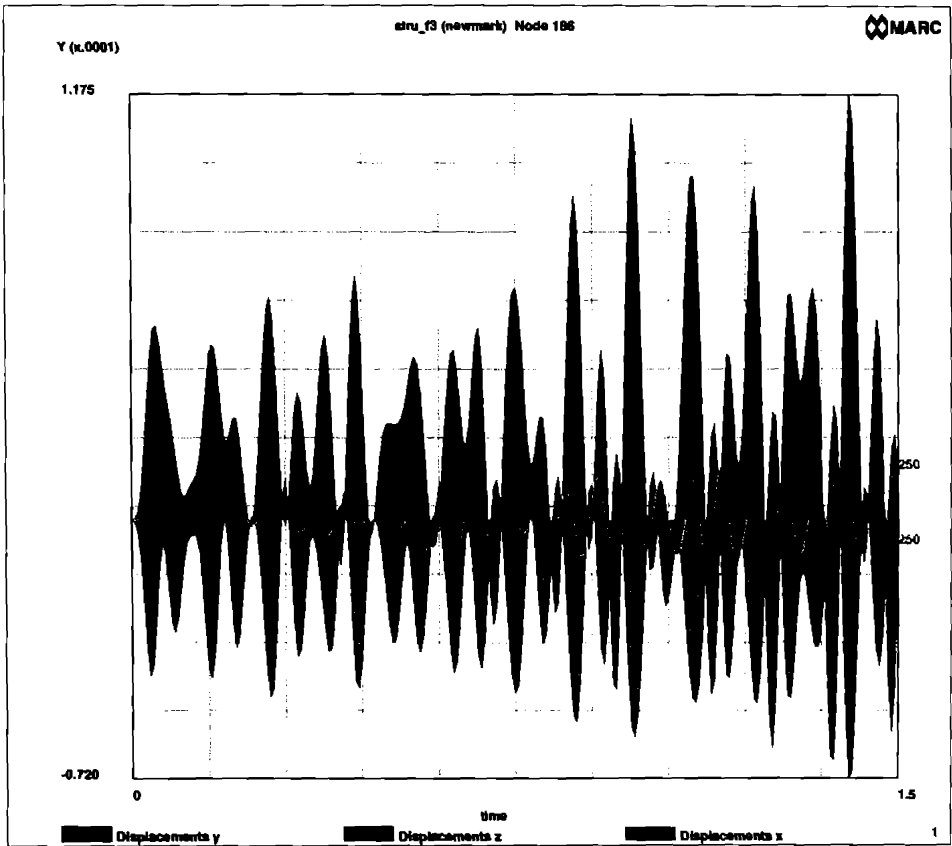


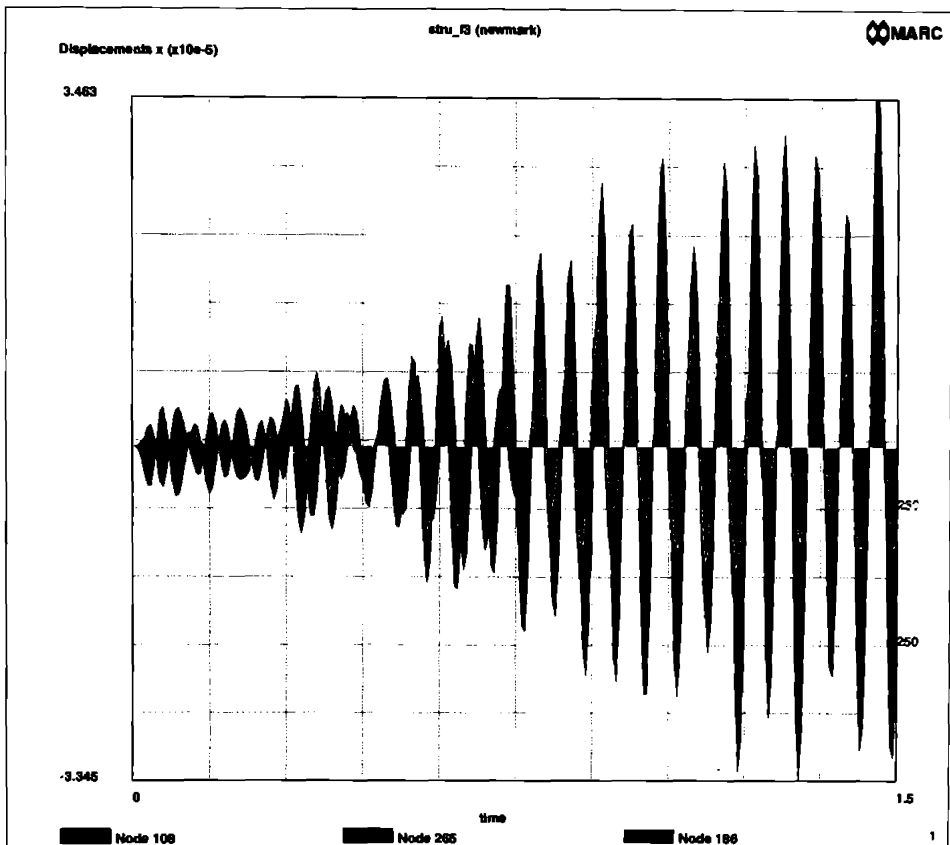


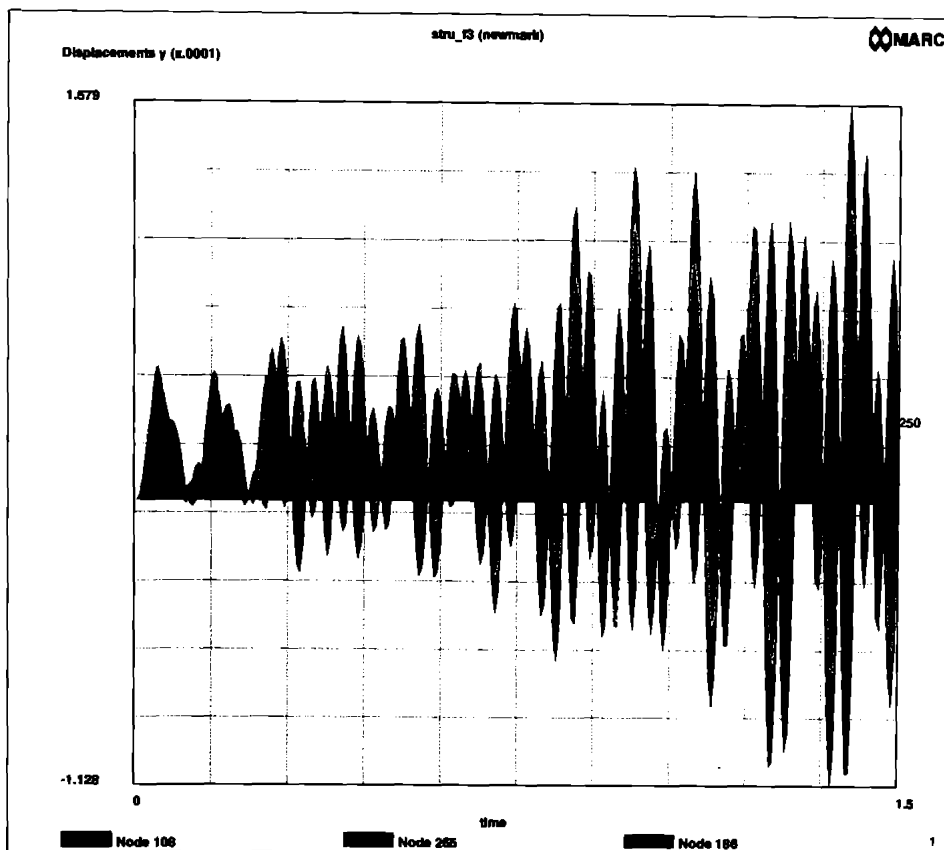


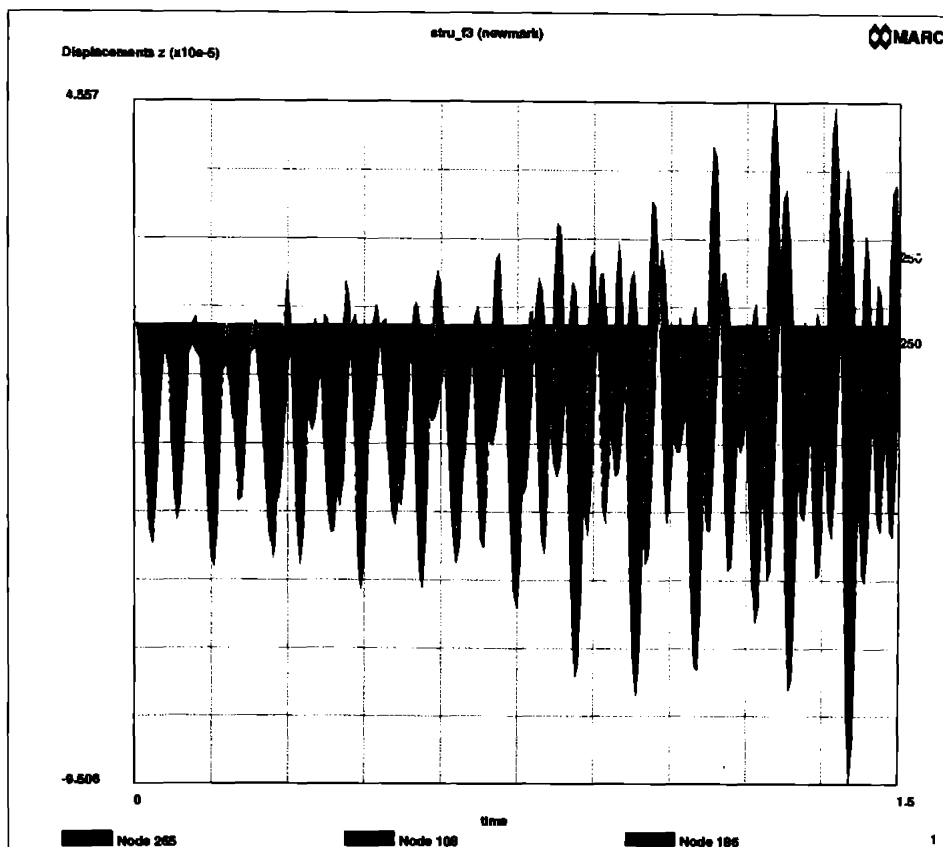


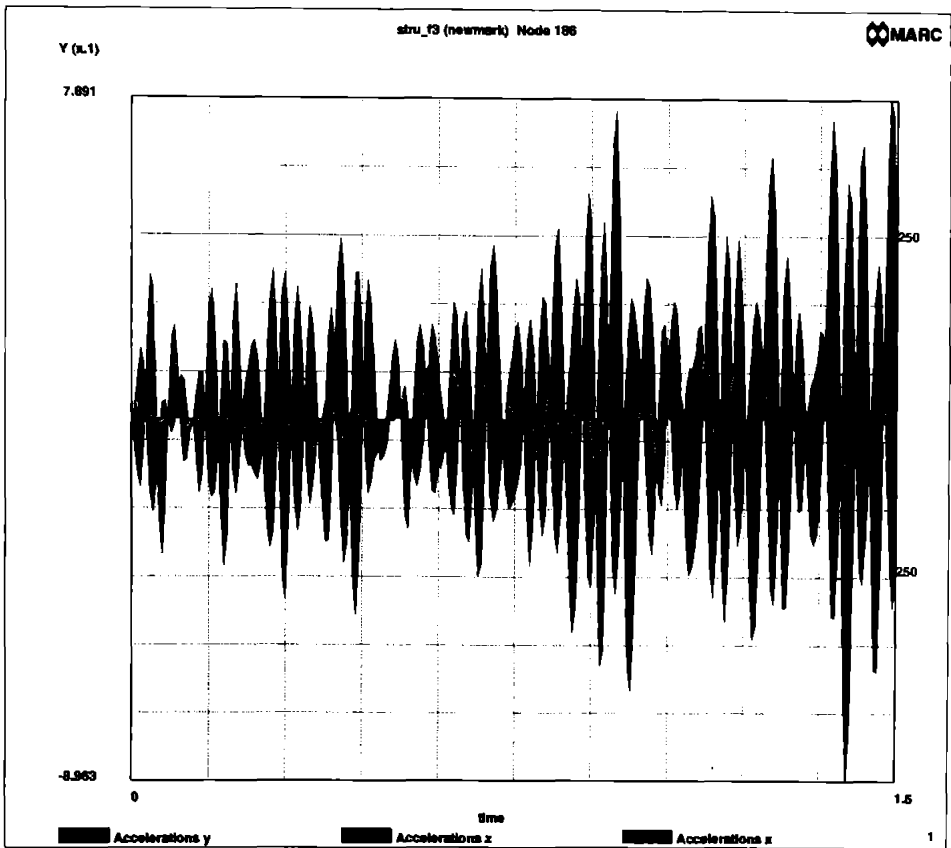


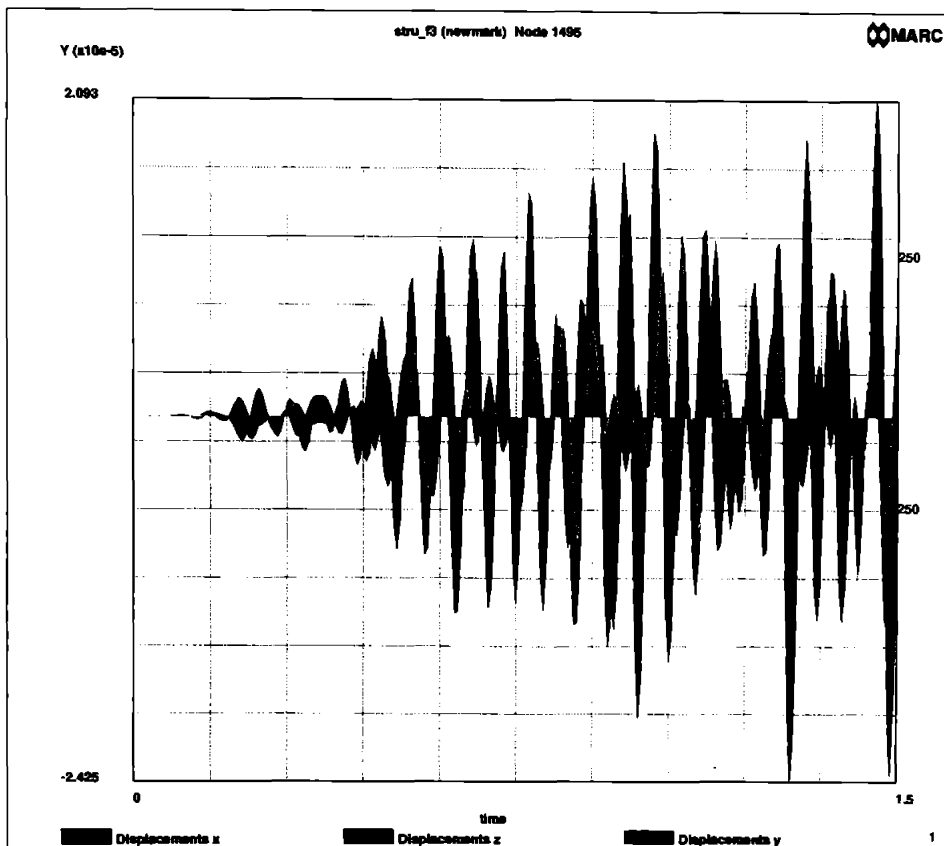


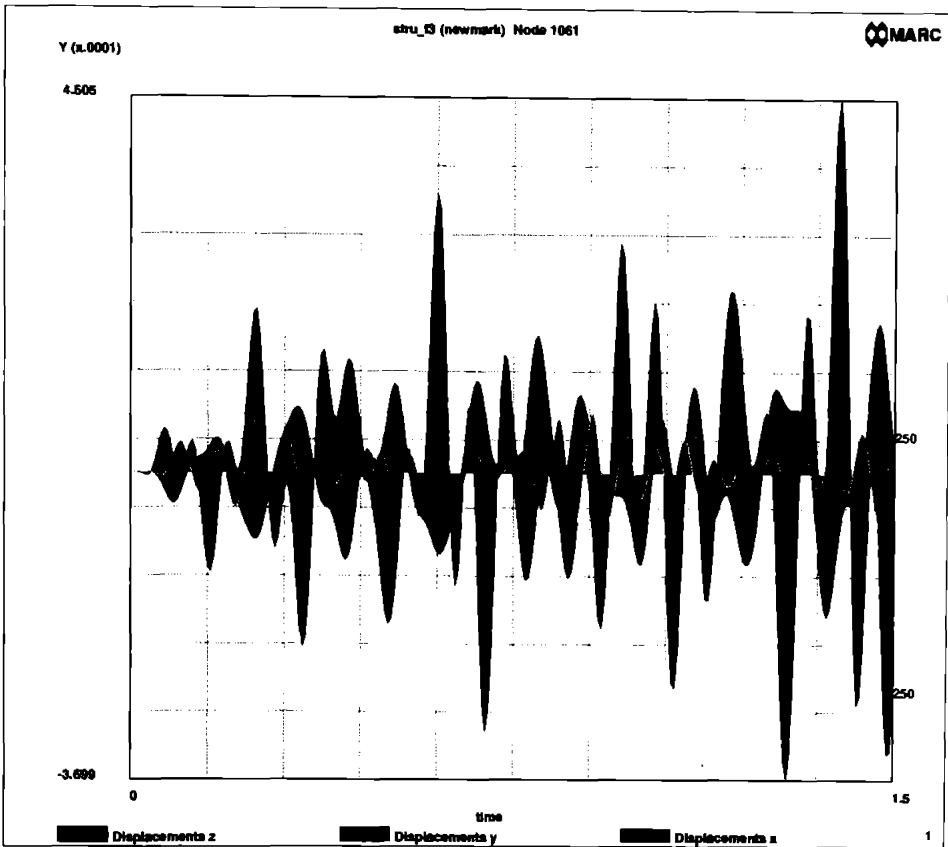


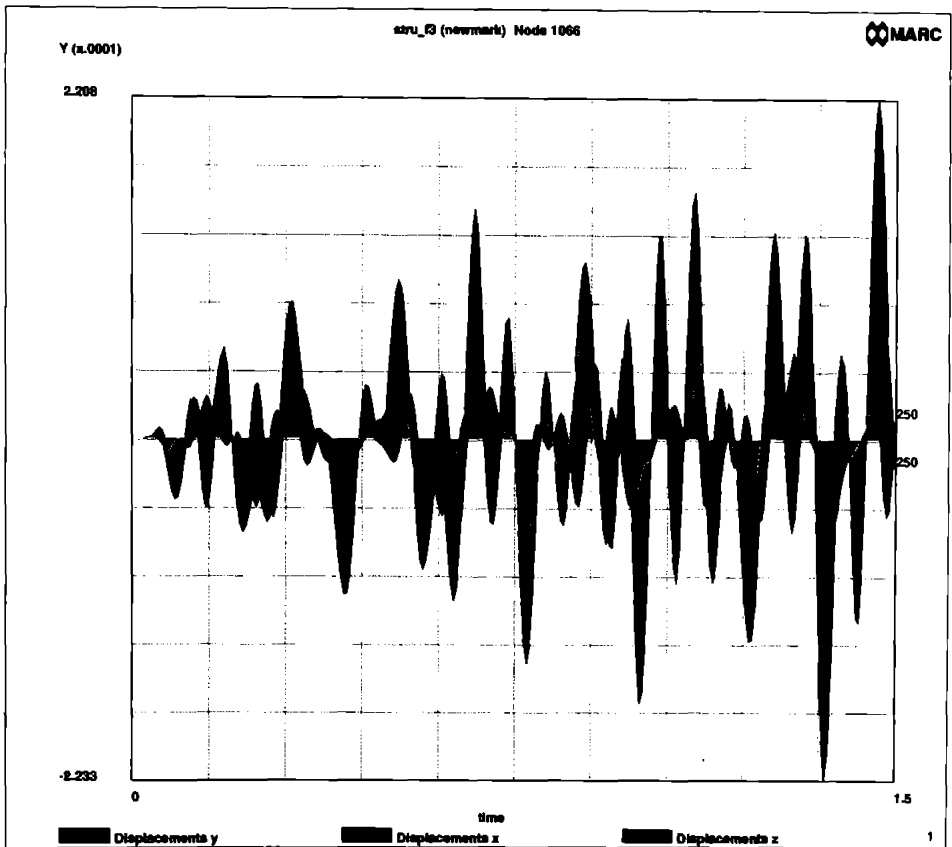


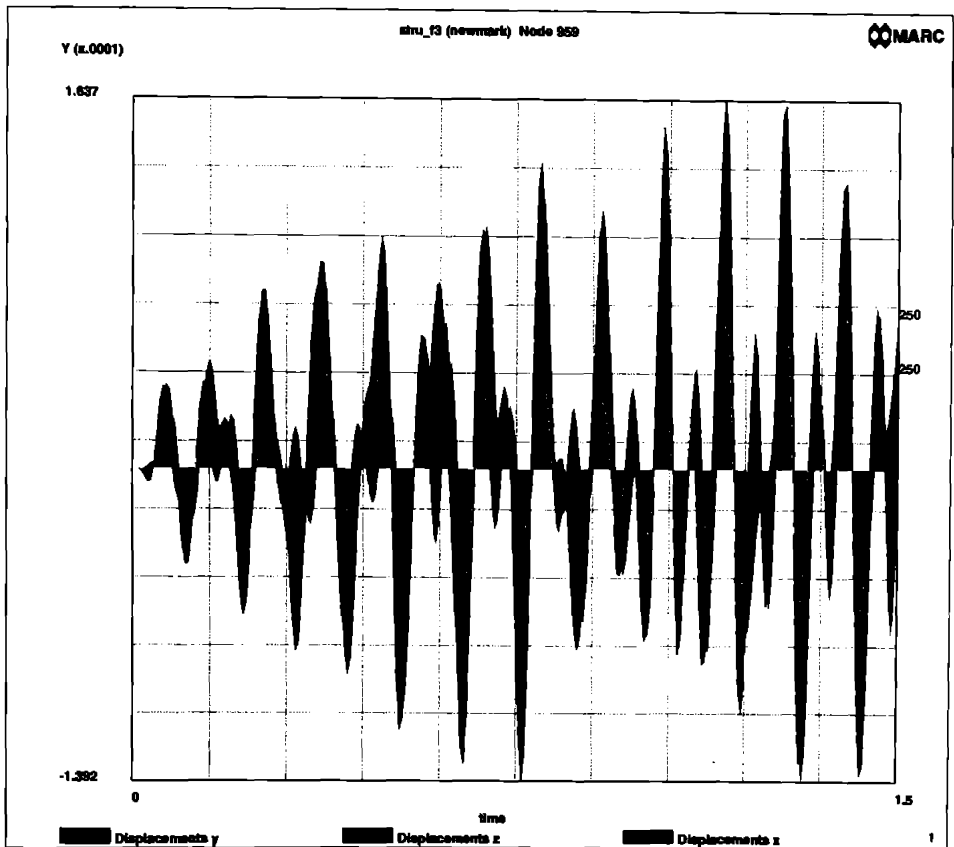


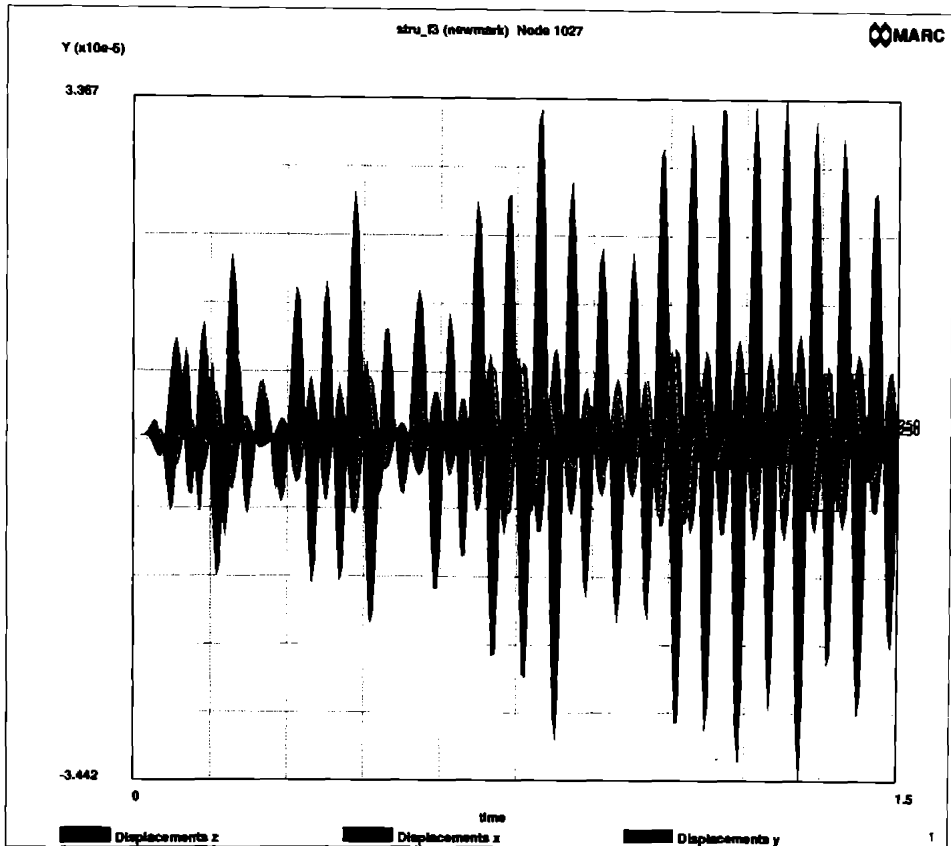


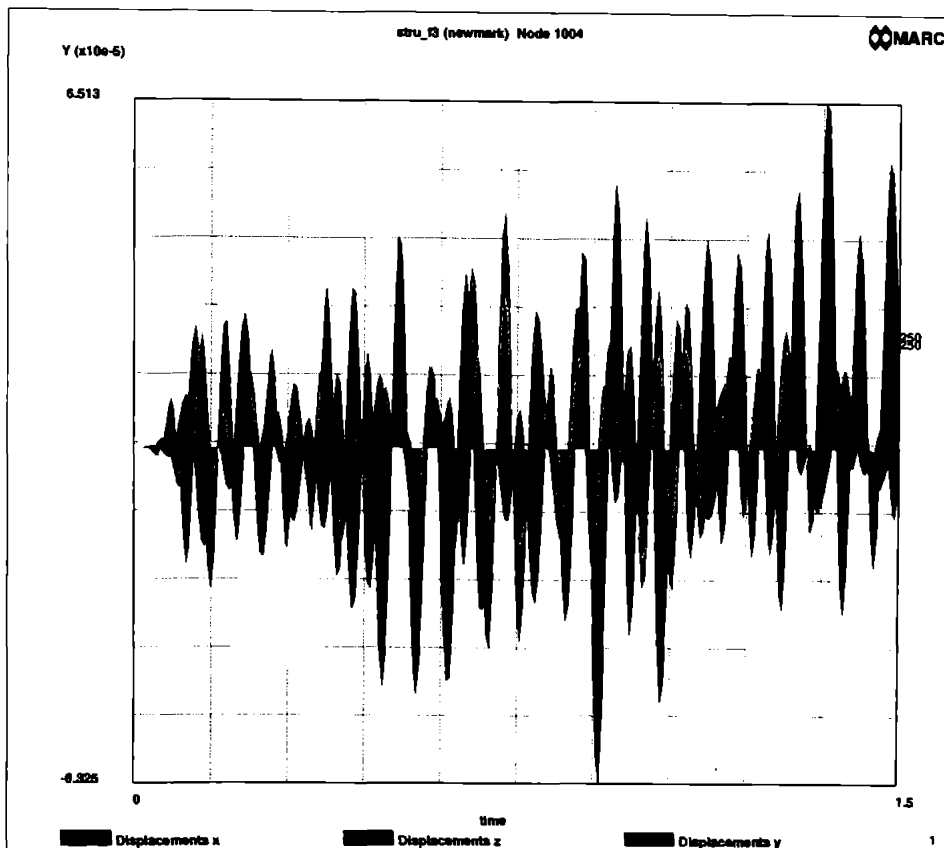


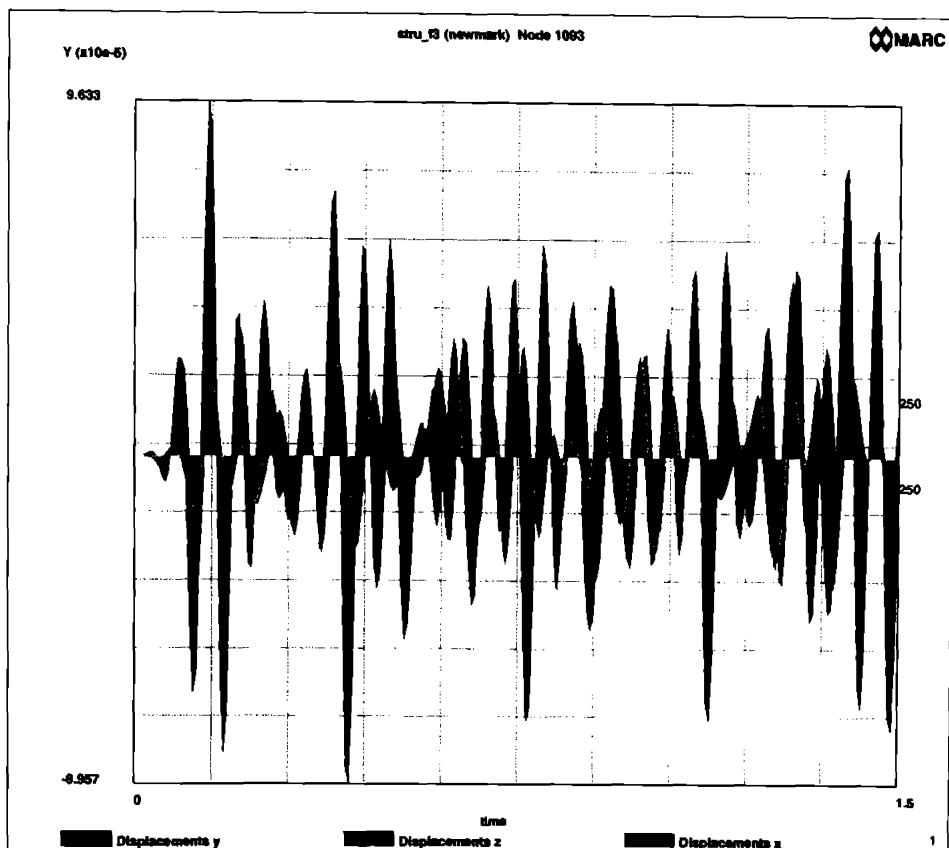


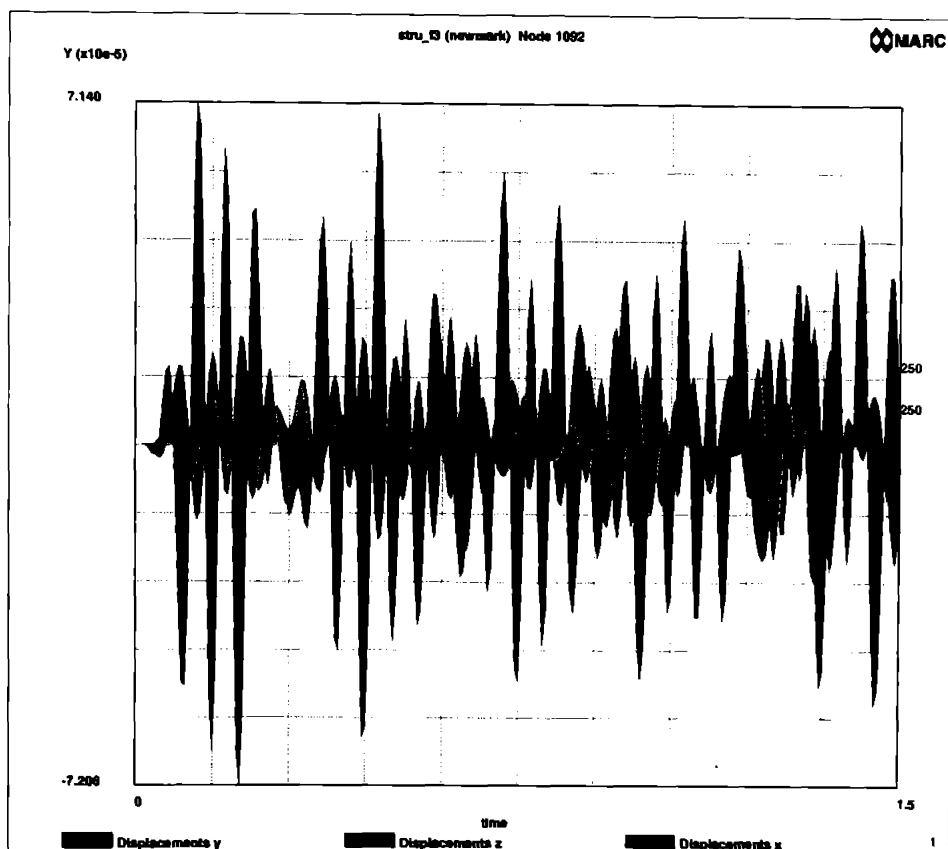


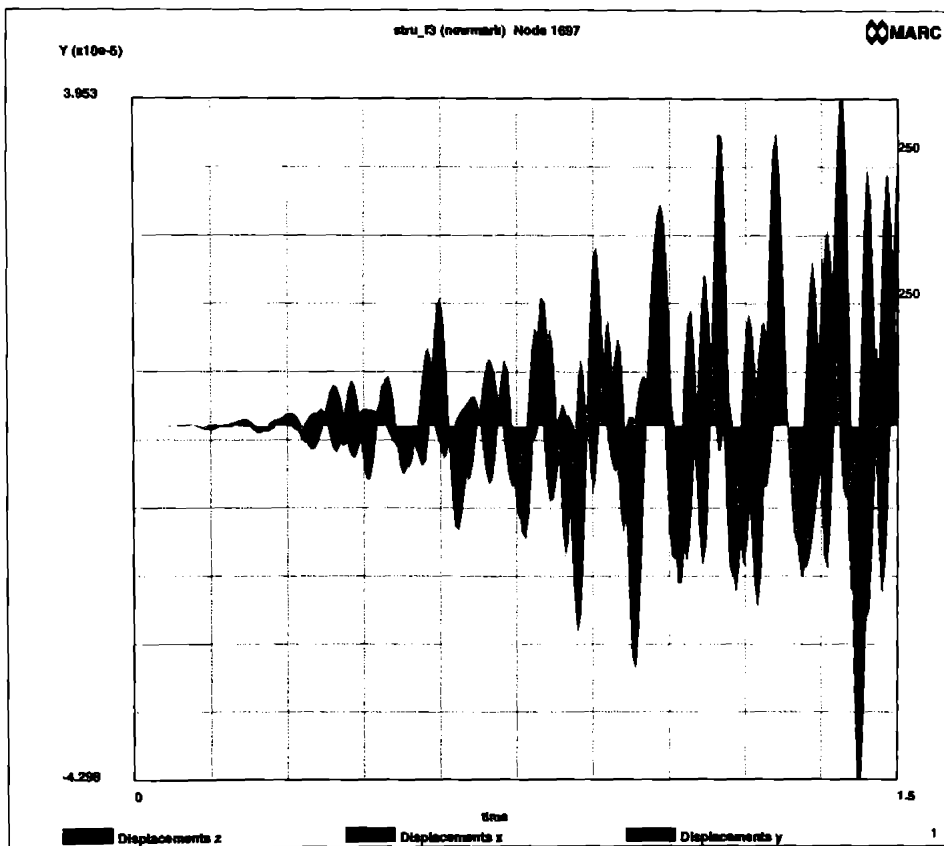


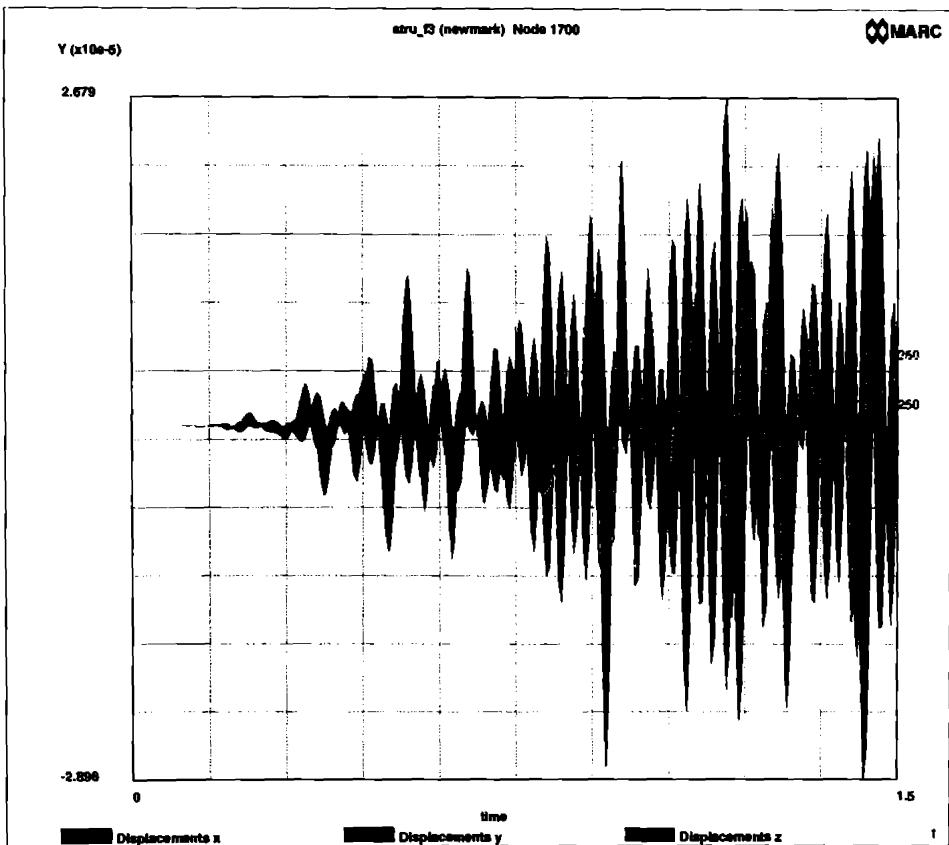












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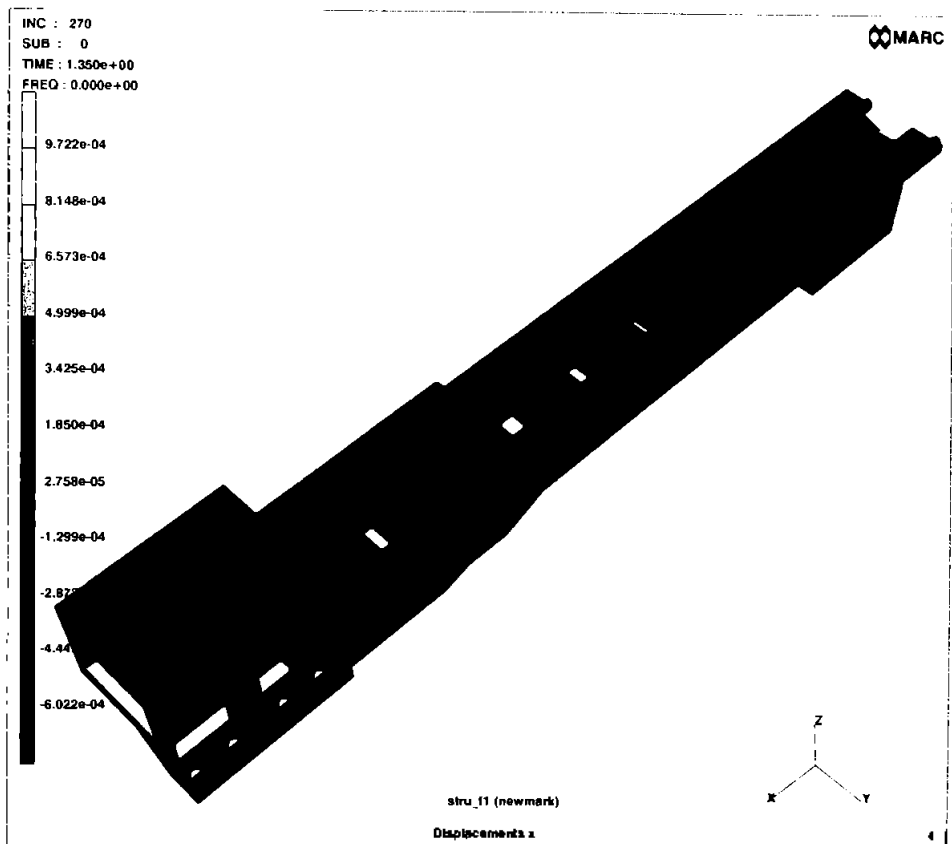
$$n=1200 \text{ rpm}$$

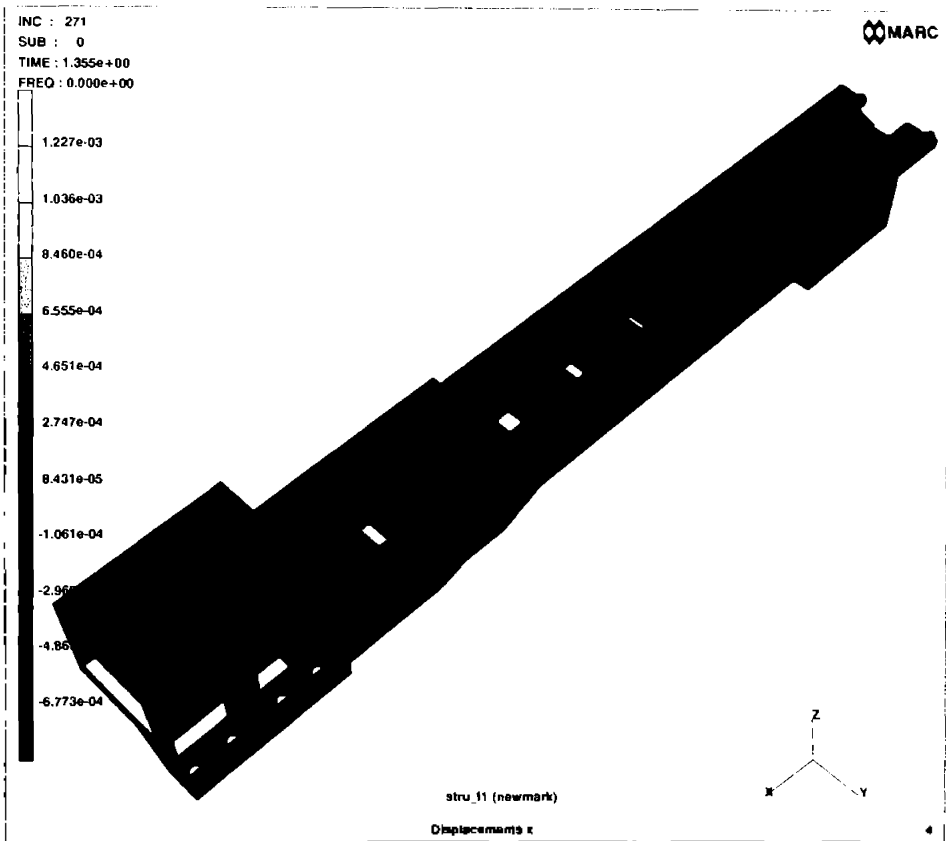
$$t=1.5 \text{ s} ; \Delta t =0.005 \text{ ms}$$

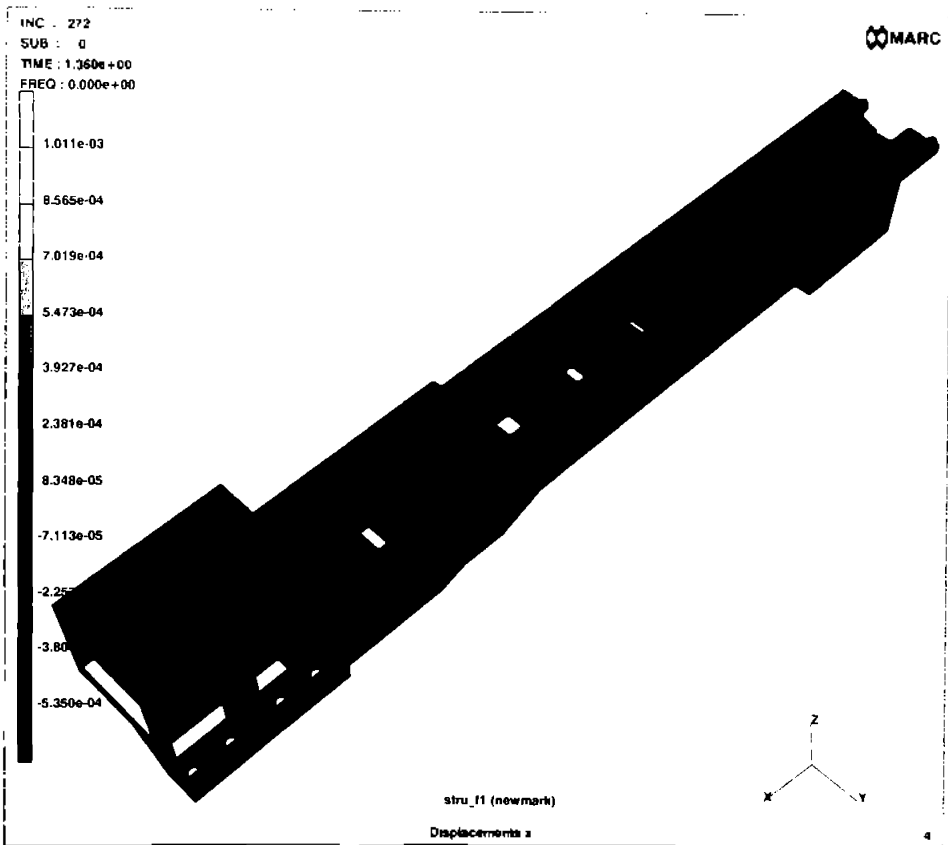
$$p_{nod} = \bar{p}_{o,nod} + p_o \cos \omega t$$

$$p_o = 0.2 \bar{p}_{o,nod}$$

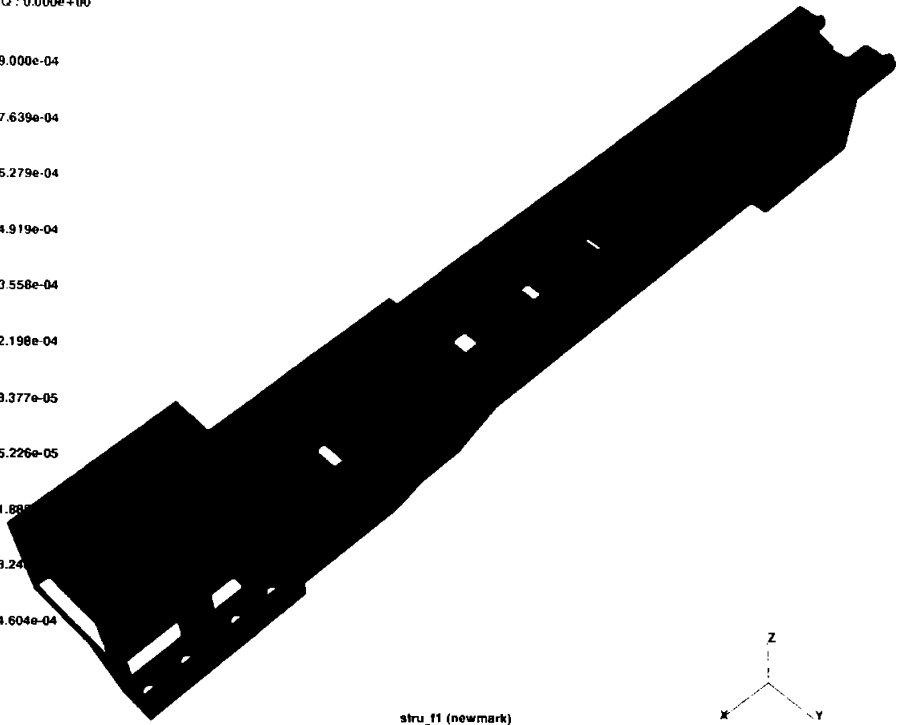
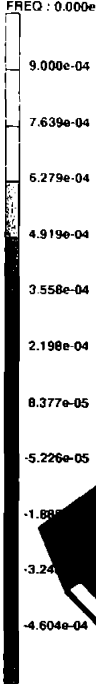
amortizare structurala





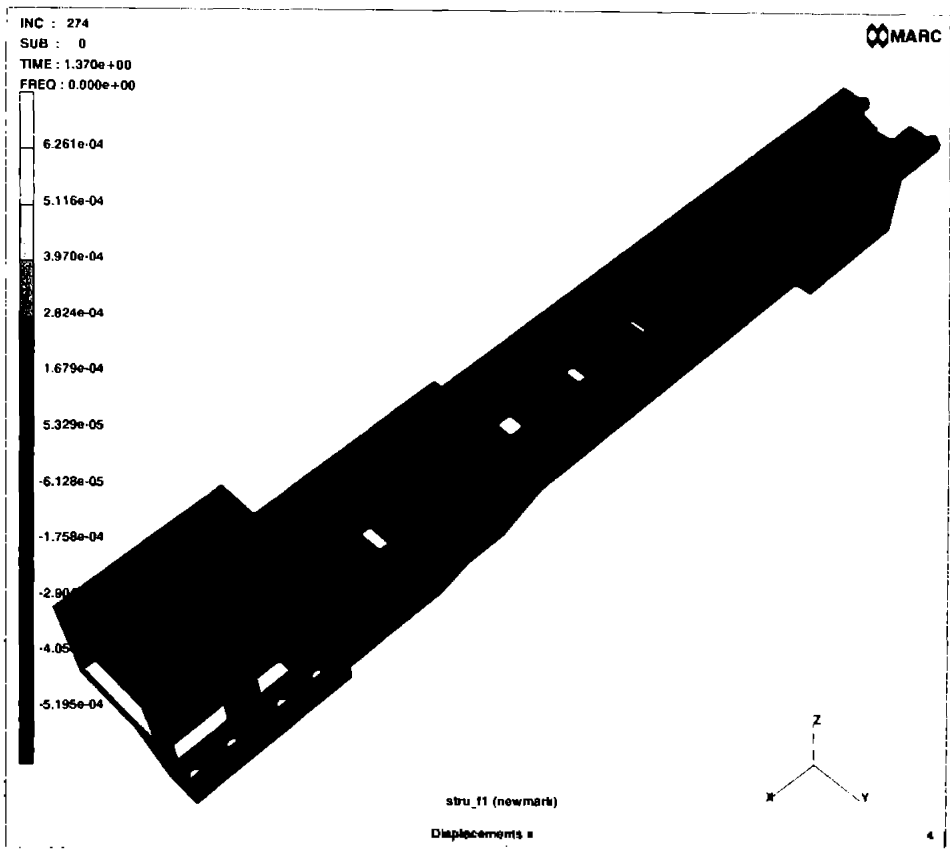


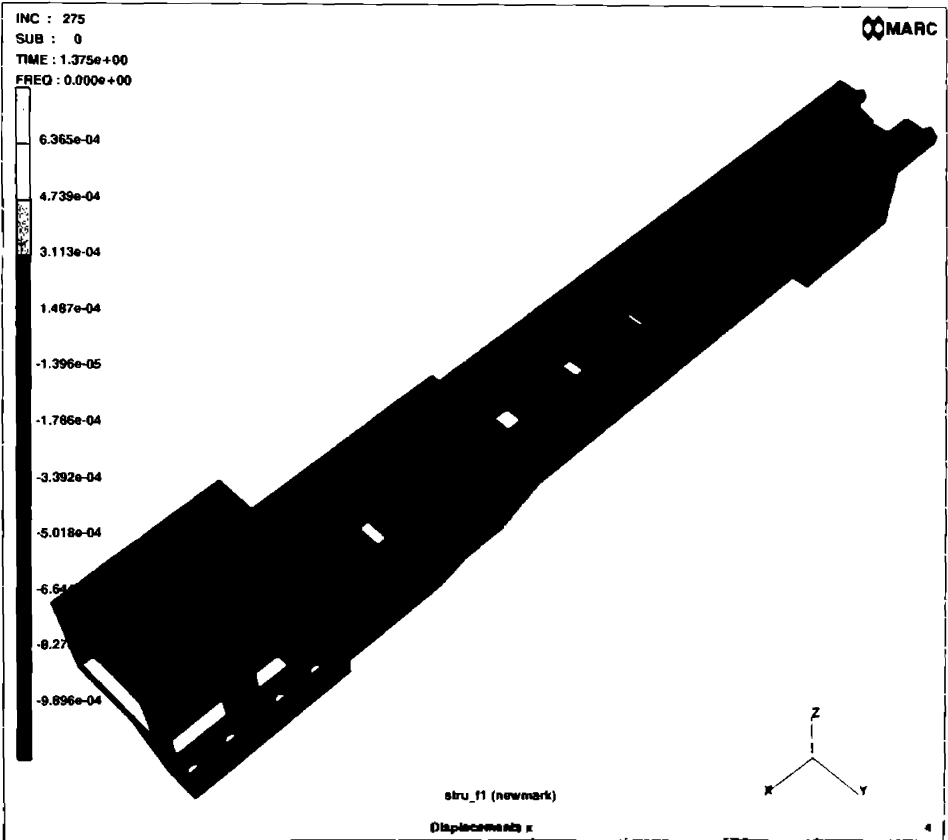
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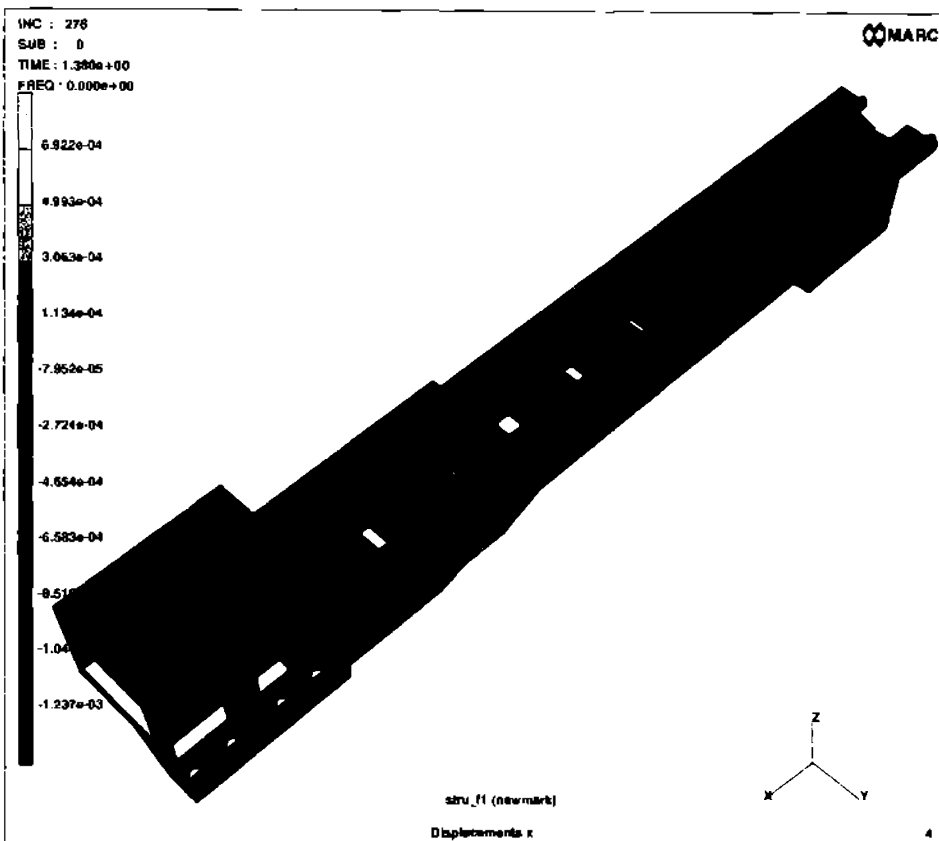


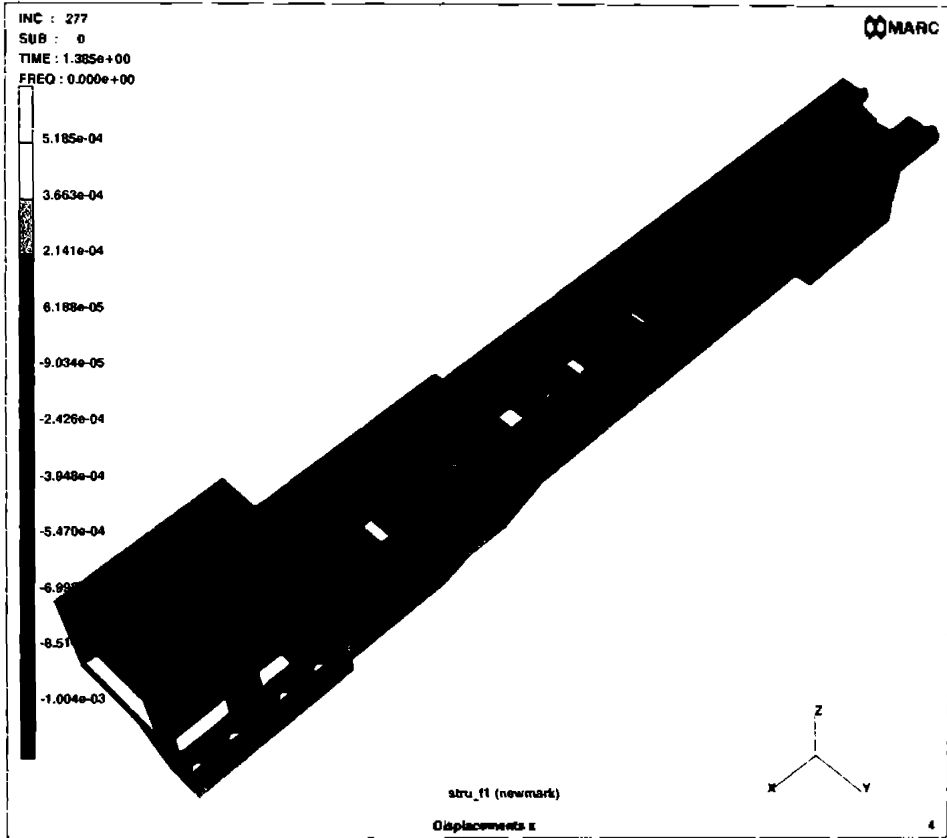
stru_f1 (newmark)
Displacements »

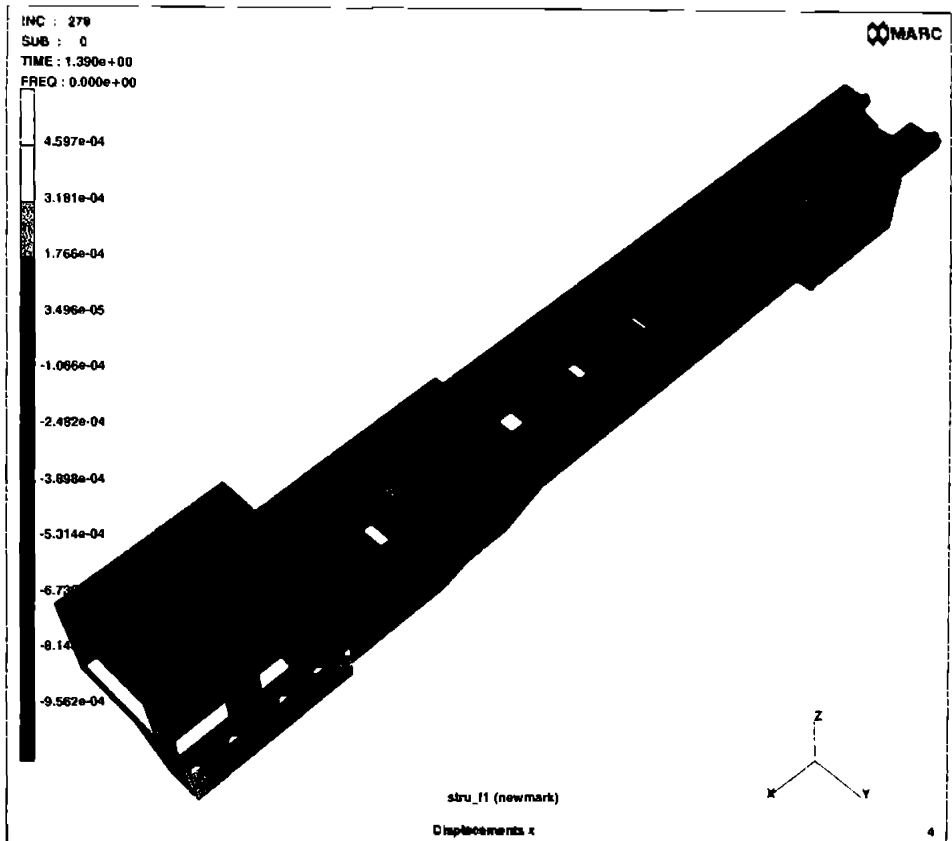


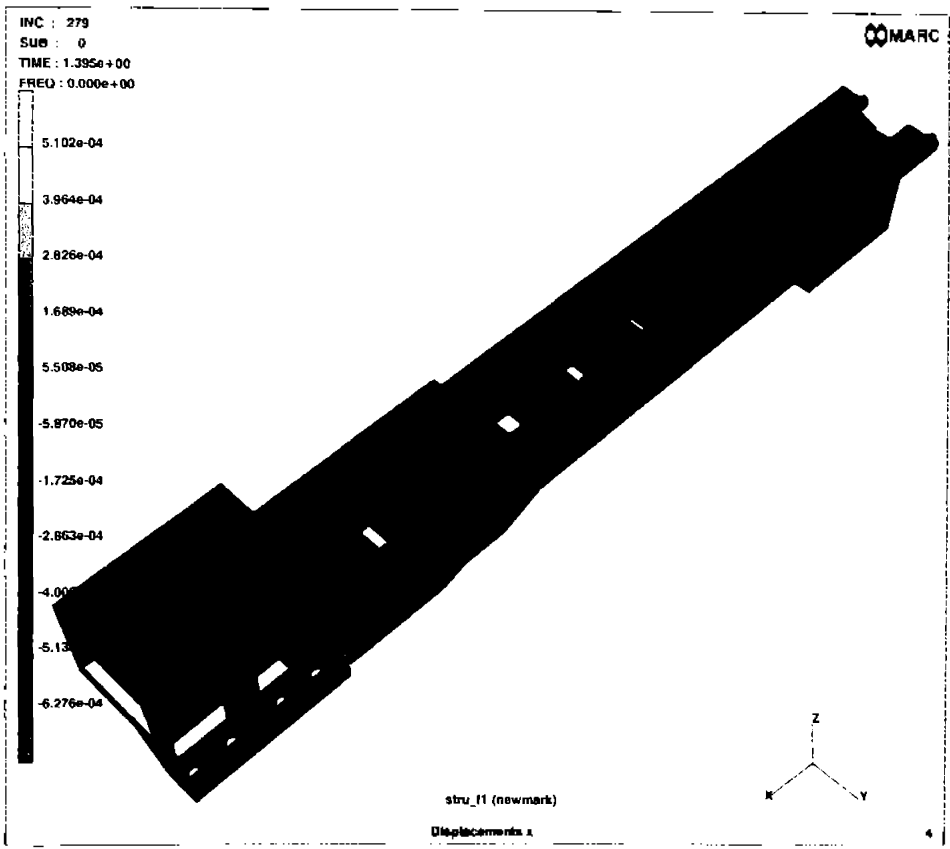




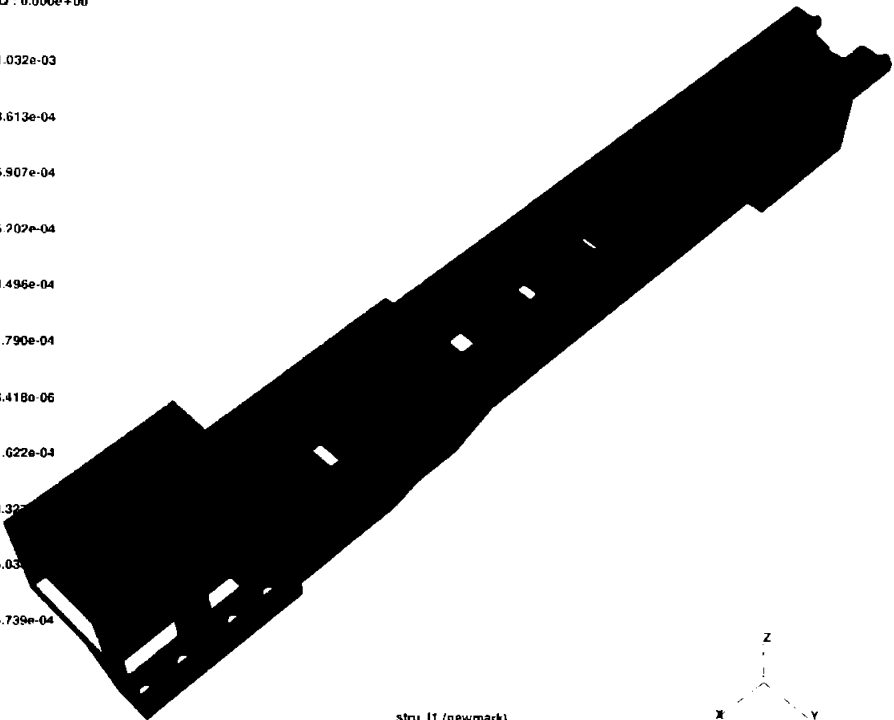
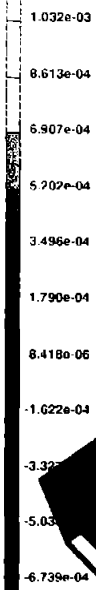








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stru_1f (newmark)
Displacement z



