

技术邻 > Technical Neighbor > CAE仿真 > CAE Simulation > Abaqus

Abaqus中C3D8R单元使用标准应变矩阵B进行一点减缩积分吗?

Does the C3D8R element in Abaqus use the standard strain matrix B for a point reduction integral?

浏览: 846 回答: 2 Views: 846 Answers: 2

自编C3D8R程序计算得到的单元刚度矩阵与Abaqus没有完全对应上, 自编MATLAB程序使用标准B进行一点减缩积分, 不清楚ABAQUS是否采用了其他修正方法

The element stiffness matrix calculated by my self-written C3D8R program does not completely correspond to Abaqus, and my self-written MATLAB program uses the standard B for a point reduction integral. I am not clear whether Abaqus uses other correction methods.

ElementStiffnessMatrix

24x24 double

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	2.7764e+...	-1.2620e+...	-1.2620e+...	1.7668e+...	2.5240e+...	-1.2620e+...	7.5712e+...	2.5240e+...	1.7668e+...	-1.2620e+...	1.2620e+...	-7.5712e+...	-2.5240e+...	-2.5240e+...	-1.7668e+...	1.2620e+...	-2.5240e+...	-2.7764e+...							
2	-1.2620e+...	2.7764e+...	1.2620e+...	-2.5240e+...	-7.5712e+...	2.5240e+...	-2.5240e+...	-1.7668e+...	-1.2620e+...	1.7668e+...	-2.5240e+...	2.5240e+...	1.7668e+...	1.2620e+...	-2.5240e+...	-1.7668e+...	2.5240e+...	-2.7764e+...							
3	-1.2620e+...	1.2620e+...	2.7764e+...	-2.5240e+...	-2.5240e+...	1.7668e+...	2.5240e+...	1.2620e+...	-1.7668e+...	-2.5240e+...	7.5712e+...	-2.5240e+...	1.7668e+...	2.5240e+...	-1.2620e+...	-2.5240e+...	2.7764e+...	-2.7764e+...							
4	1.7668e+...	-2.5240e+...	-2.5240e+...	2.7764e+...	1.2620e+...	1.7668e+...	2.5240e+...	1.2620e+...	-1.7668e+...	-2.5240e+...	-2.5240e+...	1.7668e+...	2.5240e+...	-1.2620e+...	-2.5240e+...	-1.7668e+...	-2.7764e+...	-2.7764e+...							
5	2.5240e+...	-7.5712e+...	-2.5240e+...	-2.5240e+...	1.2620e+...	1.7668e+...	2.5240e+...	1.2620e+...	-1.7668e+...	-2.5240e+...	-2.5240e+...	1.7668e+...	2.5240e+...	-1.2620e+...	-2.5240e+...	-1.7668e+...	-2.7764e+...	-2.7764e+...							
6	-1.2620e+...	2.5240e+...	1.7668e+...	-2.5240e+...	1.2620e+...	2.7764e+...	2.5240e+...	-2.5240e+...	-7.5712e+...	-2.5240e+...	1.2620e+...	-1.7668e+...	2.5240e+...	-2.5240e+...	-1.2620e+...	-2.5240e+...	-2.7764e+...	-2.7764e+...							
7	7.5712e+...	-2.5240e+...	-2.5240e+...	1.7668e+...	1.2620e+...	-2.5240e+...	2.7764e+...	1.2620e+...	1.7668e+...	-2.5240e+...	2.5240e+...	1.2620e+...	-1.7668e+...	-2.5240e+...	-1.2620e+...	-2.5240e+...	-2.7764e+...	-2.7764e+...							
8	-2.5240e+...	-7.5712e+...	-2.5240e+...	-2.5240e+...	1.2620e+...	1.7668e+...	2.5240e+...	1.2620e+...	-1.7668e+...	-2.5240e+...	-2.5240e+...	1.7668e+...	2.5240e+...	-1.2620e+...	-2.5240e+...	-1.7668e+...	-2.7764e+...	-2.7764e+...							
9	1.7668e+...	-2.5240e+...	1.2620e+...	-2.5240e+...	1.2620e+...	2.7764e+...	2.5240e+...	-2.5240e+...	-7.5712e+...	-2.5240e+...	1.2620e+...	-1.7668e+...	2.5240e+...	-2.5240e+...	-1.2620e+...	-2.5240e+...	-2.7764e+...	-2.7764e+...							
10	-1.2620e+...	2.5240e+...	1.7668e+...	-2.5240e+...	1.2620e+...	2.7764e+...	2.5240e+...	-2.5240e+...	-7.5712e+...	-2.5240e+...	1.2620e+...	-1.7668e+...	2.5240e+...	-2.5240e+...	-1.2620e+...	-2.5240e+...	-2.7764e+...	-2.7764e+...							
11	-2.5240e+...	-7.5712e+...	-2.5240e+...	-2.5240e+...	1.2620e+...	1.7668e+...	2.5240e+...	1.2620e+...	-1.7668e+...	-2.5240e+...	-2.5240e+...	1.7668e+...	2.5240e+...	-1.2620e+...	-2.5240e+...	-1.7668e+...	-2.7764e+...	-2.7764e+...							
12	1.7668e+...	-2.5240e+...	1.2620e+...	-2.5240e+...	1.2620e+...	2.7764e+...	2.5240e+...	-2.5240e+...	-7.5712e+...	-2.5240e+...	1.2620e+...	-1.7668e+...	2.5240e+...	-2.5240e+...	-1.2620e+...	-2.5240e+...	-2.7764e+...	-2.7764e+...							
13																									

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关于abaqus建模的问题，如何在模型中建...

3个回答

老师们好，这是我的模型，是用voronoi方法建立的，我现在想要使用cohesive接触，使...

Questions about ABAQUS modeling, how to establish a surface in the model? Questions about ABAQUS modeling. Questions about ABAQUS modeling. Questions about ABAQUS modeling. 3 answers Hello teachers, this is my model, which was established using the Voronoi method. I now want to use cohesive contact, and I want to establish cohesive contact using the plugin. When I get to the step of selecting the surface, I have a problem. The section enclosed by the four sides cannot be selected (4 sides can be selected, but this surface cannot be selected in the surface menu). Could you please take a look at how to solve this problem? Similar surfaces cannot be selected, as shown in the model tree.

【abaqus-块石本构选取】abaqus模拟两块...

1个回答

各位大神好，我想用ABAQUS有限元模拟块石挤压，如角面接触时，接触部分的破碎压...

【ABAQUS-Block Stone Constitutive Selection】 What is the suitable model for ABAQUS simulation of two stone contacts and crushing? 1 answer Hello all, I want to use ABAQUS finite element simulation to simulate the compression of block stones. When the corner faces are in contact, the crushing and compression of the contact part may be difficult to achieve, so I am thinking of simulating these crushing amounts with damage approximation, such as similar to concrete elastic-plastic damage constitutive, or does ABAQUS have any suitable models for the characteristics of rocks? I hope everyone can guide me, the more detailed the better. Thank you.

abaqus 应力导入abaqus explicit?

2个回答

大神请问这个问题如何解决？

编辑 Edit

abaq... 钢筋非线性静力分析...
氢 的状态进行线性瞬时分
力? 析?

What is the hydrostatic pressure in Abaqus? Can a linear instantaneous analysis be performed after the nonlinear static analysis of reinforcement?

How to import stress into ABAQUS explicit? 2 answers Great master, how can this problem be solved?



关注问题 Pay

attention to the

邀请回答 Invite to answer

我来回答 I will answer

issue

全部回答 (2) All answers (2)

cccCAPPER

关注 Focus

可以私聊一下吗，我也在搞这个 Can we chat privately? I am also working on this.

2024年10月23日 October 23, 2024

评论

点赞 Comment, Like



SnowWave02

关注 Focus

还要加沙漏 Need to add a sandglass

2024年10月11日 October 11, 2024

评论

点赞 Comment and Like

没解决? 试试专家一对一服务 Not solved? Try one-on-one service

换一批 Refresh batch



1次答疑 One session

CAE LIX

本科/9年/机械设计制造及其自动化 Bachelor's Degree/9 years/Mechanical Design, Manufacturing and Automation

结构分析、优化设计、疲劳、流固耦合、论文代做等。

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100元/次 100 yuan per time

预约答

疑 Schedule consultation



2次答疑 Two sessions

风满楼 Wind fills the Tower

博士/13年/结构工程 PhD/13 years/Structural Engineering

钢结构、组合结构设计, ABAQUS有限元分析, 论文撰写

Steel structure, composite structure

200元/次 200 yuan per time

预约答

疑 Schedule consultation



2次答疑 Two sessions

飞尘君 Feichen Jun

本科/9年/新能源汽车 Bachelor's degree/9 years/New Energy Vehicles

starccm动力电池包热仿真及流体仿真 StarCCM thermal simulation and fluid simulation of power battery...

100元/次 100 yuan per time

预约答

疑 Schedule consultation

推荐阅读 Recommended Reading

【专题课程】ANSA HEXABLOCK六面体网格划分专题(完结)...

Wonderful仿真 Wonderful simulation

¥399 \$399

沉澱原创精品系列全套: XFEM-VCCT-Cohesive-contour等...

沉澱 Sedimentation

¥350 \$350

ANSYS必修课_workbench基础操作应用...

大龙猫 Big Cat

¥188 \$188

基于primer和hypermesh的系统分析...

汽车CAE仿真 Automotive CAE simulation