
MXmountdesigner

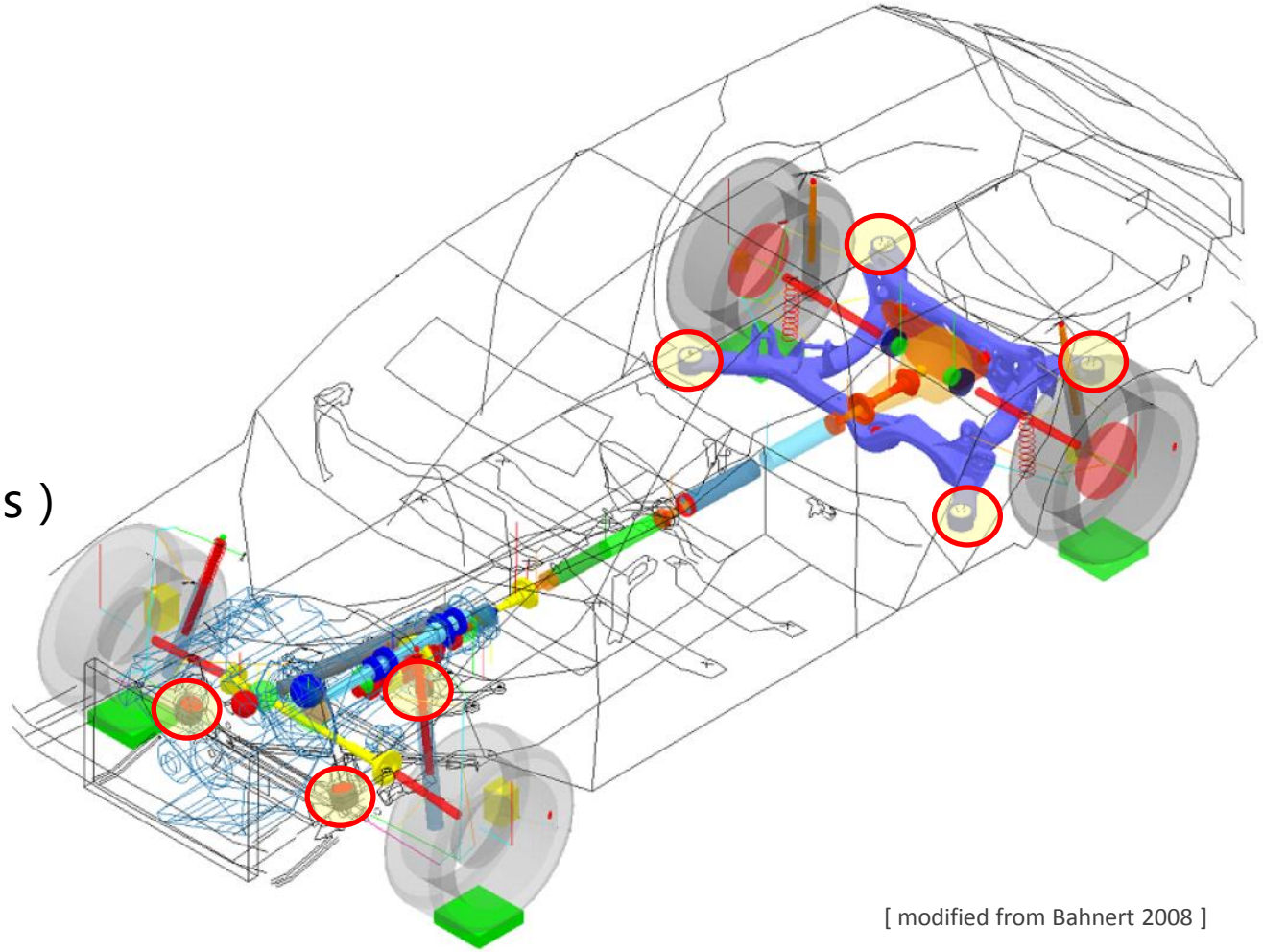
MXmountdesigner的目标

驾乘舒适性和车辆操控模拟
刚体的多体模拟

已开发的用于安装座和衬套的模型（Matlab / Simulink）：
- 弹性体
- 液压体

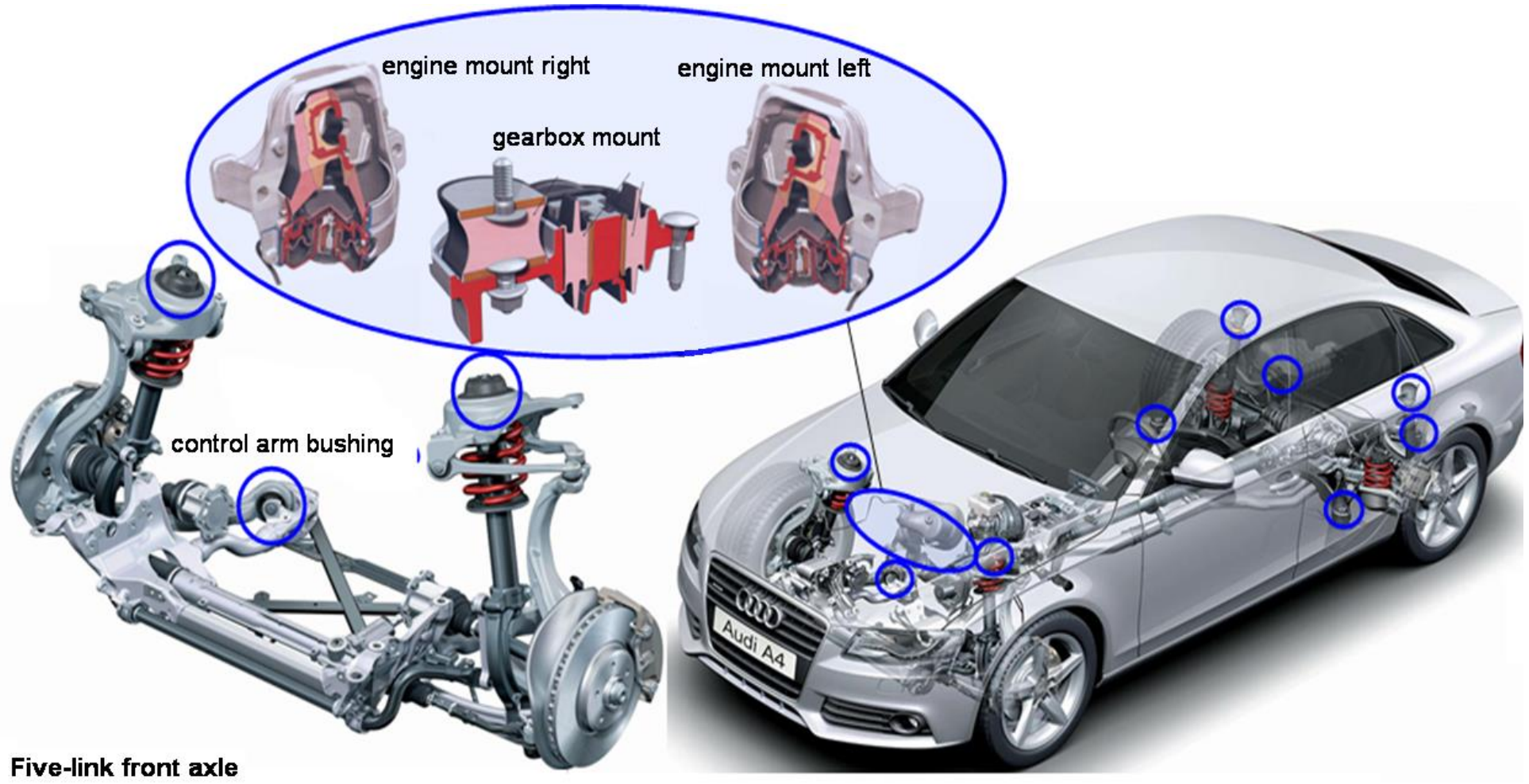
在整体车辆仿真中实施（MSC.Adams）

MXmountdesigner 自动识别相关参数并为MSC.Adams生成属性文件。

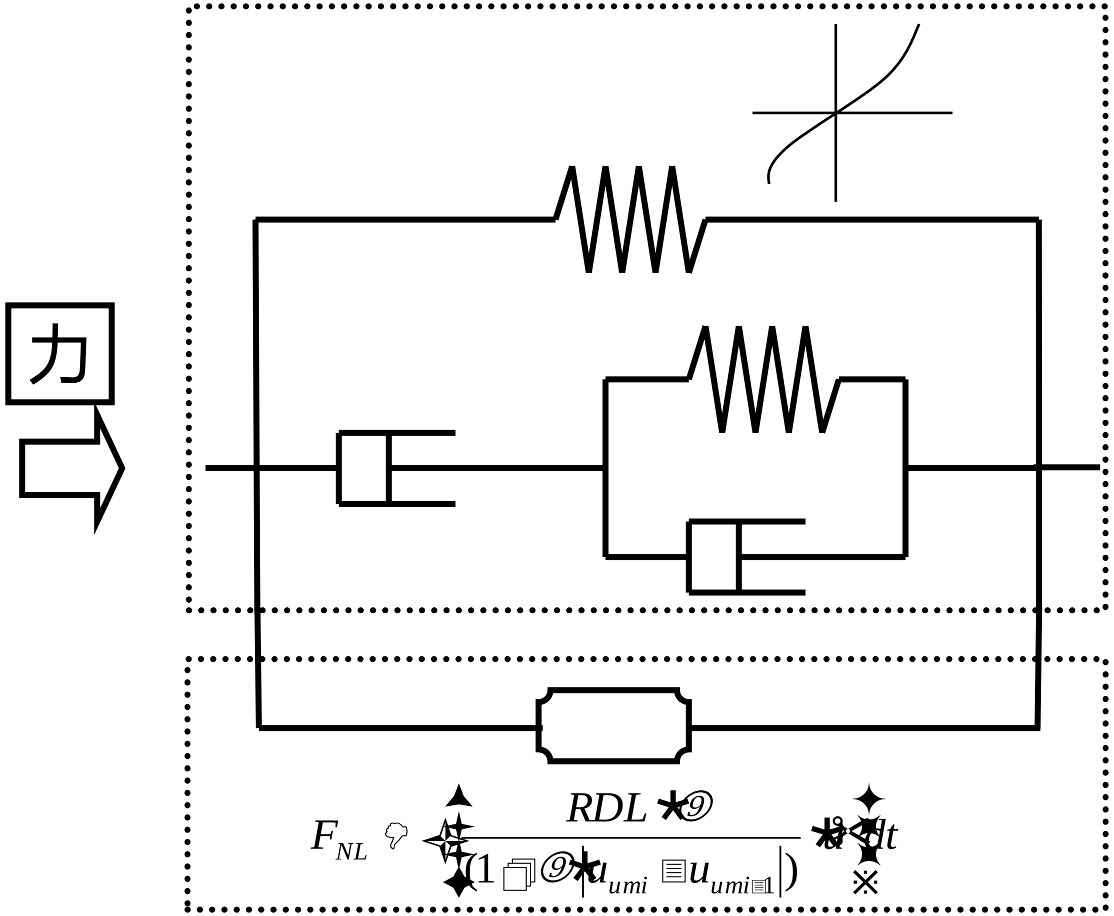


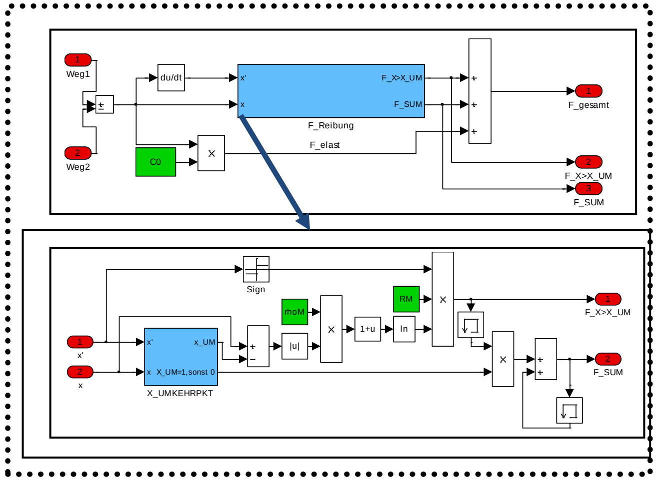
[modified from Bahnert 2008]

弹性底座和液压底座的类型



弹性底座模型结构





线性模块

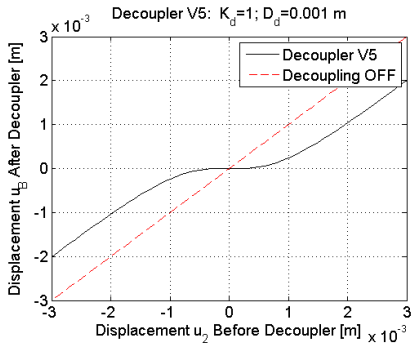
频率依赖性

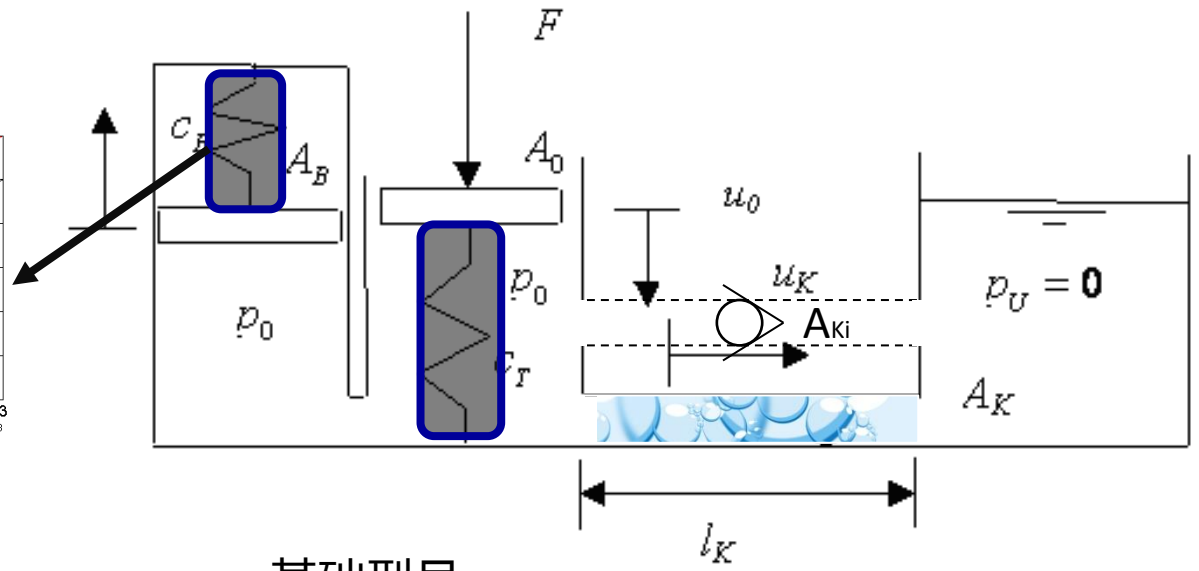
非线性模块

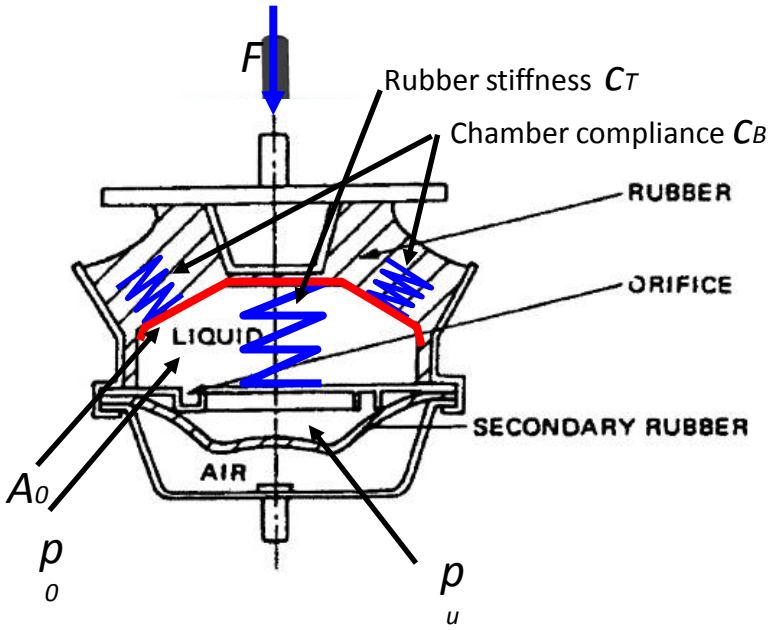
幅度依赖性

力的对数增加

液压底座模型结构



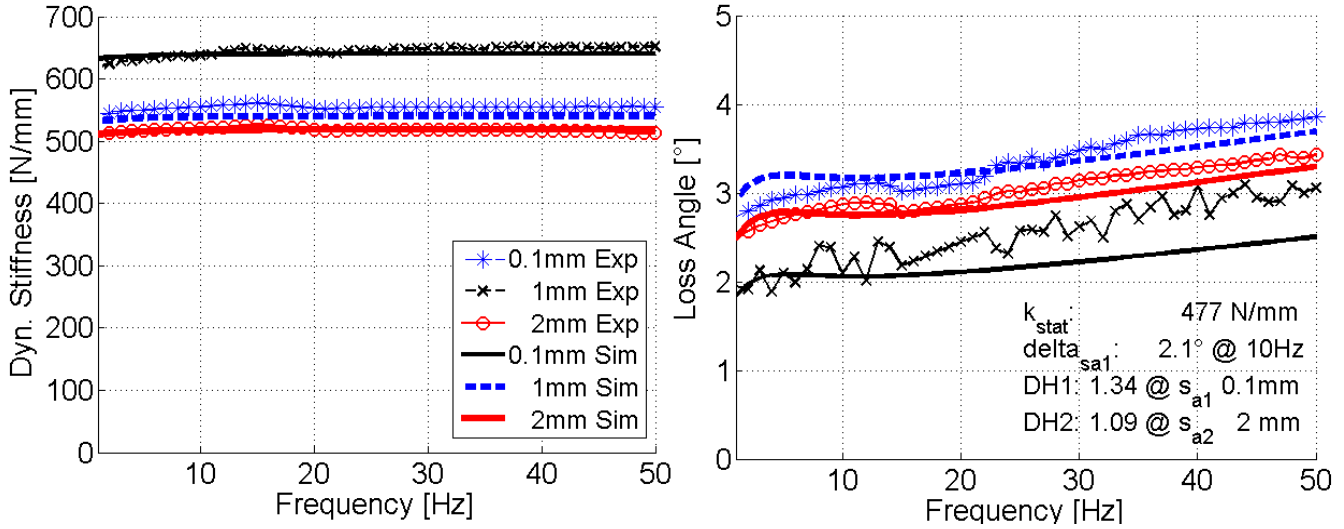




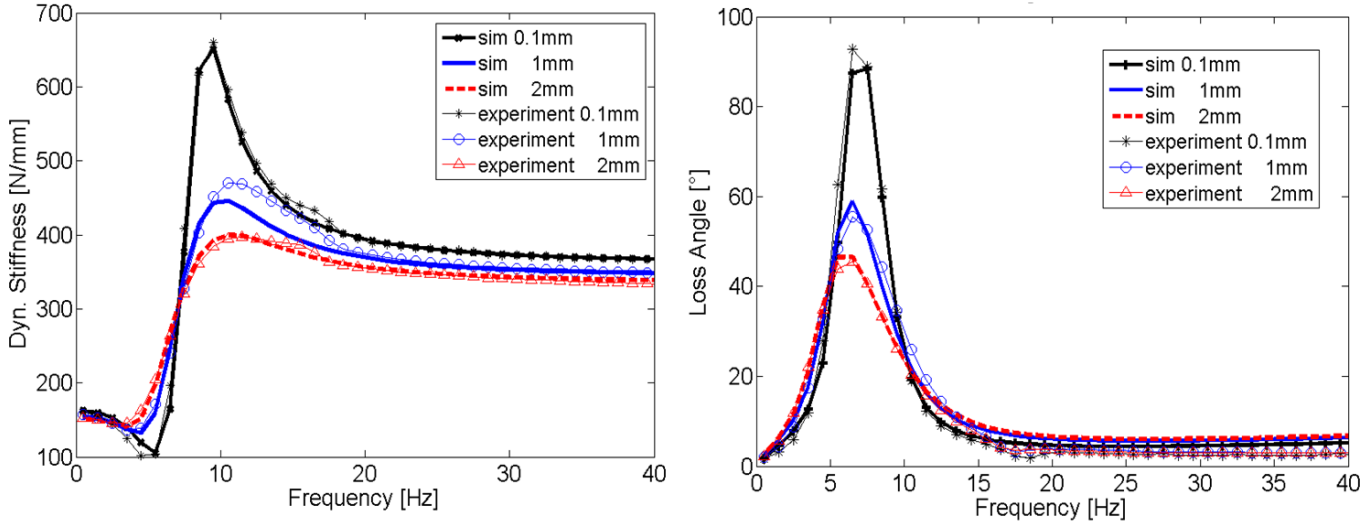
- 基础型号
- 具有物理意义的模型参数
  橡胶刚度 cT; 腔室柔软度 cB;
- 通道长度 lk; 通道的横截面积 Ak
- 弹簧代表弹性体模型G4E
- 空化（压力阈值）
- 有去耦（去耦膜/完全去耦安装座）
- 旁通阀（悬架衬套）

参数识别

MXmountdesigner识别的弹性底座的参数

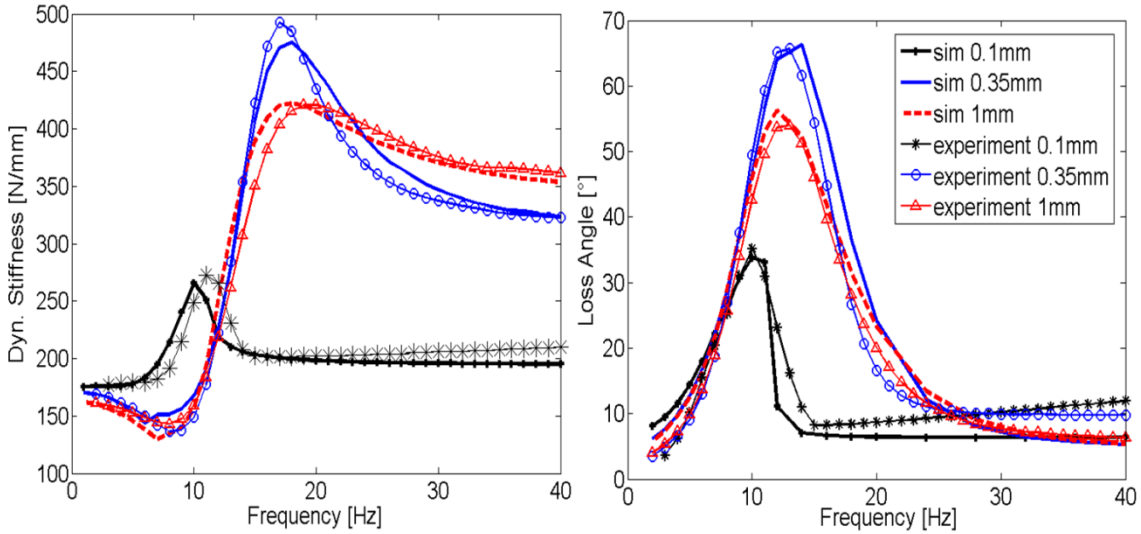


MXmountdesigner识别的液压底座的参数



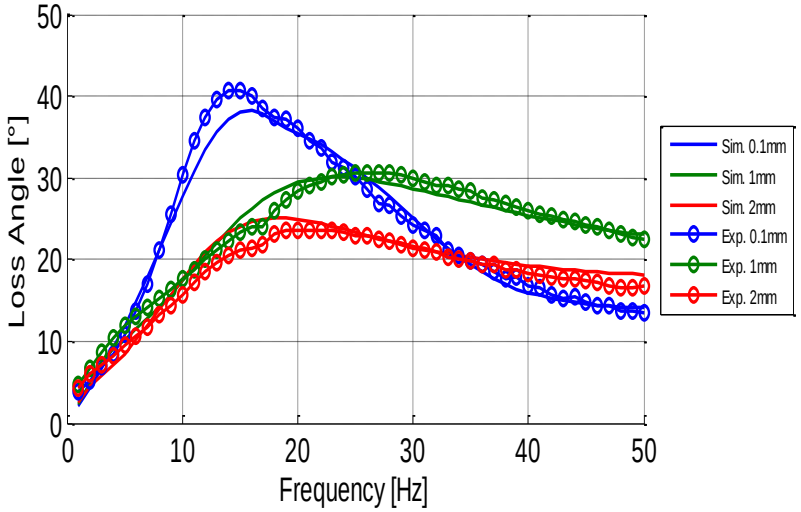
参数识别

完全解耦的被动发动机底座



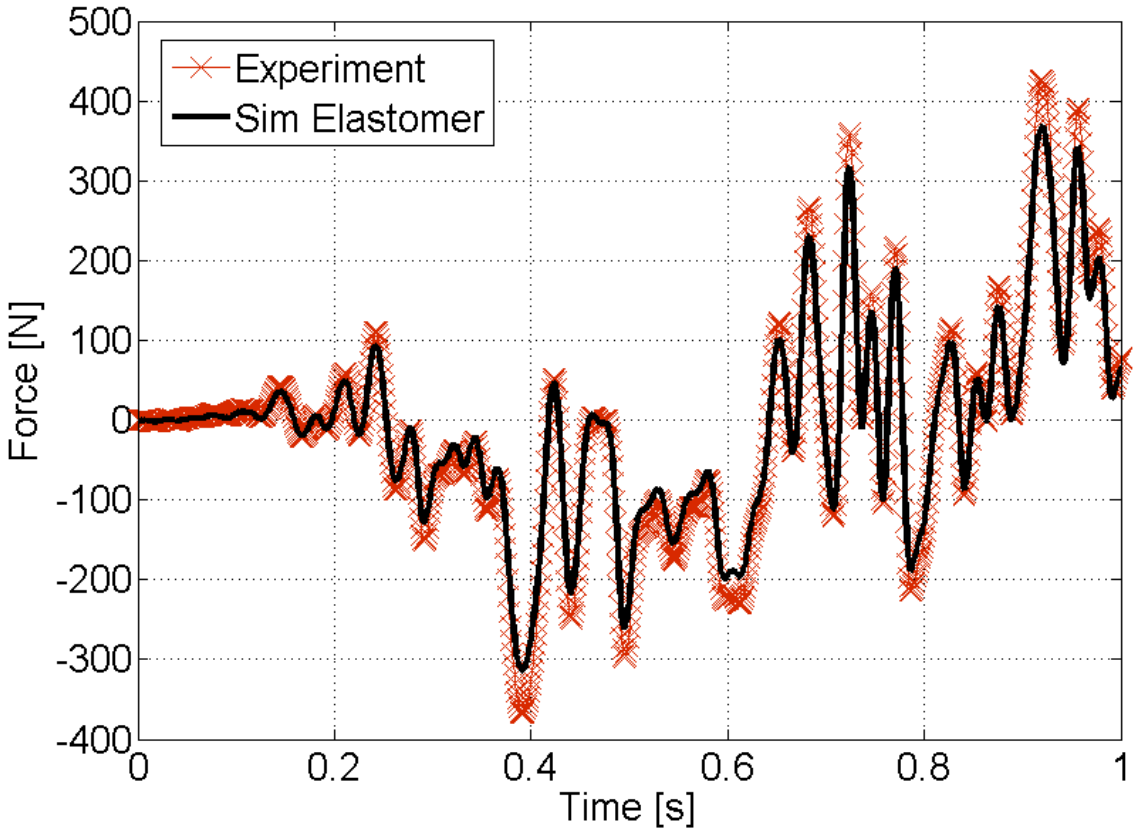
MXmountdesigner识别的液压底座的参数

悬架衬套

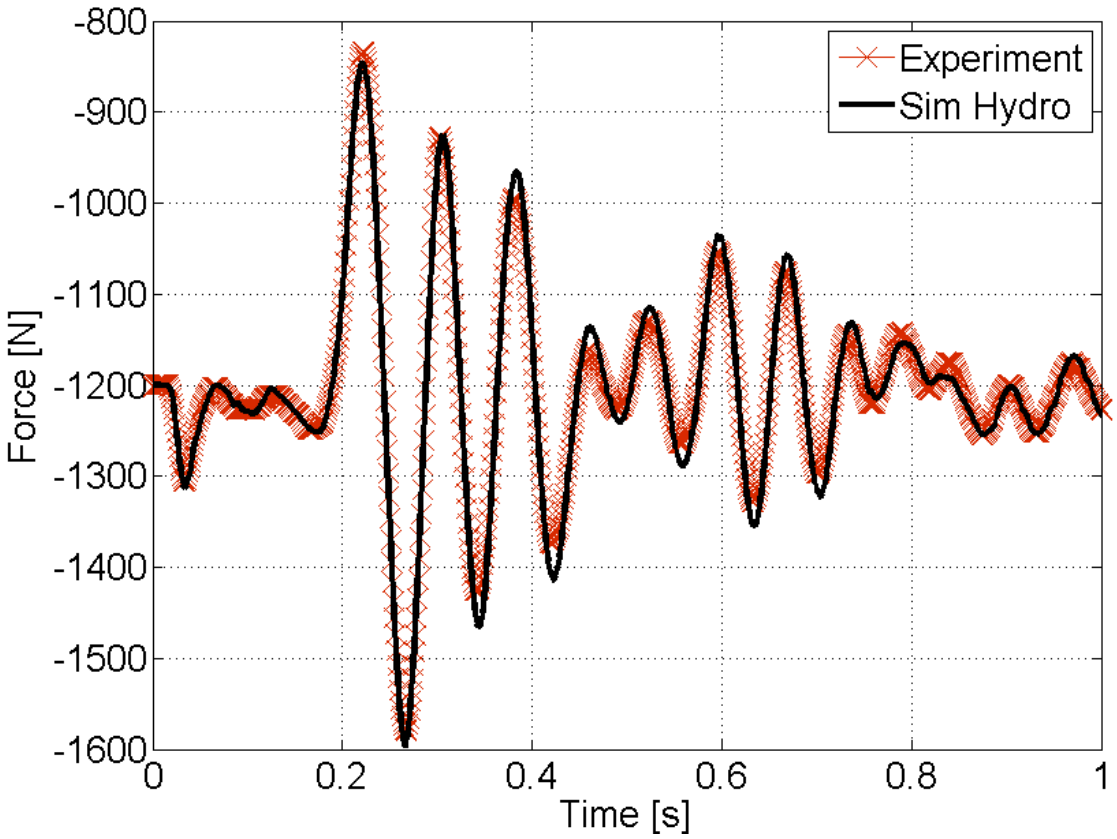


随机激励

弹性底座



液压底座

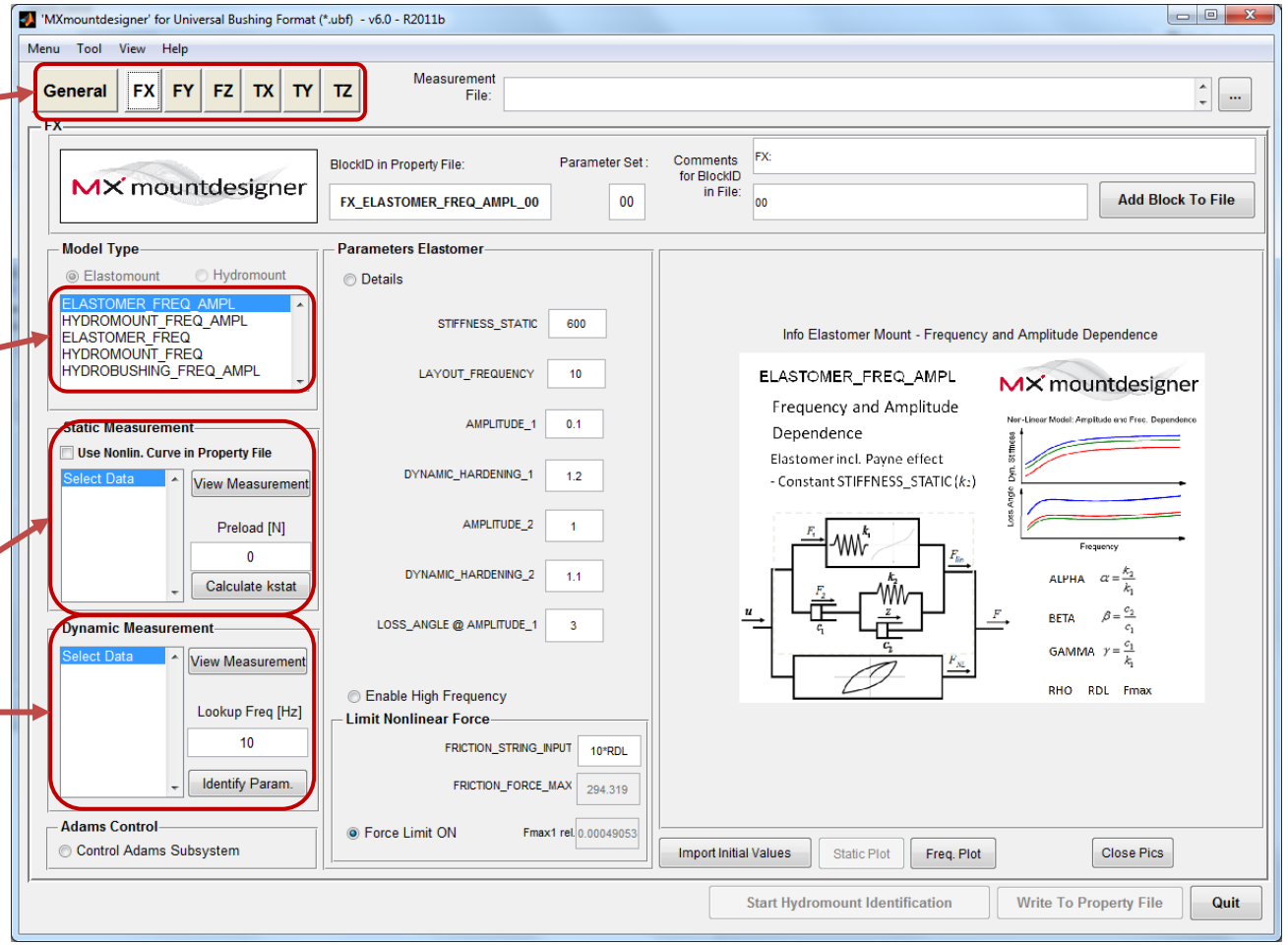


MXmountdesigner

六个方向可以耦合或独立

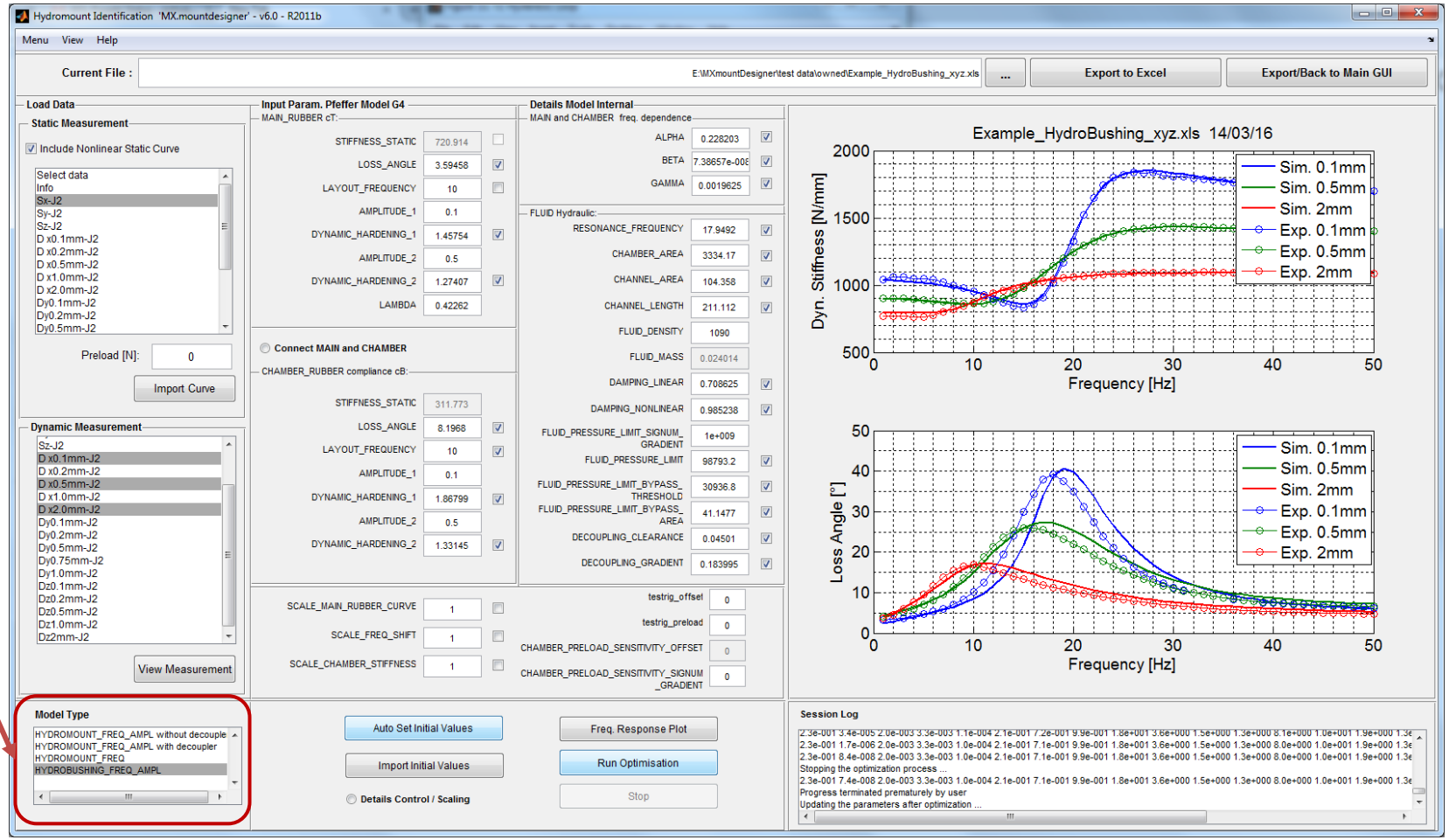
衬套模型类型：线性或非线性弹性体和液压底座

两次点击即可适应弹性底座的静态和动态测量



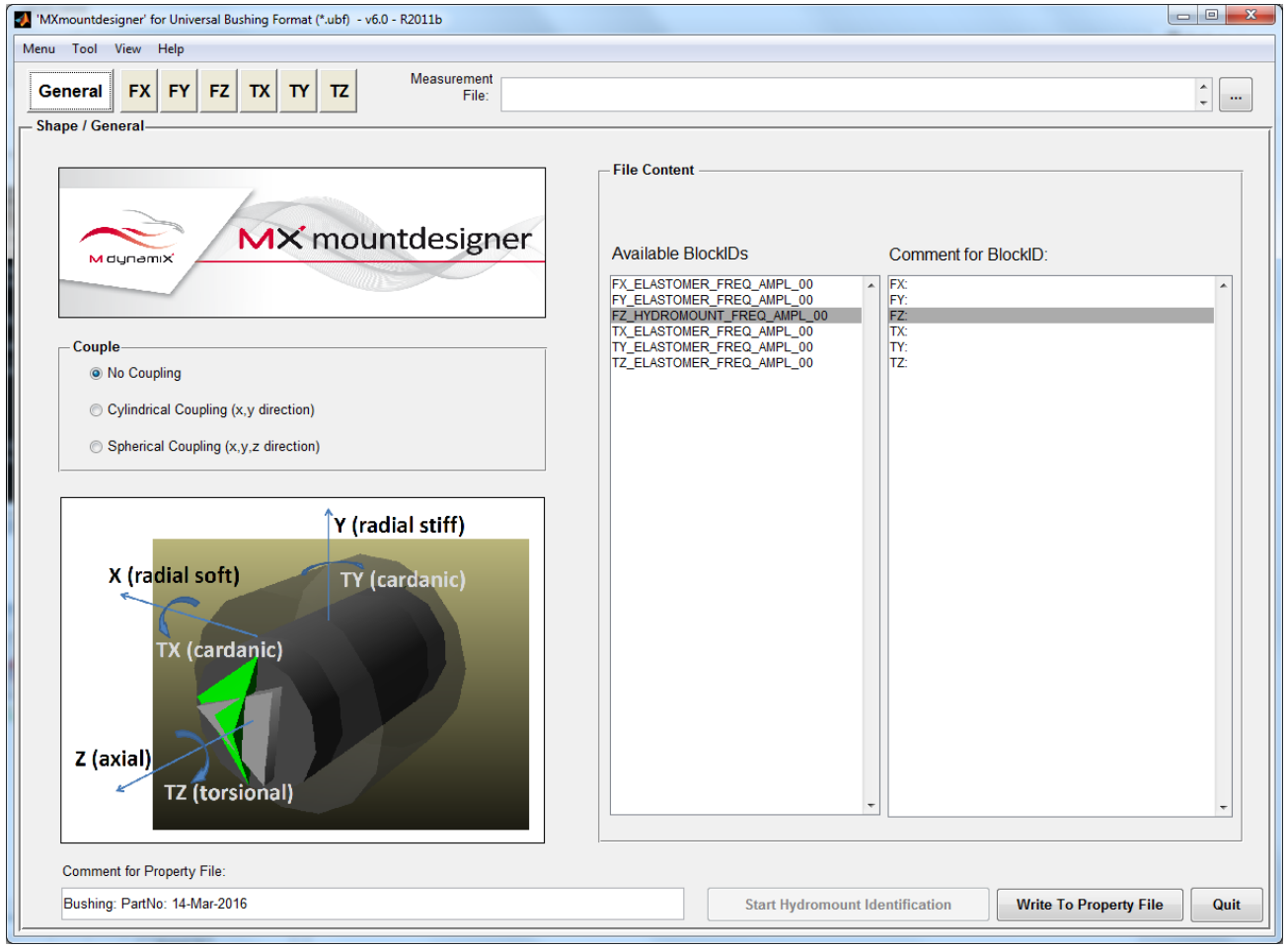
液压底座识别

四种类型的液压模型：线性或非线性的液压底座、液压衬套



属性文件生成

生成具有不同方向模型的组合的属性文件



In Combination with Multi-body Simulation - ADAMS

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 FILE_VERSION   =  1.0
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{COMMENT_line}
 'ToolVersion:v5.41 - 28-July-2014'
$------------------------------------------------------------------------UNITS
[UNITS]
 LENGTH         =  'm'
 ANGLE          =  'rad'
 FORCE          =  'newton'
 MASS           =  'kg'
 TIME           =  'second'
$-------------------------------------------------------------------GENERAL
[GENERAL]
 SHAPE    = 'none' $ 'none' (no coupling), 'cylindrical' (x,y direction), 'spherical' (x,y,z direction)
$
$--- Available BlockIDs in File:
$[FX](ELASTOMER_FREQ_AMPL_00)     $ G4 Elastomer Mount incl. Amplitude Dependence
$[FY](ELASTOMER_FREQ_AMPL_00)     $ G4 Elastomer Mount incl. Amplitude Dependence
$[FZ](ELASTOMER_FREQ_AMPL_00)     $ G4 Elastomer Mount incl. Amplitude Dependence
$[TX](ELASTOMER_FREQ_AMPL_00)     $ RX DUMMY  G2E model; Very Stiff - G2-source: RX_G2E00
$[TY](ELASTOMER_FREQ_AMPL_00)     $ RY DUMMY  G2E model; Very Stiff - G2-source: RY_G2E00
$[TZ](ELASTOMER_FREQ_AMPL_00)     $ RZ DUMMY  G2E model; Very Stiff - G2-source: RZ_G2E00
$========================================================================FX
[FX]
$-----------------------------------------------------------------ELASTOMER_FREQ_AMPL
(ELASTOMER_FREQ_AMPL_00)
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$COMMENT_USER:     'source:TX_G4E00-C:\Users\Admin\Documents\Orehek-Pfeffer_Transfer\trunk\MXmount\test dat
$Excel file:
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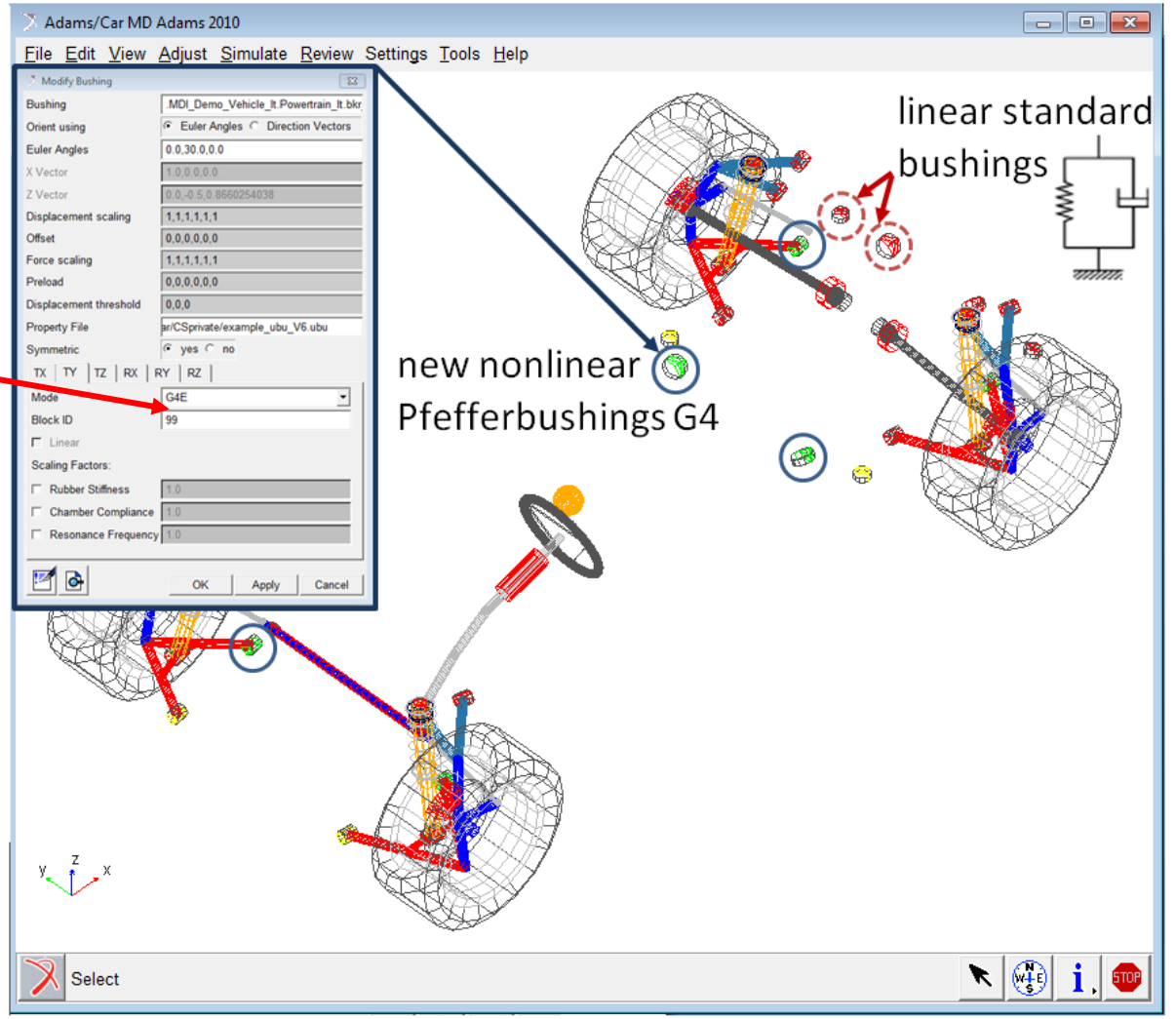
Property file generated by MXmountdesigner



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- 联系电话：020-87518317 /13570945668
- E-mail: james.sun@x-tong.com

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