



# Automotive Safety Engineering Pty Ltd

ABN 88 066 476 051

Postal Address: PO Box 113, LONSDALE, SA, 5160.

Test Facility: 28 Donegal Road, LONSDALE, SA, 5160.

Mobile: 0417 845 711

Email: ase@internode.on.net  
Web: www.autosafety.com.au



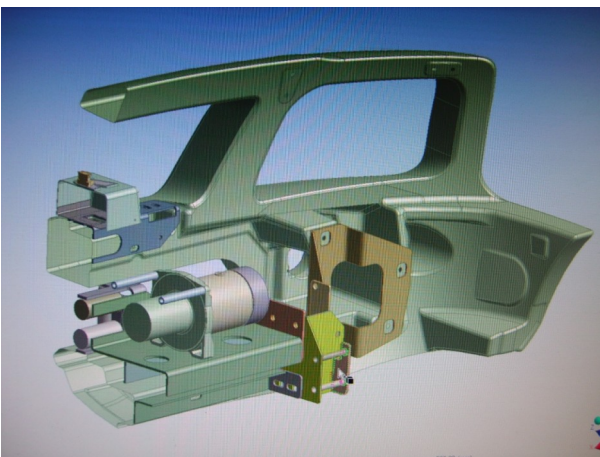
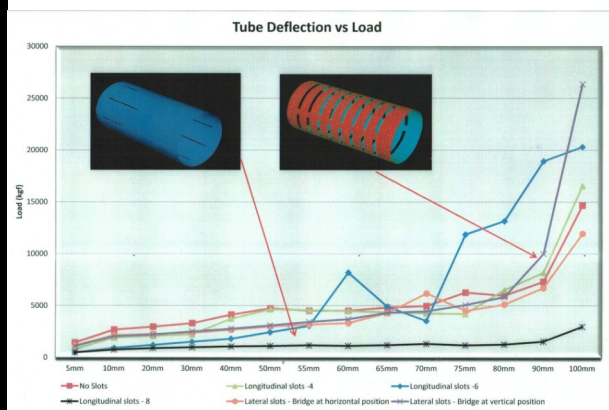
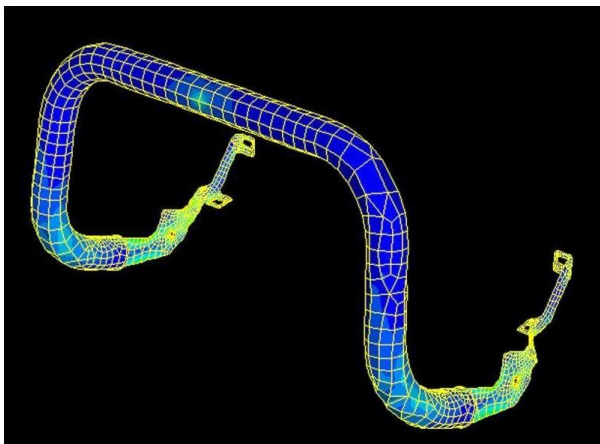
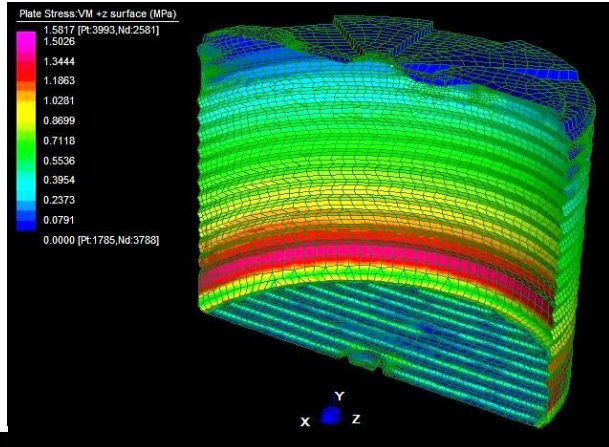
Phone: 08 8384 7863

Fax: 08 8384 3447

## FINITE ELEMENT ANALYSIS—FEA

FEA is a computer model of a material or design that is tested and analysed for a specific result. That means that ASE can test your new car component without you having to produce an example of it.

There are generally two types of analysis that are used in FEA: 2D and 3D. At ASE we use 3D-modelling because it produces more accurate results than 2D.



At ASE we mainly use structural analysis and both linear and non-linear models. Linear models use simple parameters and automatically assume that the material is not plastically deformed. Non-linear models however consists of stressing the material past its elastic capabilities. The stresses in the material then vary with the amount of deformation.

FEA also means that a proposed design will be able to perform to your client's specifications prior to manufacturing. FEA can also help with determine the designs modifications in case of structural failure.

*Using FEA, ASE will be able to help you save both time and money.*