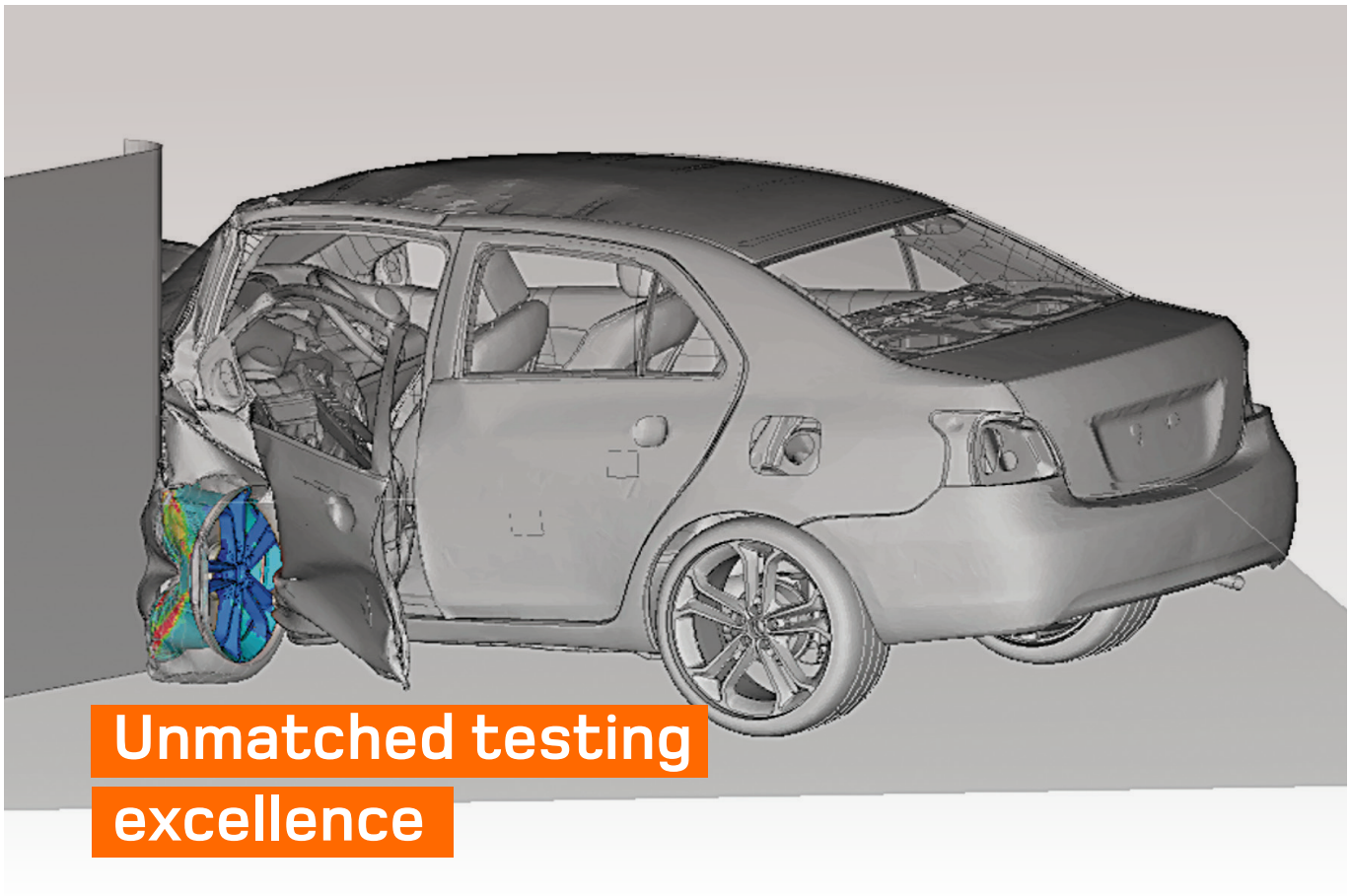


Unmatched testing excellence

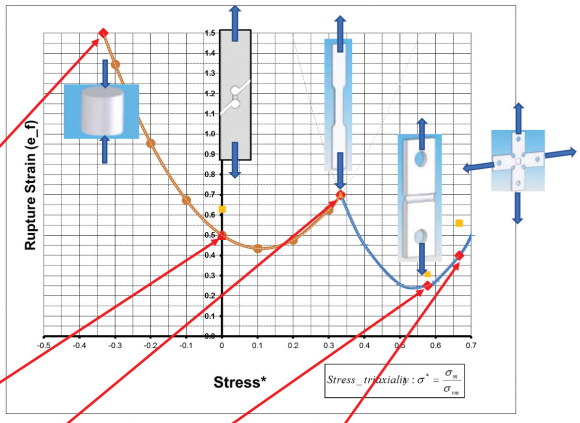
Advanced Crash Material Testing and Models for Altair Radioss

In cooperation with ALTAIR

Experience our NEW advanced failure criteria BiQuad, with at least zero fitting parameters based on input of five physical values.

Input is directly done by failure strain at:

- Uniaxial Compression
- Pure Shear
- Uniaxial Tension
- Plain Strain
- Biaxial Tension



The parameter fit in RADIOSS!

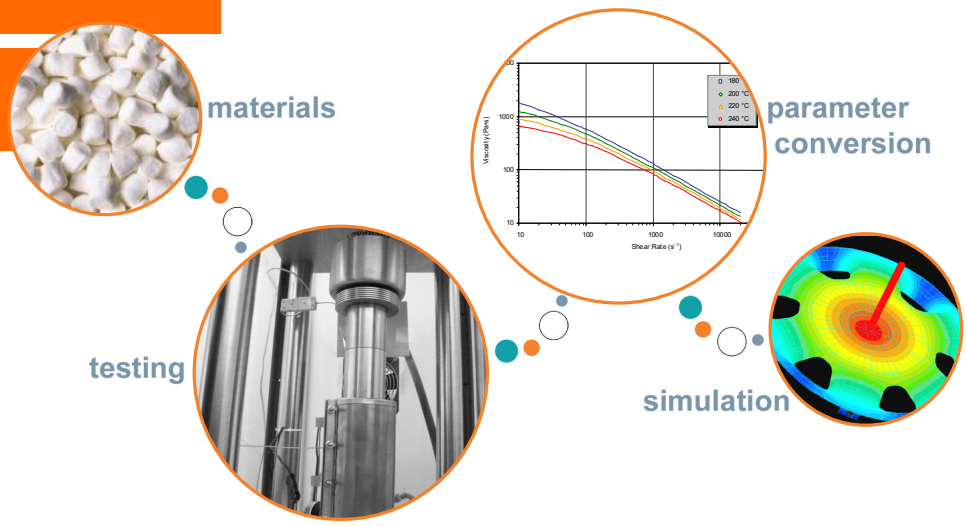
```
#---1----|----2----|----3----|----4----|----5----|----6----|----7----|----8----|----9----|---10----|
/FAIL/BIQUAD/1
# New failure criteria: BIQUAD
#                c1              c2              c3              c4              c5
                1.5             0.5             0.7            0.25             0.4
#        P_thickfail    Select    S_Flag
                  .0         1         0
#---1----|----2----|----3----|----4----|----5----|----6----|----7----|----8----|----9----|---10----|
```

Applus+ DatapointLabs

www.datapointlabs.com | Tel: +1-607-266-0405 | EU: +353 86 898 0355

TestPaks

Material Properties for Your CAE



TestPaks® include:

- Material testing to software requirements
- Material model selection and parameter conversion
- CAE-ready material files

TestPaks for Altair Radioss:

G-600	RADIOSS Elastic Material Model (Law 1)
G-601	RADIOSS Johnson-Cook Quasi-Static Material Model (Law 2)
G-602	RADIOSS Tensile Rate Dependent Model (Laws: 2, 36, 44)
G-603	RADIOSS Quasi-Static Foam Material (Law 70)
G-604	RADIOSS Rate Dependent Foam Model (Law 70)
G-605	RADIOSS Rate Dependent Foam Model with Unloading (Law 70)
G-606	RADIOSS Hyperelastic Model (Law 42, 69)
G-607	RADIOSS Hyperelastic Model with Viscoelasticity (Law 42)

Get 10% off
when you set up a Matereality Workgroup Material DatabasePro to store and manage all of your materials information.

TestPaks for composites:

DatapointLabs now offers G-190 Altair Multiscale Designer for Unidirectional (UD) Composites. Data in the form of stress-strain curves paired with DIC images is converted into an Altair Multiscale Designer material model. This material model can be used in structural simulations within a variety of commercial finite element solvers, including Altair OptiStruct, Altair Radioss, Abaqus, and LS-Dyna, to more accurately simulate composite material behavior.

G-190	Altair Multiscale Designer for Unidirectional (UD) Composites

EST 1995
ISO 17025 Quality

Material properties data, test reports, and CAE material files are delivered digitally to your Matereality database.

View our Test Catalog

Applus+ DatapointLabs

www.datapointlabs.com | Tel: +1-607-266-0405 | EU: +353 86 898 0355