

ROHACELL® 31IG - Crash Behavior

Based on various publications of
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EVONIK
INDUSTRIES

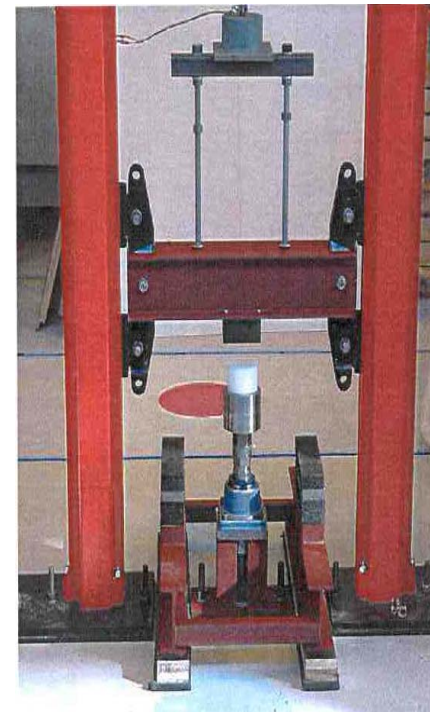
ROHACELL® 311G - Crash Behavior

Quasi-static uniaxial compression
stress-strain response at 20°C



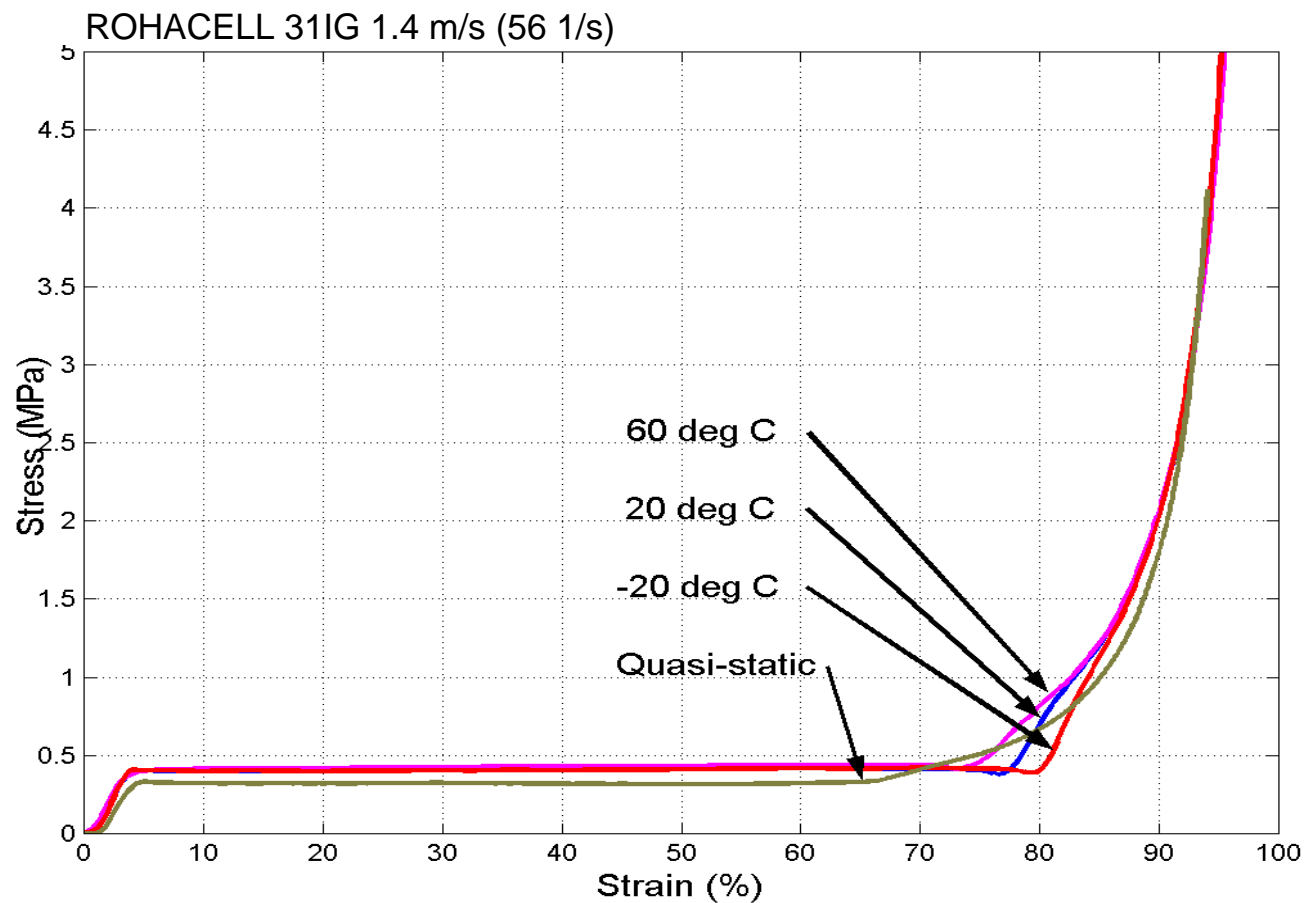
sample size: 40 x 40 x 25.4mm

Compression with
three constant velocities and three
different temperatures



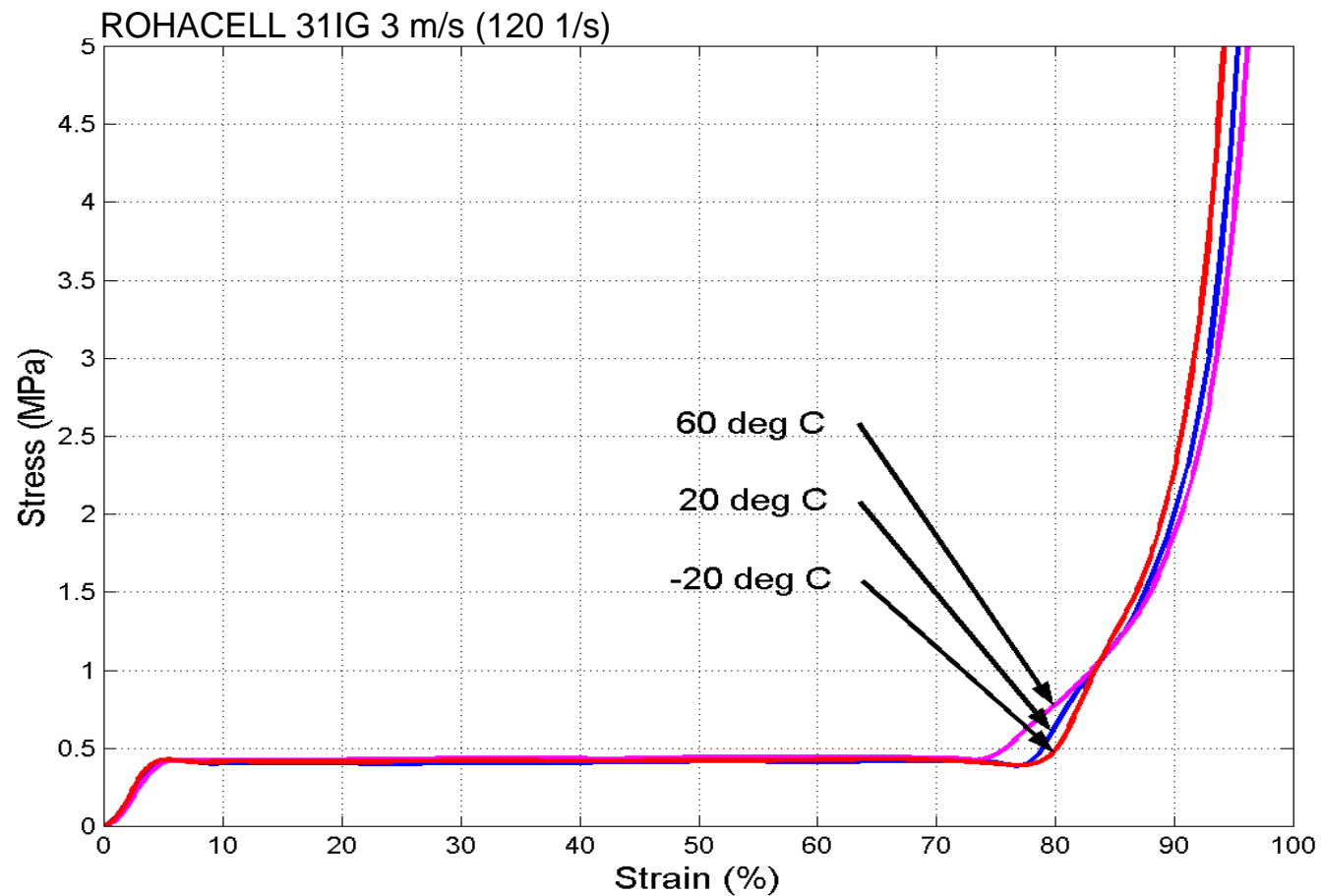
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Quasi static compression with constant velocity (1.4 m/s)



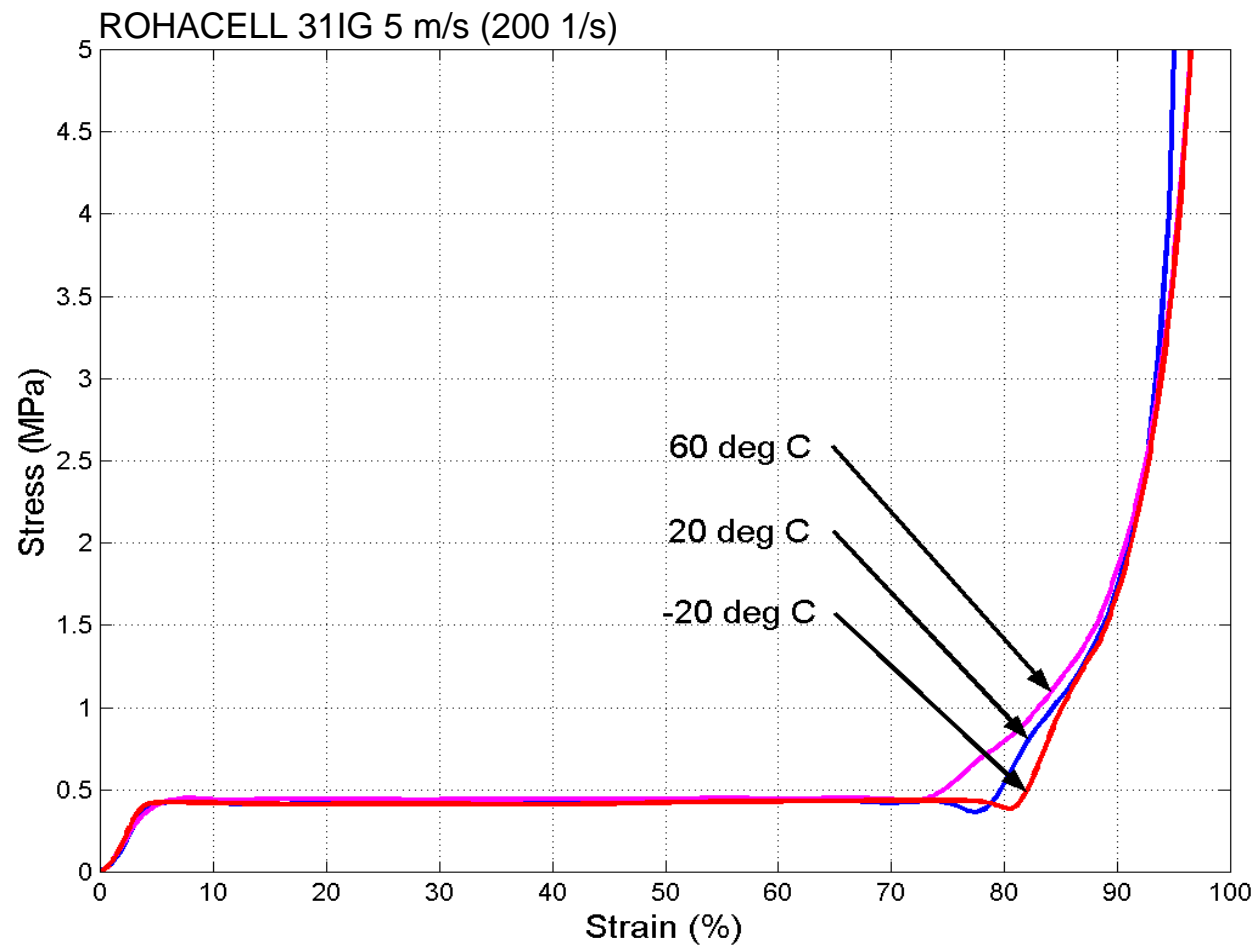
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Compression with constant velocity (3 m/s)



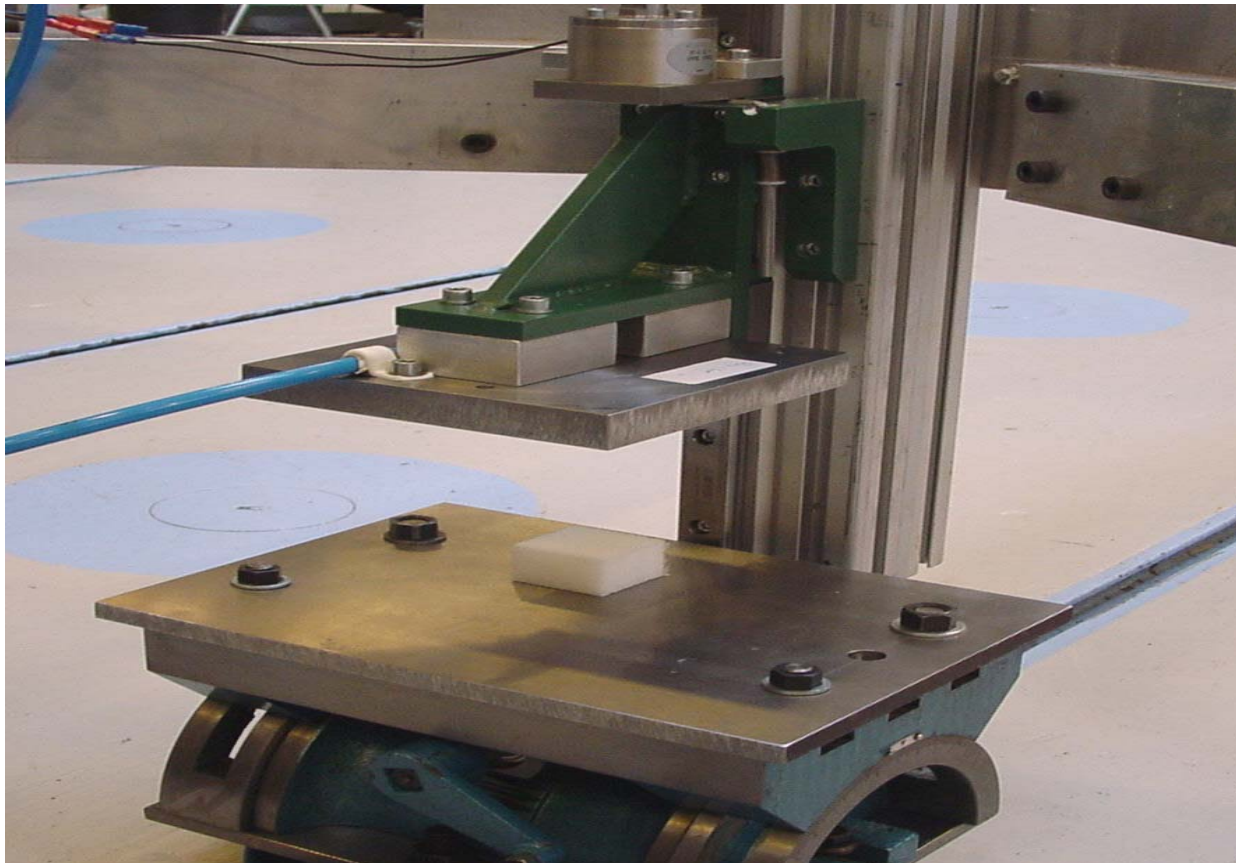
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Compression with constant velocity (5 m/s)



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Free fall impact test, planar deflector, with two different velocities at different temperatures

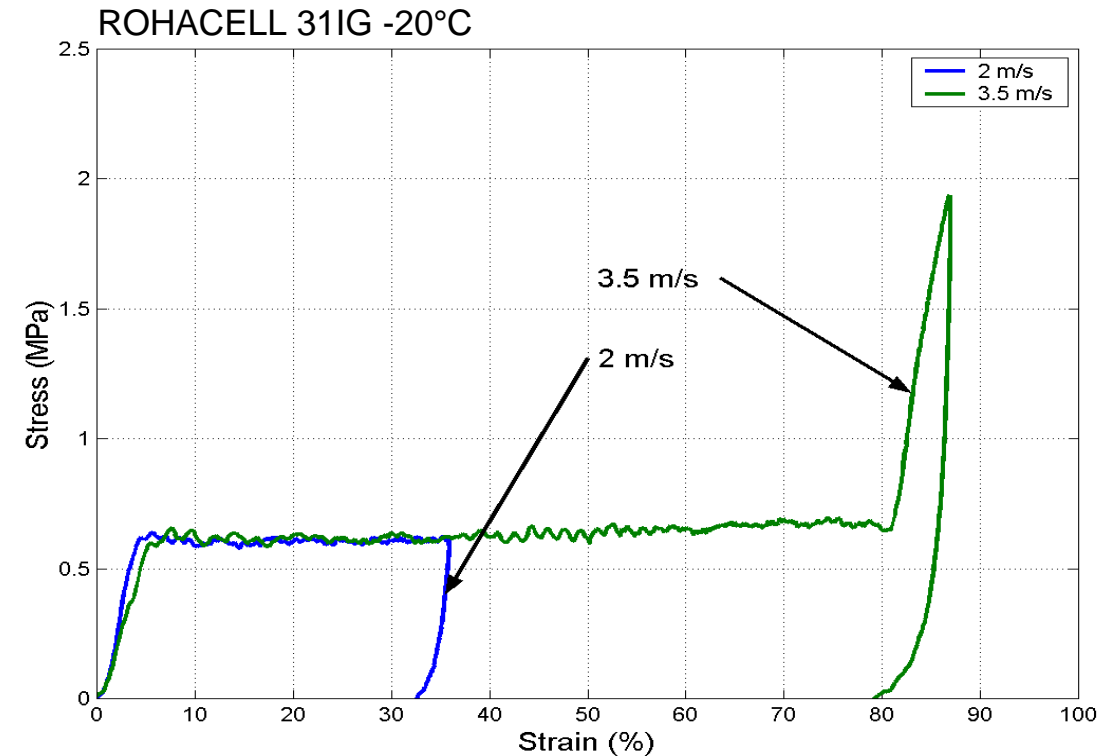
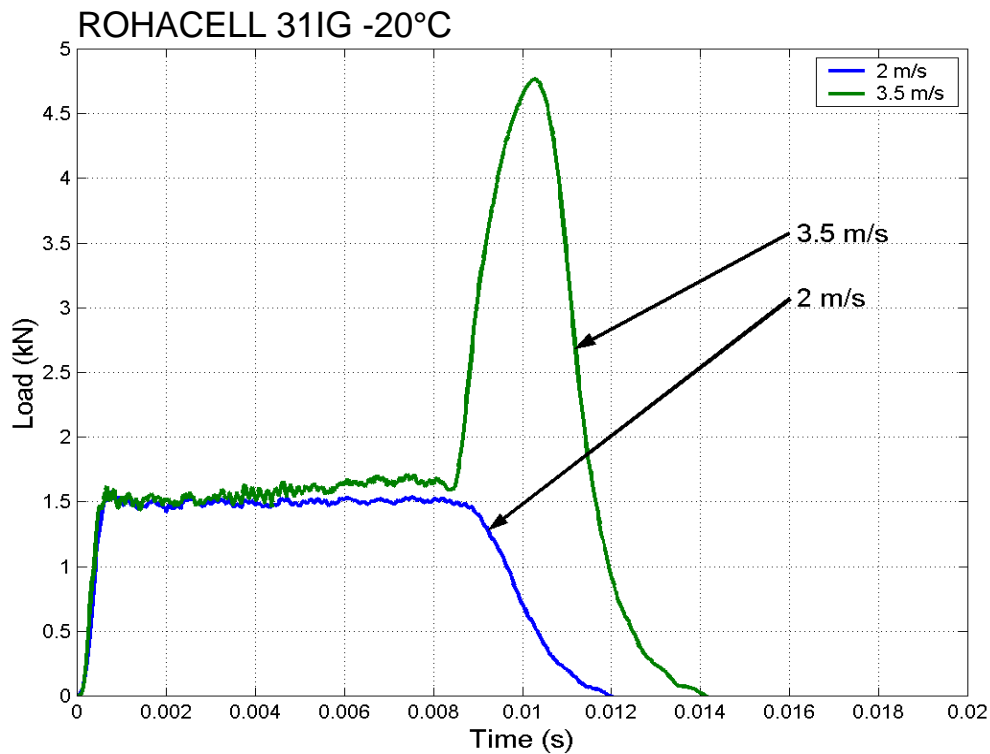


Deflector weight: 5.64 kg

sample size: 50 x 50 x 25.4 mm

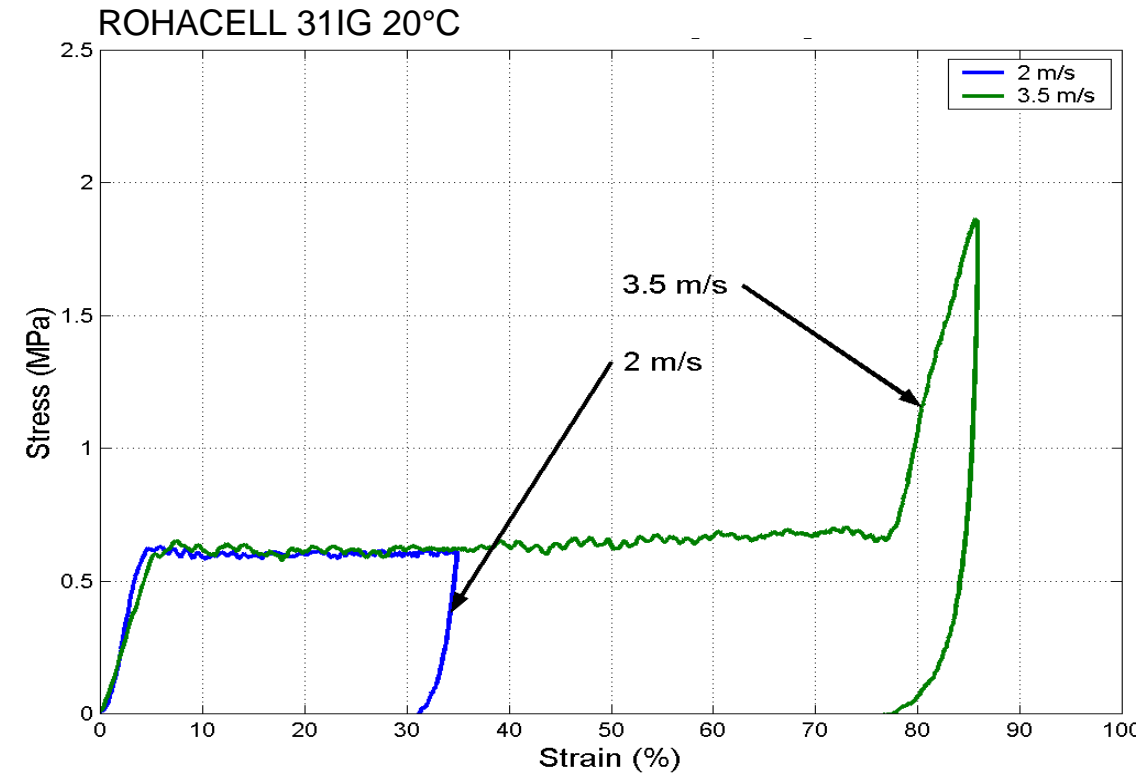
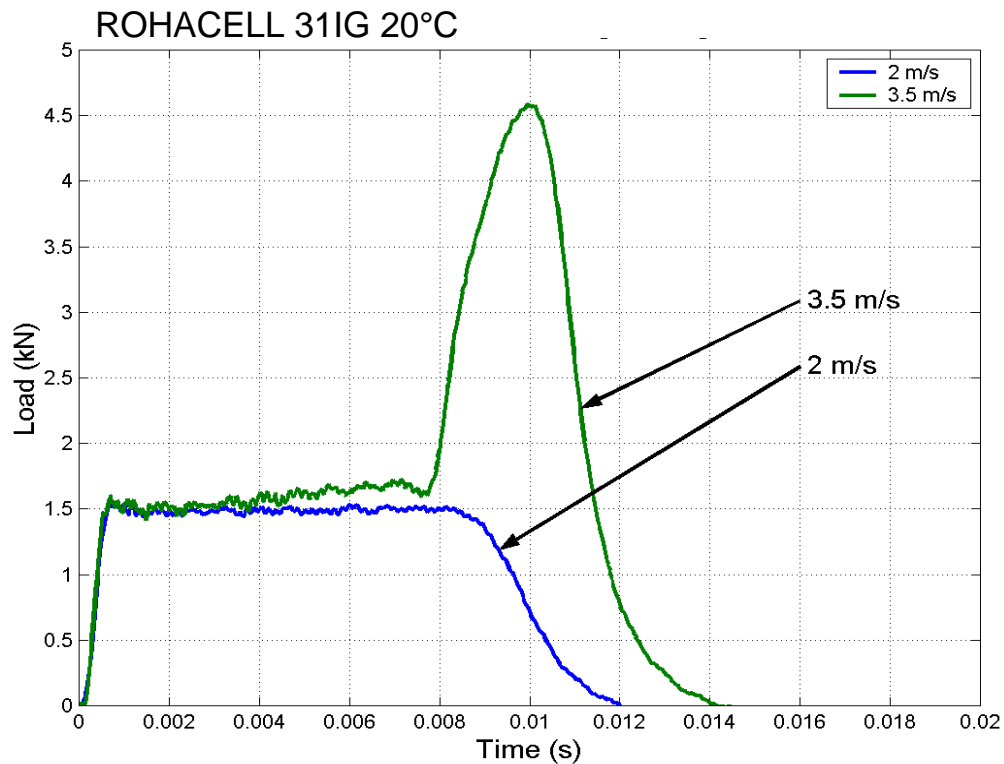
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Free fall impact test, planar deflector at -20°C



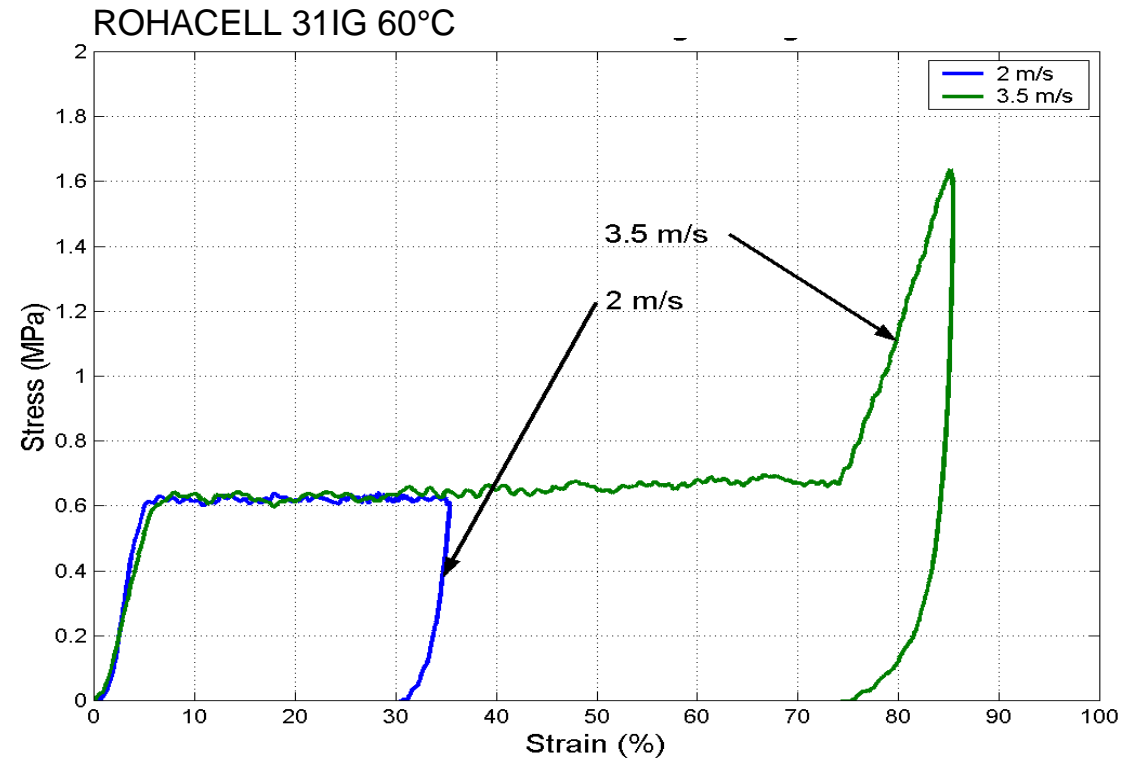
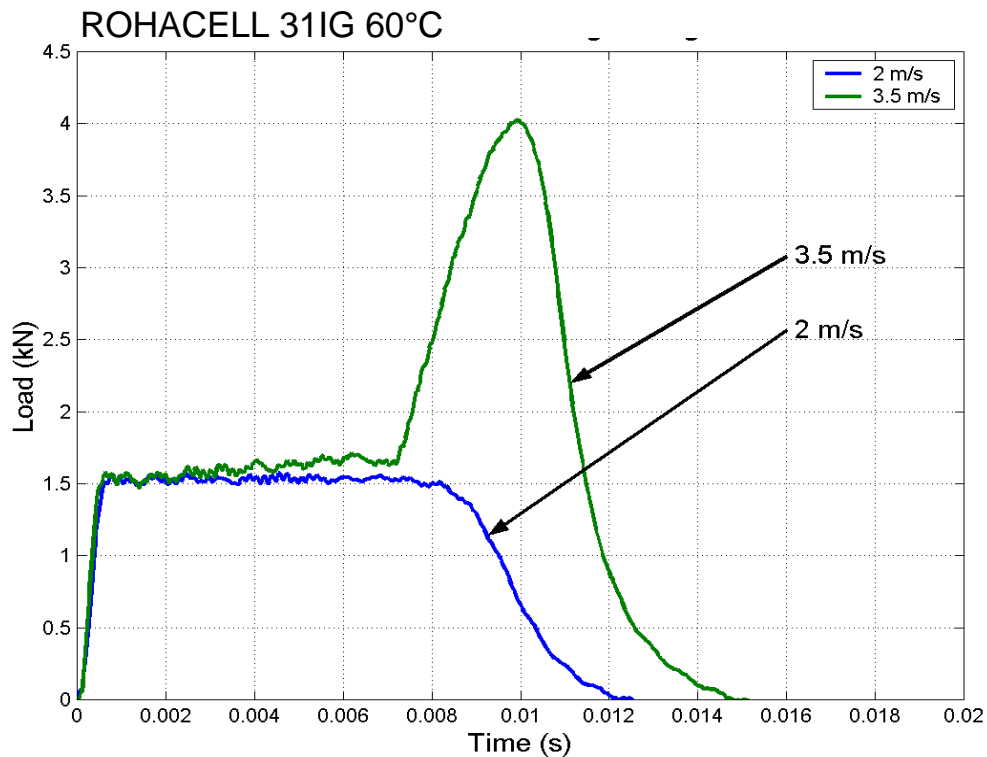
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Free fall impact test, planar deflector at +20°C



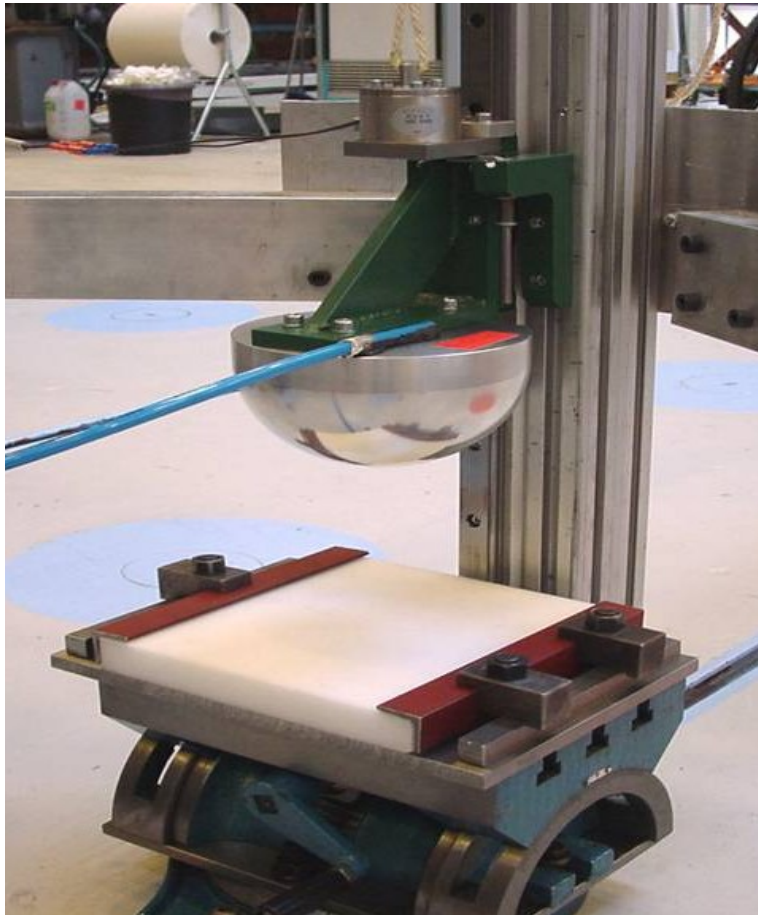
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Free fall impact test, planar deflector at +60°C



ROHACELL® 311G - Crash Behavior

Free fall impact test, half-sphere, with two different velocities at different temperatures

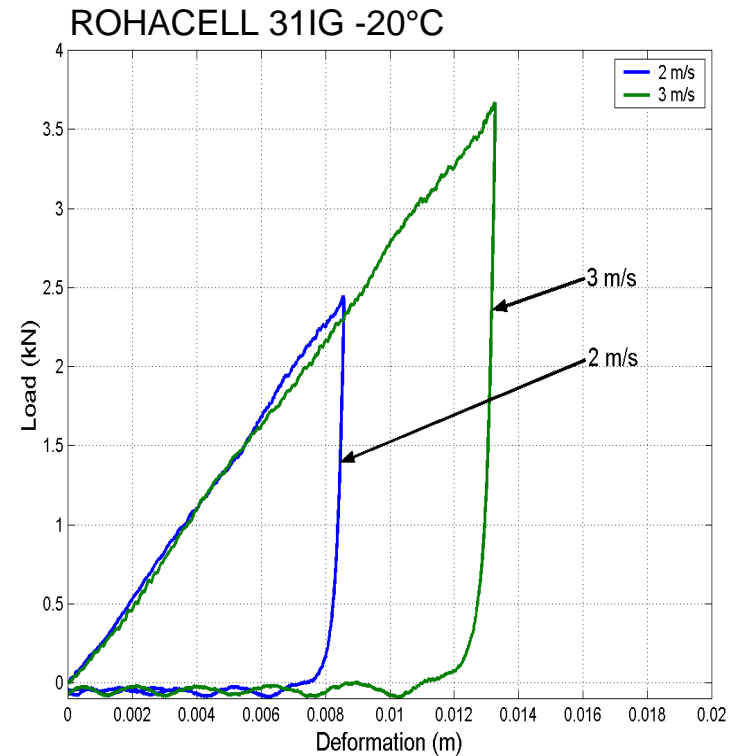
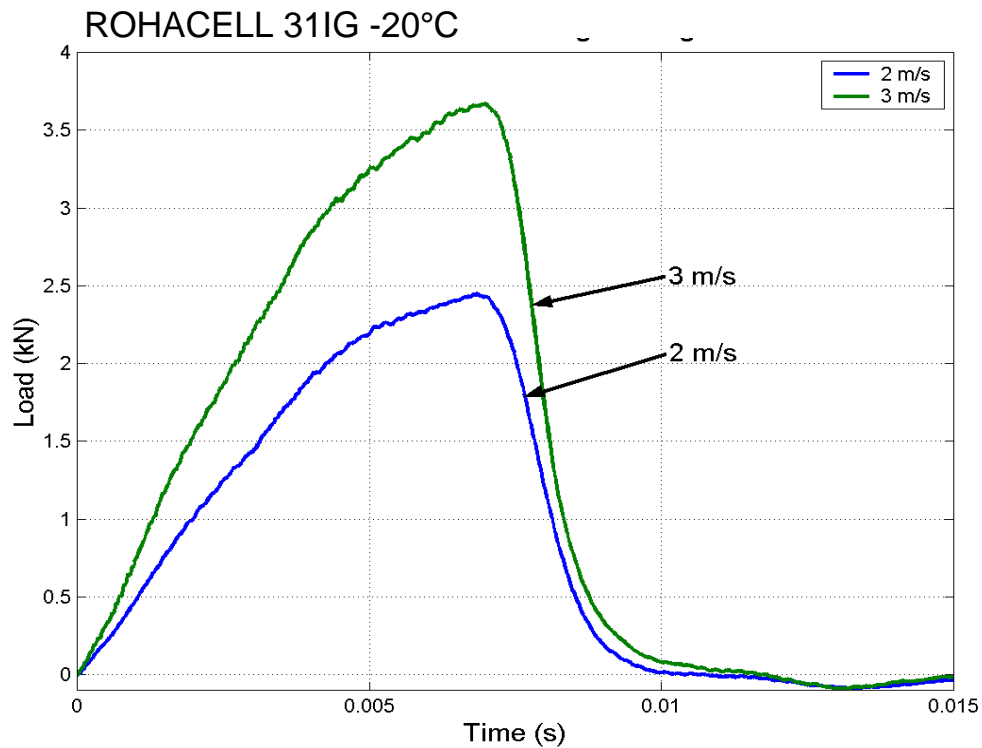


Half-sphere weight: 5.18 kg
diameter: 150 mm

sample size: 50 x 50 x 25.4 mm

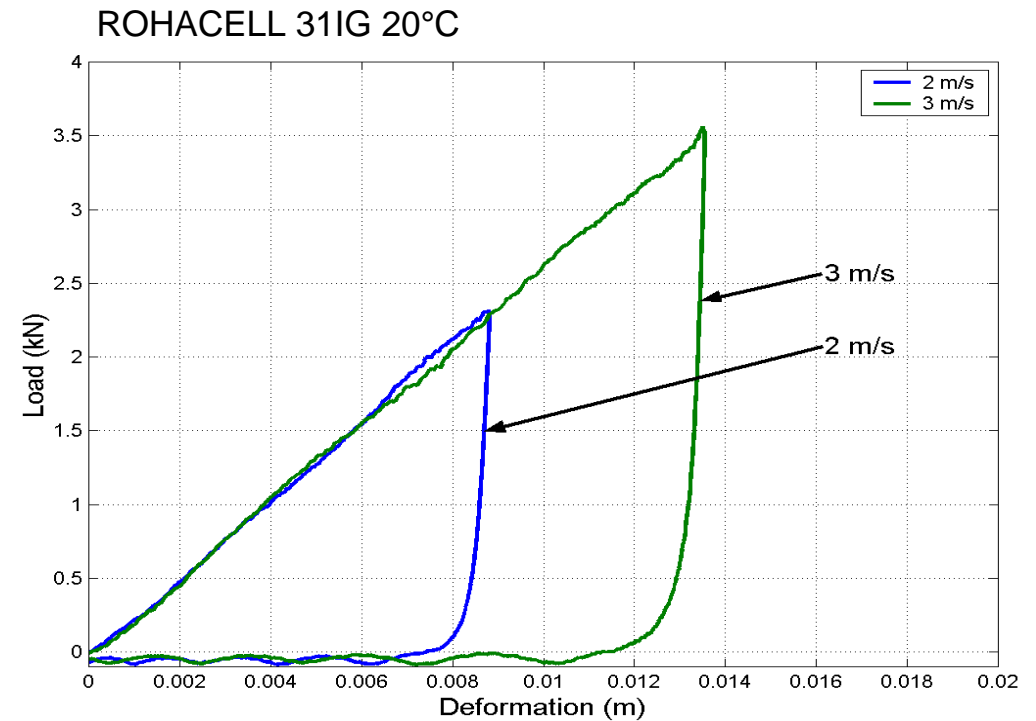
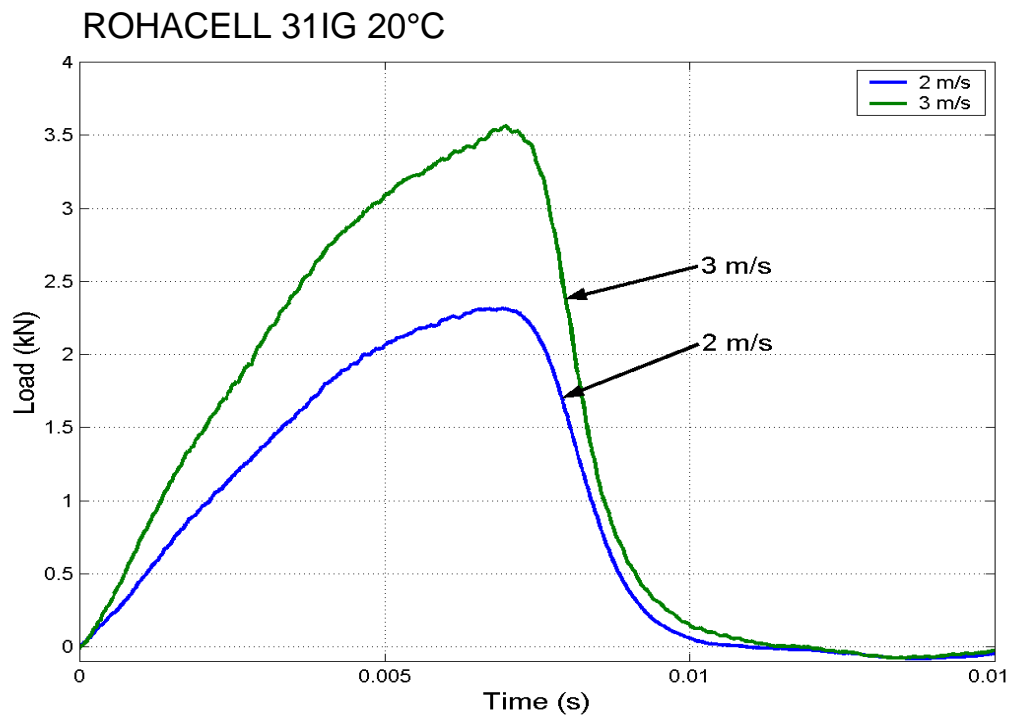
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Free fall impact test, half-sphere at -20°C



ROHACELL® 31IG - Crash Behavior

Free fall impact test, half-sphere at +20°C



ROHACELL® 31IG - Crash Behavior

Free fall impact test, half-sphere at +60°C

