

## ***DYNAMIC CONSTITUTIVE TESTING LAB***

- Split Hopkinson bars are available for constitutive testing at comparatively high loading rates (strain rates up to  $10^4$ ). Distinct systems exist for compression, tension and torsion testing. High-speed digital oscilloscopes have been acquired to facilitate data acquisition.



**Compression Bar**

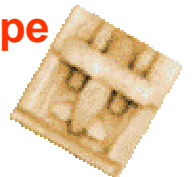


**Torsion Bar**

- **Split Hopkinson Bars**
  - Compression bar
  - Tension bar
  - Torsion bar
- **Additional features**
  - High temperature capability
  - High-speed temperature measurement
  - High-speed digital data acquisition



**Nicolet Digital Oscilloscope**



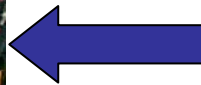
# Dynamic Materials Testing Facility

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- A variety of loading devices are available to facilitate study of material behavior over a wide range of impact conditions.



- **Air gun**
  - Impact speeds from 10 to 200 m/s
  - Projectile masses up to 2 kg



- **Drop Weight Tower**
  - Impact speeds from 1 to 10 m/s
  - Drop weight mass of 250 kg

