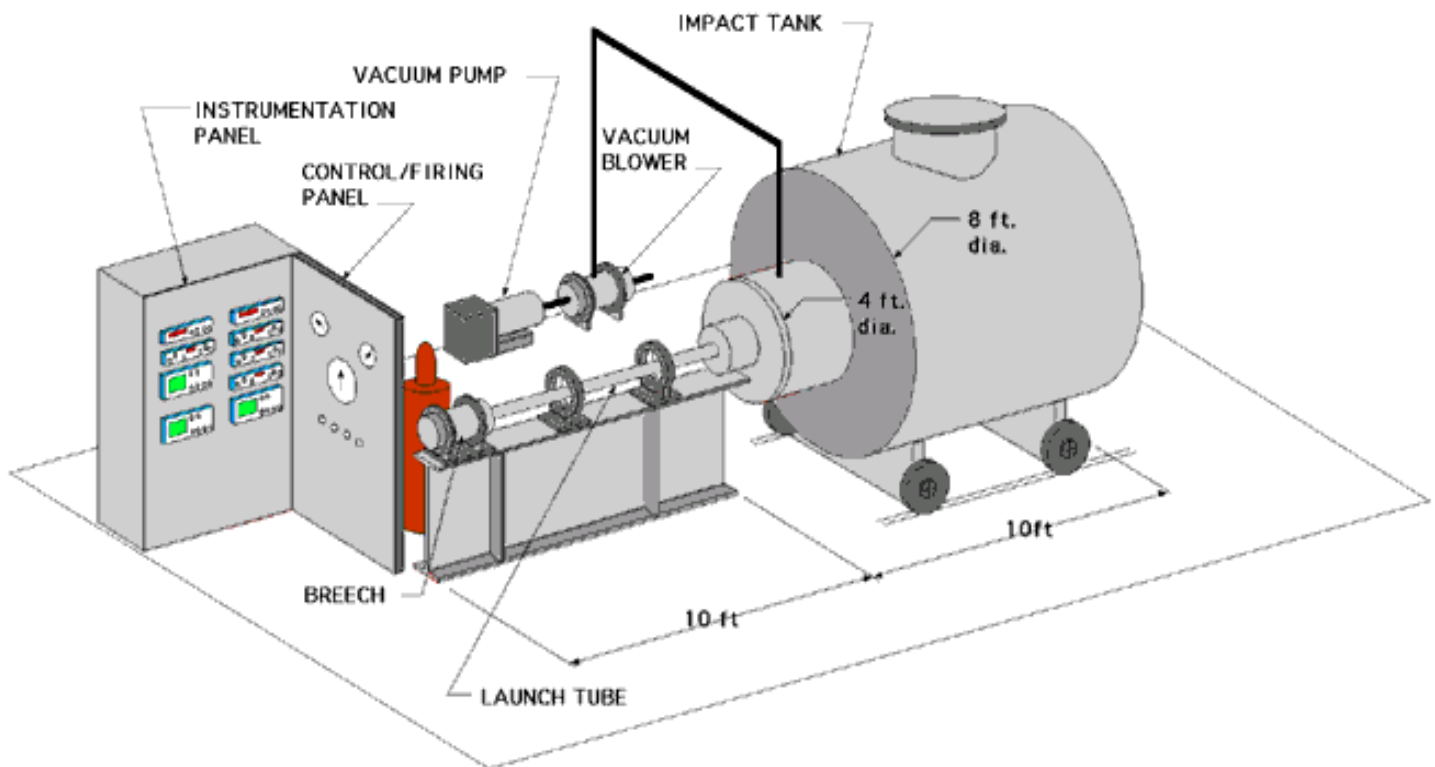


## Model 1105 Keys Shock Wave Metrology Development at Dynasen Inc.

Berkeley Nucleonics Corporation is proud to announce that Dynasen, Inc., a manufacturer of stress, strain, and flow measuring equipment in Goleta, California, recently selected BNC's Model 1105 Universal Counter to support their continuing development of shock wave metrology.

Dynasen's gas gun facility is privately owned and is one of the most complete facilities of its kind to study the response of materials and pressure sensors exposed to dynamic loads. A specific area of endeavor that can be investigated is the calibration and development of shock and high g-force sensors.

Accurately controlled impact velocity tests are conducted in a large, vacuum controlled, impact chamber supported by time interval counters, oscilloscopes, digital recorders, and pulse power supplies.



In a particular application, three "pins" are mounted at the muzzle of the gas gun with fixed values of separation distance. When a projectile is launched, the excitation of each pin causes respective capacitors to discharge through loads thus producing exponential, roughly triangular, 5 to 10 volt pulses with rise times in the range of microseconds. Dynasen chose two Model 1105 Universal Counters to capture these signals because it is essential that the time interval measurement accuracy be better than 10 ns. For ease-of-use, the non-volatile memory is able to restore the complete measurement settings upon power up.

According to Dynasen's President, Dr. Jacques Charest, "They are working beautifully!"