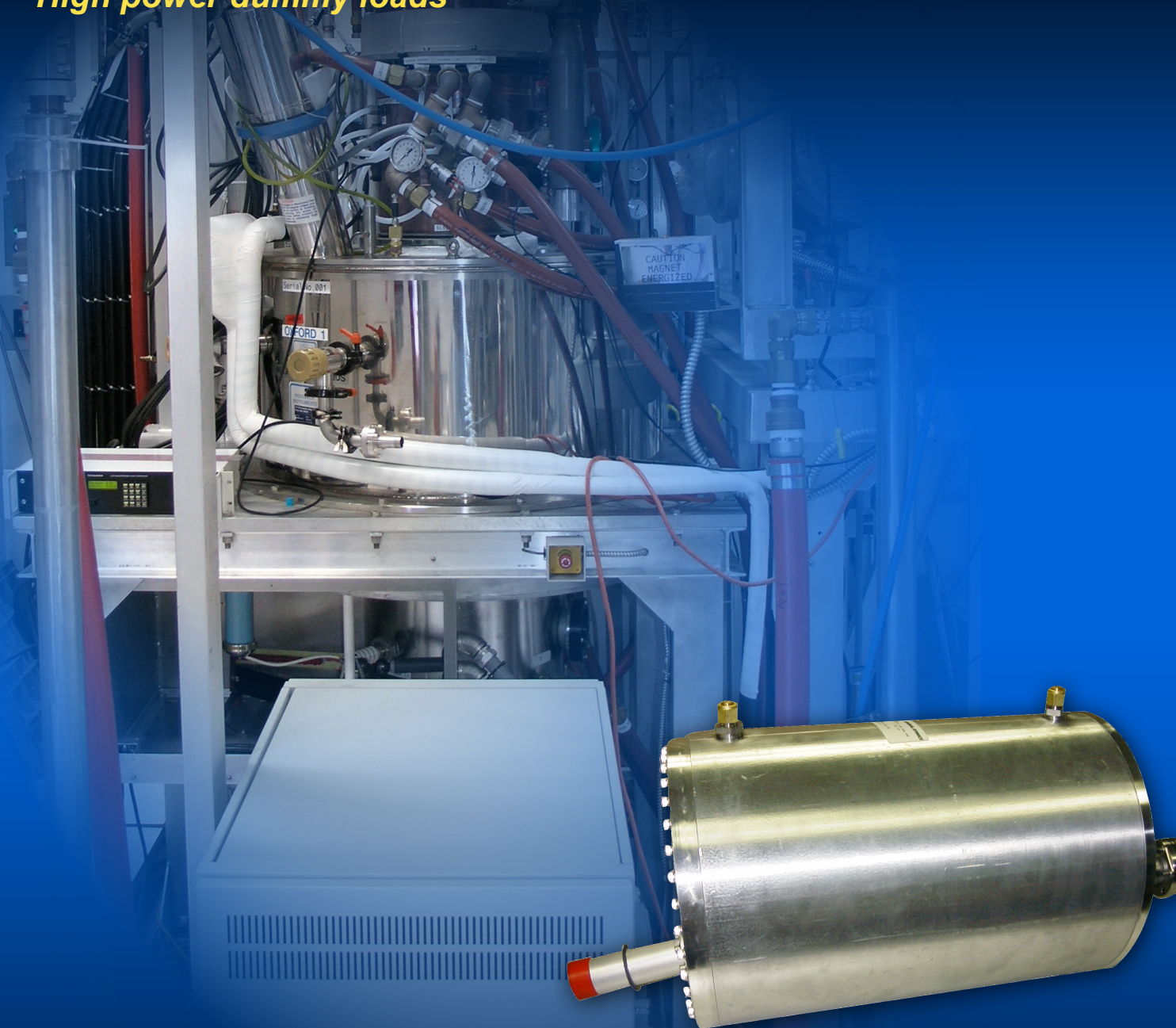


HIGH POWER CORRUGATED WAVEGUIDE COMPONENTS

High power dummy loads



- General Atomics (GA) produces tank and compact waveguide loads for short pulse, long pulse and cw applications
- Dummy load systems suitable for up to 2 MW cw operation are available

High power dummy loads for various frequencies, power levels and pulse lengths

HIGH POWER DUMMY LOADS

GA has the scientific, engineering and fabrication expertise to design and deliver standard and specialized dummy loads

LARGE TANK LOADS:

- GA produces large evacuated tank loads suitable for up to 1 MW / 5 s operation over a broad frequency range
- Input waveguide is 1.25" (31.75 mm); tapers from 2.5" (63.5 mm) and 3.5" (88.9 mm) down to 1.25" are available



SMALL TANK LOADS:

- For evacuated operation, suitable for:
 - 1 MW for 0.2 s
 - 0.5 MW for 0.5 s
 - 250 kW cw
- Design optimized for specific frequencies from 84 GHz to 170 GHz
- Reflected power < 1%



COMPACT WAVEGUIDE LOAD SYSTEMS:

- A specially corrugated Glidcop® or chromium copper attenuating waveguide section surrounded by a water jacket absorbs approximately 75-85% of power input in HE₁₁ mode
- The remaining 15-25% power is absorbed in a small tank load (as described above)
- For power inputs greater than 1 MW, a pre-attenuator waveguide section with water jacket can be provided to enable operation at up to 2 MW cw
- Standard designs are available for specific frequencies from 84 GHz to 170 GHz
- Time constant of these loads is less than 1 s



At left, absorbing waveguide sections and water jacket. At right, load installed for operation