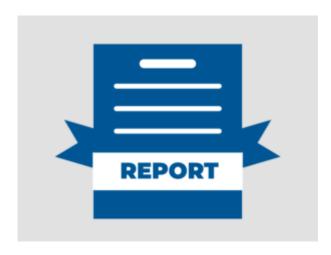
Propane A New Approach to Protecting Cylinder Exchange Cabinets Conclusions



The test results found that typical cylinder exchange cabinets constructed of either aluminum or steel, anchored or unanchored, and against a building wall or not, are capable of providing sufficient protection to cylinders to keep them from leaking product at these impact velocities and masses. Although cylinders were damaged in some cases, the level of damage was always well below that which would be required to rupture a 20-pound LP-gas cylinder. The performance of cylinders with no additional protection was demonstrated when several restrained cylinders were impacted directly by a 4,000-pound pendulum released at various heights to achieve different velocities upon impact. Only two cylinders ruptured when impacted at 10 mph.