WAC 296-155-54200 Overhead/bridge and gantry cranes—General.

(1) Permanently installed overhead/bridge and gantry cranes which are located in a manufacturing facility or powerhouse must follow the requirements of WAC 296-24-235 (General safety and health standards), even when a construction activity is being performed. This requirement applies to overhead, bridge, gantry cranes, including semigantry, cantilever gantry, wall cranes, storage bridge cranes, and others having the same fundamental characteristics.

(2) Overhead and gantry cranes that are not permanently installed must follow the applicable requirements in chapter 296-155 WAC Part L.

(3) Cranes included in this section must meet the applicable requirements for design, inspection, construction, testing, maintenance and operation as prescribed in:
   (a) ASME B30.2-2005, Safety Standard for Overhead and Gantry Cranes (Top Running Bridge, Single or Multiple Girder, Top Running Trolley Hoist).
   (b) ASME B30.11-2010, Safety Standards for Monorails and Underhung Cranes.
   (c) ASME B30.17-2006, Safety Standards for Overhead and Gantry Cranes (Top Running Bridge, Single Girder, Underhung Hoist).
   (d) It is not the intent of this rule to require retrofitting of existing cranes. However, when an item is being modified, its performance needs to be reviewed by a qualified person and compared to the applicable sections of this rule. For modification requirements see WAC 296-155-53400 (58) and (59). For cranes manufactured prior to the effective date of this rule the design and construction criteria must meet at a minimum, ASME B30.2.0-1990.

(4) The rated load of the crane must be plainly marked on each side of the crane, and if the crane has more than one hoisting unit, each hoist must have its rated load marked on it or its load block, and this marking must be clearly legible from the ground or floor.

(5) The crane or surrounding structure must be marked to provide operating directions that match and are visible from the crane’s operating controls, i.e., north/south, east/west or forward/back, left/right.

(6) Overhead and gantry cranes with bridge trucks must be equipped with sweeps which extend below the top of the rail and project in front of the truck wheels.

(7) Except for floor-operated cranes, an effective warning device must be provided for each crane equipped with a power traveling mechanism.

(8) You must provide a wind-indicating device for all outdoor overhead and gantry cranes. The device must be mounted on the crane runway structure and must give a visible and audible alarm to the crane operator at a predetermined wind velocity. A single wind-indicating device may serve as an alarm for more than one crane.

(9) Electrical.
   (a) Wiring and equipment must comply with Article 610 of ANSI/NFPA No. 70, National Electrical Code and chapter 296-155 WAC Part I.
   (b) The control circuit voltage must not exceed 600 volts for AC or DC.
   (c) The voltage at pendant pushbuttons must not exceed 150 volts for AC and 300 volts for DC.
   (d) Where multiple conductor cable is used with a suspended push-button station, the station must be supported in a manner that will protect the electrical conductors against strain.
(e) You must construct pendant control stations to prevent electrical shock. The pushbutton enclosure must be at ground potential and marked for identification of functions.

(10) All welding procedures and welding operator qualifications to be used on load sustaining members must be in accordance with ANSI/AWS D1.1, except as modified by ANSI/AWS D14.1.