

WAC 296-307-49011 What requirements apply to supply connections and conductors?

(1) A disconnecting switch or controller must be provided at or near each welding machine without a switch or controller mounted as an integral part of the machine. The switch must meet the requirements of chapter 296-307 WAC Part T. Overcurrent protection must be provided as specified in chapter 296-307 WAC Part T. A disconnect switch with overload protection or equivalent disconnect and protection means, permitted by chapter 296-307 WAC Part T must be provided for each outlet intended for connection to a portable welding machine.

(2) For individual welding machines, the rated current-carrying capacity of the supply conductors must be at least that of the rated primary current of the welding machines.

(3) For groups of welding machines, the rated current-carrying capacity of conductors may be less than the sum of the rated primary currents of the welding machines supplied. The conductor rating must be determined according to the machine loading based on the use to be made of each welding machine and the allowance permissible in the event that all the welding machines supplied by the conductors will not be in use at the same time.

(4) In operations involving several welders on one structure, d.c. welding process requirements may require the use of both polarities; or supply circuit limitations for a.c. welding may require distribution of machines among the phases of the supply circuit. In such cases, no load voltages between electrode holders will be two times normal in d.c. or 1, 1.4, 1.73, or 2 times normal on a.c. machines. Similar voltage differences will exist if both a.c. and d.c. welding are done on the same structure.

(a) All d.c. machines must be connected with the same polarity.

(b) All a.c. machines must be connected to the same phase of the supply circuit and with the same instantaneous polarity.

[Statutory Authority: RCW 49.17.040. WSR 98-24-096, § 296-307-49011, filed 12/1/98, effective 3/1/99. WSR 97-09-013, recodified as § 296-307-49011, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. WSR 96-22-048, § 296-306A-49011, filed 10/31/96, effective 12/1/96.]