

Chapter E 670

METAL WORKING MACHINE TOOLS

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For further information see NFPA Standard on Metal Working Machine Tools (No. 79)

E 670.01 Scope. The provisions of this chapter apply to the size and overcurrent protection of supply conductors to metal working machine tools and to the nameplate data required on each such tool.

History: Cr. Register, April, 1964, No. 100, eff. 5-1-64.

E 670.02 Definition of metal working machine tools. For the purpose of this chapter, metal working machine tools are defined as follows:

(1) A metal cutting machine tool is a power driven machine, not portable by hand, used for the purpose of removing metal.

(2) A metal forming machine tool is a power driven machine, not portable by hand, used to press, forge, emboss, hammer, blank, or shear metal.

History: Cr. Register, April, 1964, No. 100, eff. 5-1-64.

E 670.03 Machine tool nameplate data. (1) A permanent nameplate listing supply voltage, phase, frequency, full load currents, ampere rating of largest motor, short circuit interrupting capacity of the machine overcurrent protective device if furnished, and diagram number shall be attached to the control equipment enclosure or machine where plainly visible after installation.

(2) The full load current shall be not less than the sum of the full load currents required for all motors and other equipment which may be in operation at the same time under normal conditions of use. Where unusual type loads, duty-cycles, etc., require oversized conductors, the required capacity shall be included in the marked "full load current".

(3) Where more than one incoming supply circuit is to be provided, the nameplate shall state the above information for each circuit.

History: Cr. Register, April, 1964, No. 100, eff. 5-1-64.

E 670.04 Conductors supplying a machine tool. (1) The supply circuit conductors shall have a current-carrying capacity of not less than the marked full load current rating plus 25% of the full load current rating of the highest rated motor as indicated on the nameplate. For the protection of supply conductors to the machine tool, refer to section E 240.05.

(2) A machine tool conforming with a standard acceptable to the administrative authority shall be considered individual unit equipment. It is provided with a disconnecting means and may be supplied by branch circuits protected by either fuses or circuit-breakers.

Note: The administrative authority considers NFPA Standard No. 79 an acceptable standard.

(3) The disconnecting means may or may not incorporate overcurrent protection. Where the machine tool nameplate is marked "Overcurrent protection provided at machine supply terminals", the supply conductors are to be considered either as feeders, or taps as covered by section E 240.15.

Note: "Overcurrent protection provided at machine supply terminals" means that provision has been made in the machine tool for each set of supply conductors to terminate in a single circuit-breaker or set of fuses.

History: Cr. Register, April, 1964, No. 100, eff. 5-1-64.