



**COUNTY OF LOS ANGELES  
FIRE DEPARTMENT  
FIRE PREVENTION DIVISION**

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## **MAGNESIUM PERMIT REQUIREMENTS**

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Appendix Chapter 1, section 105.6.28 of the Los Angeles County Fire Code states that permits required by the Fire Code shall be obtained from the fire code official. An operational permit is required to melt, cast, heat treat or grind more than 10 pounds (4.54 kg) of magnesium. Applicant must meet all the requirements of chapter 36- Flammable Solids.

Heat-Treating Ovens Approved means shall be provided for control of magnesium fires in heat-treating ovens.

Dust Collection Magnesium grinding, buffing and wire brushing operations, other than rough finishing of castings, shall be provided with suitable hoods or enclosures for dust collection which are connected to a liquid precipitation type of separator that converts dust to sludge without contact in a dry state with any high-speed moving parts.

Duct Construction Connecting ducts or suction tubes shall be completely grounded, as short as possible, and without unnecessary bends. Ducts shall be carefully fabricated and assembled, with a smooth interior, with internal lap joints pointing in the direction of airflow and without unused capped side outlets, pockets or other dead-end spaces, which might allow an accumulation of dust.

Independent Dust Separators Each machine shall be equipped with an individual dust separating unit. Exception: One separator is allowed to serve two-dust producing units on multi-unit machines. One separator is allowed to serve not more than four portable dust-producing units in a single enclosure or stand.

Power Supply Interlock Power supply to machines shall be interlocked with exhaust airflow, and liquid pressure level or flow. Interlocks shall provide for the improper functioning of the dust removal and separator system to shut down the machine it serves.

Electrical Equipment Electrical wiring, fixtures and equipment in the immediate vicinity of and attached to dust-producing machines, including those used in conjunction with separator equipment, shall be of approved types and shall be approved for use in Class II, Division 1 hazardous locations in accordance with the Electrical Code.

Grounding Equipment shall be securely grounded by permanent ground wires in accordance with the Electrical Code.

Fire Extinguishing Materials A supply of approved extinguishing materials in a substantial container with a hand scoop or shovel for applying material on magnesium fires or an approved extinguisher unit designed for use with such material shall be kept within easy reach of every operator performing a machining, grinding or other processing operation on magnesium.

Additional  
Requirements \_\_\_\_\_  
Rev.01/09