

**CASE 14. 25-year old male welder died when mold he was welding on exploded.**

On August 15, 2002, a 25-year-old male welder was preheating an aluminum mold to perform TIG welding. The mold had steel backing with thirty-two 5/16-inch bolts. At another location, the mold ran 12 parts and needed some fabrication work so the mold was sent to the victim's company. The mold had 4 lines of coolant with quick disconnects. Prior to welding, the victim did not drain/purge the mold of coolant so there was coolant inside cavities within the mold. While welding, the coolant heated to boiling and over pressurized, causing the mold to explode. The explosion blew out the steel backing plates. The victim was struck by a piece of metal and thrown against the wall and a double-stacked tool chest. Employees looked for an emergency first aid kit but could not find one. 911 was called and the victim was transported to the hospital where he died of internal injuries sustained in the explosion. The victim's urine was positive for both cocaine and a marijuana metabolite.

MIOSHA issued the following Serious citations to the employer:

1. The employer did not provide adequate training in that the employee was preheating and TIG welding on a mold without training in the hazards. (General Provisions, Part 1, Rule 11(a)).
2. The employer did not insure that hollow spaces or cavities are vented and either filled with water or purged with inert gas before preheating, cutting or welding. The employee was pre-heating and TIG welding an aluminum mold which had two cavities unvented. (Welding and Cutting, Part 12, Rule 1262(3)).

MIOSHA issued the following "Other" citation to the employer:

1. The employer failed to report the employee's death to the Michigan Department of Consumer and Industry Services, Bureau of Safety and Regulation within 8 hours. (Recording and Reporting of Occupational Injuries and Illnesses, Part OSH 11, Rule 1139(1)).