

**Case 197. 39-year-old die setter was killed when he was pinned between two bolster plates.**

A 39-year-old male die setter was killed when he was pinned between two bolster plates. Two pneumatically driven bolster plates, which transported product into a press, were involved in this incident; bolster plate A (BP-A) and bolster plate B (BP-B). Prior to the incident, BP-A was located 12 to 18 inches north of BP-B on the plant floor. The decedent and two coworkers had conducted die setting activities on BP-A. BP-A was 188 inches tall by 288 inches wide and moved in a north/south direction at a rate of 0.425 sec/foot. A pendant control with two thumb levers labeled On or UP was used to initiate and stop BP-A's movement into and out of the press, which was located to the north of BP-A. The pendant control thumb levers must be depressed to initiate movement. The pendant's reaction time was 0.123 seconds. It appears that the decedent was in the process of moving BP-A into the press. He hooked up the air hose to drive the axles that moved the bolster's wheels. He then depressed the appropriate thumb lever on the pendant control located on the southeast corner of BP-A, but BP-A did not move north toward the press and then walked to the southwest corner of BP-A where he found an air ball cock valve in the closed position. He opened the valve, and BP-A began to move south, toward BP-B. He was pinned between BP-A and BP-B.

Coworkers saw the decedent pinned between the bolster plates. Because the pendant control thumb lever buttons were not clearly labeled as to function, his coworkers did not want to risk further injury to him by using the pendant control to move BP-A away from BP-B. One of his coworkers disconnected the airline to BP-A, and another coworker used a forklift to move BP-A to the north, away from BP-B. Coworkers began CPR, which continued until plant-based EMS personnel arrived. They assumed CPR responsibilities until outside EMS responders arrived.

There were additional air valves and lines that were opened and closed by levers at nearby location. These airlines controlled the directional north-south movement of BP-A. It appears, based on the movement direction of BP-A that the directional air valve for north movement was closed, and the directional air valve for south movement was open. A possible scenario has been developed. The decedent either placed the pendant control face-down on BP-A which would initiate movement because the thumb lever would be depressed, or he placed it right side up and it flipped over based on the stiffness of the air lines. The decedent was apparently unaware that the directional airlines were open to south movement instead of north movement. When he opened the ball cock valve, BP-A movement occurred to the south instead of the north in the direction of the press as he would have expected.

MIOSHA General Industry Safety and Health division issued the following alleged Serious citation:

**SERIOUS:**

**GENERAL PROVISIONS, PART 1, RULE 33(2).**

An actuating machine control, except for an emergency device for a powered fixed or transportable machine, was not guarded or located to prevent accidental actuation when unexpected motion would cause injury.

Pendent control levers not guarded against accidental actuation, unexpected motion exposed employee to being crushed between bolsters.