

NFPA Fluid Power Challenge

The NFPA Fluid Power Challenge is a middle school competition using fluid power technology to solve a real world engineering problem. Teams of 8th grade students learn about fluid power through hands-on experience designing, building and demonstrating a fluid power mechanism. The team building, design and communications skills acquired by the students during the competition provide a positive message and valuable life experience. The program also encourages students to continue math and science courses in school and exposes them to fluid power careers and technology.

One goal of the NFPA workforce development initiative is to promote the use of fluid power and raise awareness of the fluid power industry and careers. The NFPA Fluid Power Challenge meets these goals at the important middle school level while also nurturing and developing the potential fluid power workforce of the future. Of the seventy-six students that participated in the second Challenge, held December 2008, 73% expressed an interest in a fluid power career on the post-test/evaluation.

The first NFPA Fluid Power Challenge was held at Kettle Moraine High School (Wales, WI) on April 18, 2008 (Workshop Day) and May 9, 2008 (Challenge Day) with four teams attending. The second Challenge was held at the Milwaukee School of Engineering on November 14, 2008 (Workshop Day) and December 12, 2008 (Challenge Day) with nineteen teams from throughout Wisconsin and northern Illinois. The next Challenge will be held in four locations, two in Milwaukee, one in Northern Illinois (Palatine) and one in Minnesota (University of Minnesota – CCEFP) in November 2009 (Workshop Day) and December 2009 (Challenge Day) with a maximum of eighty possible teams participating.