



NFPA
Education and
Technology
Foundation

N F P A
Fluid Power
ACTION
Challenge

HYDRAULICS | PNEUMATICS

YOU'RE INVITED!

**WATCH AS STUDENTS DESIGN & BUILD A DEVICE TO
SOLVE AN ENGINEERING PROBLEM!**

BRINGING KEY SKILLS INTO ACTION:

- **Teamwork**
- **Competition**
- **Communication**
- **Problem Solving**
- **STEM Education**
- **Time management**
- **Project Management**

WORKSHOP DATE:

TIME:

LOCATON:

CONTACT:

CHALLENGE DATE:

TIME:

VISIT NFPAFOUNDATION.ORG

TEAMS ARE EVALUATED IN 5 AREAS:

- **PORTFOLIO** (55)
- **WORK HABITS** (10)
- **DESIGN & OPERATION** (10)
- **BOARD COMPETITION** (80)
- **INTERVIEW QUESTIONS** (20)



Objective: Teams design a device to move an object from the starting position to one of three zones in a timed competition.

WORKSHOP DAY

Teams are given a full kit of tools and materials to build a solution to the challenge. In the coming weeks they fine tune their skills, develop a plan and build their prototype.

CHALLENGE DAY

Teams use the portfolio and a new kit of identical materials to recreate their unique device and compete on the challenge board.

THE FLUID POWER ACTION CHALLENGE GIVES STUDENTS EXPERIENCE IN HANDS-ON LEARNING, PERSERVERANCE, & INTRODUCES THEM TO CAREER OPTIONS.

FLUID POWER INDUSTRY & CAREER EXAMPLES

• AEROSPACE • AGRICULTURE • AUTOMATION • BIOMEDICAL • CONSTRUCTION • ENERGY



Fluid Power Salaries Overview

Job Title	Job Salary*	Job Outlook - 2032 -	Education Level
Manufacturing Sales Representative	\$73,080*	1,701,400	Bachelors Degree
Sales Engineer	\$116,950*	63,400	Bachelors Degree
Industrial Machinery Mechanic	\$61,170*	503,300	High School
Mechanical Engineer	\$99,510*	323,900	Bachelors Degree
Mechanical Engineering Technician	\$64,020*	40,700	Associate's Degree

*SALARIES REPRESENT MEDIAN PAY IN 2032

SOURCE: ALL STATISTICS FROM [U.S. BUREAU OF LABOR STATISTICS](https://www.bls.gov)



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