

# IFPE 2017

## Fluid Power, Motion Control and Power Transmission Industries Come Together in Las Vegas to Promote New Solutions

Matthew Jaster, Senior Editor

Every three years Las Vegas welcomes those involved in mobile hydraulics, water hydraulics, pneumatics, electrical and mechanical power transmission and industrial hydraulics for the International Fluid Power Exposition (IFPE).

From March 7-11, suppliers, engineers, manufacturers and service providers that represent a diverse industrial base (off-highway, construction, factory automation, power transmission, machine tools, controls, to name a few) present new advances, innovations and technologies to improve the performance of hydraulic and pneumatic systems and applications.

In addition, the show is co-located with CONEXPO/CON/AGG, the largest international gathering for the construction industry with 2,500 exhibitors and more than 2,500,000 square feet of exhibits. Here's a breakdown of some programs and exhibits featured at IFPE 2017:

### Education Opportunities

IFPE 2017 will host the fluid power industry's prestigious Energy Efficient Hydraulics and Pneumatics Conference (EEHPC) in addition to offering hands-on "college course" education on the effective use of hydraulics in mobile equipment.

"We're pleased that the EEHPC conference will be held in conjunction with IFPE to bring an added dimension of fluid power education to the show. Industry professionals will benefit from the additional knowledge-sharing and networking," said Bob Mortensen, IFPE 2017 chair and president off-highway division of HUSCO International.

The Energy Efficient Hydraulics and Pneumatics Conference (EEHPC) focuses on concepts and techniques to keep fluid power (hydraulics and pneumatics) systems operating at peak efficiency to reap significant energy savings. The conference traditionally includes a "future of fluid power" program, which at IFPE 2017 will explore robotics challenges and opportunities.

Four half-day IFPE "college-level courses" will emphasize hands-on technical knowledge on the effective use of hydraulics in mobile equipment: (1) fundamentals of hydraulic



systems; (2) hydraulic fluid properties, efficiency and contamination control; (3) hydraulic system design strategies for mobile applications; and (4) electro hydraulic, systems design and control.

IFPE focuses on the latest innovations, product advances and expert insights to fully equip engineers and others involved in the design and manufacturing process to increase efficiency, contain costs and improve the performance of their hydraulic and pneumatic systems and applications.

### World of Fluid Power Summit

The world of fluid power is getting ready to gather at IFPE 2017. This summit, hosted by the National Fluid Power Association (NFPA), will bring the world of fluid power together for information sharing and education. The World Fluid Power Summit will be held on Thursday, March 9, 2017, beginning at 12:00 noon, at the Las Vegas Convention Center, and will include lunch for all attendees. Industry and association leaders from around the globe will participate in the following agenda:

- 12:00 Lunch Served
- 12:30 Welcome, Opening Remarks (Marc Weston, Danfoss Power Solutions; Vice Chair, NFPA)
- 12:45 Worldwide Need and Availability of Fluid Power Certification Programs (Rance Herren, National Oilwell Varco; Immediate Past President, IFPS)

- 1:15 Standards: The Importance of Relevance, and the Need for Technical Support to Meet Market Needs (Gary Baumgardner, Chair, ISO TC 131)
- 1:45 Report from the International Fluid Power Statistics Committee (Stéphane Rakotoarivelo, Vice President, CETOP)
- 2:00 Worldwide Fluid Power Market Trends (Including China, Europe, Australia, India, the United States and more)
- 3:15 Open Q&A
- 3:30 Adjourn

AGG and IFPE each show year and 2017 will not disappoint. We're thrilled to bring such a significant technological and first-of-its-kind achievement like the 3D printed excavator to the show; it will be a platform to demonstrate how the latest innovations and applied technologies are changing the future of construction industry," said John Rozum, IFPE show director.

The excavator is a joint collaboration between the Association of Equipment Manufacturers (AEM), National Fluid Power Association (NFPA), Center for Compact and Efficient Fluid Power (CCEFP), Oak Ridge National Laboratory (ORNL) and the National Science Foundation (NSF).

The group is working with research teams from Georgia Tech and The University of Minnesota to convert the current excavator design to one that is conducive to and takes full advantage of 3D manufacturing. Graduate engineering students at Georgia Tech will be creating a boom and bucket featuring integrated hydraulics with the goal of decreasing the weight, materials cost and maintenance, while students at the University of Minnesota are designing a hydraulic oil reservoir/heat exchanger and cooling system that reduces the size and weight and increase the efficiency of the machine.

"Technology and innovation will drive change for the future of the construction industry, and we're excited that students are playing a vital role in bringing the newly designed machine to life," said Eric Lanke, chief executive officer of NFPA.

In addition to the partnerships with the Georgia Tech and the University of Minnesota, AEM, NFPA, CCEFP, ORNL and NSF are inviting undergraduate engineering students from across the country to participate in a nationwide contest to design and print a futuristic cab and a human-machine interface for the excavator. **PTE**

### Registration

Visit the IFPE website for registration information ([www.ifpe.com/exhibit/register/](http://www.ifpe.com/exhibit/register/)) or call (800) 424-5247.



The Summit is open to all interested participants, but seating will be limited, and advance registration is required. For more information, contact Eric Lanke at [elanke@nfpa.com](mailto:elanke@nfpa.com).

### 3D Excavator Display

CONEXPO-CON/AGG and IFPE 2017 are teaming up to unveil the world's first fully-functional 3D printed construction excavator and the first large-scale use of steel in 3D printing, known as additive manufacturing. The excavator, which will be on display at the joint trade shows will bring to life how technology is transforming the construction industry in line with the show's 2017 theme, "Imagine What's Next." In addition to the pre-printed excavator, show attendees will be able to view a demonstration of the 3D printing technology.

"We know our members look forward to seeing the industry's most innovative technologies at CONEXPO-CON/