# Hydraulics & Pneumatics Show rolls into Cleveland

Cleveland features a diversified manufacturing base and is home to companies specializing in fluid power, medical, and biotech. The show will be held October 8-10at the city's I-X Center, adjacent to the airport

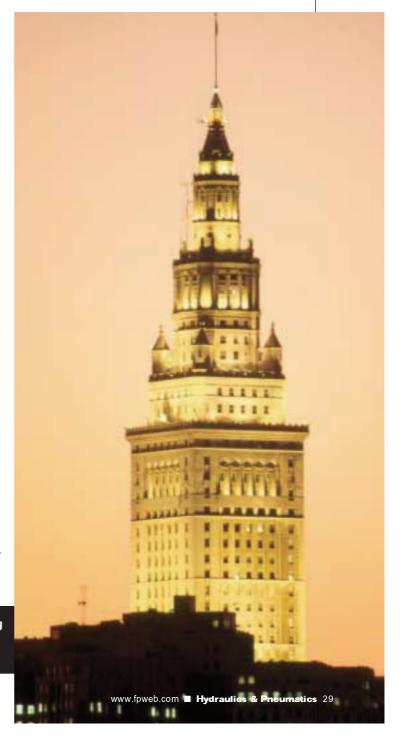
T he H&P Show, a part of Total Design Solutions Midwest (TDSM), will be held at Cleveland's I-X Center from October 8-10, 2002, as the second in a series of Total Design Solutions tradeshows and conferences. This Midwestern "Comeback City" serves as a hub of the region's diversified manufacturing base; more than 12,000 manufacturing companies thrive in Northeastern Ohio, with 7000 in greater Cleveland alone.

The traditional driver industries in the Cleveland area — plastic products, chemicals, motor vehicles, steel — have been bolstered by a major influx of biomedical investment.

Cleveland has a lot to offer as a destination, as well. Billions of dollars have been invested in the downtown and surrounding areas over the past decade, and visitors now enjoy such attractions as the Rock + Roll Hall of Fame and Museum, Great Lakes Science Center, and the Cleveland Zoo's Rainforest complex.

The I-X Center is a modern facility located just outside Cleveland's Hopkins International Airport, making it easily accessible for air travelers. The Center is also at the crossroads of two major interstate highways (I-71 and I-480), allowing for convenient auto travel.

Cleveland's signature Terminal Tower glows in the evening twilight. For information on visiting this great Midwestern city, check out the website located at www.cleveland.oh.us.



### Selected TDSM/H&P Show exhibitors

A&R Hydraulic Services
Allenair Corp.
Anderson Metals Corp., Inc.
Applied Industrial Technologies
CCECO
Ever-Flex Pinch Valves
F & M Fluid Power, Inc.
FloMet LLC
Helac Corp.

**Hydraulics & Pneumatics** 

Hydraulic Parts Source
Interface Devices, Inc.
Italian Trade Commission
LTV Copperweld
Macrotech Polyseal, Inc.
Mid-State Sales
Minnesota Rubber /
QMR Plastics
Nimco Controls, Inc.
Northlake Steel Corp.
Noshok, Inc.

Ohio State University –
Agricultural Technical Institute
Orttech, Inc.
Parker Hannifin Corp.
Pressure Components, Inc.
RB HybroDynamics
R.T. Enterprises, Inc.
RohMax

Seal Master Corp.
Sensotec, Inc.
Smalley Steel Ring Co.
SSP Fittings Corp.
Tribute, Inc.
Tuson Corp.
Vaccon Co., Inc.
Waterloo Controls

## What's with all of the guitars?

Cleveland is in the midst of Guitarmania, as you may guess from their prevalence in this article. Guitarmania is a community art project that involves nearly 100 Fender Stratocaster guitars—each fiberglass sculpture is 10 feet tall—scattered around downtown Cleveland.

Each guitar is sponsored by a local company and painted with unique imagery. Celebrity artists include Drew Carey, Keith Richards, Joe Walsh, and Omar Vizquel.

The guitars will be on display through October, at which point they will be auctioned off, with the proceeds going to area charities. For a look at the various designs, visit the website: www.cleveland.com/guitarmania.

# Brazilian fluid power expert to give free lectures

Renowned Brazilian fluid power professor, Jonny Carlos da Silva, PhD, Laboratory of Hydraulic and Pneumatic Systems, Federal University of Santa Catarina, Brazil, will give two free talks at the upcoming Hydraulics & Pneumatics/TDSM Shows.

Prof. da Silva is an active participant in and founder of Fluid Power Net, an international fluid power

research network, and he serves as the organization's representative for Brazil. He has given talks at IFPE, Hannover's World Exposition 2000, Stanford University, and numerous other conferences in the U.S., Europe, and South America. His focus is on design methodology of mechanical

systems, and his talks will explain the use of expert systems in designing fluid power systems, along with preventative maintenance issues.

# Wednesday, October 9 11:10 a.m. – 12:10 p.m. Expert Systems for Fluid Power

This presentation will cover the main aspects related to the development of expert systems,

especially how this technique can be used to improve the design process with fluid power systems in a concurrent engineering perspective. An expert system applying this concept will be demonstrated in detail, and

its potential for enhancement involving training, supplier integration, marketing, and simulation also will be discussed.

#### Thursday, October 10

1:00 – 2:00 p.m. Artificial Intelligence:

#### Application for Maintenance

In a concurrent engineering perspective, design should take into consideration different aspects — with maintenance issues included among them. This presentation will give an overview of several projects related to expert systems for maintenance, focusing on their ROI for companies, and maintainability issues in design. Case histories will be included.

