



Pictured Above:  
DS-6600/12-30/36



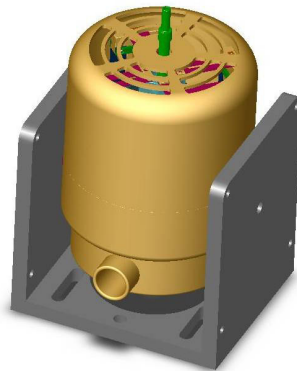
At  
Dynamic Solutions  
we believe  
that every customer  
should be a  
reference!

**What to EXPECT  
from us:**

- **State-of-the-art  
Amplifier  
Technology**
- **Standard VH  
Trunion Base on  
ALL Models**
- **THREE YEARS  
WARRANTY ON  
ALL PARTS**
- **High Fundamental  
Armature  
Resonance**
- **Exceptional  
Product Support  
and Customer  
Service**

## New Products On The Horizon

*Dynamic Solution's product line continues to grow with two more new products already slated for release in 2004. Soon-to-be-released are the new 36,000 lbf. water-cooled shaker and the 100 lbf. modal shaker, both that should be available in the Americas by mid-2004. In fact, several other exciting new products are already in development and may be ready for release before the end of the year.*



Dynamic Solution's new modal shaker, "**The Stinger**" offers 100 lbf. in a light, one-person portable design. The thruster utilizes an adjustable collet-type "Stinger" attachment and is capable of a full 1" displacement from DC to 2000 Hz. The Stinger will be officially introduced in the United States this August. Pre-orders are already being accepted.

The new **DS-36000VH/17-200** is currently undergoing extensive testing and to date has exceeded its original performance goals. The 36,000 lbf. water-cooled shaker is powered by a 200 kva air-cooled switching amplifier. The system puts out 100g-peak maximum acceleration and 79 ips maximum velocity. With a fundamental armature resonance of 1700 Hz, over two tons of payload capacity and 2" continuous peak to peak stroke, this system is a workhorse of a shaker.

## Hewlett Packard Brazil Selects Dynamic Solutions



Dynamic Solutions recently was awarded a contract to supply multiple pieces of dynamic test equipment to Hewlett Packard's facility in Sao Paulo, Brazil. The contract, which was negotiated by Signalworks, Dynamic Solutions' exclusive sales representatives in Brazil, includes both electro-dynamic vibration and package testing equipment.

Dynamic Solutions is already in conversations with other Hewlett Packard locations about their test needs. The Hewlett Packard order represents Dynamic Solutions' first installation in South America.

WE ARE THE



**CHOICE FOR  
REPLACEMENT  
AMPLIFIERS**

*(References Available)*

**IGBT outperforms  
MOSFET on the basis  
of:**

- ❑ Silicon efficiency
- ❑ Thermal characteristics
- ❑ Power-conversion efficiency
- ❑ Peak current carrying capability
- ❑ Higher switching frequency
- ❑ State-of-the-art versus 1980's technology
- ❑ Reduced waveform distortion
- ❑ Reliability



**"WE ALSO  
DESIGN AND  
FABRICATE  
CUSTOM  
FIXTURES!!"**

## Dynamic Solutions Supplies Replacement Amplifier to Dugway Proving Grounds

Dugway Proving Grounds in Dugway, Utah recently selected Dynamic Solutions to provide a 240 Kva replacement amplifier to drive their existing LE 4022 shaker. The SA240 amplifier, which was successfully delivered and installed in compliance with an extremely aggressive schedule, replaced an older LE DMA48 and has exceeded the expectations and performance criteria of many involved.

"The decision to award the work to us was most likely based on a number of factors including past performance, technical specifications, pricing and warranty," commented Dynamic Solutions' Director of Marketing. "We work hard to provide reliable and affordable products and services to all of our accounts. In this case, we had demonstrated a high level of competence as well as the ability to meet demanding schedules on past service contracts and I believe that was a major factor in deciding to order our equipment."

Dynamic Solutions amplifiers use name brand, top quality components and the latest in design engineering, including state-of-the-art Insulated Gate Bipolar Transistor (IGBT) technology.



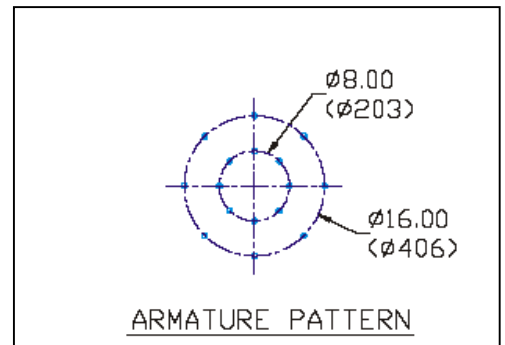
## NEW!! SAE Bolt Patterns

In response to increased customer demand, in April 2004, Dynamic Solutions began offering some new armature sizes and alternative bolt patterns for several of their shaker models. Dynamic Solutions shakers are built standard with a metric bolt pattern however, new SAE patterns are now available on many of their systems.

The DS-6600-VH shaker system is available with either a 14" or a 12" diameter armature and the DS-9000-VH is now available with either a 14" or 17" diameter armature. Moreover, Dynamic Solutions shaker systems with 17"

armatures (currently available with the 9000, 12000, 13000, and 16000 lbf shakers) can now be ordered with an optional SAE bolt pattern consisting of an 8" and a 16" B.C. at no additional charge. Similarly, the 14" armature (available with the 6600 and 9000 lbf shakers) can be ordered with 6" and 12" B.C. instead of the standard metric pattern.

With the new armature sizes, Dynamic Solutions now provides both lighter, high-g and more robust, increased mounting area alternatives for some of their most popular shaker models. In addition, the new bolt pattern options will simplify acquisitions of their shaker systems for customers who want to continue to use pre-existing fixturing. "The new choices further expand the product line and increase our ability to compete with domestically established brands," commented Steve Wood.



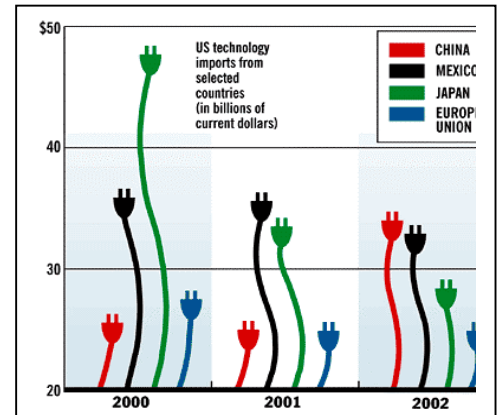


**Shaker Systems are 100% tested and rated in full compliance with ISO 5344: 1980 the recognized international method of describing equipment characteristics for electrodynamic test equipment for generating vibration**

## Chinese Hi-Tech Imports Shake-Up The U.S. Market

China is quickly proving to be more than a huge consumer market for high-tech products. The value of high-tech goods shipped to the US from China rose 32 percent from 2000 to 2002, a trend experts expect to continue. The value of such merchandise shipped from Mexico and Japan, the second- and third-biggest exporters of technology to the United States, fell 8 percent and 40 percent, respectively.

Since nearly every electronics manufacturer now contracts at least some production in China, the Chinese have quickly become familiar with the manufacturing processes and quality standards required to compete in the international market. As Chinese manufacturers adopt these same quality standards, increasingly the only difference between an American made product and one imported from China is price.



Ten years ago, none of us imagined buying a television manufactured in China for 50% of what we would pay for a Toshiba. But last year, Apex, a Chinese manufacturer of consumer electronics, sold more DVD players and recorders in the United States than any other company but Sony, according to the NPD Group, a market-research firm in Port Washington, N.Y.

What does this mean with regard to vibration test equipment? Only time will tell. But, next time you find yourself comparing the consumer electronic offerings at your local Wal-Mart, Circuit City or Frye's, think about giving us a call to discuss your test equipment requirements. If you can save \$100. on a DVD player – just think what you can save on capital equipment! And, all with the best warranty in America.

### Eagle Pitcher takes delivery of DS-6600

Eagle Pitcher's Energy Products Division in British Columbia announced it is completing the construction of their new dynamic test facility that will house their new 6,600 lbf. Dynamic Solutions Vibration Test System and support the locations vibration testing needs.

### DS Used Equipment offers Exceptional Value!

Dynamic Solutions has a number of previously owned shaker systems now in stock that are available for sale at the fraction of the cost of new. Used shakers are also available for short-term requirements on a rental basis. And, if we don't have it – we'll find it. Dynamic Solutions works closely with the top used equipment dealers in the country so we can deliver a large selection of refurbished equipment (*at no additional cost to you!*) that precisely matches your particular requirements.



**Priced  
to  
SELL**

## **HOT VALUES!!**

### **Used Equipment Now In Stock**

- Unholtz-Dickie T1000IAR Shaker in Kimball ISO-base with 60" x 60" Bearing Line Table rated for 19000lbf. Peak Sine... Can be paired with a new state-of-the-art SA Power Amplifier for optimum performance!
- DMA48 Air Cooled Power Amplifier – configured to drive an Ling 4022
- Ling 390/DMA5 3000-lbf shaker system - ALL AIR COOLED.
- Unholtz-Dickie T206/MA250 1200 lbf. shaker system - ALL AIR COOLED



## **Cutting Prices – Not Quality!**

Before introducing its product line to the North American vibration test market, Dynamic Solutions used its extensive knowledge of the vibration test market and its decades of hands on experience to find the very best manufacturing partner. The partner that was selected boasted one of the finest engineering teams in the world and was managed by some of the most talented and motivated people in the industry. Then, design, manufacturing and international distribution teams worked together to further improve the quality, designs and marketability of the equipment we now offer.

Thanks to our unique business model and low overhead, Dynamic Solutions can overbuild and de-rate systems providing greatly increased reliability and high system durability. That is why Dynamic Solutions vibration equipment is backed by the BEST warranty in the Americas – because it is built to withstand the toughest of continuous duty requirements.

After a decade of operation in installations across China, the shakers offered by Dynamic Solutions maintain the highest of consistent quality performance and have experienced minimal failures and downtime.

## **Field Service and Training Earns High Marks from Customers**

With field service engineers now located in Southern California, the Pacific Northwest and the Midwest, Dynamic Solutions is available to respond to all of your on-site field service requirements. Experienced in servicing all major brands of electro-dynamic vibration equipment (LDS, Ling, UD, MB and Dynamic Solutions), we can repair what others can't.

Dynamic Solutions also offers extensive classroom and hands on training taught by a former National Technical Systems' Dynamics Laboratory Manager with more than 24 years of experience. Training curriculums can be custom designed to meet the needs and experience level of your test engineers. Call today for a free, no-obligation price quote!



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