

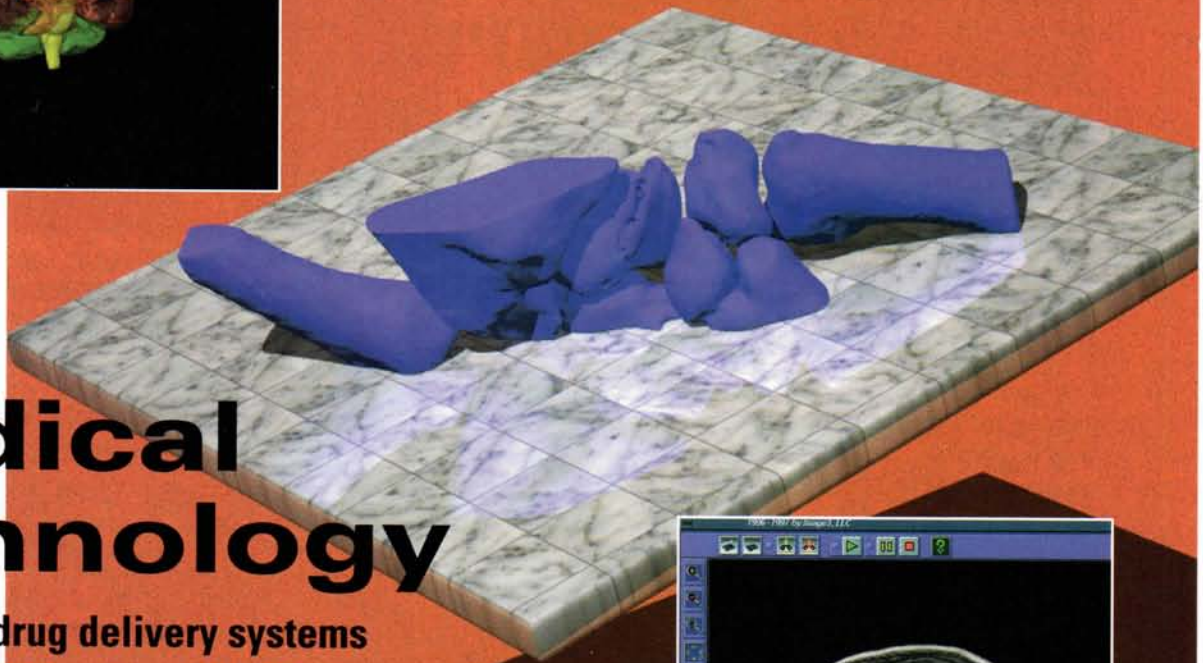
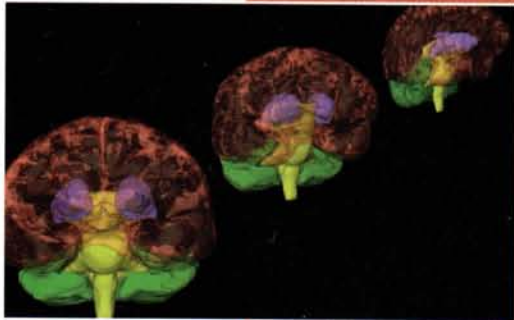
Supplement to

# MACHINE DESIGN

<http://www.penton.com/md>  
A PENTON PUBLICATION  
JUNE 19, 1997

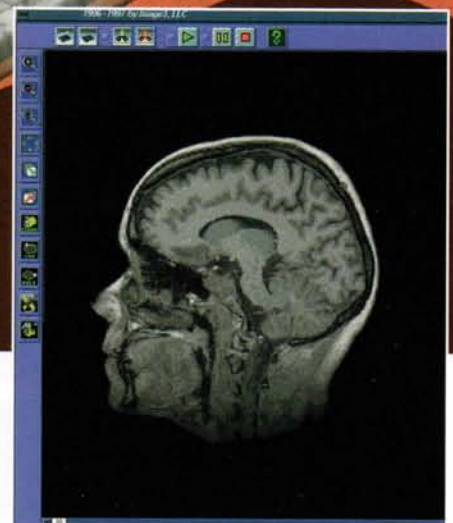
AMERICA'S MOST  
USEFUL DESIGN  
ENGINEERING  
MAGAZINE

## SPECIAL ISSUE



## Medical technology

- High-tech drug delivery systems
- Medical OEMs rate reliability tops
- New designs change MRI industry



*Environments  
which are kind  
to the patient  
can be tough  
on equipment*

# TECHNOLOGY REPORT



Self-Sealing Fasteners

Clear Boots for Circuit Breakers & Digital Panel Meters

Switch Sealing Boots

Colorizing Filters for Incandescent Lamps

## PROVEN PROTECTION FOR MEDICAL ELECTRONICS

### Switch and circuit breaker environmental sealing boots prolong life and reliability

Could failure of a switch or circuit breaker at the wrong moment have drastic consequences? Here's an easy, proven way to prolong their life, while protecting behind-panel components. APM HEXSEAL's tough yet pliable silicone boots contour-fit over switches and circuit breakers to protect them during sanitizing washdowns, and against dust, dirt and corrosion ... at temperatures of  $-94^{\circ}\text{F}$  to  $+400^{\circ}\text{F}$ . Each features an integral perimeter sealing rib which seals the component's mounting hole. Custom colors/sizes and EMI/RFI suppression models available. UL-listed.



### Fasteners that seal themselves even when internal/external pressure exceeds 6,000 psi

APM HEXSEAL'S patented self-sealing screws, bolts and



rivets provide both fastening and sealing integrity in a single unit. These easy-to-install, vibration-resistant fasteners feature a dimensionally-exact, reusable, resilient silicone O-ring nested in a precision-engineered groove under the head. This combination of groove geometry matched to O-ring characteristics assures metal-to-metal contact, while providing a leakproof seal – regardless of surface finish. UL-listed.

### Incandescent lamp colorizing silicone filters: More colors than

### LEDs could ever hope to offer

Take any clear miniature incandescent lamp from T-3/4 to S8, and slip on a SiliKromes® Color Filter. Presto — instant permanent color. Reusable and fabricated in colorfast pliable silicone rubber, SiliKromes will not chip, melt, peel or fade, even after 10,000 hours at  $-160^{\circ}\text{F}$  to  $+450^{\circ}\text{F}$ . Plus, they have the added benefit of cushioning lamps against shock and vibration and are strong enough to contain broken glass in the event of bulb shattering. SiliKromes are UL-listed.

