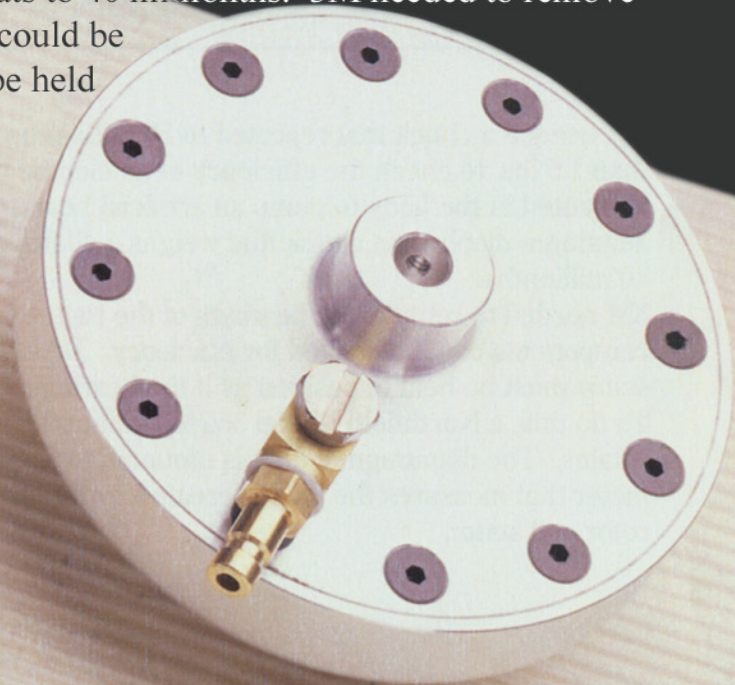
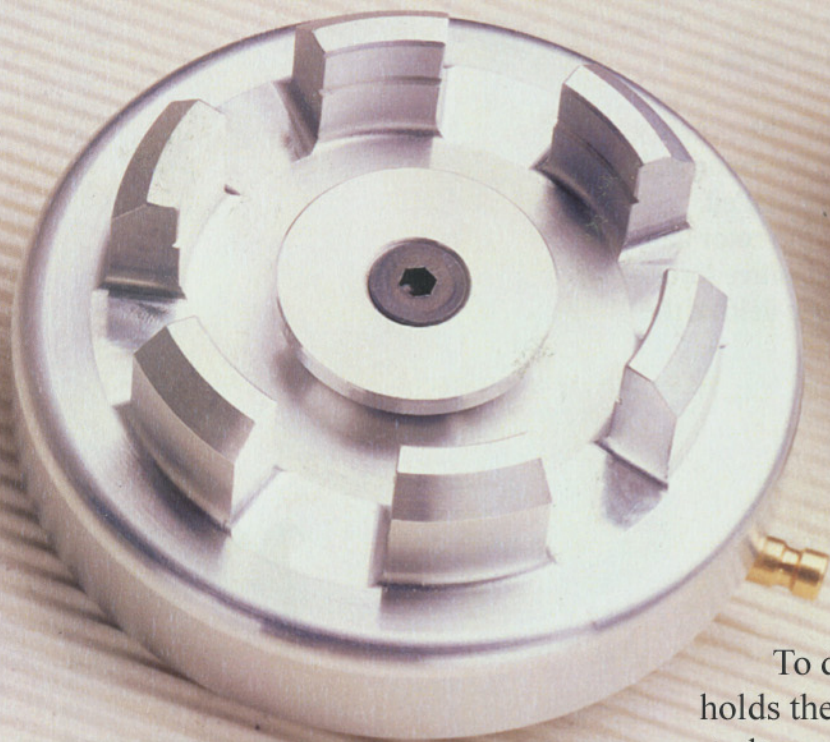


3M needed a chuck that repeated to 50 millionths and weighed less than 1.5 lbs. to check the efficiency of an electric motor that gets implanted in the body to pump and artificial heart. We made a 3 inch aluminum diaphragm chuck that weighs 1.40 lbs. and repeats to 40 millionths. 3M needed to remove the bearings of the motor so only the primary components could be tested for efficiency. To do this, the rotor and stator must be held in position as if the bearings were installed.



To do this, a Northfield Model 350-50 millionths holds the rotator and rotates. The diaphragm chuck is mounted to a very sensitive torque meter that measures the torque created by the magnetic field of the rotor and stator.

**NORTHEFIELD**  
SPECIAL 3 IN. DIAPHRAGM CHUCK