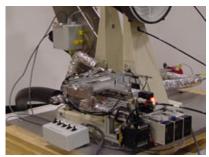


#### **Automatic Specimen Transfer**

### **INTRODUCTION**



MPM's Automatic Charpy Specimen Transfer System

Charpy testing of radioactive materials often requires special shielding and/or the use of hot cells. In such cases, specimen alignment using remote manipulators is a very difficult, time consuming, and expensive operation. MPM has developed an automatic specimen transfer system to address this problem. The system can be used on table top and floor model pendulum machines as well as on drop tower machines manufactured by MPM and by other organizations. The specimen transfer system is

intended for use with the MPM In-Situ Heating & Cooling system. Please refer to our In-Situ Heating & Cooling system brochure for more information.

## **SYSTEM OPERATION**

The specimen transfer system transfers the test specimens one at a time to the test machine supports from a 15 specimen magazine. The notch is centered between the anvils within 0.002 inches routinely using this system. The magazine has been designed for manipulator handling and can be easily transferred to a loading table. After loading, the magazine is pneumatically aligned and clamped in place.

## SPECIMEN HEATING/COOLING

The specimen transfer system can be interfaced with the In-Situ Heating & Cooling system. A lightweight thermocouple is moved into position by the automatic specimen transfer system to measure the temperature of the specimen prior to testing. The system can be interlocked with the hammer release to ensure that the swing path is clear before releasing the pendulum.

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# FOR MORE INFORMATION

If you would like a price quotation or additional information concerning MPM's services or products, please contact us at the below listed address:

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