

# **CE Marking of Instron® Equipment**

Instron manufactures testing machines used to test the mechanical properties and performance of various materials, components and structures in a wide array of environments.

Instron's largest product lines include universal and dynamic testing instruments. Other product lines include impact, rheology, thermo-mechanical, hardness, and torsion testing systems. Additionally, Instron manufactures systems to test complete structures and components, mainly for the automotive industry

To fulfill the European Union's conformity requirements for CE marking of equipment across such a wide product range, Instron uses 4 main directives, the Machinery Directive, the Pressure Equipment Directive, the Low Voltage Directive and the Electromagnetic Compatibility Directive (EMC). This article explains how these directives are used.

#### **Definitions**

## **Machinery Directive**

A product is deemed as coming under the authority of the Machinery Directive if it contains any power driven moving parts. Most Instron equipment falls under this directive with some exceptions for passive products such as manually operated fixtures and purely electrical products.

## **Pressure Equipment Directive**

This directive applies to products with pressurized fluids of 0.5 Bar or higher. All servo-hydraulic products and hydraulic grips comply with this standard

#### **Low Voltage Directive**

A product is deemed as coming under the authority of the Low Voltage Directive if it does not come under the authority of the Machinery Directive and it's designed for use with a voltage between 50 and 1000 volts AC or 75 and 1500 volts DC.

#### **EMC Directive**

The EMC directive applies to all electrical products including those that fall under the Machinery Directive, Low Voltage Directive or Pressure Equipment Directive.

Copies of current European Union directives can be obtained online at <a href="http://ec.europa.eu/">http://ec.europa.eu/</a>.

All Instron equipment falling under these directives are CE marked and a Declaration of Conformity is supplied with the equipment when shipped to the European Union (EU) or European Economic Area (EEA). The declarations list in more detail the primary international standards that were followed.