

# ECTA Safety Recommendations for Parallel or Convolute Winding Machines

## **Preliminary remarks:**

In the tube and core industry, the equipment in use differs in size, type and operation, depending on the manufacturer. The ECTA Safety Committee has made an effort to take into account all the existing differences in writing these safety recommendations. The committee advises you to take national standards and norms into account when applying ECTA safety recommendations. The current Machinery Directive 2006/42/EC and the relevant CE norms are to be observed as well.

## **A. Basic requirements**

- I. Documented risk analysis
- II. At least one safety seminar per year for all employees who work with the equipment, led by an industrial safety expert and documented in writing
- III. The emergency stop(s) are integrated components of the entire emergency stop chain of the complete line.
- IV. Protective devices which already exist on the equipment may not be removed.
- V. Placement of visual warnings at dangerous spots which cannot be secured due to the nature of the operation.
- VI. Encasing by solid fences of the complete machine so that all areas with moving parts or injury risks are protected. All openings are to be fitted with safety switches.
- VII. The unwinding part and the cutting part are protected by light curtains.

## **B. Basic elements of the technical safety devices**

- I. Direct protection of moving parts.
  1. Encasing of the complete production line
  2. Emergency stop mechanism
    - 2.1 All doors in the fences are fitted with safety switches
    - 2.2 The unwinding stand is protected by light curtains
    - 2.3 The knife is protected by a light curtain
    - 2.4 Emergency stop button
    - 2.5 Equivalent devices
- II. Area safeguarding during normal operations
  1. Additional safety devices at the output part of the machine
- III. Area safeguarding during setup operations  
(At setup machine speed)
  1. Fences can be entered at low machine speed under condition that the operator uses a mobile emergency stop device.

An example of a safety concept of a parallel winding machine is enclosed as an appendix.

*Remarks:*

The CE symbol is no longer valid when significant changes to the machine occur. Approval of the safety concept by institutions responsible for inspections at the national level is highly recommended.

*Waiver of liability:*

ECTA has made an effort to draft these safety recommendations in good faith using the knowledge available to us. The recommendations are non-binding. Claims of guarantee cannot result from following them. The recommendations do not release members from informing themselves of the current legal regulations and of their individual application needs.

