

ECTA Safety Committee/Safety Recommendations for Cutting Heads on Spiral 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. When in doubt, coordinating with the local safety authorities is recommended!

A. Basic requirements

- I. Documented risk analysis
- II. At least **one** (1) written and documented safety seminar per year for all employees who work with the equipment led by the direct supervisor together with an industrial safety expert
- III. The emergency stop chain of the cutting head is an integrated component of the entire emergency stop chain of the winding machine
- 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.

B. Basic elements of the technical safety devices

- I. Direct protection of moving parts.
 1. Protective cover with contact switch or light curtain which is enclosed on all sides.
 2. Emergency stop mechanism
 - 2.1 Emergency stop button
 - 2.2 Protective cover of contact switch

II. Area safeguarding during normal operations

If necessary, additional safety devices on the input and output openings, not necessary if fully encased.

III. Area safeguarding during set-up operations (Belt speed of 5-10 m per minute)

1. Central switch toggling between set-up mode and normal operation
2. Automatic limit of winding speed during set-up mode
3. When in set-up mode, hardware safety features need to be secured.

An example of a safety concept for an integrated cutting head is enclosed as an **appendix**.

Remarks:

If the machine is substantially altered, the original CE certificate issued by the manufacturer lapses and the user has to have a new one issued in a timely manner.

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.

Appendix: Schematic depiction of cutting head safety features.

