



FEDERATION EUROPEENE DE LA MANUTENTION
Section IX
SERIES LIFTING EQUIPMENT

FEM
9.901

Rules for the design of series lifting equipment and cranes equipped
with series lifting equipment

12.1991 (E)

1 Object

Object of this FEM rule is the standardization of the design of series lifting equipment and cranes equipped with series lifting equipment, particularly in Section I and IX of the FEM unless there are not necessary any special design rules deviating from those of Section I.

2 Scope

This FEM rule applies to series lifting equipment and cranes equipped with series lifting equipment of Section IX.

3 Rules of Section IX

The following design rules of Section IX apply to the devices specified in paragraph 2:

- FEM 9.341 Local girder stresses
- FEM 9.511 Classification of mechanisms
- FEM 9.661 Dimensions and design of rope reeving components
- FEM 9.671 Chain qualities, selection criteria and requirements
- FEM 9.681 Selection of travel motors
- FEM 9.682 Selection of lifting motors
- FEM 9.811 Specification of rope and chain hoists
- FEM 9.941 Control symbols

4 Rules of Section I

Moreover the design rules of Section I are valid, FEM 1.001 booklets 1 to 8 with the following exceptions and indications:

- Booklet 1 Object and scope**
This booklet contains a list of the symbols and terms used in the design rules of Section I. It is pointed out that there are partly used other symbols and terms in the design rules of Section IX.
- Booklet 2 Classification and loading on structures and mechanisms**
is valid without restrictions. It is pointed out that calculations according to paragraphs 2.1.3.2 and 2.1.3.3 lead to the same result as calculations according to FEM 9.511; however, there are partly used different terms and formulas (e. g. the term "class of utilization" instead of "class of operating time").
- Booklet 3 Calculating the stresses in structures**
is valid without restrictions.
- Booklet 4 Checking for fatigue and choice of mechanism components**
is valid without restrictions. It is pointed out that calculations according to paragraph 4.2.2 lead to the same result as calculations according to FEM 9.661; however, there are partly used different terms and formulas.
- Booklet 5 Electrical equipment**
is valid without restrictions. (There are no contradictions to FEM 9.681 and FEM 9.682).

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