FEDERATION EUROPEENNE DE LA MANUTENTION
SECTION II
CONTINUOUS HANDLING

FEM
2 561

QUESTIONNAIRE FOR THE STUDY OF CONTINUOUS BULK HANDLING SYSTEMS

Problems common to mechanical handling, pneumatic handling and silo storage

original F
edition E
April 1994

INTRODUCTION

This questionnaire is a document on the general questions common to mechanical handling, pneumatic handling and silo storage.

Its aim is to collect all necessary information for the study of continuous bulk handling systems.

For a given handling equipment, this document should be used in conjunction with the document relative to the specific equipment in question as listed below :

- questionnaire and check-list for the study of continuous bulk handling systems : mechanical handling - specific part - FEM 2 562 of April 1994
- questionnaire and check-list for the study of continuous bulk handling systems : pneumatic handling - specific part - FEM 2 563 of April 1994
- questionnaire and check-list for the study of continuous bulk handling systems : silos, hoppers and bins - specific part - FEM 2 564 of April 1994

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1. PROJECT DESIGNATION

1.1 - Customer.....

1.2 - Date of request.....

1.3 - Deadline for submitting the proposal (short schedule with major dates)

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1.4 - Type of quotation (budget price, detailled offer...).....

1.5 - Site of installation.....

1.6 - Site conditions :.....

- air temperature..... min.....degrees C
  max.....degrees C
- maximum humidity of ambiant air.....%

  and reference temperature.....degrees C
- specific conditions (tropical climate, aggressive atmosphere, salty environment, etc) .....
- maximum rain conditions.....
- site altitude (above sea level).....m
- maximum service wind speed.....m/s
- maximum wind speed, out of operation .....m/s
- other wind speed (e.g. to return to anchoring position, where applicable).....m/s
- snow load :

  - depth.....m
  - load.....N/m^2

or

- site zone and corresponding rule.....
- seismic spectrums .....
- maximum allowable ground pressure.....N/cm^2
- others : vibration, ...
- specific prescriptions for environmental aspects (noise level, pollution).....

1.7 - Applicable standards and recommendations : .....

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2. DATA ON THE BULK MATERIAL TO BE CONVEYED (IN ACCORDANCE WITH THE RECOMMENDATIONS FEM 2 581 + 2 582)

The available FEM documents dealing with bulk materials characteristics are listed in annex.

2.1 - Name of the bulk material .....

Describe the bulk material as precisely as possible and also indicate the chemical composition if known.

2.2 - Granulometry - Grain size (complete either 2.2.1 or 2.2.2)

Provide, if possible, the material grain size curve. If this information is not available fill in the following table giving as many details as possible (see note 1 appended).

2.2.1 - powdery materials

0 - 5 µm ..... %
5 - 10 µm ..... %
10 - 20 µm ..... %
20 - 30 µm ..... %
30 - 40 µm ..... %

For sizes above 40 µm indicate the various percentages as accurately as possible.

2.2.2 - bulk - ungraded materials

Indicate at least :
- size of the largest lumps L x W x T (mm)*
- mass percentage of lumps ranging from 0.8 L to L (mm)

* see Note 1 in annex

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