



**FEDERATION EUROPEENNE DE LA MANUTENTION  
SECTION II  
CONTINUOUS HANDLING**

**FEM  
2 562**

**QUESTIONNAIRE AND CHECK-LIST FOR THE STUDY OF  
CONTINUOUS BULK HANDLING SYSTEMS**

*mechanical handling - specific part*

*original F  
edition E  
April 1994*

**INTRODUCTION**

This specific part should be used in conjunction with document FEM 2 561 of April 1994 : Questionnaire for the study of continuous bulk handling systems - Problems common to mechanical handling, pneumatic handling and silo storage.

This questionnaire is intended for mechanical handling systems to be built as individual or complex systems. It covers the design, manufacturing, assembly and commissioning stages.

**CONTENTS**

**1 - SUMMARY OF THE CONTENTS OF THE QUESTIONNAIRE FEM 2 561 OF  
APRIL 1994 "PROBLEMS COMMON TO MECHANICAL HANDLING, PNEUMATIC  
HANDLING AND SILO STORAGE" :**

- 1.0 introduction
- 1.1 project designation
- 1.2 data on the bulk material to be conveyed
- 1.3 operational data
- 1.4 system configuration
- 1.5 electrical general characteristics
- 1.6 Data on control and automation
- 1.7 auxiliary services

**2 - QUESTIONNAIRE "SPECIFIC PART" :**

- 2.1 specific characteristics of bulk materials and their influence on the design of mechanical handling equipment
- 2.2 special requirements related to design, construction and maintenance
- 2.3 specific environmental requirements

**3 - CHECK-LIST :**

- 3.1 additional questions regarding the definition of the technical handling problem
- 3.2 specific installation requirements
- 3.3 interfaces and connecting conditions
- 3.4 supply limits

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## 2 - QUESTIONNAIRE "SPECIFIC PART"

### 2.1 Specific characteristics of bulk materials and their influence on the design of mechanical handling equipment

The precise and fullest possible knowledge of the bulk materials characteristics is essential to define and select the mechanical handling equipment and/or system. This implies close cooperation between the manufacturer and user to collect relevant information. The following documents are helpful to seek basic information.

- FEM 2 581/2 582 : general properties of bulk materials and their symbolization
- FEM 2 181 : specific characteristics of bulk materials as applicable when handled mechanically
- FEM 2 123 : influence of the characteristics of bulk materials on the design of bucket elevators
- FEM 2 124 : influence of the characteristics of bulk materials on the design of troughed belt conveyors
- FEM 2 125 : influence of the characteristics of bulk materials on the design of horizontal and slightly inclined screw conveyors
- FEM 2 126 : influence of the characteristics of bulk materials on the design of en-masse conveyors/elevators
- FEM 2 127 : influence of the characteristics of bulk materials on the design of vibrating conveyors
- FEM 2 128 : influence of the characteristics of bulk materials on the design of bucket-wheel reclaimers

### 2.2 Special requirements related to design, construction and maintenance

- does the bulk material manufacturing process require special design and/or technology to resolve the following functions ? if so, which one ?	YES	NO
- equipment feeding .....	.....	.....
.....		
- equipment discharge.....	.....	.....
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- bulk material protection against bad weather conditions .....	.....	.....
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- equipment enclosure for reasons of safety in connection with the bulk material.....	.....	.....
.....		
- complete or partial heating of the equipment.....	.....	.....
.....		
- equipment leakproofness.....	.....	.....
.....		
- antiadhesiveness of certain components.....	.....	.....
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