

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Commissioning of electrical, instrumentation and control systems in the
process industry – Specific phases and milestones**

**Mise en service des systèmes électriques, de mesure et de commande dans
l'industrie de transformation – Phases et jalons spécifiques**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**COMMISSIONING OF ELECTRICAL, INSTRUMENTATION
AND CONTROL SYSTEMS IN THE PROCESS INDUSTRY –
SPECIFIC PHASES AND MILESTONES**

FOREWORD

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International Standard IEC 62337 has been prepared by subcommittee 65E: Devices and integration in enterprise systems of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 2006. This edition constitutes a technical revision.

The main changes with respect to the previous edition are listed below:

- The definition of the documents mentioned in this standard is in accordance with future IEC 62708¹.

¹ To be published.

The text of this standard is based on the following documents:

FDIS	Report on voting
65E/221/FDIS	65E/226/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

There is an increasing trend in the process industry to award the construction of whole plants to contractors on a lump-sum turnkey or similar commercial basis. Experience has shown that both the process industry (hereinafter called “the owner”) and the contractor have long and expensive discussions to lay down unambiguously the scope of activities to be taken by the contractor and the owner and their responsibilities to achieve the handover of the plant.

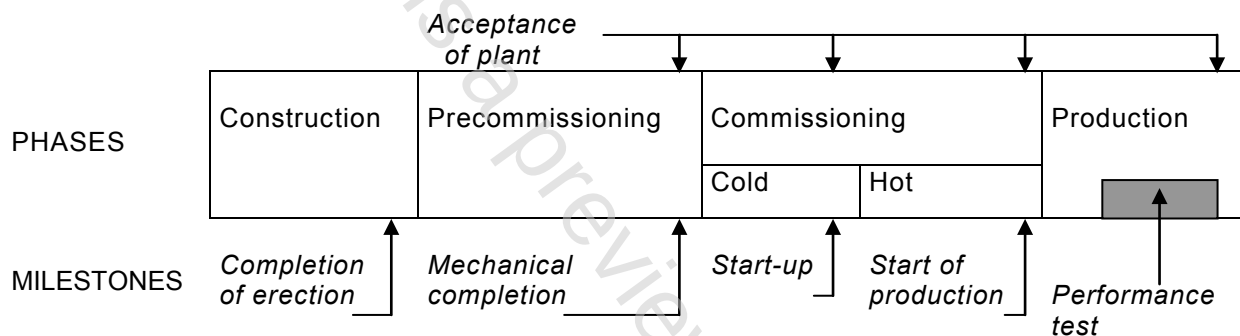
This standard is intended to lead to an improvement and acceleration of the negotiation phase and to a mutual understanding about the scope of the activities of each party.

COMMISSIONING OF ELECTRICAL, INSTRUMENTATION AND CONTROL SYSTEMS IN THE PROCESS INDUSTRY – SPECIFIC PHASES AND MILESTONES

1 Scope

This International Standard defines specific phases and milestones (see Figure 1) in the commissioning of electrical, instrumentation and control systems in the process industry. By way of example, it describes activities following the “completion-of-erection” milestone of the project and prior to the “acceptance-of-the-plant” phase by the owner. Such activities need to be adapted for each type of process/plant concerned.

NOTE This standard assumes that the “acceptance-of-the-plant” milestone will occur after the performance test. If there is a reduced scope, this document should be adapted accordingly.



IEC 135/12

NOTE Construction and precommissioning activities could be overlapping.

Figure 1 – Definition of phases and milestones

For application in the pharmaceutical or other highly specialized industries, additional guidelines (for example, *Good Automated Manufacturing Practice (GAMP)*), definitions and stipulations should apply in accordance with existing standards, for example, for GMP Compliance 21 CFR (FDA) and the Standard Operating Procedure of the European Medicines Agency (SOP/INSP/2003).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62079, *Preparation of instruction – Structuring, content and presentation*

IEC 62424, *Representation of process control engineering – Requests in P&I diagrams and data exchange between P&ID tools and PCE-CAE tools*

ISO 10628-2, *Diagrams for chemical and petrochemical industry – Part 2: Graphical symbols*

ISA-S7.0.01, *Quality standard for instrument air*