

Founding — Equipment for the production of lost patterns for the lost foam casting process

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British Standard

ICS 77.180

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee ISE/NFE/9, Foundry technology, which has the responsibility to:

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- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 16, an inside back cover and a back cover.

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13533	19 October 2001	Spelling error corrected on front cover

English version

Founding - Equipment for the production of lost patterns for the lost foam casting process

Fonderie - Outillages pour la production de modèles perdus
pour le procédé de moulage "lost foam"

Gießereiwesen – Einrichtungen zur Herstellung von
verlorenen Modellen für das Vollformgießverfahren

This European Standard was approved by CEN on 25 December 1999.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 190, Foundry technology, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2000, and conflicting national standards shall be withdrawn at the latest by August 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Within its programme of work, Technical Committee CEN/TC 190 requested CEN/TC 190/WG 1.30 "Production equipment, tools, foundry auxiliaries (e.g. patterns, permanent moulds, moulding materials)" to prepare the following standard:

EN 12892

Founding – Equipment for the production of lost patterns for the lost foam casting process

This is one of three of European Standards for foundry patterns and tools. The other standards are:

prEN 12883

Founding – Equipment for the production of lost patterns for the lost wax casting process

EN 12890

Founding – Patterns, pattern equipment and coreboxes for the production of sand moulds and sand cores

Introduction

Lost pattern production processes involve the moulding of a pattern. The pattern is then destroyed either prior to or during the casting process.

At present two processes are commonly used:

- investment casting (lost wax process);
- lost foam process.

This standard concerns the lost foam process.

This standard describes the specification for tooling to produce patterns or cores for the lost foam process.

This standard is intended for purchasers, manufacturers and founders. It is also intended to ensure correct interpretation of part and tool drawings/numerical data, and to ensure pattern equipment will produce lost moulds and lost cores, suitable for use and to assist in determining the usually undefined limits of good workmanship. It stresses the need for consultation between the founder, manufacturer (patterns), manufacturer (tooling) and purchaser before work commences.

This standard is intended to assist interested parties in producing tooling for urea or dense polystyrene or expanded material patterns suitable for use to produce castings by the lost pattern process.

There is a complex relationship between the parties who might be involved in specifying, manufacturing, ordering and designing the equipment within the scope of this standard.

NOTE: Figure 1 gives an indication of the relationships that could exist between the four parties concerned.

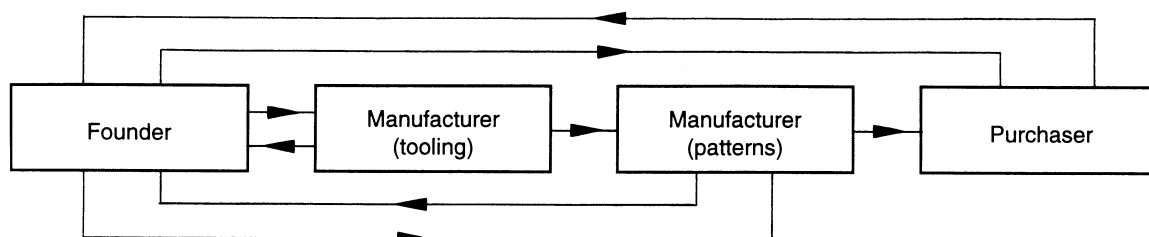


Figure 1 – Model inter-relationships between the contracting parties

This standard not only specifies the usual features of design, manufacture, materials, tolerances, contractions and required machining allowances but also specifies other features such as usage, classification, quality control, marking, packaging and storage.