



# FENOTEC\*

ALKALINE PHENOLIC BINDERS FOR FERROUS AND NON FERROUS FOUNDRIES

Very low  
nitrogen levels



Excellent mould  
and core release



Improved casting finish  
in virtually all metals



High reclaimability



HIGH PERFORMANCE SELF SET BINDERS

# FENOTEC - SELF SET BINDERS

FOR FERROUS AND NON FERROUS FOUNDRIES

The FENOTEC alkaline phenolic cold set resin process is a two part sand binder system based on a water soluble alkaline resin solution and a range of organic aliphatic hardeners. These hardeners provide a comprehensive range of reaction times.

## FENOTEC Binder

FENOTEC can be used for the production of a wide range of castings in a wide range of alloys. Suitable for both cores and moulds, resin additions are typically 1.0 to 1.5% with an optimum ester addition between 18 and 25% of the resin content. FENOTEC can be used in conjunction with a clean dry silica sand (AFS 30 - 100). Chromite, Zircon and Olivine sands can also be used successfully.

### Benefits:

- ▶ Very low fume and low odour on casting
- ▶ Very low nitrogen levels
- ▶ Zero sulphur and phosphorus
- ▶ Excellent mould and core release
- ▶ Improved castings in virtually all metals
- ▶ Excellent surface finish
- ▶ High mould and core strengths
- ▶ High reclaimability
- ▶ High temperature plasticity

### FENOTEC application

FENOTEC is fully adaptable to all mixing methods particularly to high speed continuous mixers. Batch mixers can be used but an allowance should be made for extended mixing time when selecting the required ester hardener.

Several key development programs have resulted in a range of FENOTEC resin and ester formulations which allow high levels of sand reclamation

to be achieved. Foundries are now benefiting from this new technology in terms of consistent high mould strengths, excellent breakdown after casting and improved casting finish.

### FENOTEC properties

A range of alkaline phenolic binders which offers excellent strength, ensuring consistent production of even the most complicated cores and moulds with reliable dimensional accuracy and the highest product consistency.

The adjusted reactivity of the products ensures binder consumption is minimised and productivity can meet the requirements of the foundry.

The viscosity of the products is optimised to provide improved sand flowability, whilst sand compaction is eased. The latest developments even provide good pattern strip characteristics from a wide range of pattern equipment including wood, plastic and all metals.



FENOTEC binders offer excellent mould and core properties and easy pattern release



### FENOTEC Hardener

The hardener product range for FENOTEC binders ensures minimised addition and superior mixed sand bench life to curing time ratios to meet the specific needs of each customer application.

These in combination with the DUOMIX online set-time control unit ensure the highest degree of possible productivity combined with lowest mould and core manufacturing costs.

Foseco Foundry International · PO Box 5516 · Tamworth, Staffordshire · England B78 3XQ · Phone: +44 (0)1827 262021 · Fax: (0)1827 283725  
www.foseco.com · Please contact your local Foseco Company

\*FOSECO, the Logo and FENOTEC are Trade Marks of the Foseco Group of Companies, used under license. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system of any nature or transmitted in any form or by any means including photocopying and recording, without the written permission of the copyright holder. All statement, information and data contained herein are published as a guide and although believed to be accurate and reliable (having regard to the manufacturer's practical experience) neither the manufacturer, licensor, seller nor publisher represents nor warrants, expressly or impliedly: (1) their accuracy/reliability (2) that the use of the product(s) will not infringe third party rights (3) that no further safety measures are required to meet local legislation. The seller is not authorised to make neither representations nor contract on behalf of the manufacturer/licensor. All sales by the manufacturer/seller are based on their respective conditions of sale available on request. © Foseco International Limited 05/07

