

## LIBRARY OF 3D GEOMETRIES AND THERMO-PHYSICAL DATA

- + Sleeve material data
- + Filter pressure drop data
- + Heat transfer coefficients
- + Parametric 3D library
- + Database search functionality



## THE FOSECO PRO MODULE FOR MAGMA<sup>5</sup>

Library of 3D geometries and thermo-physical data

The Foseco Pro Module is a parametric 3D library of sleeve and filter products, combined with proprietary thermophysical data, which has been integrated directly into MAGMA casting process simulation software.

This tool, jointly developed by Foseco and MAGMA, supports the foundry simulation engineer by greatly simplifying the modelling of Foseco products and their performance within MAGMA<sup>5</sup>.

Simulation accuracy is improved by using performance data specific to Foseco sleeve and filter types, leading to greater confidence in the results.

It facilitates optimisation of the casting guality and casting production processes, primarily through improved gating and risering system design.

Key Functionality

- + Search and select from a library of Foseco sleeve or filter products directly in the MAGMA<sup>5</sup> geometry perspective.
- + Once a product is selected, it is automatically imported into MAGMA<sup>5</sup> as a 3D model.
- + Sleeve material thermo-physical data, filter pressure drop data and relevant Heat Transfer Coefficients are automatically assigned to their respective geometries.
- + The models are fully parametric and the user can easily change the size or configuration of the chosen product.
- + The library and functionality of the Pro Module is designed for use in gating and risering optimisation studies with MAGMA 5.3.





Simulated filling of Valve Casting







Accurate thermophysical data allows for correct prediction of filling, solidification and feeding of the casting

\*MAGMA and MAGMASOFT are registered Trade Marks of MAGMA Giessereitechnologie GmbH.

\*FOSECO and the Logo are trade marks of the Vesuvius Group, registered in certain countries, used under licence. 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 or as expressly permitted by law.

Applications for permission shall be made to the publisher at the address mentioned. Warning: The doing of an unauthorised act in relation to a copyright work may result in both a civil claim for damages and criminal prosecution. 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 infring ethicity aptr rights, (3) that no further safety measures are required to meet local legislation. The seller is not authorised to make 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 05/15



The Pro Module interface in MAGMA<sup>5</sup>

> Foseco International Limited Drayton Manor Business Park, Tamworth, Staffordshire, England B78 3TL Phone: +44 1827 262021 Fax: +44 1827 283725 www.foseco.com

Please contact your local Foseco team

COMMITTED TO FOUNDRIES

FOSFCC