

Reduction of water-leachable fluoride in the green sand system saves money in sand disposal



SUSTAINABILITY

THE CHALLENGE

Like most foundries today, ZANARDI are focussed on minimising their environmental impact and reducing material disposal costs. The challenge was to reduce the amount of water-leachable fluoride in their sand system (coming mainly from exothermic sleeves). With a reduced fluoride content, the waste sand can be disposed of more easily and at lower cost.

FOUNDRY:

ZANARDI Fonderie S.p.A is a family owned company



Zanardi
F o n d e r i e

founded in 1931, and now run by the 4th generation of the family. They specialise in ductile iron and ADI components ranging between 1-120kg in weight. They produce both raw castings and fully machined parts for the agricultural, energy, construction, railway and automotive sectors.

PARAMETER

Alloy:	ADI (Austempered Ductile Iron)
Casting Weight:	4.15 kg
Pouring Weight:	41 kg
Pouring Time:	5.3 s
Pouring Temp.:	1385°C
Moulding Process:	Horizontal machine moulding, green sand

FOSECO PRODUCTS

KALMINEX* 2000 FF FZP 4/7K
SEDEX* 50x50x22/10 ppi



OUR SOLUTION

The application of exothermic / insulating KALMINEX 2000 FF fluoride free vacuum formed insert sleeves .

THE OUTCOME

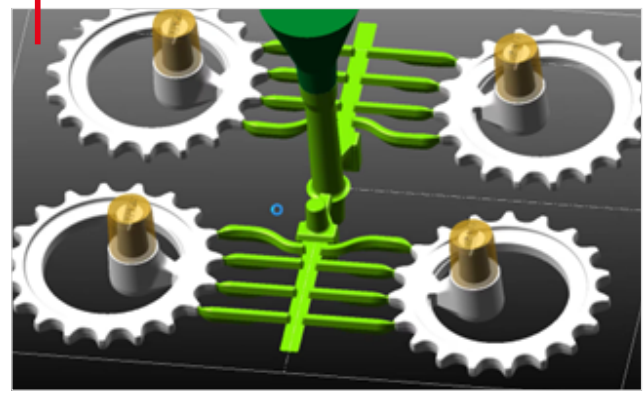
Reduced levels of water-leachable fluoride in the green sand system, resulting in lower disposal costs. Feed performance was maintained at same high level as conventional sleeves.

KEY BENEFITS

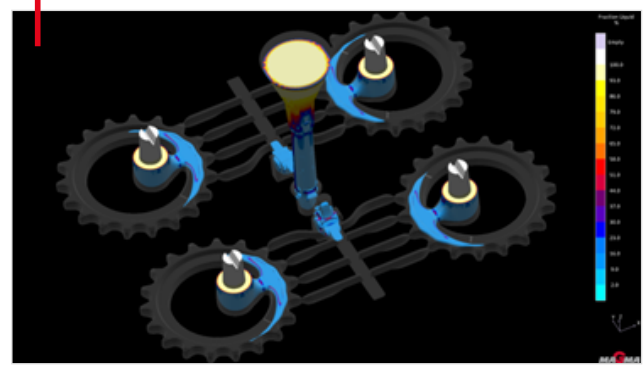
- Significantly reduced fluoride content of the greensand system, allowing lower cost disposal of the waste sand.
- Equivalent feed performance to the standard exothermic formulation.
- Optimised yield and shrinkage free castings.

> LET'S LEARN MORE 

Casting Layout



MAGMA Fraction Liquid view



THINK BEYOND. SHAPE THE FUTURE.



VESUVIUS
A VESUVIUS GROUP COMPANY

COMMENT: Editorial policy is to highlight the latest Foseco products and technical developments. However, because of their newness, some developments may not be immediately available in your area. Your local sales organisation will be pleased to advise. 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. © Foseco International Ltd., 2023 *FOSECO, KALMINEX and SEDEX are trade marks of the Vesuvius Group, unregistered or registered in certain countries, used under license.

