

Best Selling Software in Japan on Casting CAE


The Highly-Integrated CAE System for Casting

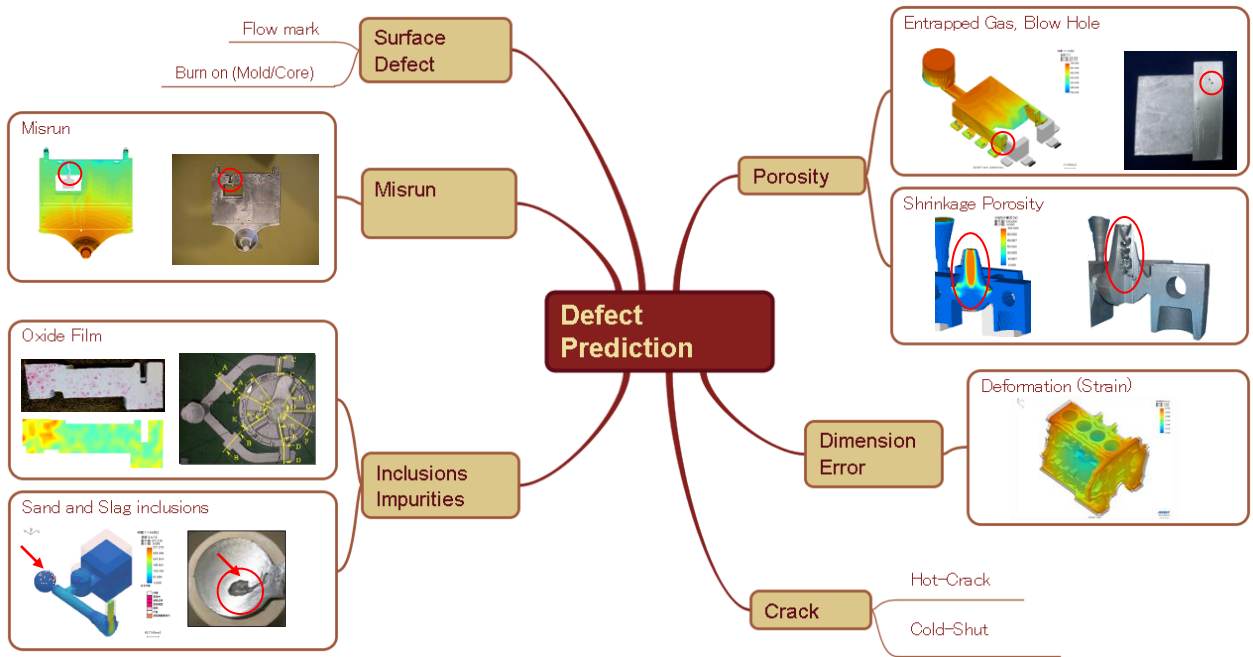
**JSCAST**



**JSCAST** - the casting simulation software evolving year-by-year, is mainly focused on the **high-accuracy** , **high-speed** and **high user-friendship**.

We offer our customers products and solutions with the **best cost-performance** and **best services** (initial training course, technical support).

【Simulation with High Accuracy】	【Benefits to Users】
 <p>Gas entrainments are very well reproduced in the simulation</p> <p>Evaluation of mold filling simulations using X-ray radiography</p>	<ul style="list-style-type: none"> <li>• Low rejection-rate, High yield-ratio, Short lead-time (cost down)</li> <li>• Better solutions, and better qualities (More contracts)</li> <li>• Accumulation and heritage of casting technologies (Young engineer education)</li> <li>• Globalization (Reinforce collaboration between branches and departments, domestically and abroad)</li> </ul>



**A powerful casting CAE tool. Applicable to any of the casting alloys and most of the casting processes. Capable to identify main causes of various casting defects and develop counter-measures more effectively.**

**QUALICA Inc.**

<http://www.qualica.co.jp/>

# Simulations of An Investment Casting of large Scale

The 13th World Conference on Investment Casting

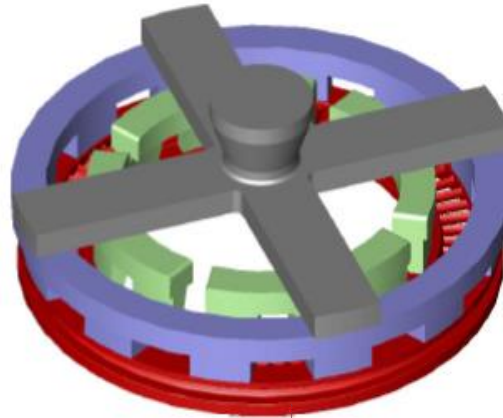
# JSCAST

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Courtesy of King Parts Ltd.

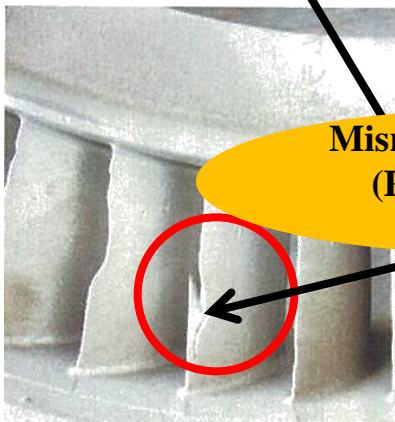


Casting Product

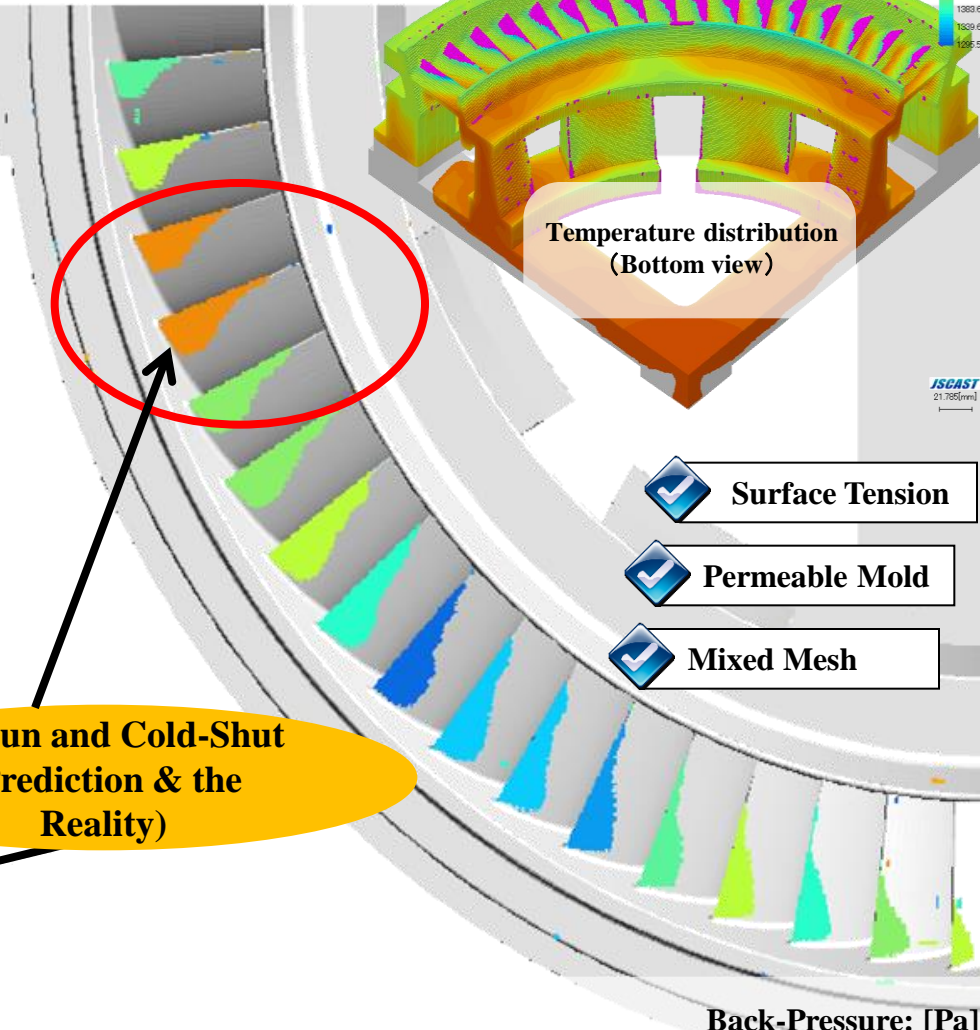


Initial Casting Design

Simulation Conditions  
 Casting alloy : SCS13  
 Pouring Temp: 1670°C  
 TL: 1460°C  
 TS: 1390°C  
 $\rho$  : 7.0g/cm<sup>3</sup>  
 $C_p$  : 0.18cal/g/°C  
 $\lambda$  : 0.07cal/g/°C/cm  
 $H$  : 50cal/g  
 $\sigma$  : 1800mN/m  
 Contact Angle: 160°  
 $K$  (mold) : 0.2 (JIS)  
 Viscosity : 0.5(cm<sup>2</sup>/sec)  
 (Temperature-dependent)



Misrun and Cold-Shut  
 (Prediction & the Reality)



Back-Pressure: [Pa]

QUALICA Inc.

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