

# METALLURGICAL KNOWLEDGE SERVICES

GUIDANCE OF YOUR  
METALLURGICAL PROCESS

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A NOVACAST SYSTEMS PRODUCT



# METALLURGICAL KNOWLEDGE SERVICES

**Metallurgical Knowledge Services (MKS) is developed to help foundries improve the daily process in their melting shop. We have extensive knowledge to help you make a profound reality check of your melt and evaluate your metallurgical fingerprint. With our assistance you will find strengths and weaknesses of the melt in your foundry.**

## Active service up to 8 hours per month

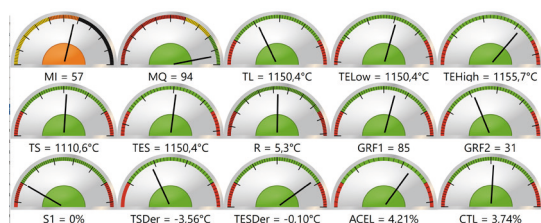
Customers get access to 8 hours of active service each month, given by our metallurgical experts. The service are performed online and includes phone calls, email conversations, and creation of reports, etc.

## Monthly report

Customers are entitled to receive monthly or weekly service (based on mutual agreement) where NovaCast Systems (NCS) with their partners will service customers.

## Checking Cloud Database

Downloading and checking database for possible adjustments of fingerprint for specific group of alloys, ACEL targets together with defects risk evaluation, creation of unique user advice, user equations, and MasterMind correlations, etc.



## Metallurgical advice

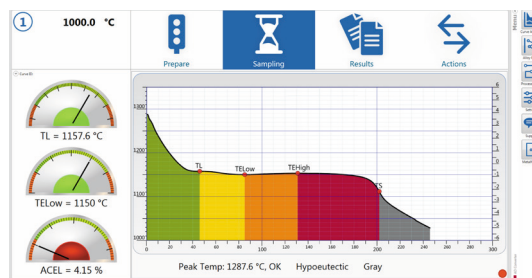
Metallurgical advice will help optimize alloy composition, enhance process efficiency, increase reliability, improve casting techniques, assisting in new product development and improve overall metallurgical awareness in the foundry.

## Helping with any kind of modulus if purchased

Pearlite, Ductile, Dynamic Inoculation, Spectrometer, etc.

## Benefits of using MKS:

- Real-Time Process Control
- Optimized Alloy Composition
- Reduced Defects and Scrap Rates
- Enhanced Process Efficiency
- Improved Product Consistency
- Energy Savings
- Enhanced Innovation Capability
- Improved Compliance and Quality Assurance
- Data-Driven Decision Making
- Innovation and R&D Service
- Training and Skill Development
- Risk Management
- Customer Satisfaction



Material	Change	Target and result
Target weight	1900.00	4021.76g
Weight	1900.00	4021.76g
Waste	0.00	0.00
Steel returns	0.00	0.00
Gas	13.10	13.10
Blow	35.13	35.13
Refuse	372.58	372.58
Fe	100.00	100.00
Mn	0.45	0.45
P	0.01	0.01
S	0.00	0.00
Si	0.40	0.40
Al	0.00	0.00
Ni	0.00	0.00
Cr	0.00	0.00
Mo	0.00	0.00
W	0.00	0.00
Fe	1.16	1.16
Fe99	0.00	0.00
Return	30%	30%
Scrap	57%	57%
Cost per Ton	473.76\$	1905.35\$
Cost per Kg	0.47\$	1.90\$
CO2 per Ton	117000kg	402174kg
CO2 per Kg	117kg	117kg