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Sub: Installation of Thermal Analysis System

Magna is happy to announce the installation of a "**Thermal Analysis System**".

This thermal analysis system is not only for white chilled samples, but more important samples that solidify gray, i.e. where the carbon precipitates as graphite. It is the precipitation pattern of graphite, not the chemical composition that largely determines how the melt will behave. A thermal analysis systems takes a "fingerprint" of the melt and correlates it to the actual behavior. It gives the metallurgist new information that will enable him to verify the melts and optimize the processes.



The unique expert system interprets cooling curve data and estimates the risk for various casting defects. It gives a new metallurgical window into the complex processes involved in melting and treatment of gray- and ductile iron. This allows the user to optimize each step of the process to aim at zero defects.

This thermal analysis system will be useful in forecasting the metallurgical properties like Percentage Nodularity, Shrinkage tendency, Inoculation

effects before the metal is poured into the molds, which will enable prevention of defects based on a large database for individual components.

This system has the following advantages,

1. To avoid casting defects
2. To achieve a high yield
3. To reduce cost

This system will help Magna in supplying metallurgically consistent and cost effective products to our customers.

