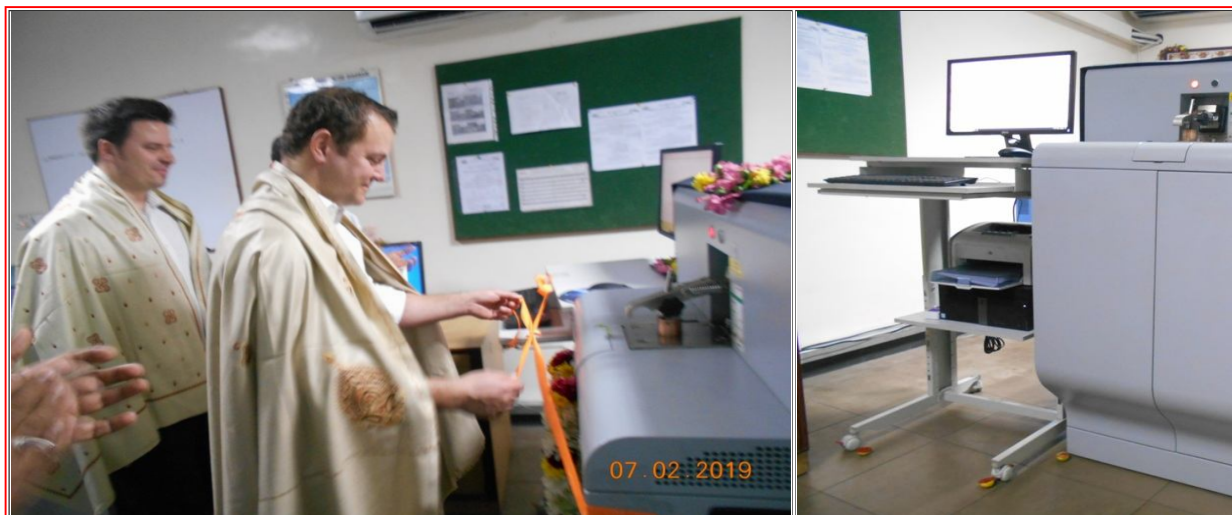


**MAGNA***Ductile Iron Components Made Easy.*

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**News Letter No: 176****February - 2019*****Sub :: Installation of New Spectrometer.***

Magna is pleased to announce the installation of a new state of the art Spectrometer to our Metallurgical Lab and the same was inaugurated by Mr. Pascal Somm, Vice President, Head of BU Supply & Value Chain Excellence, and Mr. Tobias Schoch, Global Category Manager - Iron castings from ABB Turbo Systems Limited, Baden, Switzerland on 07th Feb 2019.

**Spectrometer Details:**

Sr. No.	Key Features	Details
1	Model Name	SPECTROLAB LAVM12
2	Type of Spectrometer	Optical Emission Spectrometer
3	Optical System	Hybrid with PMT (Analog Photomultiplier Tube) detectors & CCD (Digital Charge Coupled Device) sensors. Maximum of 108 channels possible
		Focal Length = 750 mm (add on optic 400 mm focal length)
		No vacuum pump required, Argon gas will be used to create inert atmosphere
4	Spark Stand	Argon flushed light path
		Open spark stand for high sample throughput, minimized argon consumption, temp absorbent design without water cooling, integrated shutter system for optimum plasma viewing
5	Excitation System	Fully digitalized plasma generator with digital discharge definition, digital pulse generation and digital offline pulse control
6	Calibration	Performed at factory with certified reference material (CRM's) and reference materials (RM's)
		Provided with necessary SUS for ordered calibrations
7	Analytical Software	Spark Analyzer Pro Software with MS Windows
		Flagging of results beyond calibration range
		Configurable transmission of analytical results and statistical data (XML, ASCII - configurable)
8	Calibration Modules/No of Programs - Only Fe base	1. Fe01 - Orientation (For all types of unknown samples) 2. Fe10 - Low Alloy Steel 3. Fe20 - Cast Iron (Grey+SG) 4. Fe60 - Cr Hard Cast Iron 5. Fe65 - Ni-Resist
9	No of Elements	30 excluding Fe
10	% C Determination Accuracy	US patent for accurate analysis carbon content which eliminates need for combustion analysis

**Advantages:**

- A hybrid model ensures simultaneous, fast & accurate measurement of all the elements including trace elements.
- Ultra low limits of detection due to instrument calibration for lower values.

- **Stability and repeatability of the results is very good.**
- **30 elements include Oxygen & Nitrogen measurement.**
- **Silent operation as vacuum pump is not required.**
- **% C measurement is patented and highly accurate which avoids need of combustion analysis.**
- **Open spark stand ensures less time of inspection.**
- **Reduced consumption of argon gas due to improved positioning of the argon distribution block.**