

## Editor's Point – Career for MONEY?

Money is necessity for decent living. There is no limit that could satisfy human beings. Some follow MONEY and there are a lucky few who are chased by the money but then should there not be a sustainable wage for every professional covering sports, education, fine arts, music, science and engineering?

Why is it that some of those who participated in more than one OLYMPICS make their living selling vegetables or serving with a meager wage of Rs 5,000/- per month. There are careers that call for devotion, commitment for excellence and they bring laurels to the nation. Such cases could be seen in every profession. Couple of years ago, an ailing old engineer in PUNE was helped by a company from Delhi.

The news that some engineering graduates are offered annual package of a few millions (Rupees in Crore), the system should ensure that every student joining engineering is made to stand with a minimum sustainable wage. Questioning quality of education by Industry is justified but it needs involvement of Industry as well. Let industry adopt a student each every year in manufacturing or IT sector. A 4-year simultaneous INTERNSHIP and mentoring support will create a different ENGINEER (who could stand of his own for a comfortable job or entrepreneurship)

A 4<sup>th</sup> year student of Mechanical stream when asked about L&T, the answer was – it's a Civil Construction company; an EC graduate had not heard of Texas Instruments and Honeywell. It shows lack of awareness of Industry and our COMPANY Profile series intends to bridge this gap in a small way that every institution and corporate house should support. You may have a better idea; why not share with us at [ispatbharti@gmail.com](mailto:ispatbharti@gmail.com).

This is 5<sup>th</sup> issue of e-Newsletter. It is FREE; help us to reach out to every Institution, faculty and student of engineering. Another mission on knowledge dissemination pertaining to Metals-Materials-Manufacturing in HINDI will come live at our website from September 14<sup>th</sup>. You may support us sustain the initiative through small contributions or mini advertisements. Greetings for the Indian Independence Day - Aug 15<sup>th</sup>!

## Company PROFILE - 1

[E&A is one of the several business areas of L&T that was introduced in July issue]

**Electrical & Automation (E&A)** is one of the key business portfolios of **L&T**. The business comprises of low and medium voltage switchgear, electrical systems, marine switchgear, electrical and automation systems integration, energy meters & relays. It caters to industries, utilities, infrastructure, buildings and agriculture segments. Broad product range comprises of –

[\[CLICK on the Link Below to get Product Details\]](#)

- a) Powergear    b) Controlgear    c) Meters & Energy Management    d) Industrial Automation    e) Building Electricals  
f) Building Automation    g) Motors

It all began in 1960's when L&T embarked on Controlgear business. Right from the launch of MK series over 50 years ago, L&T has been at the forefront of Controlgear product development. Over the years, the range has grown in width of its offerings, size, etc. The comprehensive range of Controlgear products from L&T Switchgear meet every demand and suit every requirement across diverse applications; whether it is motor control, capacitor switching, supply changeover or any other single phase or three phase application.

Thermal overload relays with their sensitive mechanism ensure protection of system against overloads. Motor Protection circuit breakers combine both overload and short circuit protection in a single compact solution with wide range of accessories and spares complementing these products.

Manufacturing operations of E&A are located at Mumbai, Navi Mumbai, Ahmednagar, Vadodara, Coimbatore and Mysore. Internationally, it has presence in Saudi Arabia, UAE, Malaysia, Indonesia, Australia and UK. A major strength of E&A is in-house Switchgear Design and Development Centre (SDDC) and Engineered Tooling Solutions (ETS) that design and manufacture a wide range of high precision tools, a pre-requisite for high quality products.

E&A is operating Switchgear Training Centers (STCs) at Pune, Lucknow, Coonoor and Vadodara, where they conduct courses for technicians, customers, engineers, professionals and even STUDENTS for enhancing their knowledge and skill on switchgear products.

Powergear products cover:		
a) Air Circuit Breakers	c) Switch Disconnecter Fuses	e) Changeover Switch
b) Moulded Case Circuit Breakers	d) Switch Disconnecter / Isolator	f) High Rupturing Capacity Fuses

TAMCO Switchgear (Malaysia), a medium Voltage (MV) switchgear brand of E&A is conferred with the '2014 MV Company of the Year' Award by Consultancy Company Frost & Sullivan – CONGRATULATIONS to L&T !

## Company PROFILE – 2

**BODYCOTE** is multi-national company with 190 facilities worldwide and presence in 26 countries. In India, they are based in PUNE. It specialises in Thermal Processing of METALS that encompasses a variety of techniques and specialist engineering processes. The operations are vital part of manufacturing which improve properties of metals and alloys and extend the life of components. Major areas of operation include:

Heat treatment

Metal Joining

Surface Technology

Hot Isostatic Pressing

**Heat treatment** is a controlled process used to alter the microstructure of metals and alloys to impart desired properties which benefits working life of components by- increased surface hardness, temperature resistance, ductility and strength. Processes include case hardening, tempering, solution and ageing treatment, Specialty Stainless Steel Processes (S3P), annealing and normalising. Refer to the LINK to learn more about these processes - <http://www.bodycote.com/en/services/heat-treatment.aspx>

## The SOLAR Mission {लक्ष्य सौर ऊर्जा}

- 1) Indian engineer prepares solar tuk-tuk for London odyssey...  
... Naveen Rabelli's tuk-tuk, or auto rickshaw, is powered entirely by electricity and solar power.  
[www.financialexpress.com/news/former-mahindra.../1269745?](http://www.financialexpress.com/news/former-mahindra.../1269745?)
- 2) A SOLAR Energy vendor sold 1 kW unit to a domestic user integrating WAREE Panels, Su-kam Inverter and HBL Batteries. The system does not give adequate back-up at night during power outages. Similar systems in Europe are equipped with monitoring software modules to display energy produced, used in day-time and stored in batteries to be availed at night. Lack of education and support to clients in India seems to be the reason, why SOLAR power is not getting popular.
- 3) Govt of India has allocated Rs 10,000 Crore for SOLAR Energy in the Budget for the year 2014/ 15!
- 4) The US government is striving to make solar energy cost-competitive with traditional energy sources by 2020 through the **SunShot Initiative**. It supports private companies, universities and national laboratories to drive down the cost of solar electricity to \$0.06 per kilowatt-hour (kWh). Earlier the effort has brought down average price per kWh of a the utility-scale PV project from about \$0.21 to \$0.14 and the project is well on its way to achieve its goal of \$0.06/kWh by 2020.

<http://energy.gov/eere/education/explore-solar-careers-0>

## The KNOWLEDGE Link(s)

- Business Etiquette: the 26th Installment of a BLOG by Veerendra Jaitly, an IIT-Kharagpur alumnus, is there at the LINK - <http://excellenceguru.blogspot.in/> or you may visit him at [www.ccubeconsultants.com](http://www.ccubeconsultants.com)



The Indian Institute of Metals (IIM), a professional body engaged in promoting KNOWLEDGE of Metals, Materials, Minerals and Manufacturing organizes exhibition and Conference every alternate year. The event MMMM-2014 to be held at PRAGATI Maidan, New Delhi is scheduled during the period Sept 5 – 7, 2014. [www.mmmmconference.com](http://www.mmmmconference.com) Every Engineering Institution in NCR should plan a visit to the EXHIBITION by students and faculty.

- American Society of Metals (ASM) was established 100 years ago by a group of Heat Treatment companies of the United States of America. The professional society has grown over the years encompassing almost every area of KNOWLEDGE pertaining to Metals, Materials, Manufacturing ....and is now renamed ASM International. As a professional body, the information disseminated through training courses, seminars, workshops and publications is a big contribution to the Engineering profession. Anyone can visit the site [www.asminternational.org](http://www.asminternational.org) and register for a very informative FREE newsletter.



Exhibition of Renewable Energy is scheduled at India Expo Centre, Greater NOIDA from 3 – 5 Sep, 2014, an excellent learning opportunity for the Engineering Students and professionals.

## FEED BACK

1. “.....a noble Endeavour” – Patita Paban Panda, Director, Gandhi Institute for Technology, Bhubaneswar
  2. “.....I also agree that ultimately KSA (knowledge, skill and attitude) matters, not the certificate and certifying institution. It is said that *your attitude determines your altitude*” - Surendra Nath Tripathi, IAS, Jt. Secy to the Govt of India, Min of MSME.
- Buy “**Dream IIT**” a book on ENGINEERING Profession from [POTHI](#), [AMAZON](#) or [FLIPKART](#). Click on the LINK to reach the site.

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