

### Latest From in\_cr\_ove

in\_cr\_ove announces **workshop** on creativity and innovation. < for details see link below >

### Quality Management System of Tyco Thermal Controls – India Design Centre has been certified to be complying with ISO 9001:2000 standard by QMI Canada.

The certification covers Design Engineering Procurement & Construction of Projects for Electrical Heat Tracing Systems, Cathodic Protection Systems, Thermal Insulation, Mechanical Equipments, Electrical Distribution Wiring, Temperature Measurement & Leak Detection Systems for two facilities located at Noida & Mumbai.

It was a joyous occasion when Mr. K. B. Singh (General Manager) & Mr. Ramesh Sethi (Management representative) of Tyco Thermal Controls received the certificate from Dr S. K. Dutt of QMI Canada.

in\_cr\_ove rendered the consulting services for system design, improvement, training & implementation. The team members were trained in the system knowledge, implementation approach & methods. A special training module on lean projects was developed & delivered at Mumbai location. Nine internal auditors at both the locations (Noida & Mumbai) were trained & certified by in\_cr\_ove.

in\_cr\_ove is proud of its association with Tyco Thermal Controls – India Design Centre in its journey of business excellence

### Electrohydraulic Cylinders

They are actuation devices that use pressurized hydraulic fluid to produce linear motion and force. They are comprised of linear actuators, used to control valves in a variety of pumps, compressors, and in steam turbines that are used in hydropower generation. They are combined with a pilot valve, power cylinder, and electronic feedback components and are designed to operate in mechanically-driven or generator-driven steam turbines.. Advances in transducers and the logic used to program them makes electro hydraulic systems highly accurate, efficient, and precise because of the feedback control system built in to the electro hydraulic cylinder. Electrohydraulic actuators are controlled by a variety of components, like linear transducers for sensing rod position; hydraulic amplifiers to amplify the motion of a stepper motor; and rotary encoders which translate piston motion in to ball screw rotation. This enables electro hydraulic cylinders to be used as custom cylinders on machine tools and for precision motion control applications.

### Mind Set: let your old habits die

By Roy Klienwachter

Source: TOI 20 Jan, 2007

Most of us are slaves to habit and familiarity. Our present environment is a symbol of our present thoughts. My family is me, my job is me, my friends are me. It has been observed a wounded animal will return to what is familiar.

Because man is also an animal he likes familiarity and in time of trouble will also return to what is familiar. This bit of knowledge is how criminals are tracked down. For instance a white collar criminal who has expensive tastes in cars and fancy restaurants will not be difficult for the authorities to locate. He will be driving his favourite type of car to his favourite restaurant.

< for complete article see link below >

### Variable Gear System for cycle rickshaws

Sheikh Jabbar, from a village near Nagpur, developed a variable gear system for cycle rickshaws inspite of the financial constraints and ridicule. Determined, he left driving trucks and bought a rickshaw for Rs.550 in 1975 to earn his living as well as try out his ideas. He would open the parts to understand its mechanism and went hunting for scrap and spare parts in Chor Bazaar. He developed a four-gear rickshaw with differential mechanism and single axle in which the double-axle was removed and a single continuous axle was introduced. The power from the paddle was transferred to both the wheels in a much simpler way and the add-on weight was also reduced. The principle was similar to that of a double sprocket system, where two free wheels were used. Free wheel is an indigenous mechanism which allows rotation in one direction and becomes free in the reverse direction. He used this and converted it into a gear system, where the gear is changed or engaged with the help of a dog-lift, which can be activated by the rickshaw-puller with the help of the lever attached to the handle. It has improved free wheel, multi-gear system, drum brake means and multi-chain system. It is simpler in construction, of lower cost and easier to maintain as against similar devices which have got US patents. Compared to traditional rickshaw cycles and the ones developed by IDC and IIT Delhi, this model made by Jabbarbhai has three and four gear speed options.

### Waking Hours

By Amitabh Baxi

Source: The Economic Times Jan 07, 2007

**Gaurav Kumar's joy knew no bounds when he got a message from a call centre that he had been appointed as an executive at an attractive salary and perks. Only 21 and just out of the college, this seemed the most appropriate break he was looking for. However, three months down the line, Gaurav felt something was amiss, long travel time to workplace and back, odd shift hours and glued to the computer for long hour all were taking their toll. He was last seen by his colleagues at a psychiatrist clinic, unable to cope with the biological, psychological and social stress emanating from working in night shifts.**

< for complete article see link below >

Workshop : '**NAVPRAVARTAN – Solution Oriented Creativity for manufacturing and service organisations'**

Complete article: **Mind Set: let your old habits die**

Complete article: **Waking hours**