



7<sup>th</sup>

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*Handbook for*  
FICCI Safety  
Systems Excellence  
Awards for Industry

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September 2018





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## The Awards

FICCI Safety Systems Excellence Awards have completed their seventh year of journey with an expanded scope. Enhancing the scope from “Manufacturing Awards” to “Awards for Industry”, the Awards now cover sectors like Construction, Manufacturing, Oil & Gas, Mining and Power.

The Awards, institutionalized for excellence in workplace safety systems in industry, focus on the robustness of systems and not just the performance. Good safety systems lead to systematic improvement in organization performance. The Award is an initiative of FICCI Manufacturing Committee & FICCI Taskforce on Manufacturing Excellence that works with an agenda of improving Industry competitiveness that would enable the domestic industry to stand up to new and emerging challenges of the global market.

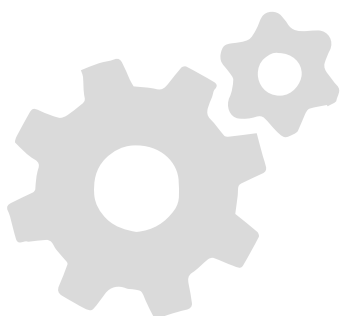
Materialising this ambition requires enabling policy environment and also the need to follow global best practices in the processes at firm level. Firms and companies that display high performance safety systems and stand through a rigorous three-tier evaluation process are felicitated with these awards. The Awards provide a benchmark for the industry as the best practices of awardees are shared with other applicants and also with the wider industry. Hopefully, this would motivate and act as a catalyst to encourage the industry to adopt robust safety systems.

The awards are given in three categories which are as follows:

- **Large size organization** (organization having either turnover or investment excluding working capital of more than Rs 500 crore)
- **Medium size organization** (organization having either turnover or investment excluding working capital between Rs 100 crore to Rs 500 crore. If any one of the parameter crosses the limit of Rs 500 crore then the organization goes into large size organization)
- **Small size organization** (organization having turnover & investment excluding working capital both less than Rs 100 crore)

Picture of last few editions of the Awards:

Parameters	Awards 2012	Awards 2013	Awards 2014	Awards 2015	Awards 2016	Awards 2018
Total Applications received	115	107	103	79	85	99
Total Applications in Large category	74	61	49	70	77	85
Total Applications in Medium category	37	37	37	6	7	9
Total Applications in Small category	4	9	17	3	1	5





## The Award Process

The award process was started in June 2018. FICCI Safety Systems Excellence Award Process has 3 qualifying stages:

- Document Assessment of all applicant units
- On-site Audit for short listed units based on Document Assessment
- Jury Meeting to finalize the Awardees

### **Details of this process are as follows:**

- Design and finalisation of application for the awards with the support of industry
- Circulation of application amongst the industry
- Application forms received by FICCI
- Empanelment of auditors/assessors for the evaluation from the industry based on prescribed eligibility criteria formed by the Safety Working Group under FICCI Manufacturing Committee and FICCI Taskforce on Manufacturing Excellence
- Finalization of checklists for application evaluation and on-site audit by FICCI Taskforce on Manufacturing Excellence
- Applications evaluated by the assessors and marks allotted along with feedback for each application
- Presentation of document evaluation results to the FICCI Working Group on Safety
- On-site audit for shortlisted units by FICCI Working Group on Safety
- Presentation of on-site audit results to FICCI Working Group on Safety
- Presentation of further shortlisted units to the Hon'ble Jury of the Awards
- Selection of Awardees by Hon'ble Jury
- Announcement of Awards in the Conference





## Last Edition's Awardees

### FICCI SAFETY SYSTEMS EXCELLENCE AWARDS 2016

#### Construction

- **Winner in Large Scale Category**

**Gold Prize Winner:** Siemens Ltd., Site- 220/22KV GIS, Site Palava, Maharashtra

- **Winner in Medium Scale Category**

**Silver Prize Winner:** EDAC Engineering Limited, Andhra Pradesh

#### Manufacturing

- **Large Scale Hazardous Category**

**Gold Prize Winner:** Cairn Oil & Gas Vedanta Limited Pipeline Operations, Gujarat

**Silver Prize Winner:** Unit – II, UPL Limited, Gujarat

**Bronze Prize Winner:** Reliance Industries Limited, Gujarat

- **Large Scale Low-Hazardous Category**

**Silver Prize Winner:** ITC Limited, Uttar Pradesh

**Bronze Prize Winner:** Mahindra & Mahindra Limited, Uttarakhand

- **Medium Scale Hazardous Category**

**Silver Prize Winner:** International Paper APPM Limited, Andhra Pradesh

- **Medium Scale Low-Hazardous Category**

**Silver Prize Winner:** Oerlikon Balzers Coating Private Limited, Maharashtra

#### Mining Sector

- **Winners in Large Scale Category**

**Gold Prize Winner:** Ravva Mine, Cairn Oil & Gas Vedanta Limited, Andhra Pradesh

**Gold Prize Winner:** Raageshwari Gas Mine, Cairn Oil & Gas Vedanta Limited, Rajasthan

**Silver Prize Winner:** CB/OS-2 Mine, Cairn Oil & Gas Vedanta Limited, Gujarat

**Silver Prize Winner:** Noamundi Iron Mine, Tata Steel Limited, Jharkhand

#### Power Sector

- **Silver Prize Winner:** Lanco Tanjore Power Company Limited, Tamil Nadu





## **Mr. Ajay Shankar**

*Former Member Secretary*

National Manufacturing Competitiveness Council (NMCC)

Mr. Shankar has had rich and varied experience in public service for over forty years. He has served as Secretary, Department of Industrial Policy and Promotion in the Government of India where his key responsibilities included FDI policy, investment promotion and the IPR regime in the country. The plan for the ambitious Delhi-Mumbai Industrial Corridor Project was developed under his stewardship. He was the Chairman of the National Productivity Council and of the Quality Council of India. He initiated the setting up of Invest India to facilitate enhanced inflow of FDI. After superannuation, he served as the Member Secretary of the National Manufacturing Competitiveness Council (NMCC), an advisory body comprising leading Captains of Industry, key Secretaries of Government and eminent Academics.

He has been a member of the Committees set up by Government of India on: (i) Reform of Public Sector Enterprises, (ii) Restructuring of HAL and (iii) Electricity Distribution Reforms. He has recently served as the Chairman of (a) PPP Review Committee of the Railways and (b) Expert Committee for Replacing Multiple Prior Permissions with a Regulatory Mechanism for improving Ease of Doing Business.

He has served on the Boards of major public sector companies and is now non-executive Independent Director in a few companies. He has been a Public Policy Scholar at the Woodrow Wilson Center in Washington DC. He is a Distinguished Fellow at TERI, a Senior Fellow at the Delhi Policy Group (DPG) and a Senior Adviser at IRADe.







## **Mr. Shyam Bang**

*Chairman*

National Accreditation Board for Certification Bodies (NABCB) &  
Chairman, FICCI Manufacturing Excellence Taskforce

Mr. Shyam Bang is a post graduate chemical engineer and has been associated with chemical and pharmaceutical industries in India and abroad for over four decades. He is recognized for his contribution in the field of manufacturing and supply chain management.

- He is member of the board of some companies.
- He is Chairman of National Accreditation Board for Certification Bodies.
- He is Chairman of FICCI Task Force on Manufacturing Excellence.
- He is past president of Indian Institute of Chemical Engineers.
- Member of Governing Council of National Safety Council, Ministry of Labour and Employment.





## **Mr. V Sridhar**

*Group Vice President & Director*  
Honda Motorcycle & Scooter India (HMSI)

A Mechanical Engineering Graduate from BITS Pilani and Masters in Business Administration, Mr Sridhar has a total of 33 years work experience in Automobile & 2 wheeler Production and Operations area.

He started his work career as a graduate Engineer Trainee in Maruti Udyog Ltd in 1985. He had a rich mix of production planning, project & shop floor experience for 15 years in Maruti Suzuki India Ltd.

He had worked in areas of Production Planning & Control, Engine Assembly & Vehicle Assembly. In 1999, he led the team which set up and operated the Vehicle Assembly line in Maruti's 3<sup>rd</sup> plant in Gurgaon.

He joined Honda Motorcycle & Scooter India (HMSI) in year 2000 and has been associated with HMSI for 18 years since its inception as Head of Manufacturing.

In HMSI, he has been completely involved and responsible from plant setup to operations of all 4 factories, Quality Production Strategy & Control, New Models & expansion projects. He has been in the Board of Directors of HMSI since 2013.

With his vast experience in Manufacturing & Management, Mr Sridhar has been a member of several committees. Notable among them are Society Of Indian Automobile Manufacturers (SIAM), Confederation of Indian Industry (CII) , FICCI Manufacturing Committee and FICCI Quality & Safety Work group and Society of Automobile Engineers.





## **Mr. Sumit Roy**

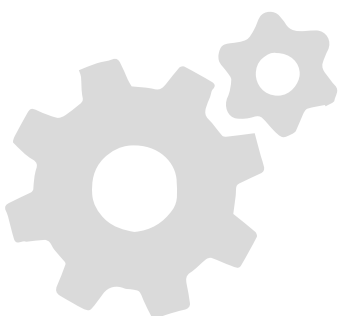
*Director (Safety)*

Regional Labour Institute (DGFASLI)

Born on 24<sup>th</sup> January, 1979 completed Bachelors degree in Mechanical Engineering in the year 2001. Started his career with the manufacturing sector in the year 2003 in an automobile manufacturing unit under the Ministry of Defence and worked on various aspects for more than 8 years. While working with the Ministry of Defence completed Post Diploma in Industrial Safety and Masters degree in Ecology and Environment.

Joined the office of Directorate General Factory Advice Service and Labour Institutes in the year 2012 as Deputy Director (Safety). At DGFASLI, Mumbai worked with the Factory Advise Service division dealing with matters relating to the administration of the Factories Act, 1948, ILO conventions and matters incidental thereto. Promoted as Director (Safety) in the year 2018 and joined Regional Labour Institute, Faridabad and presently continuing in the same capacity. At Regional Labour Institute, Faridabad as Director (Safety) responsible for the activities of the institute in addition to dealing with the matters relating to the Factory Advice Service division of DGFASLI, Mumbai. Also incharge of the Awards Cell at Regional Labour Institute, Faridabad.

Deputed by the Government of India in the year 2015 as a resource person for 'Training of Trainers' programme at Nepal organized by ILO Nepal. Delivered lectures on various topics related to occupational safety and health in the ship-breaking industry for the supervisors and workers of the ship breaking yards at Alang, Gujarat during the training programme organized jointly with Gujarat Maritime Board. Delivered talks during various national seminars and conferences.





## Auditors/Assessors for the Awards

1. Mr. Ajay Pannu, Safety Health and Environment Leader – South Asia E. I. DuPont India Private Limited
2. Mr. Amit Bhal, Manager – HSE, SBU-4 – Cairn Oil & Gas, Vedanta Limited
3. Mr. S K Srivastava, Chief Health & Safety Officer-Rajasthan Gas - Cairn Oil & Gas, Vedanta Limited
4. Mr. Satish Kumar Kaushik, Manager – Safety Department, Maruti Suzuki India Limited
5. Mr. Devendra Gill, General Manager – Delhi Metro Rail Corporation
6. Mr. Prabodh Pandey, Manager – Safety, Delhi Metro Rail Corporation
7. Mr. Mangesh Mohan Brahme, General Manager – Thane Belapur Association
8. Mr. Prashant Khurana, AGM – Safety & Environment, Honda Motorcycle & Scooter India Private Limited
9. Mr. Navneet Mann, Senior Manager (CQA & HSSE) – Engineers India Limited
10. Dr Gyanendra Kumar Pandey, Sr GM & Corporate HSE Head - Lanco Infratech Ltd
11. Dr. Avdhesh Mathur, CEO - A4 Global Consultants
12. Mr. R M.Lakshmanan, Assistant General Manager (CQA&HSSE), Engineers India Ltd
13. Mr. Saurabh Dixit, Senior Manager- EHS, Jubilant Life Sciences Limited
14. Mr. Ankan Mitra, Head Regulatory Affairs-Mining & Steel - Tata Steel
15. Mr. J C Sekar, CEO & Co-founder - AcuiZen
16. Mr. Rajnish Kumar Singh, Manager – Safety, Honda Motorcycle & Scooter India Private Limited





## Eligibility Criteria for Assessor/Auditor for Empanelment to FICCI Safety Systems Awards

### Qualification and Experience of Assessors – Manufacturing & Power Generation

#### 1. Qualification

- Bachelor's degree in Engineering Or
- Master's degree in other science subjects with Post graduate diploma (1 year or above) in Industrial Safety from a University/ recognized Institute

#### 2. Experience

- Minimum 10 years' of experience in a manufacturing/power generation industry in the operation/maintenance/safety department with a minimum 5 years' experience in Health, Safety and Environment department.
- Identification of hazards, unsafe conditions, unsafe acts
- Experience to cover implementation/knowledge of safety systems, safety inspections, investigation of incidents/accidents, root cause analysis, corrective and preventive actions
- On-site emergency plans and organising mock drills
- Good Knowledge of Factories Act and relevant Rules

The qualification and experience mentioned above are essential requirements.

#### 3. Preferable

- Safety Audit experience
- OSHAS 18001 Lead Auditor

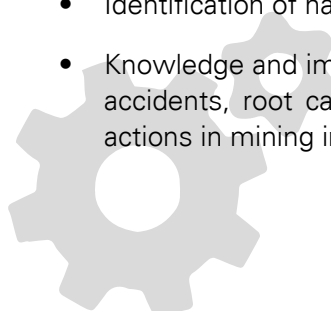
### Qualification and Experience of Assessors - Mining

#### 1. Qualification

- Bachelor's degree in Mining Or
- Master's degree in Geology or allied subjects dealing with identification, assessment and management of risk and hazards in mining industry

#### 2. Experience

- Minimum 10 years' of experience in Mining industry in the operation/maintenance/safety department
- Identification of hazards, unsafe conditions, unsafe acts related to mining industry
- Knowledge and implementation of safety systems, safety inspections, investigation of incidents/accidents, root cause analysis, identification and implementation of corrective and preventive actions in mining industry





- On-site emergency plans and organising mock drills
- Good Knowledge of relevant Acts and Rules applicable to mining industry.

### **3. Preferable**

- Safety Audit experience
- OSHAS 18001 Lead Auditor

## **Qualification and Experience of Assessors – Construction**

### **1. Qualification**

- Bachelor's degree in Civil Engineering/ Mechanical / Electrical Engineering Or
- Master's degree in Science with diploma in Construction Management

### **2. Experience**

- Minimum 10 years' of site experience in a Construction industry
- Identification of hazards, unsafe conditions, unsafe acts in construction industry
- Knowledge and implementation of safety systems, safety inspections, investigation of incidents/ accidents, root cause analysis, corrective and preventive actions in construction industry
- On-site emergency plans and organising mock drills
- Good Knowledge of relevant Act and Rules applicable for construction industry

### **3. Preferable**

- Safety Audit experience
- OSHAS 18001 Lead Auditor





## Awardees for 7<sup>th</sup> Edition and their Best Practices

### MANUFACTURING SECTOR

#### Awardees in Large Scale Category

##### Platinum (First) Award

**Name of the Organization:** Maruti Suzuki India Limited

**Location:** 1 HUDA, Sector-18, Industrial Estate, Palam Gurgaon Road, Gurgaon (Haryana)

Organisation Overview: Maruti Suzuki India Limited is the leading passenger vehicle manufacturer in India with 47.4% of domestic market share. The Company was established in 1981 as a joint venture between Government of India and Suzuki Motor Corporation (SMC), Japan. Today, it is SMC's largest subsidiary in terms of volume of production and sales. Suzuki Motor Corporation owns 56.21% equity stake in the Company. The Company is listed on BSE and NSE of India.

##### Key Features of the Safety Systems:

###### 1. Safety Organisation Structure:

Management of MSIL has a proactive approach towards OH&S. Safety has been made an integral part of our Business. In the organizational structure, safety has been established as a separate division which is led by Senior Vice President Safety and reports directly to Managing Director of the company like other functions (Production, Engineering, Marketing and Sales etc.)

Managing Director of the company takes safety review meetings every 15 days with Safety Division, wherein new technologies, policy issues etc. with regard to betterment of safety management system at MSIL is discussed and way forward is chalked out.

###### 2. Safety Ambassadors Scheme (200+ safety ambassadors) : Each department/shop has specially appointed one person for:

- To coordinate the safety activities related to the department.
- To assist the concerned Department Head in their roles and responsibility regarding safety.
- Implementation of Occupation Health and Safety Management System procedures
- Implementation of decisions taken at various safety committees.
- Coordinating Audits, understanding the observations, recommendation and taking forward the corrective and preventive actions.
- Conducting shop specific safety trainings for the purpose of prevention of personal injuries.
- Making the Departmental safety manual and all its contents.
- Conducting HIRA and completing all connected documentation
- Preparation of Occupational Health & Safety Management Programs, Progress Reports and Completion Reports.
- Employee awareness and training on Basic safety Awareness, OH&S Policy, EPRP, OCP, Objectives & Targets etc.



### 3. 44 nos. senior level Safety Committees

- At MSIL safety committees are established over and above the legal requirement.
- MSIL functions at vertical level, divisional level and department level hence safety committees are formed covering all the verticals, divisions and departments.
- The top management of verticals, divisions and departments is heading the safety committees:

Department level Safety Committees are established in all shops/departments which also meet every month.

All these safety committees are chaired by senior member of the management and various reports on safety, risk assessment; practical solutions on safety related matters are discussed in these meetings and way forward is chalked out in these meetings.

Some of the advantages achieved through these safety committee meetings are as follows:

1. Involvement of TOP management to improve safety of the company
2. Faster resolution of safety concerns
3. Issues with regard to plant layout and implementation of other best practices to improvement
4. Every functional leader takes up responsibility to improve the safety performance of his/her function.

### 4. Safety training through simulators

MSIL has established a fully equipped safety lab with simulators for providing real time simulation training of workplace hazards and significance of safety controls

To sensitize employees about that are available in the process like

- Sharpe edges
- Working on Running machines
- Component Handling
- Fall Slip Trip
- Electrical hazards
- Working at height
- Fire hazards

Real time models are installed and of understanding of all the above hazards and their consequences.

The simulators also consists of Engineering control devices for control of these hazards which are explained to the trainees.







## Gold (Second) Award

**Name of the Organization:** UPL, Unit 02

**Location:** Bharuch

### Organization Overview :

We "UPL Limited" formerly known as United Phosphorus Ltd started in 1969. UPL is among largest global generic crop protection, chemicals and Seeds producing Company, headquartered in India.

- 7 % - Growth in revenue inspite of sectoral downturn
- 7 % - Increase in Gross Margins
- 9 % - EBITDA Margin
- 86 % - Revenue from branded products
- 5884 - Product registrations
- 241 - Patents granted

Unit Intro	
Product Family	Insecticide, Herbicide & Speciality Chemical
Turn Over	INR 848 Cr.
Human Capital	650 employees
Location	Ankleshwar, Gujarat

To achieve safety vision UPL set world class safety benchmarking parameters:

- TRFR (Total Recordable Frequency Rate) <0.4
- SI (Severity Index) < 10
- MPSI(Major Process Safety Incident) = 0

### Key Features of the Safety Systems

To conquer the journey of "Best in Class in Safety" we have implemented "Process Safety Management" as Vehicle. This helps us to ensure safety at work place using 3 pillars approach System, Facility & Personnel.





Good system will produce great result when it is lived by involved personnel on daily basis. We at UPL have firmly established following people driven benchmark practices.

- Manufacturing Excellence Initiative – Unique way of engaging employees to look for opportunity for improvement, mistake proofing and complex problem solving. Each and every employee continuously vouch for maintain 5S & leak free manufacturing plants. Best of the departmental Kaizen, Poka-Yoke, Story of the month are rewarded monthly basis and best 5S Score and Zero Leak scoring departments are rewarded on

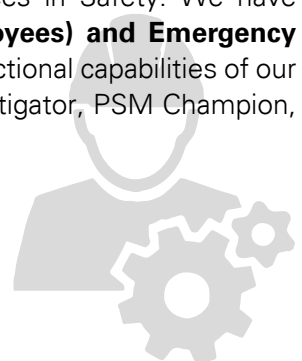


quarterly basis.

- Suraksha Kawach – IT enabled system to capture various data point critical to safety practices. This enables us to make faster and reliable decisions to avoid reoccurrence of incidence and tracking of timely closure of action points. Along with that Unit has unique facility called “Dial 4”, employees can register unsafe condition and unsafe act on real time basis unanimously.
- Leadership Walkthrough (Gemba) – Unit Leadership team take structured walkthrough every fortnight in plant area to interact with employees at Gemba and identifies opportunity for improvement.
- Facility with upgraded safety systems – Unit is equipped with all upgraded safety systems such as Fixed Life lines on all roofs and pipe racks, Centralised communication (PA) system for emergency, facility for lifting tools and tackles inspection and engineering system to control odour in processes.
- Safety and Health Accountability Standard – To ensure the safety system compliance, we have established Safety and Health Accountability standard and implemented as “Inviolable Standards” as follow:
  - Changes done to Technology / Facility / Personnel without Change Management.
  - Hot Work / Confined Space / Working at Height / Electrical Permit Violation.
  - Safety Interlock bypassing without Authorization of Unit Head
  - Violation of Process SOP
  - New Joinee & Transferred Employee assigned into the plant operation without level 2 Training

Any violation to the above standard are dealt for consequence management.

- Capability Building – Our employees are one of the important resources in Safety. We have developed our internal employees as **Professional Fireman (22 employees) and Emergency Response Team (116 employees)** Members. Also we have enhanced functional capabilities of our employees by developing them as PHA network member, Incident Investigator, PSM Champion, Contractor Safety Champion etc.





- Structured Reward and Recognition Program – The concept of “Safety Self Recognition Program” in which gift coupons are given to plant people including contract workmen of a particular plant if no incident occurs in their plant. **“Kaun Banega Safety Gyani”** (based on the theme of who wants to be Billionaire) it is an safety knowledge competition which is conducted Unit level and the Awardees have been awarded trip to GOA with family for three nights & four days.
- Suraksha Ka Tyauhar – This is the unique event we are holding on 6th April every year to celebrate joy of safe guarding our workplace with Zero Incident. Our employee takes commitment of working safety year on year to achieve **“Best in Class in Safety”**.

## Silver (Third) Award

**Name of the Organization:** Dalmia Cement Bharat Cement

**Location:** Kadapa - Andhra Pradesh.

### Organisation Overview:

The Dalmia Bharat Group is the one of the premier business conglomerate having the interest is Cement, Sugar, Power and Refractories. Company having the presence in the Indian business for seven decades since 1939. The applicant unit is part of Dalmia Cement (Bharat) Ltd., (DCBL) the cement business of Dalmia Bharat Group. The DCBL is the fourth largest cement producer in India with installed capacity of 27 million MT and pan India presence. The DCBL is adjudged as fastest growing cement manufacturing company by Cement Review in 2016. The company is the member of Cement Sustainability Initiatives(CSI) of World Business Council for Sustainable Development(WBCSD). The DCBL registered the lowest carbon foot print of 493 in sustainable way against the world average of 612. The unit is water positive by 250%.

The applicant unit located in YSR Kadapa District of Andhra Pradesh is one of the fastest built Green Field Cement plant without any reportable incident. The safety by design is implemented by adopting state-of-art technology. The unit is certified for ISO9001:2015, ISO14001:2015, OHSAS18001:2007 and ENMS50001:2011.

### Key Features of the Safety Systems

- Safety Observation and Contractor Safety Management to focus on cultural
- Safety is condition of employment.
- Safety is the Line Function Responsibility and Senior Management commitment
- Well defined roles and responsibilities of SHE at each job position and Key Performance Indicators
- Alcohol and tabbaco free work premises.
- Pictorial SOP displayed in Local Language in all sections.
- Visual control for confined space entry.
- Gate Meeting –Demo on Live Models.
- The concept of “Safety Star Award ” to bring strong safety culture among the workmen and also is the highest appreciation award in the unit.
- Ceremonial red carpet honoring of best safety worker in monthly safety meeting for flag hoisting.
- Defensive Driving Training
- Extended safety practices beyond workplace



- Road safety in near by 4 villages to bring awareness on traffic management and safety systems
- 5s practices to maintain the clutter free work places
- Clearance certificate form safety department for every restart of kiln to ensure safety.
- Monitoring the light vehicle speed through GPS system is a key reinforce positive driving behaviors among drivers along the vehicle check.
- Safety review meeting on monthly,meeting is chaired by the CEO.
- Fire Hydrant System Through Out the Plant.
- Fire alarm system
- Co2 flooding system.
- Fire Tender & Ambulance
- Safety Park with Live Models.
- She News Letter in Gate Meeting
- 100% Crash Helmet Implementation.
- Introduced Star of Safety Award for Workmen on Quarterly Basis
- 100% Hand Rail and Toe Guard Provide to all Platforms , Floors and Staircases.
- Achieved 8 Millions safe hours.
- Developed Audio - Visual of Visitor Induction.
- Conducting Safety Campaigns.
- CCTV Camera, Reverse Horn, Seat Belt, Implementation of PPE, Mirrors, Back door Hook.
- Rear View Camera Fitted to JCB ,EXCAVATORS, Tippers.
- Pedestrian Pathways Safety.
- Group Lockout System.
- Double Hand Railing Provided with Mesh at Preheater Building.
- Standardized Model Safety Park .

#### **Awards & Accolades:**

- Excellence in energy efficient unit award from CII (consecutively FY 13,14,15,16,17).
- National Energy Leader Award from CII in FY18
- 1<sup>st</sup> in cement sector for EHS best practices by CII (consecutively FY 15, 16).
- CII 4star rating in EHS best practices (consecutively FY 15,16,17).
- Appreciation award for quality system excellence by FICCI ( consecutively FY 15,16).
- GEM granites environment award FY16 by FIMI for Mines.





- Commendation - Rajiv Gandhi National Quality Award from Bureau of Indian Standards, Govt of India Best
- Illumination and Electrical Systems from DGMS, Hyderabad

## Silver (Third) Award

**Name of the Organization:** ITC Ltd. India Tobacco Division

**Location:** B-27, MIDC, Ranjangaon, Pune, Maharashtra

### Organisation Overview:

ITC Ltd. India Tobacco Division is the world class cigarette manufacturing facility, created to be “the center of excellence for manufacturing in the organization” with a clear focus on people processes.

### The Key features of the plant are:

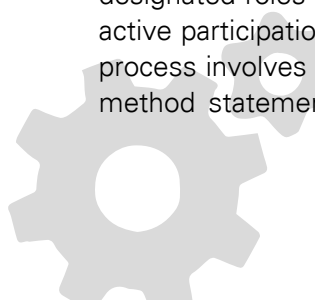
- Use state –of-the-art technology from Italy, Germany and Poland for manufacturing of Cigarettes with inbuilt safety systems
- Plant is built with clear focus on elimination of hazard at first place
- IGBC Green Factory Building- Platinum rating
- 100% of the total electrical energy requirements of the unit is met from renewable sources (wind energy).
- 100 % rain water harvesting & Zero discharge plant.

### The Key achievement and awards for the unit are:

- Zero accident plant and zero fire plant from last five years
- Pune Factory was certified for ISO 9001 2008, ISO 14001 and OHSAS 18001. British Safety Council’s 5 Star Rating & Sword of Honor, Suraksha puraskar from NSCI, Green manufacturing excellence Award from frost and sullivan, Sustainability 4.0 from TERI & frost and sullivan, CII-Excellence in Energy Management award, Safety Innovation Award from IEI and safety award from Maharashtra Safety council are the latest additions to its glory.

### Key Features of the Safety Systems

- ITC has declared a board approved EHS Policy and to support the implementation, ITC formulates EHS Guidelines with the help of various national, international standards and industry best practices.
- In line with the policy & guidelines we integrate Environment, Health & Safety at the design stage covering building & structural stability, fire & life safety, lighting, ventilation & hygiene requirements, Optimization of water, energy usage & sustainable development etc.
- Pre commissioning audits of projects are carried out by Corporate EHS Team to ensure the above.
- At the operational stage, unit level has established EHS management system. This include designated roles and responsibilities & competent EHS resources, EHS Committees to promote active participation of employees & service providers in EHS management. The risk assessment process involves the workforce to identify the risks in their operations though HIRA and detailed method statement, identify control measures through engineering interventions and the Safe



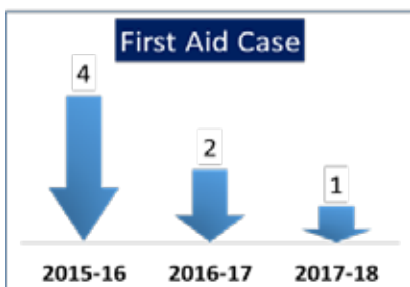
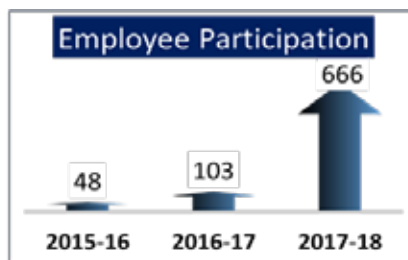
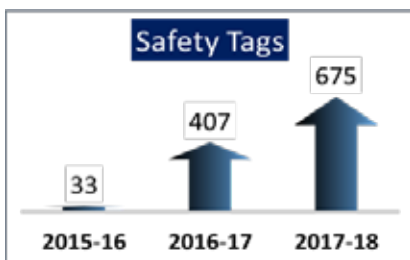


Work Procedures (SWPs). Planned Job Observations (PJOs) and plant safety inspections enable the Unit/ Management team to monitor the level of compliance and effectiveness of SWPs.

- The compliance of above is monitored through internal audits and review, Divisional & corporate EHS audit and external audit by third party.

**The Key initiative taken for Health and Safety in year 2017-18 are**

- Implementation of Behavior Based safety for correcting human behavior. Safety excellence through TPM.
- Using IT enabled technology for easy reporting of unsafe act and Unsafe condition.
- Elimination of manual material handling by providing various technological solution.
- One Point Lesson (OPL) and Visual operating procedure implementation for quick knowledge sharing.
- Using new technology like augmented reality and virtual reality for training employee. Training feedback analysis through pictorial questionnaire. EHS skill matrix for all including contractor employee.
- Stress management initiative for reduction of stress with help of experts
- Introduction of “Key stone behavior and “Non-Negotiable Requirement”
- Involvement of contractor employee and supervisors in each and every safety education and events
- Sharing of accident case studies of other ITC units and implementation of preventive actions.
- Training employee, employee family and surrounding community for Home and road safety for inculcating safety in society.
- Four wheeler defensive driving training for drivers, GPS implementation in employee transportation buses and car.



**100%** involvement of all employees as well as ESPs

**1.12** EHS Suggestions and Incident Reporting per Employee







## MANUFACTURING SECTOR

### Awardees in Medium Scale Category

#### Platinum (First) Award

**Name of the Organization:** Elin Appliances Pvt. Ltd. Unit-II

**Location:** Village: Belikhol, P.O-Manpura, Tehsil-Nalagarh, Distt-Solan, Himachal Pradesh 174101

#### Organisation Overview:

Elin Appliances Private Limited Unit-II, an ISO-9001:2015 and ISO-14001:2015 certified company and complies with OHSAS, SA-8000 (Social Accountability), CSR-26000 and Responsible business Alliance Code of Conduct (Pillars-Labour, Health& Safety, Environment, Ethics and Management Systems). EAPL-II was established in March 2010 in Baddi (HP) with a vision of "Service to Nation through Industry". The Company is into designing, developing and manufacturing of small home appliances for reputed brands and by focusing on continuous improvement in its processes, it has been constantly delighting its customers with better quality products. Our values are top management driven which aims at honesty, transparency & ethics, and values human rights and labour laws. EAPL believes in Diversity and is focussed on mainstreaming people with disabilities.

Our constant efforts to ensure sustainable business at all levels have made us won some of the most prestigious Awards in the field of Quality, Safety, Environment, CSR, HR, Training and Business Excellence from Bureau of Indian Standards (BIS), Quality Council of India, CII, FICCI, ASSOCHAM, National Safety Council of India, MSME, National Productivity Council and India SME Forum. We have been the first one to be rated under the ZED scheme of government in Himachal Pradesh and have been rated as Silver.

Our training and development programs are designed to enhance key skills, focussing on safe operations and prepare them for career growth. We offer a range of trainings for up gradation and developing leadership and managerial skills. As a good corporate citizen, it values the community around and the environment, and cares for them. Company has a well-defined CSR Policy and is working on thematic areas like Environment, Health & Sanitation, Education and Livelihood.

The Company is focusing on reducing its Carbon Footprint and apart from developing parks and forests it has taken several Energy Conservation Projects and initiated the implementation of Cleaner Technology. Under our CSR and Environment initiatives we have recently developed forests on barren land and created a beautiful park along the periphery of a heritage pond which was an abandoned area. The landscaping and development of the park has resulted into a wholesome recreation place for all age groups.

#### Key Features of the Safety Systems

- Dedicated HSE Policy and Safety Committee driven by Top Management
- Top Management Commitment to Zero Accidents- Offering best safety features to employees.
- Compliance to all legal parameters
- Emergency Management- Defined Plan and adequate infrastructure for different types of Emergency
- Trainings, Mock-drills & Awareness on Safety related Aspects
- Hazard Identification and Risk Assessment of Complete Plant with defined Safe Operating Procedures



- Mini-Company (Involvement of all employees in QCDSM)-A unique feature in which the organization has been divided into small companies which compete with each other on various parameters such as Safety, Quality, Cost, delivery and morale.
- Various types of Safety Audits and Inspections both Internal and External
  - a. EHS System Audit (Half Yearly)
  - b. Shop Floor Excellence Audit (Half- Yearly)
  - c. Safety Walk/Gemba Walk/Combing Operation (By senior team-Quarterly)
  - d. PPE Audit (Twice a month)
  - e. Sustainability Audit (Once in Three Years)
  - f. Fire Safety Audit by NSCI (Once in Three Years)
  - g. Electrical Safety Audit by NSCI (Once in Three Years)
  - h. Performance during Mock Drills (Once in a Quarter)
  - i. Daily inspection by Mini-Company Members
- Occupational Health Facility
- Employee Welfare related to EHS
- Pollution Control & Carbon Footprint Monitoring with steps to offset it
- Pro-active approach towards Self-assessment and aiming towards better performance towards EHS objectives

## Gold (Second) Award

**Name of the Organization:** Mahle Anand Filter Systems Private Limited

**Location:** Gurugram (Khandsa)

Organisation Overview: MAHLE ANAND Filter Systems Private Limited is a joint venture between MAHLE Filter Systems GmbH of Germany and Anand Automotive Pvt. Limited, India. MAHLE ANAND Filter Systems Pvt. Ltd. supplies to every major automotive and industrial Original Equipment Manufacturer in the country. The company was originally known as Purolator India Limited, set up as Joint Venture in 1966 between Purolator, USA and Anand. In 2005, Mahle Filter Systems GmbH acquired shares from Purolator USA and Anand. The organization was then rechristened as MAHLE ANAND Filter Systems Pvt Limited. The company has five state-of-art plants, located at Khandsa (Haryana), Parwanoo (Himachal Pradesh), Pune (Maharashtra), and Chennai (Tamil Nadu). MAHLE ANAND Filter Systems Private Limited is the largest manufacturer and exporter of Air, Oil, Oil Mist Separators and Air Intake Manifolds used in the automotive, railways and aviation industries in India.

With the widest range of automotive and industrial filters in the country, MAHLE is the principal supplier to both the OEM segment and the Aftermarket with a sizeable presence in the overseas market as well. The customers are spread across Japan, Thailand, Germany, Austria, Spain, Italy, Indonesia and USA. The company is the largest in its segment in the Aftermarket as well and its products are marketed under the brands- 'MAHLE' and 'PUROLATOR'.







MAHLE ANAND Filter Systems, as the leading Automotive Filter supplier in the country has consistently invested in research & development to develop filtration media, new filter geometries, constructions and systems and has pioneered a number of firsts in the filtration industry in India. MAHLE has the only integrated Filter paper impregnation plant providing unique filtration solutions - the largest of its kind in India!

### **Key Features of the Safety Systems**

Safety is our first core value out of five core values and given top most priority by the management. Moreover, all safety and health related issues discussed and resolved in daily meetings chaired by Plant Head. Below mentioned are the key features of the Safety Systems and the part of efforts made on regular basis to build and maintain Safety and health culture at workplace and further promoted through:-

- Top management involvement by making safety the top most agenda for monthly plant performance review, monthly business process review, quarterly board meeting reviews and annual operational meetings/reviews
- Employee participation in day-to-day activities like Morning Meetings, regular monthly EHS committee meets, Continuous Improvement Meetings;
- Employee engagement activities like National Safety Week Celebrations, National Fire Safety Week celebrations, Road safety week celebrations, safety quizzes, annual health check-ups camps;
- Drafting and implementing various procedures/guidelines/rules/check sheets to be followed during routine/non-routine operations in the plant;
- Participation in external awards and recognitions to continually improve the system and increase motivation levels
- Conducting safety mock drills for the identified potential emergency conditions even at odd times like early morning etc.
- Periodic Health & Safety specific trainings;
- Periodic HSE Meetings as well as Safety Observation Tour with all department heads chaired by Plant Head;
- Inter-plant risk assessment by Plant Heads
- Safety induction when new joiners are inducted into the system
- Promoting and rewarding safety solutions suggested by shop floor workers;
- Formulation of cross functional teams for accident/incident investigation and reporting
- Performing studies with the help of CFTs related to machine safety like guarding and Safety FMEA;
- Sharing of lessons learnt from past incidents and accidents and parallel deployment of best practices;
- Workers are encouraged to report on unsafe acts and conditions by filling information on specifically designed cards as part of proactive near miss capturing;
- Providing awards for best lines in terms of safety performance and safety champions on a regular basis;





- Display of safety related information at all important points to keep the safety awareness levels high including shop floor;
- Weekly communications on general safety topics like industrial hygiene, chemical safety, storage of chemicals, hazardous waste, Storage of waste, machine safety, energy saving, , PPE safety and emergency preparedness etc.;
- A bulletin board reserved for displaying safety related issues and happening which is prominently displayed for public and regularly updated by EHS Team;
- As far as audits are concerned there are area wise audits, quarterly surprise audits and internal system audits for OHSAS/ISO that are conducted as per predetermined schedule;
- Inter-plant EHS audits are also planned to improve the -performance
- Audits conducted by external agencies like National safety Council, legal compliance audit, Electrical Safety and Fire Safety audits by external experts and external system audits of ISO/OHSAS;
- International best practices/Kaizens are shared and internal benchmarking is done through visits of HSE heads from other countries;
- Reporting on EHS performance happens in specifically designed templates at plant level, organization level, group level and global level;
- Sharing of the best practices and happenings of the month in the form of magazine SANRAKSHA circulated monthly.





## MANUFACTURING SECTOR

### Awardees in Small Scale Category

#### Platinum (First) Award

**Name of the Organization:** ATC Limited

**Location:** Hosur, Tamil Nadu

#### Organisation Overview:

- Factory was established in 1974
- First company to start operations in SIPCOT Hosur belt
- Total land area 11.3 acres, Built up area 1.97 acres
- Green coverage 62%, Road and other open area 19.5%
- Manpower – 187 employees, 123 ESPs, 34 Managers & OAs
- Licensed Capacity – 9500 Million Cigarettes / Annum
- Nil loss time accidents for the past 8.5 years
- Several awards for EHS excellence from CII, FICCI, NSCI and TN Government
- Zero waste water discharge Unit
- Bench Mark in Energy Conservation, Water Conservation, Waste Minimization
- 100% Roof Rain Water Harvesting
- Offsite wind power – 1.5MW capacity
- 95% of energy used is from Renewable Energy Source (Wind)
- Excess power generated is sold to TNEB

#### Key Features of the Safety Systems:

- All employees (including employee of service provider) are trained on fire safety, emergency procedure, general EHS awareness and job specific training.
- Implementation of corrective measures for all Divisional/ Corporate EHS audit findings.
- Quarterly safety inspections to identify any deviations from established safe practices or safe work procedure, are done by the Unit head during the year and corrective actions implemented.
- Premises kept clean and in an orderly condition and goods or wastes not kept in the aisle or other designated escape route.
- Timely scrap removal from the operational areas is in place and disposed off from the Unit on a regular basis to mitigate fire and life safety risks.
- Floors maintained clean and free of oil, grease, water etc., and are free of tripping and slipping hazards like unmarked level differences, protrusions, uneven drain covers, trailing cables, etc.



- All storage area aisles, walkways demarcated to ensure a smooth and efficient material flow and safe storage practices (height restricting colour band, safe wall clearances, no lights over storages, etc.,) followed.
- Motorised transport: proper segregation of vehicle and people movement is ensured
- Guarding, ladders, dangerous opening, etc.: All risk mitigation measures with respect to rotating machines, work at height, portable ladders, dangerous openings, chandeliers (applicable for hotels) etc., are provided and maintained in good working condition.
- Unit TNS earthing has been maintained in good working condition.
- Unit's electricals system maintained in good working condition and without twisted & taped joints, fuses, exposed live parts, uncontrolled access to panels, etc.
- Battery banks are installed and maintained as per IS standards.
- Premises CCTV coverage: CCTV coverage & recording of all operational and peripheral areas is in place and the system is maintained in good working condition.
- Up to date onsite emergency management plan and organisation structure is in place and the team members are being provided with regular refresher training.
- Integrity of occupancy fire compartmentation (both horizontal and vertical) as per EHS approved designs ensured.
- All fire detection/ protection and life safety apparatus / systems (HVAC, fire doors, Exit signs, smoke management, fire pumping, etc.,) are maintained as per standards.
- Periodic fire safety inspections are carried out and corrective measures implemented.
- A systemic approach of risk assessment by people actually involved in the activity covering operational, cleaning and maintenance aspects is in place.
- Safe work procedures are developed based on the above risk assessments and planned job observations carried out to verify effective implementation of these safe work procedures.
- Behavioral Based Safety
- Reporting of Accidents / Injuries / Dangerous Occurrences / Incident Reporting will be captured through online EHS Excellence System
- Hazard spotting and Plant Inspections
- Planned job observation
- Noise Survey
- Ergonomics & VDU
- Stress / Life Style management





## Gold (Second) Award

**Name of the Organization:** Deutsch India Power Connectors Pvt Ltd. (TE Connectivity)

**Location:** #104, Prestige Omega Building, EPIP Zone, 1<sup>st</sup> Phase, Whitefield, Bangalore.

### Organisation Overview:

Deutsch Connectors are renowned for their usage in the harshest environments. From aerospace applications to defence through marine, Deutsch provides a robust product line that includes connectors, contacts, accessories, wires and subsea power cables. For more than 70 years, DEUTSCH brand has been partnering with Aerospace customers offering expertise to solve their challenges. Today Deutsch is part of the brand of TE and expands the product portfolio in areas including military specs such as 38999 Deutsch connector series. Deutsch connectors are also leaders in autos port and motorsport applications.

### Key Features of the Safety Systems

- Safety being a key aspect in the organizational culture, it is given utmost importance in our day to day activities as well as the annual goal of all employees in the organization. The drive comes from Top Management down towards the employees in the Shop floor through continuous engagement and programs such as Self Managed Teams (SMT).
- TRIR being one of the metrics to measure our organization's EHS performance, we use the Velocity EHS Tool to effectively report out, investigate and track corrective actions. The best recordable injury free days count in the organization is 1755 days, which we celebrated with all employees to congratulate and encourage our employees behaviour towards Safety.
- The organization also has Management Systems to measure the EHS progress of sites, called SAFE- Safety Assessment For Effectiveness. This program has three modules- Management Module, Critical Module and Preventive Module. Each Module having elements with ownership taken by employees to drive individual elements to achieve targeted score. Element Owners are Operations Manager, HR Manager, Maintenance Leader, Supply Chain Manager, etc. who have this as part of their annual goals and meet quarterly for assessment reviews.
- Other key metrics of EHS at site is LOTO and Machine Guarding, wherein to assess the effectiveness of our LOTO program we conduct LOTO mock drills and audits and have observers to identify gaps and have corrective actions implemented for gap closure. Machine Guarding was an initiative driven across to all sites from the Global team, wherein an assessment form was filled for all machines of site to identify machine with inadequate guarding. These machines were prioritized based on risk level and guarded in a phase manner for employee's safety. The same process is followed when any new machine is brought to site, guarding needs to be robust prior to handing it over to Production teams.
- Proactive EHS metrics of the site are Behaviour Based Safety and Ergonomics. These two programs have all employees involved actively. Behaviour Based Safety program is our method to identify and address unsafe acts and conditions prior to it turning into incidents and accidents. Trained observers monthly observe employees to assess their behaviour at work and if any deviations or unsafe behaviour observed, it is immediately corrected. Other unsafe conditions are noted and tracked for closure. Ergonomics on the other hand is the program to ensure all our shop floor and office employees are working efficiently without having to face major ergonomic stress. Annually projects are identified and implemented, and the AON Ergonomic Job Measuring System(EJMS) Tool supports in capturing the actual and the improved ergonomic score. The EJMS tool having images with description to assess helps the assessor and can be filled easily by all employees.





## CONSTRUCTION SECTOR

### Awardees in Large Scale Category

#### Platinum (First) Award

**Name of the Organization:** Larsen & Toubro Limited

**Location:** New Hot Strip Mill Project – SAIL (Rourkela, Odisha)

#### Organization Overview:

Larsen & Toubro is an Indian multinational engaged in Technology, Engineering, Construction, Manufacturing, and Financial services with over USD 18 billion in revenue. It operates in over 30 countries worldwide. A strong, customer-focused approach and the constant quest for top-class quality have enabled L&T to attain and sustain leadership in its major lines of business for eight decades.

L&T Construction India's largest construction organization and ranked among the world's top 30 contractors, has been over the past eight decades transforming cityscapes and landscapes with structures of immense size and grandeur. The company's capabilities span the entire length of construction - Civil, Mechanical, Electrical and Instrumentation Engineering - and its services extend to all core sector industries and infrastructure projects.

Metallurgical & Material Handling Strategic Business Group (L&T MMH SBG) has comprehensive in-house strengths for complete technology/ turnkey solutions for a wide range of projects. MMH SBG services ranging from concept to commissioning including Proposal Engineering, Detail Engineering, Procurement, Supply, Fabrication, Construction, Erection, Testing & Commissioning, covering all disciplines as per Customer's requirements. MMH SBG is currently certified with ISO 9001:2015, ISO 14001: 2015 and OHSAS 18001:2007.

MMH SBG was awarded EPC contract from SAIL for construction of New Hot Strip Mill at Rourkela Steel plant includes Design, Detail Engineering, Supply of equipments and Testing & Commissioning.

#### Key safety features adopted at New Hot Strip Mill project – SAIL (RSP):

##### A. Environment Initiative:

1. Monitoring of Carbon FOOT Prints
2. Ambient Air monitoring
3. Plantation of Tree sapling
4. Water sprinkling for dust suppression
5. Noise Level Monitoring
6. Illumination Level Monitoring

##### B. Health Initiative:

1. Pre-employment medical test
2. Medical test for the persons deployed to work at height
3. Weekly Medical examination for the workmen engaged in high-risk activities





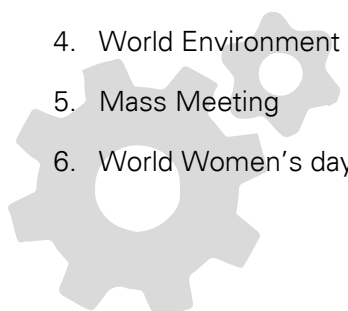
4. EYE & ENT test for Drivers and Operators
5. Hygienic Drinking water facility
6. Health campaigns
7. Designated Food Shelter
8. Blood Donation Camp

### **C. Safety Initiatives:**

1. Dedicated pedestrian pathways for the personnel movement
2. Multilevel EHS screening & induction system
3. Height phobia test for the persons deployed for work at height
4. Virtual reality enabled training system
5. Morning Staff Safety meet before proceeding to the job site
6. Warm up exercise for the workforce before starting the jobs
7. PEP TALK/ STA before commencing the jobs
8. Weekly walk downs
9. Internal Audits
10. On spot training workshops
11. Skilled based training
12. Training programs on defensive driving for drivers & operators
13. Operational Control – Work permit system to carry out the jobs
14. Mock Drills to tackle emergency situations:
  1. Fire drill
  2. Heat stress
  3. Work at height
  4. Electrocution

### **D. Motivational Programmes:**

- |                          |   |   |
|--------------------------|---|---|
| 1. L&T Safety Month      | : | January   |
| 2. National Safety Week  | : | 4 <sup>th</sup> March to 10 <sup>th</sup> March |
| 3. L&T Safety Day        | : | 4 <sup>th</sup> July                            |
| 4. World Environment Day | : | 5 <sup>th</sup> June                            |
| 5. Mass Meeting          | : | Fortnight                                       |
| 6. World Women's day     | : | 8 <sup>th</sup> March                           |





7. World Yoga Day : 21<sup>st</sup> June
8. World Water Day : 22<sup>nd</sup> March

#### **E. Monthly Rewards:**

1. Best Safety conscious workmen
2. Safety conscious staff

#### **F. Occupational Health Management:**

1. Health Campaigns

#### **G. Campaigns:**

1. Electrical
2. Gas cutting
3. Height work
4. Road safety
5. River cleaning

#### **H. Prevention Management: Golden Rules of Vision ZERO**

1. Take leadership
2. Identify hazards
3. Define targets
4. Ensure a safe and healthy system
5. Use safe and health machines & equipment
6. Improve qualification
7. Invest people

#### **• Project Achievements:**

1. 6<sup>th</sup> FICCI quality systems excellency award FTY -2018
2. Best digitally enabled project among L&T MMH SBG FTY -2017
3. 5 Million Safe Man Hours award by Steel Authority of India Limited
4. 10 Million Safe Man Hours award by Steel Authority of India Limited







## Gold (Second) Award

**Name of the Organization:** Larsen & Toubro Limited, MMH SBG

**Location:** Jamshedpur

### Organisation Overview:

The Metallurgical and Material Handling (MMH) business vertical is India's market leader in Engineering, Procurement & Construction of metallurgical projects possessing the capability and expertise to undertake engineering, procurement, manufacture, supply, construction, erection and commissioning of projects through its dedicated business units mentioned here under spread across length and breadth of the country with foot prints in International arena as well.

L&T's Metals and Minerals business offer one-stop solution for the ferrous and non-ferrous sectors. The Ferrous business unit provides Comprehensive Engineering, Procurement and Construction (EPC) solutions for the iron and steel industry while the Non-ferrous business unit caters to aluminium, copper, zinc, lead and mineral beneficiation plants.

EPC solutions complimented with supply of heavy bulk material handling equipment are on offer from L&T's Bulk Material Handling (BMH) business for material handling requirements of core sector industries through its Power and Steel, Mines, Ports & Special Conveyors business units.

L&T's Industrial Machinery and Cast Products business unit based in Kansbahal, Odisha undertakes design, manufacture and supply of complete range of crushing systems and equipment, blast-free surface miner solutions, advanced Sand Manufacturing Solutions, apron feeders, critical machinery and parts for steel and paper industry and castings for wind mill and wear-resistant applications. The comprehensive product offerings are complemented with excellent design, engineering, quality control and logistic expertise.

### Key Features of the Safety Systems

#### Planning:

- Committed to comply corporate EHS policy, M/s Tata Steel EHS policy and Applicable statutory requirements
- Determining the EHS objectives targets and plan for achieving the same
- Preparing work methods for all main and sub-activities prior to commence the same
- Effective Risk Mitigation through EHS risk assessment and safe work method

#### Support:

- Deployment of EHS staff at the ratio of (1:250 workers) to facilitate the EHS implementation
- Enhanced training coverage for employees by training matrix, plan and schedule
- Adequate budget for EHS implementation
- Deployment skilled workforce by effective screening procedure
- Enhanced awareness and communication program on daily, weekly and monthly basis such as mass meeting, weekly EHS walk down, Monthly EHS committee, Monthly EHS campaigns, etc.
- Deployment of dedicated rigging engineer at workplace





### **Operation:**

- Reviewing the HIRA and safe work methods on daily STA ( safety task assignment)
- Conducting EHS surveillance through general Workplace inspection, Electrical inspection, Plant machinery, Equipment and Vehicle inspection, Permit to work system, etc.
- Enhanced EHS surveillance using CCTV monitoring
- Effective reward and reprimand system
- Emergency response plan and mock drill system

### **Check:**

- Effective internal and external EHS audit program
- Monthly scoring of key performance indicators (KPI)
- Monthly evaluation of sub-contractor EHS performance
- Monthly review of EHS performance by site EHS committee, Apex committee at corporate level, customer EHS committee at site level

### **Act:**

- Effective incident management system
- Enhanced CAPA system
- Revising the set procedures and systems according to the outcomes of review meetings, results of EHS objectives, EHS performance, non-conformity reports, etc.
- Continual improvement by reviewing the various leading and lagging indicators of EHS
  - Project EHS committee with involving sub-contractor representatives and weekly review of EHS matters
  - Monthly safety mass meeting by gathering all engineer and workmen
  - Workmen screening, skill test, pre-employment medical check-up, 4 hrs safety induction training, height pass
  - Trade wise training programme
  - CCTV surveillance of site
  - Safety Task Assignment (STA) / PEP talk before start the activity
  - Work permit system
  - EHS Campaign and competitions
  - Reward and reprimand
  - Area wise EHS performance monitoring by Key Performance Indicator method
  - Quarterly internal EHS audit and half yearly EHS audit by external agency
  - Dissemination of CAPA to the workforce





- Mock drill
- Fire prevention and control
- Weekly twice EHS walk down
- Deployment of dedicated rigging engineer
- Soil protection during excavation
- Electrical safety like LOTO, RCCB in electrical circuit, usage of MCB in place of fuse.
- Campaigns and competition like mass housekeeping drive, safety monthly celebration, road safety awareness programme, national safety day celebration.
- Digital work permit, app based EHS observation, web based rigging permit





## POWER SECTOR

### Awardees in Large Scale Category

#### Platinum (First) Award

**Name of the Organization:** Sembcorp Energy India Limited

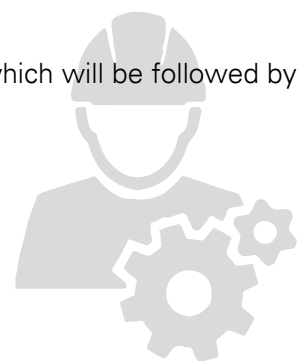
**Location:** Nellore, Andhra Pradesh

#### Organization Overview

Sembcorp Energy India Limited developed, owns and operates one of the largest thermal power assets located on the eastern coast of southern India (close to the Krishnapatnam port) in SPSR Nellore District of Andhra Pradesh State. Comprising two 660-megawatt supercritical coal-fired units. The power station has a total generation capacity of 1320 megawatts, equivalent to about 20% of the daily energy demand of Andhra Pradesh.

#### Best Practices

- Management demonstrates strong commitment for Safety through its visible leadership and regular interventions.
- Every Senior Management meeting starts with Safety Moment and Safety Performance is discussed first.
- Senior Management Site Walk-Downs are being done at regular intervals.
- SEIL is IMS Certified by LRQA (ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007).
- External (NSC, Marsh, Chola Mandalam) & Internal (Group HSSE, E&Y) audits are conducted at regular intervals.
- Dedicated Safety Team to support O&M activities 24 X 7.
- Dedicated HSE Training Department for training associates and employees.
- Safety Culture Perception Survey conducted and action points drawn out for implementation.
- Sembcorp's proprietary HEART Programme (HSE Engagement And Reinforcement Team) has been implemented wherein Heads of different disciplines work with safety team to augment safety systems by their domain knowledge and experience.
- Trained firefighting crew with state of art equipment and fire tenders.
- Mandatory Safety awareness & fire safety training is being imparted to all employees and associates.
- Dedicated Occupational Health Centre with qualified Medical Crew for providing first aid and stabilizing the IPs if required.
- Mailers on Occupational diseases are released for creating awareness.
- Wellness initiatives launched with programme of (know your numbers) which will be followed by sessions on meditation and Desk Yoga & Office Ergonomics.



- Usage of State Of Art Technologies in HSE (Video Analytics, Lone Worker SOS Device, Drone)
- Well-developed On-site Emergency Response Plan with 39 possible emergency scenarios followed up by monthly drill.
- Continuously improving safety systems with the help of Group HSE, Singapore by adopting international best practices.
- Near Miss Reporting Policy released which encourages anonymous reporting to capture all near miss incidents.
- Since PPE is the last control in the hierarchy of hazard control, Mandatory PPE Policy is being released.
- Hazard Identification and Risk Assessment systems with periodic updation and trainings.
- Permit to Work System through SAP with Lock Out & Tag Out. Permit to Work (PTW) policy is reviewed periodically.
- Work specific Tool Box Talk conducted before start of every work.
- Daily Plant O&M meeting starts with discussion on Safety Observations.
- Innovative SAFE START programme for Eliminating (Ignorance, Indiscipline, Immaturity), Improving (Integrity, Ingenuity, Intend) and Reinforcing (Care, Compassion, Consultation).
- Behavioural Based Safety Programme implemented.
- Mass Tool Box is conducted on first day of every month with declaration of Safety Theme for the month.
- Theme based campaigns are conducted on regular basis.
- Safety advisories are issued to educate employees and associates as per relevance.
- Learnings by way of corrective & preventive actions are implemented from Incidents of peer industries.
- Safe Operation Committee (SOC) consisting 6 experienced department heads, are responsible for developing Risk Assessment for non-routine and critical works. It also oversees incident investigations.
- Safety Action Committee (SAC), a DuPont Initiative, is formed at department / shift level which meets every week and volunteers to correct unsafe conditions at work place.
- SEIL has a Compliance Management System (CMS) which tracks and ensures all legal & statutory compliances are complied with.
- Hazard Identification Quiz & HSE quiz is being conducted on weekly basis for improving awareness among employees.
- Encouraging safety behaviour through Green Cards (on spot awards).
- Safety campaigns for communities and township are regularly conducted.



## Gold (Second) Award

**Name of the Organization:** JSW Energy Ltd.

**Location:** Toranagallu (Vijayanagar) Dist. Ballari. Karnataka.

### Organisation Overview:

JSW Energy Ltd (JSWEL) is an integrated power company, primarily engaged in generation and sale of power. It is a part of 11.3 Billion USD JSW group. It includes the business segments include Power Generation, Power Transmission, Mining, Power Trading and Equipment Manufacturing. It includes Hydro Plants in Himachal Pradesh (Total 1391 MW), thermal power plants (Total 3140 MW) in Rajasthan (RWPL, Barmer), Coastal based plant at Ratnagiri in Maharashtra and Toranagallu (Vijayanagar) in Karnataka.

JSWEL, Toranagallu IPP operates 860MW TPP with coal and by product waste gas from JSW steel plant. Also, extends O&M support services to 830 MW of captive power plants (CPPs) of JSW Steel plant.

### Key Features of the Safety Systems

- JSWEL is ISO certified company certified for Integrated Management system, ISO 9001-2015, 14001-2015: OHSAS18001-2007: ISO 50001-2011 by Bureau Veritas.
- There is a EHS policy approved by senior leadership and implantation is reviewed by top leadership/ board member at Corporate level. Similarly, the safety management system is established at Plant level and is reviewed by Plant Head.
- The Safety management programmes are well supported by safety enablers at Corporate level as well as plant level through review committees like Executive council committee, Apex committee respectively.
- The sub committees for safety observation system, Rail and road, Contract management, Incident Investigation, Rules & procedures are also part of safety management system.
- The divisional implementation committee follow the subcommittee and implement the recommendations towards the improvements in the plant.
- In-house designed software tools are used for better monitoring and periodic review of safety management system
- There is an in-house developed Permit to work (PTW) and LOTO (Log out- Tag out) policy & procedures in place and mapped to SAP ERP to ensure utmost safety during operation & maintenance activities.
- There is a separate Hazard identification & risk assessment (HIRA) procedure implemented to control the potential hazards in the plant.
- There is comprehensive on-site Emergency plan, prepared based various anticipated hazard scenarios. Multidisciplinary team has been developed, trained and deployed in all three shifts to take care of the emergency situations.
- JSWEL has well equipped firefighting crew with fire tenders for fire emergencies in the plant.
- There is a full-fledged Occupation health centre with qualified Doctor and supporting nursing staff to take care employees and associated employees health and injury.





- There is dedicated subcommittee for training and communication (T&C) to identify the training needs, schedule, impart training and assess the effectiveness of training.
- Apart of training to stake holders, JSWEL conducts awareness programs like safety skits, road safety March as per the schedule to improve the overall safety awareness.
- JSWEL, OHC team conducts counselling programs on tobacco & alcohol eradication among stake holders and monitors the effectiveness.
- JSWEL has implemented On boarding rules & procedures of associate employees by Interviewing, medical fitness test, Safety Induction, onsite induction, PEP-TALKs- This has helped us to identify & deploy right people at right job. There is dedicated contract workmen management system (CWMS) a software tool is being implemented to bring discipline & transparency from on boarding to billing of contract workmen.
- Beyond compliance to statutory requirements, JSWEL conducts Peer group assessment among all operating units for better understanding of systems and sharing beset practices too.





## MINING SECTOR

### Awardees in Large Scale Category

#### Platinum (First) Award

**Name of the Organization:** Bhagyam Oil & Gas Mine, Cairn Oil & Gas, Vedanta Limited

**Location:** Dist. Barmer, Rajasthan

#### Organisation Overview:

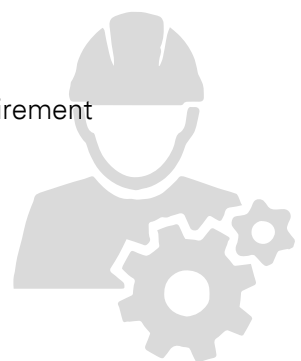
#### Key Features of the Safety Systems

##### 1. Processes, Design and System Control

- Automated Process controls adopted in the Design to prevent escalation of emergency.
- QRA and HAZOP study conducted to minimise the impact of process failures.
- Well defined Work permit system.
- No changes conducted without Management of Change Process
- Line Management ownership of Safety and wellbeing of workforce
- Automated Shutdown systems in place to control process upsets
- No overriding or bypassing of process controls possible without secondary authorisation
- Regular field visits by Site leadership teams
- Annual schedule for planned visits by multi-functional workforce.
- Scheduled and surprise mock-drill being conducted to check and improve emergency response preparedness
- Organisation has developed Disaster Management to control high exposure emergencies and mitigate in case of realisation of scenarios
- Participation in Mock drills conducted by Dist. Authorities
- Emergency response to Community and external emergencies to support the society.
- Reliability centred maintenance practices
- Asset Integrity Management system in place and effective
- Oil Spill response assessment and response strategy in place
- Oil Spill response team in place and regular mock drills being conducted.

##### 2. People

- Engagement of Qualified and competent manpower
- Regular supervision to coach and train the workforce to organisation requirement
- No person is put on work unless he / she undergoes Induction process







- Regular training imparted to workforce on Fire-fighting, First Aid and 7 Fatal risk control standards
- Rewards and recognition policy to motivate workforce.
- Consequence Management process in place for erring workforce
- System and Process in place to seek participation and consultation of workforce to improve the system
- No work at height without medical fitness assessment
- No work in confined space without proper training and authorisation

### **3. Road Safety**

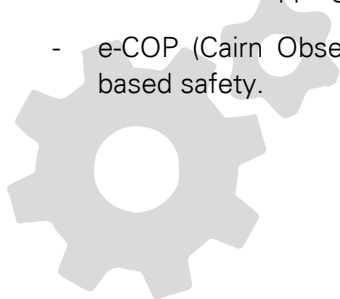
- Specification set in for passenger and utility vehicles
- All vehicles working for Cairn (self or through contractor engagement) enabled with VTS
- Speed limits in place while driving for Cairn activities or Cairn vehicle
- No driver is put behind wheels without proper driving assessment, training and authorisation.
- No use of communication devices while driving
- Defensive driving training and refreshers training conducted for drivers at periodic intervals

### **4. Stakeholder Engagement / Support to stakeholders**

- Community awareness sessions regularly conducted in schools, colleges and community on;
  1. Fire prevention
  2. Home Safety
  3. Road Safety
  4. Driving Safety
- Responding to community emergency response call like, hutment, fire, Propane / LPG Tanker toppling, Fire in Local shopping malls, Fire in near-by industry, Fire call on Airforce plane crash
- "Introduction to Road Safety", session conducted for driving license aspirants at Barmer RTO
- Community Health support by providing Mobile health Vans

### **5. Checks and Balances**

- The organization has implemented Web based systems to check and balance the strength of HSE Mgmt. system
- CIMS(Cairn Incident Management system):- For Near miss and Incident reporting, Analysis (investigation) and Action tracking
- En Force – Mapping applicable Statutory requirements and tracking the compliance
- e-COP (Cairn Observation Programme):- Recording Behavior based safety deviations behavior based safety.





- GAT (Global Action Tracker): Recording Corrective and preventive actions, other than Incident recommendations and iAct.
- E-MOC (Management of Change):-Electronic process to request change in Design, Hardware (Plant layout & Machinery), Operating process, Human Resources, Application chemicals. MoC is tracked till implementation and then closure

## Gold (Second) Award

**Name of the Organization:** Lanjiberna Limestone & Dolomite Mines, M/s. OCL India Ltd. (A Subsidiary of Dalmia Cement Bharat Ltd.)

**Location:** Lanjiberna, Dist: Sundergarh, Odisha-770023.

### Organization Overview:

- DCBL is a renowned cement manufacturing company in the country since 1939.
- DCBL is a member of CSI (Cement Sustainability Initiative, under the aegis of the WBCSD, Geneva). Consequently, it is bound by the CSI's Charter on Sustainability.
- DCBL is the first company in the cement sector to achieve GREENPRO certification for Portland Pozzolana cement from CII.
- Joined RE100 by pledging 100% renewable energy by 2030.
- Association with EP 100, double the economic benefit from every unit of energy consumed. First cement company in world to join the initiative.
- The Group has cement plants in Tamil Nadu (Dalmiapuram & Ariyalur), Andhra Pradesh (Kadapa), Meghalaya (Thangskai) Karnataka (Belgaum), Jharkhand (Bokaro), Assam (Umrangso & Lanka), Odisha (Rajgangpur & Cuttak) and West Bangal (Midnapur).
- The Group now controls a cement capacity of 25 million tonnes & has a strong presence in Southern, Eastern & North East Regions of the Country.
- M/s. OCL India Limited is the flagship company of 'Dalmia Group' of companies, set up and operating from Eastern India.
- 'Konark' brand cement manufactured by OCL is the market leader in the State of Odisha and has emerged as a brand synonym of premium quality cement. Lanjiberna Limestone & Dolomite Mines of M/s. OCL India Ltd. (Dalmia Bharat Cement Ltd.) is a large capacity metalliferous opencast mine situated at Lanjiberna village. This mine is producing about 7 million tonnes of ROM (4.2 Mio T Limestone & 2.8 Mio T Reject Material) per Annum comprising mining process of deep hole drilling, blasting, loading & transport, crushing, stacking and dispatch. In every process sophisticated eco-friendly equipment is being used.

### Key Features of the Safety Systems

#### Safety System/Initiatives

- o Workplace Risk Assessment (WPRA) before commencement of Non routine jobs
- o LOTO System
- o Near Miss/Unsafe Act & Unsafe Condition Reporting booklet.





- o Daily tool box talks are organized in every section before shift start in all the shifts
- o Monthly safety get-together on 1st of every month
- o Safety Committee Meeting-Once in a month
- o Daily zone wise safety inspections
- o Monthly safety Audit
- o Workmen direct participation in development of safety management system/plan

### **Employee Safety, training & Development**

- o Annual health checkup of employees
- o Structured Training based on Training Need Identification, Initial & Refresher Training, External Training by OEM & Experts, Behavioral training and feedback system
- o Rewards/recognition to the workmen for any innovation /Idea/ improvements in safety

### **Facilities/Infrastructure for Training & Development**

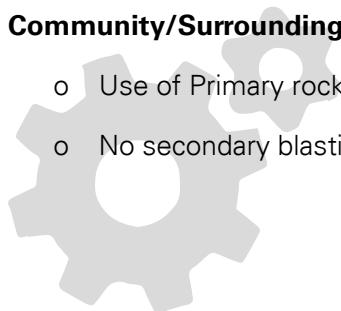
- o Well-equipped air conditioned training room
- o Full time training officer assisted by requisite staff
- o Tele-presence training conferencing
- o Computer aided video animation
- o Various models and sections as training aid
- o Full-fledged CSR team to impart safety, health and environment awareness training to the external stake holder of surrounding mines operational area
- o Workman Instructor

### **Latest Technology/Safety Features**

- o Blasting- Non Electric & Electronic Detonators.
- o Roll over protection system (ROPs) & Fall over protection system (FOPs).
- o Dumpers equipped with Audio Visual Alarm (AVA), Rear View Camera, Proximity sensing, Fatigue, Tail gate protection, Auto Fire Suppression & Auto Dipping System.
- o Hydraulic and battery cut-off switch
- o Ergonomic and acoustic operator cabin.
- o Temperature sensor in all bearings, gearboxes, motor installed in crusher and conveyor belts
- o Belt Sway, ZSS, PCS, Rip Switch & Protection guard in open moving parts

### **Community/Surrounding Safety**

- o Use of Primary rock breaker and Terminator near village area
- o No secondary blasting





- o Fully covered gallery & Deck plate arrangement in conveyor belts
- o Fully enclosed Crusher & Stacker-reclaimer
- o Green belt alongside the village
- o Safety awareness program for family members of workmen/community
- o Safety skit/drama & quiz competition











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FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

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