ACMA

**Automotive Component Manufacturers Association of India** 



Vol. 9 No. 1

by ACMA Centre for Technology

May 2016

TIME 70

Indian Production System

> Innovations, Zero Defects, New Product Design & Development



## Nicks (India) Tools

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Our Main Products are:



#### Our main customers are:















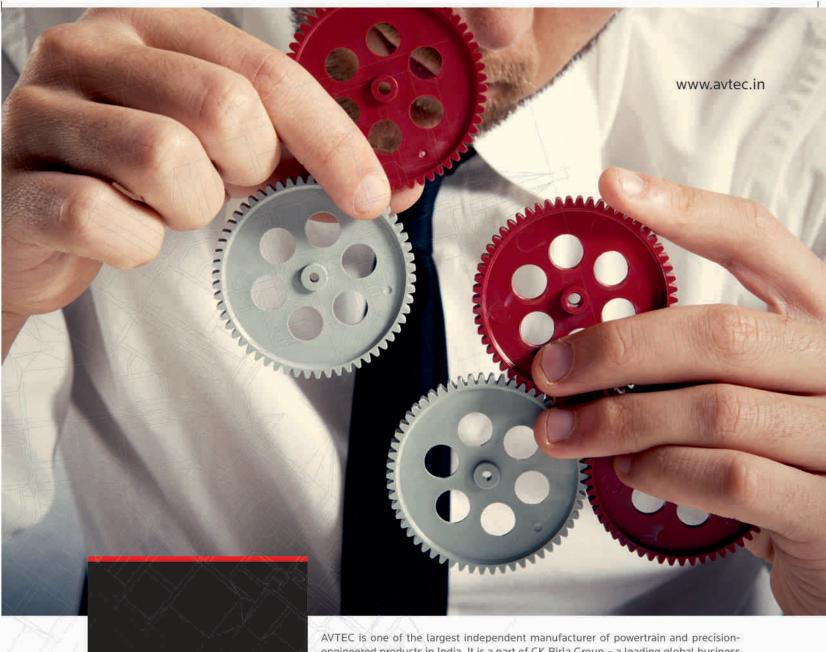




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One complimentary copy of "ACT Now" is sent to each member of ACMA. Additional copies are available @ ₹ 150/- for each copy. This cost is including service tax & postage charges.



## Chairman's Message

The turnover of the auto component industry stood at Rs. 2.55 lakh crore (USD 39 billion) for the period April 2015 to March 2016, registering a growth of 8.8 per cent over the previous year and a CAGR of 6 per cent over the last six years. As per the automotive mission plan 2016-26, Indian auto component Industry is envisioned to grow by 5X from USD 39 billion to USD 200 billion and exports from USD 10.8 billion to USD 80 billion. To achieve these targets, Automotive Industry would need investments of USD 80 billion, out of this auto component industry alone requires USD 25-30 billion.

The growth opportunities are for the component sector are tremendous, however, to be globally competitive we need to deliver better quality and technology products.

The ACMA Centre for Technology (ACT) has been a pioneer in implementing best manufacturing practices in the automotive industry. It was instituted in 1989 with the objective of providing handholding services to auto component industry and help it produce quality products at the most competitive prices. ACT ensures that the industry is prepared to meet the challenges of the future through a distant roadmap. Automation, Digitization, Industry 4.0, Robotics, Zero Defects, New Product Development, Design Capabilities and Product Cost Reduction with a focus on Energy Reduction and use of Non-Renewable energy are the key drivers for the industry today.

ACT has also started to support OEMs, recently three new clusters were launched for Force Motors, Indore. That apart, the ACMA UNIDO intervention has been supporting well Tier 2 and Tier 3 companies. Currently over 250 companies are availing the benefits under this project.

We have also commenced the process for this year's ACMA awards. These awards are the most coveted recognition for outstanding performance in the component industry. We introduced a new category of awards last year - the HR Excellence Awards while this year another new category - the "Supplier Development Award" is being introduced. I do hope that your company has applied for the ACMA Awards.

This issue of ACT Now shares with you the achievements of various ACT improvement projects as also the feedback from the participating companies. 3<sup>rd</sup> ACT Case Study Competition is also featured in this issue.

Lastly, please do share with us your critical feedback to enable us in improving this newsletter.

Best wishes

Srivats Ram

## Launch of ACMA Clusters for Force Motors Ltd. On 22<sup>nd</sup> April 2016 in Pithampur

ACMA Centre for Technology has always been working rigorously to cater the ever changing and demanding needs of the Indian Auto Component Industry, since its inception back in 1989, the ultimate mandate is to develop and enhance the quality levels and to upgrade technological aspects of the component manufacturers. ACT has always believed in keeping one foot on improving the present conditions of the auto component industry and the other on the futuristic needs that will be required along with the changing times.

At various intervals experts from ACT have analyzed the growing needs of the auto component manufacturers and helped them achieve global standards that are practiced.

In the history of ACMA Centre for Technology, a great milestone was set when a specialized Cluster was launched for Force Motors Ltd. It is indeed a very proud moment for ACMA to cater its signature cluster program for an Indian OEM.

Considering the specific needs of Force Motors, three unique clusters were developed based on the assessments by experts from ACMA Centre for Technology.

On 22<sup>nd</sup> April, 2016 the clusters were launched at the premises of Force Motors Ltd., Pithampur.

Following are the clusters and the manufacturing units of Force Motors Ltd where implementation of Cluster has started:

| Sr.<br>No | Plant                              | Unit offered                       | Duration | Focus of Implementation   | Cluster                    |
|-----------|------------------------------------|------------------------------------|----------|---|----------------------------|
| 1         | Force<br>Motors Ltd ,<br>Pithampur | Body Shop<br>( 5 Mfg. Units )      | 2 Years. | Workplace Improvement, Workplace Ownership, Quality Management, Inventory Management,   | Foundation<br>Cluster 11 A |
| 2         | Force<br>Motors Ltd ,<br>Pithampur | Press Shop<br>( 7 Mfg. Units )     | 2 Years. | Productivity Improvement,<br>Introduction to Lean   | Foundation<br>Cluster 11 B |
| 3         | Force<br>Motors Ltd ,<br>Pithampur | Aggregate Lines<br>( 5 Mfg. Units) | 2 Years  | TEI, Advance 55, Cellular Manufacturing, Integrated Flow Manufacturing, Re-Training (Sustenance Culture), Introduction to EEC | Advance Cluster 9          |

#### Highights of the Launch



Key note Address by Mr. Prasan Firodia, MD, Force Motors Ltd.



Guidance by Mr. C Narasimhan, **Chief Mentor ACT** 



Cluster Methodology & Counselors' Introduction by Mr. Dinesh Vedpathak, Head Cluster Program, ACT



ACMA Cluster Implementation Team along with Force Motors Team attended the launch program



### ACT Cluster Programs - Value for Money and Company Feedback MSME Clusters (Nationwide)

ACT had launched its first cluster for MSME's in 2014 for northern region with the objective to cater Tier 2 & Tier 3's of the automotive component supply chain. It being well received, various more MSME clusters were launched nationwide with the same objective.

Apart from learning best manufacturing practices the companies have gained tremendous cost savings through the cluster program, the company CEOs have given their feedback for the cluster program which is mentioned below:

| ACT Cluster Program                         | Cluster Period             | Closing Month | No. of    | Net Savings | Feedback by Company CEO |       |       |        |  |  |
|---|----------------------------|---------------|-----------|-------------|-------------------------|-------|-------|--------|--|--|
| (completed)                                 | 5.000.00                   | 8             | companies | (Rs Lakhs)  | 81 - 85                 | 85-90 | 90-95 | 95-100 |  |  |
| MSME Lean Project Makino<br>Automotive      | Mar 15 - Mar 16            | April-16      | 1.        | 7           | 1                       |       |       | 96%    |  |  |
| MSME Lean Cluster<br>Haridwar - Pantnagar   | Jan 15 - Dec 15            | March-16      | 3         | 84          |                         |       |       | 97%    |  |  |
| MSME Lean Cluster Ludhiana                  | Jan 15 - Dec 15            | February-16   | 5         | 65          |                         |       |       | 97%    |  |  |
| MSME - Satara Cluster<br>(Mutha Founders)   | Jan 15 - Dec 15            | February-16   | 4         | 37          |                         |       | 93%   |        |  |  |
| MSME-Pune Cluster<br>(Greaves Cotton)       | Feb 15 - Jan 16            | January-16    | 5         | 121         |                         |       | 94%   |        |  |  |
| MSME-Aurangabad Cluster<br>(Greaves Cotton) | Nov 15 - Oct 15            | January-16    | 5         | 61          |                         |       | 94%   |        |  |  |
| MSME Lean Cluster NCR                       | Nov 14- Oct 15             | November-15   | 8         | 173         |                         |       |       | 97%    |  |  |
| MSME Lean Cluster<br>Pantnagar              | Nov 14 - Oct 15            | December-15   | 5         | 83          |                         |       | 94%   |        |  |  |
| Grand Total No. of compa                    | nies & Savings an<br>dback | 36            | 631       |             | 95                      | %     |       |        |  |  |



## ACT Cluster Program - Value for Money and Company Feedback Advance, Foundation, Engineering Clusters & ACT Projects (Nationwide)

Keeping in view with changing needs of the auto component industry, ACT clusters have been time to time honed and upgraded to meet the changing trends, that suits the requirement of the auto component manufacturers. ACT's signature clusters like Foundation, Advance, Engineering Excellence

and Projects have been the pinnacle in making paradigm shift in the manufacturing facilities and in changing people mindset to help them achieve global standards.

Cost savings and feedbacks from companies that have participated in these programs are provided below.

| ACT Cluster Program              | Cluster Period                | Closing Month | No. of    | Net Savings | Feedback by Company CEO |       |       |        |  |  |  |
|----------------------------------|-------------------------------|---------------|-----------|-------------|-------------------------|-------|-------|--------|--|--|--|
| (completed)                      |                               |               | companies | (Rs Lakhs)  | 81 - 85                 | 85-90 | 90-95 | 95-100 |  |  |  |
| Advance Cluster 4 N              | Nov 13 - Oct 15               | December-15   | 5         | 404         |                         |       |       | 97%    |  |  |  |
| Advance Cluster 4 SW             | Nov 13 - Oct 15               | December-15   | 5         | 1639        |                         |       | 94%   |        |  |  |  |
| Foundation Cluster 8 N           | Nov 13 - Oct 15               | December-15   | 8         | 1042        |                         | 89%   |       |        |  |  |  |
| Foundation Cluster 8 SW          | Nov 13 - Oct 15               | December-15   | 6         | 549         |                         | 90%   |       |        |  |  |  |
| Engineering Cluster 2            | Jan 13 - Feb 15               | February-15   | 4         | 872         |                         |       | 91%   |        |  |  |  |
| Lean Project- IPCL,<br>Bhavnagar | Sep 14 - Aug 15               | August-15     | 1         | 411         |                         |       | 95%   |        |  |  |  |
| Grand Total - No. of co          | mpanies & Savings<br>Feedback | and Average   | 29        | 4917        |                         | 93    | %     |        |  |  |  |

#### Tangible:

| S.N. | Parameters                         | Overall Improvements |  |
|------|------------------------------------|----------------------|--|
| 1    | Customer Quality (PPM Reduction)   | 90 %/100 %           |  |
| 2    | In-house Rejection (PPM Reduction) | 50 -60 %/90 %        |  |
| 3    | Inventory Turns (Achievement)      | 25 to 100/200 +      |  |
| 4    | Productivity Per Man               | Doubled/10 X         |  |
| 5    | Safety (Accident Free Days)        | >250/>1000 days      |  |
| 6    | Breakdowns (Reductions)            | 80 %/Zero            |  |
| 7    | Space Saving                       | 30 to 50 %/60 %      |  |
| 8    | Lead Time Reduction                | 30 to 50%/80 %       |  |
| 9    | Containerization                   | 60 to 70%/100 %      |  |
| 10   | Manufacturing Cost (Reduction)     | 20 %/>20 %           |  |



#### Intangible:

| S.N. | Parameters  |
|------|---|
| 1    | Improved Customer Focus and Responsiveness        |
| 2    | Employee Involvement & Capability for Innovations |
| 3    | Improvement Culture                               |
| 4    | Safe Workplace to Work                            |
| 5    | Plant Visibility and Joyful Workplace             |
| 6    | Caring for Employee Needs                         |
| 7    | Dust Free (Inside and Outside Shop Floor)         |
| 8    | Ownership of QCD Parameters                       |
| 9    | Greening of Supply Chain                          |
| 10   | Building Competencies                             |

## Feedback from Participating Companies of ACT Foundation Clusters:

**Chopra Autotech, Haridwar** – It has given our team a feeling of optimism and satisfaction. It conveys both happiness and Meaning. It has worked a magic for us. ACMA has given us the confidence to change and fit in the changing times.

**Jumps Auto, Gurgaon -** It's been a rich learning experience for Jumps as a company. We have been able to make lot of changes within the organization for effective working and also saving extra cost.

Mark Exhaust, Binola - Cluster activity has enhanced competitiveness in team & have helped my team to implement best practices adopted by cluster companies

**Meenakshi Polymers, Haridwar** – This cluster helped us to go beyond our imagination. It developed our employees for manufacturing excellence and company profitability increased as the cluster progressed.

New Swan Enterprises - Unit II, Ludhiana - It's been a fantastic journey for me and my team throughout cluster. We learnt and implemented best practices which were out of the box for all of us.

Sandhar Automotive, Dhumaspur - To my mind the real "Workers Participation in Management" is through this program. This involvement brings commitment which is most essential for achieving excellence

**Sterling Tools, Prithla -** The ACT Foundation Cluster has impacted the work culture at STL in terms of: 1. Improvement activities, 2. Sustenance of improvements carried out and 3. Created a way forward for future growth

Wheels India, Rampur – ACT Cluster is a forum where the Industries get path to enhance the competitiveness which in term supports to meet customer expectations

Delux Bearing - Developed Kaizen Culture - Huge Cost Saving.

INEL - Participation and sharing the thoughts have helped INEL to raise the Standard

MGM Springs - Brought great learning for our team, QCD improvements through TEI.

Mutha Founders - Green floor, reclaimed spaces from various zone, achieved Mindset change benefited in Inventory reduction, Productivity and Cost Reduction

Nash Industries – Cluster is a well-defined learning & implementing methodology towards achieving world class manufacturing system.

Western Thomson - Helped in educating our team on various quality improvement activities in a systematic manner.



## Feedback from Participating Companies of ACT Advance Clusters:

Anand NVH Products (P) Ltd., Gurgaon – Actions are better driven as the learning is based on GEMBA rather than being only theoretical.

Munjal Auto Industries Ltd., Gurgaon - The improvements which we have got through ACT advance cluster are very realistic and truly beneficial for the organization.

Neolite ZKW Lightings Pvt. Ltd. Bahadurgarh- I interacted with counselors and got lot of confidence. Major revolution is the change in mind set across all levels.

New Swan Autocomp (P) Ltd., Ludhiana – By the teaching of our counselor & our collective learning from various other cluster companies, we found drastic positive results which benefited the company as well as individuals.

Nipman Fastener Industries Pvt. Ltd., Haridwar - Today Nipman Haridwar Plant has been acknowledged as a "Model Manufacturing Plant" by several firms in the industry. Thanks to the ACMA Cluster's Learning.

Moflex Suspension Pvt. Ltd., Vadodara – We underwent changes without having stress on mind – it was more of a joy then working.

Pinnacle Industries Ltd., Pithampur- We have achieved better efficiency & productivity with lesser manufacturing time after implementing ACMA cluster learning.

Sandhar Automotive, Bangalore - Very Impressive, achieved Root level changes

Vikrant Auto Suspension, Vadodara - It's a program that will make your factory half its size, gift you your own equipment's.

Wheels India Ltd., Sriperumbudur - Triggered TEI, Resulted in More QC & Kaizen Participation.

## Feedback from Participating Companies of ACT Engineering Excellence Clusters:

**Bharat Gears, Faridabad** - The most important point of the journey is that we have been able to re-calibrate eyes of our employees. Our employees have now developed ability to identify waste and eliminate waste.

Menon & Menon, Kolhapur - The most satisfying part of the journey was when our engineers designed and developed an Automated Material Handling System totally in-house. Capabilities like these would form the base of our future competitiveness.

Metalman Auto, Aurangabad - The growth wheel is moving on with same speed this year also. As a result of this journey not only lead to reducing defects but less breakdown & increasing productivity.

Wheels India, Chennai - There has been a considerable effort by the team to reduce costs and improve efficiencies. The learnings in Engineering cluster gives engineers confidence in executing new out box of ideas.



## **INSTITUTE FOR AUTOPARTS & HAND TOOLS TECHNOLOGY**



### (UNDP/UNIDO ASSISTED PB. GOVT. PROJECT) A-9, PHASE – V, FOCAL POINT, LUDHIANA-141010





AN ISO 9001: 2008 CERTIFIED INSTITUTION







Institute for Autoparts & Hand Tools Technology is a Punjab Government Project assisted by UNDP/UNIDO. The Institute is primarily assisting Small Scale Automotive Component & Hand Tools manufacturers to upgrade their Technology base and Quality of their products in the changing economic and technological environment.

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#### **Forthcoming ACT Cluster Programs**

## Launch of 2<sup>nd</sup> ACT New Product Development Foundation Cluster and 1st ACT New Product Development Design Cluster

#### 2nd ACT New Product Development Foundation Cluster

The overwhelming response and the commitment received from the ACMA Members for 1st ACT New Product Development Cluster Program encouraged ACMA to launch the 2nd such cluster program in September, 2016. The 1st Cluster was launched in September, 2014 with six companies as its member.

#### Following companies are part of this running cluster:

IM Gears, Chennai

JK Fenner, Chennai

Sundaram Auto Components, Hosur

Menon and Menon, Kolhapur

Sanjeev Auto, Aurangabad

Rockman industries, Bawal



**ACMA Vision** 

The objective of this cluster is to build product development capabilities among manufacturing units. Learnings from the first cluster have been well incorporated in the second cluster program. Second cluster comes with improved roadmap, richer training content and compelling intervention strategy. The companies, who have been a part of this cluster program, have reported:

- Improved on time delivery of projects
- Reduced rework in tooling and process
- Reduced rejections during initial production and in regular production
- Achieving cost committed in RFO response stage
- Improved RFO conversion
- Improved team work
- Learning culture and expertise development

| Parameter                            | unit      | before | after | Remarks          |
|--------------------------------------|-----------|--------|-------|------------------|
| Sample resubmission                  | ratio     | 1.54   | 0.01  | issue eliminated |
| Initial quality - internal rejection | %         | 18%    | 5%    | Cur. prod. level |
| Initial quality - customer rejection | 96        | 2%     | 0.02% |                  |
| Sample development time              | ref ratio | 1      | 0.69  | 30% less         |
| Lead time for SOP                    | ref ratio | 1      | 0.67  | 33% less         |
| Cost deviation, negative is good     | 96        | 8%     | -1%   | 9% points gain   |
| New product sales, annual            | Rs, Cr    | 23.3   | 37.5  | 1                |
| Perpetuity in 2018-2019              | 96        | 796    | 22%   | 1                |

| Business benefits (total for all six | compa | nies), in Rs Cr. |
|--------------------------------------|-------|------------------|
| During cluster period                | 4.02  | not yet matured  |
| Potential generated for 2017-2018    | 41.69 |                  |

Running NPD Cluster Results so far

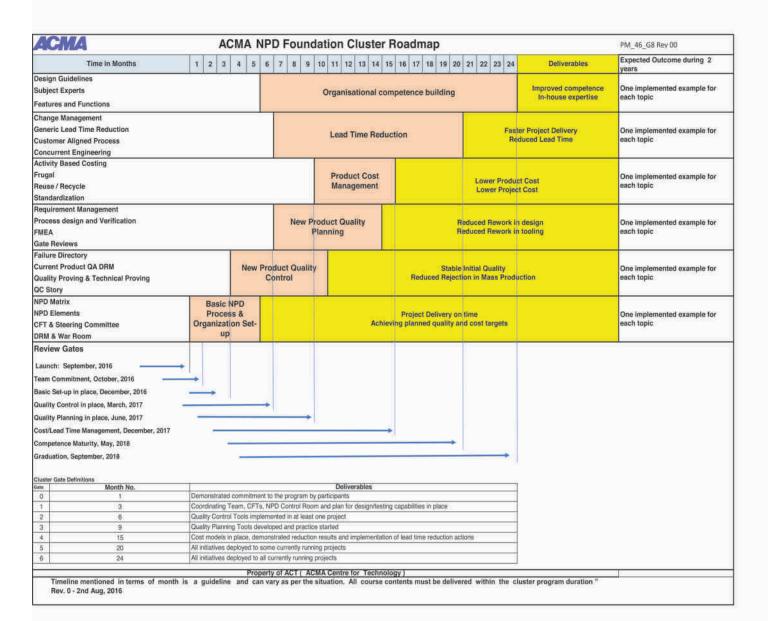
The various clusters of ACT have been designed in such a way that it caters to the varied needs of the industry. ACT Foundation, Advance, Engineering and ZED Clusters have been customized to the needs of large companies whereas ACMA UNIDO Clusters supports the smaller auto component units. In addition, ACT has also been deploying various quality projects suiting to the specific needs of companies. ACT has been running various cluster programmes since 2001 and till date these clusters have helped more than 650 manufacturing units.

In an industry where the margins are under constant pressure due to the increasing input costs on one hand and the demand of the customers to continually lower prices, on the other, the only way to hold the head above water is to focus on value-addition by indulging in new technologies, by focusing on new product development, by deploying newer and improved processes etc. We urgently need access to right technologies, which are in-line with green manufacturing, a trend gaining fast acceptance the world-over.

#### ACT NPD Cluster Road map consists of:

- Basic NPD process and organization setup
- New Product Quality Control
- New Product Quality Assurance
- Product Cost Management
- Lead time reduction
- Organizational competence building





#### Deliverables of ACT NPD Cluster program:

- Controlled processes
- First time right products
- Consistent product quality
- Lead time reduction for product development
- Cost Reduction
- Organizational competence
- Improved customer satisfaction

#### **Company Requirements**

- Top management commitment to implement organisational changes
- Good levels 5S, TEI and Employee Welfare



- · Safety, Health and Environment
- · TS Certification

This is assessed during selection process assessment.

#### **Implementation Team**

- One Coordinator to be assigned from the applicant company. Coordinator should have been working in the same company from last 3 to 5 years.
- · Implementation of CFT structure to learn, implement and cascade the learning.

#### **ACT Engagements**

- · One Product Line
- · Audit for full implementation
- · Train the Trainer

#### Design and Process Verification Capability

- · Applicant Company should have a fully equipped tool and process design office.
- Applicant Company should have tooling and process verification capabilities for the processes. If not
  available for a few processes, then it should be ready to establish the same or should be able to get timely
  service from outside.

|                                   | 2014 September     | 2016 September                 | 2018 September                 |
|-----------------------------------|--------------------|--------------------------------|--------------------------------|
| Foundation Cluster                | Launch 1st Cluster | Launch 2 <sup>nd</sup> Cluster | Launch 3 <sup>rd</sup> Cluster |
| Design Responsible<br>Cluster     |                    | Launch 1st Cluster             | Launch 2 <sup>nd</sup> Cluster |
| Design Aspirant<br>Bridge Cluster |                    | 1                              | Launch 1st Cluster             |

### 1st ACT New Product Development Design Cluster

ACT Team always works hard and tries to support the auto component manufacturers to achieve new level of performance.

As a next step, ACT is pleased to launch the New Product Development Design Cluster in September/October, 2016. Learnings of the presently running NPD cluster have also been well incorporated in this cluster.

The Design Cluster comes with a roadmap, training content and intervention strategy which is appropriate for tier-1 and tier-2 companies that have responsibility for design.



Rigorous German product development process



Efficient Japanese tools and methods



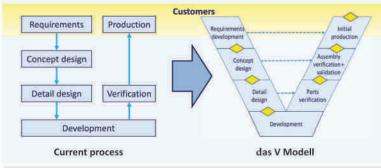
Effective Indian Daily Routine Management

Three pillars of new product design and development cluster



#### ACT NPD Design Cluster Road map consists of:

- Basic NPD process and organization set-up
- Trouble free new product introduction
- New product quality deployment
- Design to cost
- Lead time compression
- Technology and knowledge management



Approach to improve new product quality

| ACMA                       |                   |     |     |      |     |   |   | AC | M/           | 1     | NP                              | D D                      | esi    | gn    | Cli    | ust    | er F                             | Roa                         | dm   | ар |   |                                  |       |      |       |       |                                 |                                  |  |  |
|----------------------------|-------------------|-----|-----|------|-----|---|---|----|--------------|-------|---------------------------------|--------------------------|--------|-------|--------|--------|----------------------------------|-----------------------------|------|----|---|----------------------------------|-------|------|-------|-------|---------------------------------|----------------------------------|--|--|
| Time in Months             | 1                 | 2   | 3   | 4    | 5   | 6 | 1 |    | В            | 9     | 10                              | 11                       | 12     | 13    | 14     | 4 1    | 5 1                              | 6                           | 17 1 | 8  | 19 2  | 20                               | 21    | 22   | 23    | 24    | Deliverables                    | Expected Outcome during 2 year   |  |  |
| Design to Cost             |                   |     |     |      |     |   |   |    |              |       |                                 |                          |        |       |        | - file |                                  |                             |      |    | *   | *                                | 101   | 100  |       |       |                                 |                                  |  |  |
| Agile Project Management   |                   |     |     |      |     |   |   |    |              |       |                                 |                          |        |       |        |        |                                  |                             |      |    |   | 0-                               | timi  | nin. | ~     |       | New Technologies<br>Lowest Cost | One implemented example for each |  |  |
| Technology Development     |                   |     |     |      |     |   |   |    |              |       |                                 |                          |        |       |        |        |                                  |                             |      |    | Optimizing Lowest Cost High Organizational Capability |                                  |       |      |       | topic |                                 |                                  |  |  |
| Academic Link              |                   |     |     |      |     |   |   |    |              |       |                                 |                          |        |       |        |        |                                  |                             |      |    |   |                                  |       |      |       |       |                                 |                                  |  |  |
| Lead Time Management       | d Time Management |     |     |      |     |   |   |    |              |       |                                 | R                        | teduce | d Le  | ad Tir | ne     |                                  |                             |      |    |   |                                  |       |      |       |       |                                 |                                  |  |  |
| Cost Management            | cost Management   |     |     |      |     |   |   |    |              | N     | Meeting Challenging Cost Target |                          |        |       |        |        | One implemented example for each |                             |      |    |   |                                  |       |      |       |       |                                 |                                  |  |  |
| Capability Management      |                   |     |     |      |     |   |   |    |              |       | Managed                         |                          |        |       |        |        | N                                | Meeting Challenging Quality |      |    |   |                                  |       |      | topic |       |                                 |                                  |  |  |
| Technology Management      |                   |     |     |      |     |   |   |    |              |       |                                 |                          |        |       |        |        |                                  |                             |      |    |   |                                  |       |      |       |       |                                 |                                  |  |  |
| Product Development System |                   |     |     |      |     |   |   |    |              |       |                                 |                          |        |       |        |        |                                  |                             |      |    |   |                                  |       |      |       |       |                                 | ľ                                |  |  |
| Design Process             |                   |     |     |      |     |   |   |    | n            | efir  | har                             | Controlled Processes     |        |       |        |        |                                  |                             |      |    |   | One implemented example for each |       |      |       |       |                                 |                                  |  |  |
| Testing Process            |                   |     |     |      |     |   |   |    | 2            | CIII  | icu                             | Predictable Stage Timing |        |       |        |        |                                  |                             |      |    |   |                                  | topic |      |       |       |                                 |                                  |  |  |
| Design & Gate Reviews      |                   |     |     |      |     |   |   |    |              |       |                                 |                          |        |       |        |        |                                  |                             |      |    |   |                                  | ·     |      |       |       |                                 |                                  |  |  |
| Basic NPD Organization     |                   |     |     |      |     |   |   |    |              |       |                                 |                          |        |       |        |        |                                  |                             |      |    |   |                                  |       |      |       |       |                                 |                                  |  |  |
| Daily Routine Management   |                   | p   | and | atat | ıla |   |   |    | Deli<br>able |       |                                 | lines                    |        |       |        |        |                                  |                             |      |    |   |                                  |       |      |       |       |                                 | One implemented example for each |  |  |
| Quality Trouble Shooting   |                   | .15 | che | atai | no. |   |   |    | led C        |       |                                 |                          |        |       |        |        |                                  |                             |      |    |   |                                  | topic |      |       |       |                                 |                                  |  |  |
| Change Management          |                   |     |     |      |     |   |   |    |              |       |                                 |                          |        |       |        |        |                                  |                             |      |    |   |                                  |       |      |       |       |                                 |                                  |  |  |
|                            |                   |     |     |      |     |   |   |    | Pro          | perty | y of A                          | ACT (                    | ACN    | IA Ce | ntre   | for 1  | echn                             | rolog                       | y)   |    |   |                                  |       |      |       |       |                                 |                                  |  |  |

"Timeline mentioned in terms of month is a guideline and can vary as per the situation. All course contents must be delivered within the cluster program duration" Rev. 0 - 2nd Aug, 2016

#### Deliverables of ACT NPD Design Cluster program:

- Controlled product design, development and introduction
- Smooth transfer of new products to production
- Consistent product quality pre and post launch
- Lead time reduction for product development
- Meeting challenging cost targets
- Organizational competence
- Technology management capabilities
- Improved customer satisfaction

#### **Company Requirements**

- Top management commitment to implement organisational changes
- Good levels 5S, TEI and Employee Welfare
- Safety, Health and Environment
- TS Certification

#### This is assessed during selection process assessment.

#### Implementation Team

- One Coordinator to be deputed from the applicant company. Coordinator should have been working in the same company from last 3 to 5 years.
- Implementation of CFT structure to learn, implement and cascade the learning.

#### **ACT Engagements**

- One Product Line
- Audit for full implementation
- Train the Trainer

#### Design and Testing Capability

- Applicant Company should have a testing laboratory or should be ready to establish the same or should be able to get timely service from outside.
- Applicant Company should have a design office or should be ready to establish the same.



#### Eligibility Criteria for 2nd ACT New Product Development Foundation Cluster and 1st ACT New Product Development Design Cluster:

Companies, who have undergone any of ACT / UNIDO Cluster successfully or achieved similar levels on shop-floors (This would be decided after the site visit and interaction with company team) have the privilege to join the these Programs.

The duration of these Cluster programs are 24 months.

#### These Cluster Programs are Comprised of:

- Monthly Counsellors visits
  - (1 visit per month, total 12 visits per year in addition to MRMs)
- Monthly training
- Monthly Review Meetings (MRM)
- Visit/exposures to model companies
- Additional guidance from Mentor in MRMs
- Cross learning and sharing

Dynamic and totally committed CEOs, who have a keen desire to rapidly transform their organizations should approach ACT for joining the 1st ACT New Product Development Design Cluster/2<sup>nd</sup> ACT New Product Development Foundation Cluster.

#### Course material:

Course materials as per road-map topics will be provided in soft form to companies to enable cascade training across the organisations within the company.

You can visit www.acma-act.in to access and download "IMPACT now" Newsletter, which shares success stories of ACT Cluster companies.

The Launch of these Cluster Program is scheduled in September/October 2016. Interested companies are requested to inform latest by 25th August, 2016.

Final selection of the companies will be done by ACT management after plant assessment and personal discussion with the CEOs of the applicant company.

#### For more details, you can write/contact:

Mr. S. Selvamani Mentor, ACT NPD Cluster, mentor.npd@acma.in, +91 8793620007

Mr. S. Narayanan, Expert, ACT NPD Cluster, sreenara0456@gmail.com, +91 9677101856

Mr. Jitender Rana, Assistant Director, ACMA, jitender.rana@acma.in, +91 9873369699

Mr. Binny Tomy, Executive, ACMA,

binny.tomy@acma.in, +91 9711138869





## Bohra Rubber Pvt. Ltd.

End to End Sealing solutions in Rubber Polymers for Automotive Industry













### 3<sup>rd</sup> ACT Case Study Competition 15th & 16th November, 2016

#### Streams:

Group A: Improvement in Productivity, Quality, Cost Reduction, Safety & Environment

Group B: Zero Defect Quality, Zero Effect Activity, IoT - Internet of Things, Innovation/Automation)

For over 50 years, the Automotive Component Manufacturers Association of India (ACMA) has been working to facilitate a greater synergy between various stakeholders of the automotive component industry. The ACMA Centre for Technology (ACT) was formed in the year 1989 with a mandate to provide technical support and services to auto component industry. ACT has delivered since, in multiple configurations, with available resources and professionals from the industry.

To achieve excellence in manufacturing, we need competent people and robust systems/processes. In keeping with industry needs, ACT has pioneered implementing quality projects in auto component / automobile industry. Since inception, ACT helped more than 650+ manufacturing plants all over India through its signature - ACT Cluster Programs. ACT is also involved in designing and implementing ACMA

Awards, Domestic & International Study Tours, Seminars and Conferences.

ACT organized "1st ACT Case Study Competitions" at Pune in 2015 which was a grand success. Encourage by the success the 2nd ACT Case Study Competition was organized in October, 2015.

We are pleased to announce the 3rd ACT Case Study Competition in November, 2016. This time the competition will be organized in Pune.

These competitions provide a platform to the participants for direct learning as live case study presentations are shared by various competing companies from nationwide. These competitions provide the much needed exposure to the employees and also motivates them to deliver their best to their organizations.

The objective of this competition is to help companies witness actual Case Studies from various companies, take clues and reduce their Non-value added activities, besides the abundant cross learning opportunities.

Last date to submit Case Studies (for Level 1 Competition) is 20th September, 2016.

#### Streams (Group Category A): 3rd ACT Case Study Competition

Note for Stream topics: Case studies should have linkage for stream topics, however, examples shown like zero defect, zero rework are representative and you may choose similar/nearer topic for selection of case study area in any stream.

| ms      | Streams of 3rd   | ACT Case Study Competi                            | tion for Group Category A                                 | - November 2016                         |  |  |  |  |
|---------|--|---|---|---|--|--|--|--|
| Streams | Stream 1:<br>Improvement in Productivity                 | Stream 2:<br>Improvement in Quality               | Stream 3:<br>Cost Reduction                               | Stream 4:<br>Safety & Environment       |  |  |  |  |
|         | Productivity improvement                                 | Reduction/ Elimination of<br>Defects              | Waste elimination / reduction                             | Increase in Accident Free days          |  |  |  |  |
|         | Manpower optimization                                    | Reduction / Elimination in<br>Rework              | WIP reduction   | Reduction in Effect ( Zero<br>Discharge |  |  |  |  |
|         | Per person per day productivity increase                 | Reduction / Elimination in<br>Customer Complaints | Reduction / Elimination of<br>Accidents                   |   |  |  |  |  |
|         | Reduction in cycle time                                  | Reduction in Customer returns                     | Increase in Inventory Turn Ratio                          | Conservation of Resources               |  |  |  |  |
|         | Improvements in layouts for<br>material travel reduction | Reduction / Elimination in<br>Rejection/ scrap    | Energy Savings  | Use of renewable Energy                 |  |  |  |  |
| S       | Multi-machine concept                                    | Reduction / Elimination in<br>Warranty Rejection  | Saving through Kaizens /<br>Suggestions / QCC and similar | Carbon Foot Print reduction             |  |  |  |  |
| opic    | Changeover time reduction                                | Reduction in Incoming Quality<br>Rejection        | Cost saving through LCA                                   | Paper elimination                       |  |  |  |  |
| -       | OEE Improvement  | Reduction in Handling Damages                     | Yield improvement   | Wood elimination                        |  |  |  |  |
|         | Automation   | Reduction in Mis-Shipments                        |   | Use of environment friendly materials   |  |  |  |  |
|         |  | CPk Improvement                                   |   | Recycle / Reuse                         |  |  |  |  |
|         |  | COPQ Improvement                                  |   | Waste Management                        |  |  |  |  |
|         |  |   |   | Water Saving                            |  |  |  |  |
|         |  |   |   | Oil saving                              |  |  |  |  |



Improvement in Productivity: Increase in production output per person per day/shift/day Improvement in Quality: It should result in Customer (Internal/External) delight.

Cost reduction: Reduction in cost & increase in profit

Safety & Environment: It should result in improving mother earth / nature delight & employees. Accident elimination, converting Unsafe to safe conditions / Reduction or Elimination in risk, injury or loss to personnel &/or property.

### Streams (Group Category B): 3rd ACT Case Study Competition

Note for Stream topics: Case studies should have linkage for streams / topics, however you may choose similar / nearer to topics for selection of case study areas in any stream.

Zero Defect Quality: It should result in killing defects (At Final stage / In-process / Incoming).

Zero Effect Activities: It should result in reduction / elimination of effect on environment

IoT- Internet of Things: It should result in wireless networks between objects / systems / Elimination of manual interventions / adaptive controls.

Innovation/Automation: It should result in embracing new ways and elimination of manual efforts / time reduction/cost reduction/fatigue reduction and improving resources substantially.

| ms      | Streams of 3rd A  | CT Case Study Competi               | tion for Group Category               | B - November 2016                    |
|---------|---|-------------------------------------|---------------------------------------|--------------------------------------|
| Streams | Stream 1:<br>Zero Defect Quality                        | Stream 2:<br>Zero Effect Activities | Stream 3:<br>IoT - Internet of Things | Stream 4:<br>Innovation / Automation |
|         | Zero Defect   | Zero Effect / Zero Discharge        | RFID / Passive RFID                   | Inspection & Gauging                 |
|         | Zero Rework   | Conservation of Resources           | Sensors                               | Tooling                              |
|         | Zero Customer Complaints                                | Energy Saving                       | Barcodes                              | Fixture                              |
| П       | Zero Customer returns                                   | Carbon Foot Print reduction         | DNS                                   | New Process Technology               |
| S       | Zero Rejection/ scrap                                   | Oil elimination                     | Wi-Fi                                 | New Product Technology               |
| ŀ       | Zero Warranty Rejection                                 | Paper elimination                   | Mobile Computing                      | Process Automation                   |
| 15      | Zero Incoming Quality Rejection                         | Wood elimination                    | GPS tracking                          | Product Light Weighting              |
| -       | Zero Process Quality Rejection                          | Material Yield improvement          | Security sensors                      | Material Yield                       |
|         | Zero Handling Damages                                   | 100% Recycle / Reuse                | Condition sensors                     | Auto Material Handling               |
| П       | RFT (Right at First Time)                               | Waste Management                    | Near Field Communication (NFC)        | AGV-Automated guided vehicle         |
|         | Reduction in DPMO ( Defects per million opportunities ) | Water Saving                        | Grid Sensors                          | Pick to Light systems                |
| ı       |   |                                     | Mesh Networks                         | RGV- Robotic guided vehicle          |
|         |   |                                     | Telematics                            | Mechatronics                         |
|         |   |                                     | CDMA / GPRS / 4G                      | Automatic assembly station/line      |
| L       |   |                                     |                                       | Auto loading / unloading             |

Qualified and Shortlisted Case Studies of Level 1 Competition will be eligible for the final round of Level 2 Competition which is scheduled to be held at Pune on  $15^{th}$  &  $16^{th}$  November 2016 in Pune.

In addition to participation in Case Study Competition, interested companies can also nominate officials to participate as delegates. Nominal fee for delegate participation has been kept. Delegate Registration would open after 20th September, 2016.

Furthermore, various sponsorship options have been worked out for the companies which are interested to promote their brand in auto component industry through such events. The details of these sponsorship options are as follows:

A. Gold sponsors : (INR 2,25,000)
B. Silver Sponsors : (INR 1,50,000)
C. Principal Sponsors : (INR 1,00,000)
D. Associate Sponsors : (INR 35,000)
E. Stall Sponsorship : (INR 25,000)



| Sr | Sponsorship          | Sponsorship   | Benefits for Sponsors   |  |  |  |  |  |  |
|----|----------------------|---------------|---|--|--|--|--|--|--|
| No | Category             | Amount        |   |  |  |  |  |  |  |
| A  | Gold<br>Sponsor      | INR 2.25 Lakh | <ul> <li>Free entry for two shortlisted Case Study teams for the Level 2 Competition</li> <li>Display of Company Logo &amp; Name on Backdrop</li> <li>25 numbers complementary delegates for competition-(any one day)</li> <li>Opportunity to run company promotional film of maximum three minutes during Lunch &amp; Tea breaks</li> </ul> |  |  |  |  |  |  |
|    |                      |               | Company Brochure in doc pack (Hard copies / CDs to be provided by sponsor company in advance)   |  |  |  |  |  |  |
| В  | Silver<br>Sponsor    | INR 1.5 Lakh  | <ul> <li>Free entry for one shortlisted Case Study team for the Leve 2 Competition</li> <li>Display of Company Logo &amp; Name on Backdrop.</li> <li>15 numbers complementary delegates for competition—(any one day)</li> <li>Company Brochure in doc pack (Hard copies / CDs to be provided by sponsor company in advance)</li> </ul>       |  |  |  |  |  |  |
| С  | Principal<br>Sponsor | INR 1 Lakh    | <ul> <li>Display of Company Logo &amp; Name on Backdrop</li> <li>10 numbers complementary delegates for competition-<br/>(any one day)</li> </ul>   |  |  |  |  |  |  |
| D  | Associate<br>Sponsor | INR 35K       | <ul> <li>Display of Company Logo &amp; Name on Backdrop</li> <li>4 numbers complementary delegates for competition-<br/>(any one day)</li> </ul>  |  |  |  |  |  |  |
| Е  | Stall<br>sponsorship | INR 25K       | <ul> <li>Space to company &amp; company representative for products / services display during Level 2 Competition at Hotel. This will include one standard table &amp; 2 Chairs outside the main halls.</li> <li>2 numbers complementary delegates for competition-(Including exhibitors) (any one day)</li> </ul>                            |  |  |  |  |  |  |

Interested companies can pay the sponsorship amount through Local Cheque / Demand Draft in favor of "Automotive Component Manufacturers Association of India", payable at New Delhi towards the sponsorship amount for the 3rd ACT Case Study Competitions. (Last date to submit - 20th Sept 2016)

#### Note-

- 1) The Sponsorship amount is non-refundable.
- 2) Sponsors are to email their company logo in Coral Draw or JPG high resolution format minimum 10 days before event.
- 3) Sponsors are to Mail/Post their Company Brochures / advertisement hard copies / CDs as per sponsorship category minimum 10 days before event.
- 4) Gold sponsors need to send their film in DVD minimum 10 days before event.



## 3<sup>rd</sup> ACT Case Study Competition 15<sup>th</sup> & 16<sup>th</sup> November, 2016 at Pune

#### **Guidelines for Participation**

- a. Only implemented case studies will be considered for shortlisting under Level 1.
- b. One company can submit multiple number of case studies in all streams.
- c. Case studies to be submitted in soft copy (use Entry Form Case Study Level 1) by email to sakshi.karkamkar@acma.in,act@acma.inbefore 20th September 2016
- d. Only ACMA Member companies + ACT or UNIDO Cluster Companies (which may be non ACMA members but have participated / Presently participating in ACT, ACMA-UNIDO Programs) are eligible to participate.

#### **Filling Case Study**

- 1. Need to fill up all contents
- 2. Case Study (Level 1 entry form) should not be more than 2 to 3 number of A4 Pages (4 to 6 Pages, when printed on both sides of paper.
- 3. Graphs, Photographs can be added suitably in the same page.

#### **Rules for Competition**

- 1. There is no fee for submission of case study for entering (Level 1) this competition. If selected for next level (Final Level 2), participation fee per case study need to be paid to ACMA. Gold winner case studies from Level 2 will make a presentation at 2nd ACT Summit planned in January 2017 at Pune, free entry will be provided to Summit for 2 team members.
- There are different streams for entering (Level 1) for competition for Group Category A & B companies.
- Case studies must describe actual implementation of improvement projects.
- 4. Case studies which cleared screening (Level 1) will be invited to participate in Level 2 competition
- Venue for Level 2 Competitions: Pune. Communication would be sent to all shortlisted case study companies via email from ACMA office along with Presentation Template (Level 2).
- Competition time for Level 2 is 12 minutes for each Presentation in PPT format which preferably should have audio – video.
- 7. Level 2 competition will be separate for Group Category A & B companies.
- 8. One company can submit multiple case studies in any stream
- 9. Case studies can be presented in English / Hindi only.

- Stream wise winners of the competition will be announced on same day. All participating case studies will receive a Certificate of Participation.
- 11. Fees for Level 2 to be paid in advance or before competition - by cheque / demand draft / NEFT -RTGS transfer \*
- 12. Additional persons can attend the summit by paying appropriate delegate fees.
- Presenters at Level 2 competitions can be Staff or Operatives (We suggest to depute good speakers who have confidence and fluency in English / Hindi Language)
- 14. Case Study submitted during 1st & 2nd ACT case study competition are not eligible.

#### Judging of entries

Accepted entries will be judged by an independent Jury Panel having experienced and eminent professionals from the industry, constituted by ACMA. Entries will be evaluated on the basis of organization of content, quantified benefits to the organization.

#### Decisions

All decisions on all matters relating to the ACT Case Study Competition will rest with ACMA or anybody authorized by it and it will be binding on all contestants.



### 3<sup>rd</sup> ACT Case Study Competition 15th & 16th November, 2016 at Pune

#### Timelines & Fees Structure for all Streams

| Sr.<br>No. |   | Timeline & Location                                | Participation Fees                                     |  |  |  |  |  |  |
|------------|---|--|--|--|--|--|--|--|--|
| 1          | Receipt of Case study via email (send filled Entry Form)  | 20 <sup>th</sup> Sept<br>2016                      | No entry level fees                                    |  |  |  |  |  |  |
| 2          | <b>Level 1-</b> Scrutiny of case papers & Shortlisting for Final round by Jury Panel  |  | Level 1-<br>No Processing fees                         |  |  |  |  |  |  |
| 3          | Level 2 and Final Round — -Case Study team leader & team members need to deliver presentation -Winner declaration & Awards Distribution | 15 <sup>th</sup> & 16 <sup>th</sup><br>Nov 2016 at |  |  |  |  |  |  |  |
| 4          | Gold winner case studies to ma<br>presentation at 2nd ACT Summit  |  | Free entry to Summit for 2 team members per case study |  |  |  |  |  |  |

#### **Program Content**

The broad Program of the day will be:

- Parallel Case Study Teams Presentation for the Competition for Group Category A & B companies in different halls
- Group Category A & B winner teams will be decided by the team of Jury members & awarded in the Valedictory Session on the same day.
- Certificate of participation to all participant companies
- Complementary DVD of all case study presentations to all participant companies

## Benefits to the Winning Teams of this

Winner team will be awarded during the event with a trophy, certificate, memento and

- "Excellence in Manufacturing...Inestimable Mantras!!" A book written by C. Narasimhan
- Jury special award/s by chief guest for presentation skill, if any team member is found suitable.
- Opportunity to present selected gold winner case studies at ACT Summit (free entry of 2 team members to Summit)
- Circular to all ACMA members, informing winners of Case Study Competition.
- Gold award winning case studies of all streams will be published in "ACT Now" magazine (Each edition is circulated to more than 700 auto component manufacturers, more than 40 vehicle manufacturers and at important ACMA events)
- List of Winners & Photographs of gold winner case study will be displayed on ACT website.



## 3<sup>rd</sup> ACT Case Study Competition 15<sup>th</sup> & 16<sup>th</sup> November, 2016 at Pune

## Entry Form Case Study (Level 1)

| Case Study (Level 1)  |   |  |  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|--|
| (Font size- Arial 11)  Last date of case study submission is 20th September 2016 via email to sakshi.karkamkar@acma.in, act@acma.in   |   |  |  |  |  |  |  |  |  |  |
| Company / Plant Name: (Mention full company name)  Address:   | Contact Person Name *:  Designation:  Mobile:  Email:   |  |  |  |  |  |  |  |  |  |
| 1.1 Project Name :  1.2 Project Start Date : Project End Date: (Projects Done between Sept 2014 to Sept 2016**)   |   |  |  |  |  |  |  |  |  |  |
| 2. ACT Competition Streams #: Group Category A (Company Group Turnover < INR 150 Cr)  Stream 1- Improvement in Productivity  Stream 2- Improvement in Quality  Stream 3- Cost Reduction  Stream 4- Safety & Environment   | Group Category B (Company Group Turnover > INR 150 Cr)  Stream 1- Zero Defect Quality  Stream 2- Zero Effect Activities  Stream 3- IoT- Internet of Things  Stream 4- Innovation / Automation |  |  |  |  |  |  |  |  |  |
| photos / Tables / Graphs to support the data. In case Step 3.1 to 3.3 and you may use your presentation  3.1 Project linkage to company business: (Example ppm / companywide drive on quality year approach)  3.2 Project objective: (Example- To achieve zero def) | e- Company objective for current year is to achieve 10 h) (2-3 lines)   |  |  |  |  |  |  |  |  |  |



| 3.4 Analysis to find root ca | use: (Example-process | s of analysis & findin | ig of root cause, you | ı may use suitable |
|------------------------------|-----------------------|------------------------|-----------------------|--------------------|
| tools)                       |                       |                        |                       |                    |

3.5 Validation of root cause & Action:

3.6 Results to compare Before & After Status:

**4. What is uniqueness of this project?** Explain in brief (max. 3 lines):

**5.1 Benefits of the Project:** Tangible (Quantitative)

i) Financial Benefits ..... INR/Annum

**5. 2 Benefits of the Project:** Intangible (Qualitative) (Space, Time, Skill reduction etc.)

i)

ii)

iii)

#### **Company Permission**

We certify that the contents of the Synopsis are factually correct and we agree to depute our team to make a final presentation at the ACT Case Study Competitions 2016 (Level 2) scheduled to be held on 15<sup>th</sup> & 16<sup>th</sup> November, 2016 at Pune. In case this entry is shortlisted in Level 1 & if won Gold Award, we will present the case study (if selected for presentation) at 2<sup>nd</sup> ACT Summit, January 2017 at Pune.

All shortlisted case study presentations will be distributed into DVDs to all participating companies at the ACT Case Study Competitions 2016 (Level 2) & gold award winning case study presentation will be published.

Name: (Plant Head / Authorized Person) Designation:

Date :

In case of any query, interested companies can contact:

Ms. Sakshi Karkamkar, Executive Officer, Email: sakshi.karkamkar@acma.in, act@acma.in,

Mobile: +91 7387002181

And/Or

Ms. Pragya Srivatava, Executive, Email: pragya.srivastava@acma.co.in Mobile: +91 8826092235



<sup>\*</sup>All communication will be sent to the Contact person through email \*\* Case Study submitted during 1st & 2nd ACT case study competition are not eligible for participation.

## Information on Standardisation and Regulations

#### AIS Standards:

#### Following AIS have been hosted on web-site:

- 1. AIS-049 (Rev. 1): Electric Power Train Vehicles -CMVR Type Approval for Electric
  - Power Train Vehicles
- 2. AIS-119 (Rev. 1): Specific Constructional Requirements for Sleeper Coaches
- AIS-123(Part 2): CMVR Type Approval of Hybrid Electric System Intended for Retro-fitment on Vehicles of M and N Category having GVW > 3500 kg
- 4. AIS-123 (Part 3): CMVR Type Approval of Electric Propulsion Kit Intended for Conversion of Vehicles for Pure **Electric Operation**
- AIS-127 : Provisions Concerning the Approval of Adaptive Front-Lighting Systems (AFS) for Motor Vehicles
- : Electronic Stability Control 6. AIS-133 Systems

#### Following Standards are under Revision:

- 1. AIS-017 (Part 1, 2, 4 and 5) (Rev.1): Procedure for Type Approval and Certification of Vehicles for Compliance to CMVR. Revisions of AIS 038, 039, 040, 041: Standards on Battery Operated Vehicles
  - AIS-017 (Part 2) (Rev. 2): Procedure for Type Approval Certification of Agricultural Tractors for Compliance to CMVR.
  - AIS-017 (Part 4) (Rev. 1): Procedure for b. Conformity of Production of Agricultural Tractors for Compliance to CMVR.
  - AIS-017 (Part 1) (Rev. 1): Procedure for Type C. Approval and Certification of Vehicles for Compliance to CMVR.

#### Following Notifications have been Release through Ministry of Road Transport and Highways during April 16 to June 16.

- SO 1328 (E) dated 6th April, 2016 regarding implementation of new norms for maximum axle load limits for two axle airport buses (Tarmac buses) with air-suspensions
- Draft GSR 408 (E) dated 6th April, 2016 regarding implementation airport buses (Tarmac buses) provisions under CMV Rule 93C and 118
- Draft GSR 425 (E) dated 18th April, 2016 regarding implementation of provisions for vehicle carriers

- in articulated combination under CMV Rules
- 4. Draft notification dated 2nd May 2016 for introduction of provisions of Vehicle Location Tracking Device, Alert Button and Closed Circuit Television under CMV Rule 125 F for Buses
- SO 1472(E) dated 22nd April 2016 regarding postponement of requirement of Speed Governor fitment as per Sub-rule (2) of CMV Rule 118 till 1st July 2016
- 6. SO 1473(E) dated 22nd April 2016 regarding postponement of brakes for Agricultural Tractor and Trailers as per CMV Rules 96-C and 97 (3) till 1st January 2017
- 7. SO 1329 (E) dated 5th April 2016 exempting the motor vehicles transporting livestock from the purview of 125E of the CMVR up to 30th September, 2016
- SO 1434 (E) dated 18th April 2016 regarding axle 8. loads for Modular Hydraulic Trailers.
- SO 1599 (E) dated 2nd May 2016 regarding postponing requirements of Bus compliance as per AIS-052 (Rev.1) notified under CMV Rule 125C(1) up to 1st October 2016.
- 10. Draft GSR 472 (E) dated 2nd May 2016 regarding implementation of AIS-062 (Rev. 1) and AIS-007(Rev. 5) under CMV Rules 124-A and 126 respectively
- 11. GSR 473 (E) dated 2nd May 2016 regarding fitment of light weight container to two wheelers under CMV Rule 123
- Draft GSR 479(E) dated 3rd May 2016 regarding omitting requirement of Speed Governor Fitment as per Sub-rule (1) of CMV Rule 118 till 3rd May 2016.
- Draft GSR 530(E) dated 18th May 2016 regarding All India Authorization for Tourist Bus Permit Rule 2016
- 14. GSR 594 (E) dated 13th June 2016 regarding provisions on dimensional, speed governor and clarity on restricted use within Airside application for Airport Passenger Bus
- GSR 595 (E) dated 13th June 2016 regarding Procedure for managing vehicle recalls under rule 127A
- 16. Draft GSR 620 (E) dated 23rd June 2016 regarding implementation of Sleeper Coach norms as per AIS-119 (Rev. 1):2016 under CMV Rule 125 C
- 17. Draft GSR 621 (E) dated 23rd June 2016 regarding clarity on goods carried by vehicles carrying livestock under CMV Rule 125 E.



## Recently held activities and forthcoming activities of ACMA Centre for Technology

| New Programs                      | Companies<br>undergoing current<br>Clusters | Next Cluster<br>available<br>from |  |  |
|-----------------------------------|---|-----------------------------------|--|--|
| Tier 2/3 UNIDO Program            | 230   | Aug-16                            |  |  |
| Foundation                        | 24  | Sep-16                            |  |  |
| Advance                           | 24  | Dec-16                            |  |  |
| Engineering Excellence            | 8   | Oct-17                            |  |  |
| NPD Foundation                    | 6   | Sep-16                            |  |  |
| Zero Defect & Zero Effect ( ZED ) | 7   | Proposed                          |  |  |
| Export VDA 6. 3                   | 3   | Mar-17                            |  |  |
| Total Companies                   | 302   |                                   |  |  |

## Launch of 1st Export Cluster

Launched 1st ACMA Export Cluster on 13th Apr 2016 at New Delhi, participating companies-

- Gajara Gears Pvt. Ltd., Dewas
- Sanjeev Auto Parts Manufacturing Pvt. Ltd., Aurangabad
- Madhusudan Auto Ltd., Gurgaon











#### ACMA EXPORT CLUSTER ROADMAP

PM 46 G14 Rev 0 : Dec 2015

| Time in Months *   | 1                                     | 2   | 3 | 4 | 5   | 6 | 1 | 8 | 9 | 10 | - 11  | 12   | Deliverables | Implementation during 12 months   |
|--|---------------------------------------|---|---|---|---|---|---|---|---|----|---|--|--------------|---|
| 1. Preparing organisation for the Audit 2. Reduced customer/ internal/ supplier concerns  Supplier requirements of Auto OEMs  Supplier requirements of Auto OEMs  OEMs from other American 2  European countries.  |                                       |   |   |   |   |   |   |   |   |    |   |  |              |   |
| 1. Focus areas of Process elements P6.1 to P6.6 2. Focus areas of Process elements P5 & P7. 3. Focus areas of Process element P2, P3 & P4 4. Quality Tools, 7 types of wastes, 8D. & Problem-solving. 5. Machine and Process capability, Pre Control charts, 6. Failure prevention, Mistake proofing & Poka Yoke solutions 7. Continuous Improvement techniques including DDE & QFD  |                                       |   |   |   | Tools and Proficiency ( Different tools as per VDA 6.3) |   |   |   |   |    | Revise the basic concepts  Evidence in auditee organization.  Different tools as per VDA 6.3  Quicker Problem Solving |  |              | Revise the basic concepts, evidence of which is required to be seen in auditee organization. Organisation will be prepared for facing Customer Audits |
| method using the internal audit team.  Hands On train VDA audit VD |                                       |   |   |   |   |   |   |   |   |    |   | Actual implementation of VDA 6.3 with<br>Internal Audits |              |   |
| 1. System audit Vs. Process audit 2. Structure of VDA 6.3 3. Process elements P2 to P7 4. Generic launch Pad 5. Risk identification with Turtle diagram  | pen audit-q<br>ules / Kno<br>analysis | the VDA system of process auditing, audit-questions & link up to VDA questionnaire. s/ Knock Out criteria alysis with P1 ng customer requirements Property of ACT ( ACMA Centre for Technology ) 20 |   |   |   |   |   |   |   |    | Create awareness of VDA 6.3   |  |              |   |

Rev 0: Dec 15

## 1st ZERO DEFECT AND ZERO EFFECT Cluster Program (Report card of 9 Months)



C. Narasimhan Chief Mentor, ACT



Dinesh Vedpathak Head Cluster Program, ACT

ACMA Centre for Technology launched its ZED (ZERO DEFECT & ZERO EFFECT Cluster Program) in Sep 2016 with 7 Companies.

ZERO DEFECT QUALITY is dream of all and we have all options of tools to bring quality from % levels to PPM Levels. Today this is not acceptable other than Zero Defects. To get different results, we need to use different methods.

This Cluster is designed and being mentored by Mr. C. Narasimhan, Chief Mentor ACT with Mr. Dinesh Vedpathak, Head Cluster Program, ACMA as Counselor.

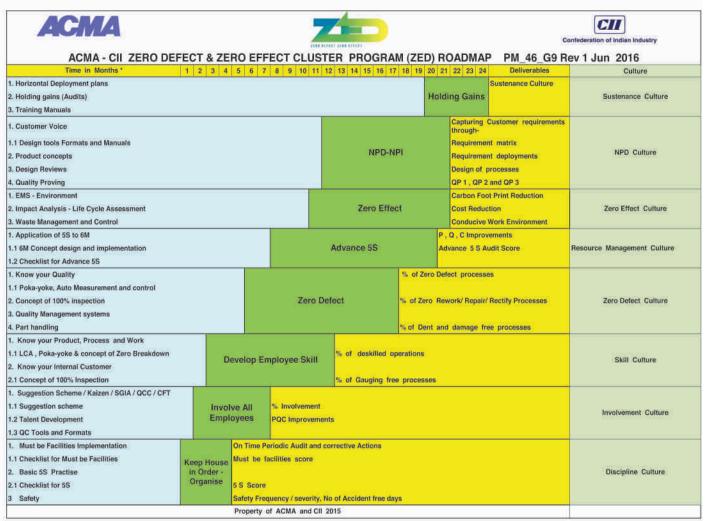
Progress of 9 Months journey proven that ZERO DEFECT is possible and it can be achieved in short span of time.

Here tool used are: 5 Senses, 5 Tatvas, DRVME sheet, PERT CHART, TTC and a room to fight war on quality called QUALITY WAR ROOM.

Actual data is shown from one of the participating company NEOLITE ZKW LIGHTINGS PVT. LTD, Bahadurgadh.

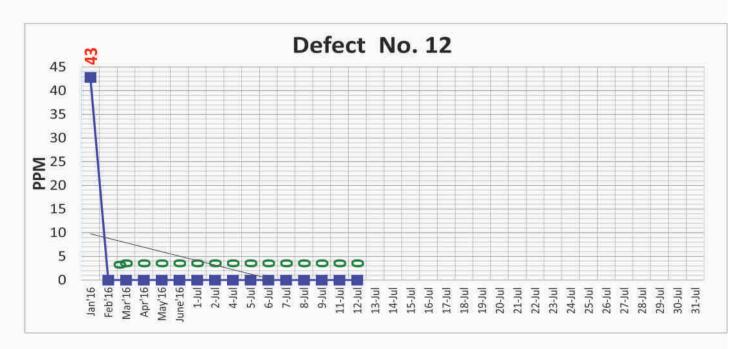


<sup>\*</sup> Timeline mentioned in terms of month is a guideline and can vary as per the situation. All course contents must be delivered within the cluster program duration."



Rev 1 : June 2016

<sup>\*</sup> Note: timelines mentioned are guidelines, All course contents to be delivered within total duration of program





### Launch of ACMA- GIZ- TERI One Year Project on Resource Efficiency on 25th April 2016

#### Participating Companies:

- Admach, Faridabad
- Sterling tools, Faridabad
- Wheels India, Rampur



- Objective: To improve resource efficiency utilization of secondary resources
- Scope: Material, Energy, Water and Waste
- Deliverables: Material yield improvement, Energy usage to be reduced by 30%, Water consumption to be reduced by 40%, Waste utilization.

#### ACMA/UNIDO CLUSTER PROGRAM - 12 months (to address needs of Tier II / III companies) Benefits

- Floor space utilization: 25%
- Absenteeism: 30%
- PPM:50%
- Waste Reduction:50%
- On time deliveries: 25%

- M/C breakdowns: 30%
- Set up times: 35%
- Lead times: 30%
- Inventory turns:25%
- Implement KPIs (Key Performance Indicators) tracking.
- Strong monitoring & review mechanism for "Sustenance & Continuous Improvement" "Return of investments in 3 months"

#### Fees Structure for ACMA Members for 12 months Program (Service tax extra)

Companies upto Rs. 10 crores P.A turnover: Rs.60,000/-Companies between Rs. 11 and 20 crores P.A turnover: Rs.90,000/-

Companies above Rs. 20 crores P.A turnover: Rs. 1,20,000/-

(Rs.5,000 extra will be charged for non ACMA members)

Strengths of ACMA UNIDO Programs: Dedicated, passionate, qualified, experienced and competent counselors. Use of easy to adopt training material (with depth and breadth)- covering modern manufacturing practices, performance indicators, archives of photos, videos, results achieved etc.

Essence of the Program: Help create a sustainable, continuous improvement culture with problem solving competencies and robust monitoring/review mechanisms and built on a foundation of Employee Involvement'.

## 8<sup>th</sup> ACT Team Meet 19<sup>th</sup> to 21<sup>st</sup> January 2016, Jaipur

ACMA Centre of Technology conducts regular meets to review the progress of its team and also provides a platform to exchange their views. Such meets are always conducted with a visit to a Plant.



19th January, 2016

Conference

20th January, 2016 21st January, 2016

Model Plant Visit at M/s National Engineering Industries Limited, Jaipur

Training Program on- "Team Bonding"



## ACMA Awards 2016 - Nationwide Awareness Sessions for Members



7<sup>th</sup> April, Pune



13th April, Chennai



14th April, New Delhi



27th April, Jamshedpur

Forthcoming Programs: Launching Shortly

1st Innovation Cluster-Efficient Resources, Future Mfg concepts, Constraints free thinking, Adaptive controls, Profit Improvement

1st Digitization Cluster M/C speaks to M/C and Human, Processes speak, Decide and take control

1st NPD Design Cluster Achieve at Design stage and develop structured design capability.

Leadership for Future (Mentoring CEOs) Not only develop, but learn process of development of leaders M.Sc. In Advance Lean Mfg (India-UK) Joint program.

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|  | Single                                  | issue (INR)  | year (thre               | e issues) (INR) |  |            |  |
| Advertisement Type   | Member                                  | Non Member   | Member                   | Non Member      | Member   | Non Member |  |
| Front Cover Outside  | 50000                                   | 65000  | 135000                   | 175000          | 225000   | 292000     |  |
| Cover Leaf Front - 2 Page Advt.                            | 35000                                   | 45000  | 95000                    | 123000          | 157000   | 204000     |  |
| Cover Leaf Back - 2 Page Advt.                             | 30000                                   | 39000  | 81000                    | 105000          | 135000   | 175000     |  |
| Footer Advt Company Logo & Slogan- (excluding Advt. pages) | 30000                                   | 39000  | 81000                    | 105000          | 135000   | 175000     |  |
| Back Cover Outside   | 20000                                   | 26000  | 54000                    | 70000           | 90000  | 117000     |  |
| Centre Spread (2 Page Advt.)                               | 25000                                   | 32000  | 67000                    | 88000           | 112000   | 146000     |  |
| Centre Spread (4 Page Advt.)                               | 50000                                   | 65000  | 135000                   | 175000          | 225000   | 292000     |  |
| Cover Inside (Front or Back of Newsletter)                 | 13000                                   | 17000  | 35000                    | 45000           | 58000  | 76000      |  |
| Inside Full Page   | 11000                                   | 14500  | 30000                    | 39000           | 50000  | 64000      |  |
| Half Page  | 6600                                    | 8600   | 17800                    | 23000           | 30000  | 39000      |  |
| Quarter Page   | 3900                                    | 5000   | 10000                    | 13000           | 18000  | 23000      |  |

(1) Service Tax will be charged extra, as applicable.
(2) Advt. Size for Full Page: in inches: 8.5"(width)X11"(Height) (3 mm bleed extra)

(3) Advt. Size for Half Page: 8" (width) X 5.25" (Height)

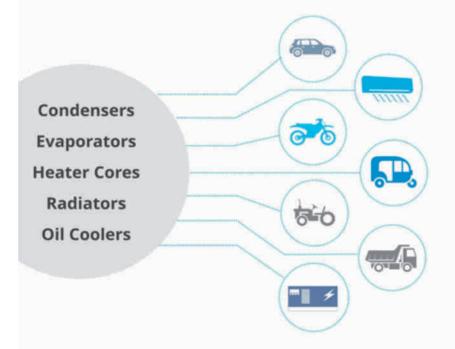
#### Terms and Conditions:

- 1. Advertisement should be an open file with all fonts and links with a color reference printout,
- 2. Advertiser should ensure that the size of advt. material provided by him is as per the size of the advt. space booked by him.
- 3. In case of a mismatch between size of material provided and space booked, the advertiser will be charged the cost of space booked OR actual advertisement printed, whichever is higher.
- All payments, through DD, Cheque or Net banking, should reach ACT within 30 days from the date of invoice.





## Customised Heat Exchange Solutions for Automotive & Non-Automotive Applications



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State of the Art facilities at 3 locations with excellence in specific product lines and market segments

Product innovation Focus - Strong Design & Development team-Complete Testing & Validation facilities.

ISO/TS 16949, EMS 14001 & OHSAS 18001 certified.











#### **About Talentonic**

Talentonic is an HR consulting, research and products company which was set up by senior HR professionals with both consulting and practicing experience. Talentonic is a scalable HR Services business, which can support Clients' need for growth and increasing sophistication of HR solutions. Our solution areas include



#### Our experience in the Automobile Sector

- We have conducted audits for more than 50 auto component companies on behalf of OEMs and Auto Associations to capture best practices in HR service delivery
- Currently partnering with a number of companies in the sector in defining, designing and implementing their HR plans in the long and short term including running engagement and 360 feedback survey

#### **Consulting Solutions**

- · Vision, Mission & HR Strategy
- Organization Structuring, Role Definition & Grading (Job evaluation)
- · Compensation and Rewards Management
- Performance Measurement & KPI cascade using frameworks like Balanced scorecard
- HR Policies and Procedures
- Development / Assessment Centers
- Manpower Planning and Optimization
- · Coaching and Leadership development
- Integrated offering to manage growth journey of an organization.

#### **Product Solutions**

#### talent 3sixty

 A 360-degree assessment tool, which allows you to use your own competency model

#### talentmaturity

 A tool for assessing the maturity and satisfaction with 8 major HR processes & 45 sub-processes.

#### **employee**engagement

 A global employee engagement solution. which is supported with a unique action learning solution, which helps to enhance engagement.