# Little things make perfection, but perfection is not a little thing.



Unceasing commitment to quality and business excellence since 1929.



Engine Valves · Tappets · Valve Guides · Manual Steering & Suspension Systems · Brake Linings · Clutch Facings · Disc Pads Power Steering Systems · Occupant Safety Systems · Steering Columns · High Pressure Die Casting Products



Our automotive range of products emphasizes our philosophy of "Inspiring Every Movement" symbolized by blending Engineering with innovation, crafted in every genre of Bearings we manufacture namely; Self Centering Clutch Release Bearing Assembly, Tapered Roller Bearings, Cylindrical Roller Bearings & King Pin Bearings



@ SETCO

















Trademarks shown above are property of respective company

Phone: +91 22 2492 6660, 4058 0707 Website: www.deluxbearings.com Email: info@deluxbearings.com

### Inside

1 <sup>st</sup> ACT Summit	4
Make in India – Beyond Zero	
Defect Quality: An ACT Approach	
Engineering Excellence in Manufacturing By Mr. Dinesh Vedpathak, Head Cluster Program	8
Launch of ACT MSME Lean Clusters	10
Case Studies of ACMA Award Winners Bosch Ltd., Bangalore	12
Delux Bearings Ltd., Wadhwan, Gujarat Litens Automotive (India) Pvt. Ltd., Chakan, Lumax Industries Ltd., Chakan, Pune Lumax DK Auto Industries Ltd., Pantnagar Wheels India Limited, Padi, Chennai	Pune
ACT News (September 2014 - December 2014 ) Launch of 1st ACT New Product Development Cluster	25
Closing of ACT SME Cluster (NR) & SME Cluster (Pantnagar)	26
Release of Book - 'Excellence in Manufacturing Inestimable Mantras!!'	27
Launch of ACT Advance Cluster 5	28
ACT - AOTS - HIDA Training Workshop and Study Tour to Thailand on "Essential Skills on Automotive Industry"	28
72 <sup>nd</sup> Session of GRE: Held at Geneva, Switzerland	29
6 <sup>th</sup> ACT Meet	30

### **Editorial Team**

**Publisher** : Mr. Vinnie Mehta, Director General, ACMA

**Chief Editor** : Mr. V. K. Sharma,

Principal Counselor, ACT

Assistant Editors : Mr. Jitender Rana, Mr. Binny Tomy

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

With immense pleasure, I present to you this issue of "ACT Now" focusing on "The First ACT Summit" as Issue's Special. ACT is organizing this Summit to commemorate its successful 25 glorious years of service to the industry. I am proud that these 25 years have been full of achievements, resulting out of the relentless contribution of ACMA leadership, the ACT Team and all other stakeholders.

The automobile and the auto component industry play a vital role in the Indian Economy. With return on focus on manufacturing by the new Government, it becomes imperative for the industry to not only focus on scaling-up but also improving on quality and productivity front. Unless each and every manufacturing enterprise becomes worldclass, we can't aspire to build a world-class auto components manufacturing hub.

I am happy that ACT is contributing in implementing world-class shop-floor practices in the auto component sector. ACT was founded in the year 1989. Since its inception, ACT has helped more than 450 manufacturing units all over India through its signature - ACT Cluster Programs. To celebrate the Silver Jubilee, the First ACT Summit with the theme "Make in India - Beyond Zero Defect Quality: An ACT Approach" is scheduled on 16th & 17th February, 2015 at Hotel Westin, Pune. The summit will showcase success stories and the growing capabilities of the auto component industry in India - in their quest From Best Practices to Next Practices. The present issue of ACT Now will share with you the broad details of this Summit.

I hope that you will enjoy reading this issue and also participate in the ACT Summit. Do kindly share your critical feedback on ACT Now in the enclosed format.

Wish you a very happy & prosperous new year ahead.

Srivats Ram

### 1<sup>st</sup> ACT Summit



# Make in India - Beyond Zero Defect Quality: - An ACT Approach

The First Ever Summit of ACMA Centre for Technology (ACT) scheduled on 16<sup>th</sup> & 17<sup>th</sup> February, 2015 at Hotel Westin, Pune.

ACMA is the apex body representing the Indian auto component industry. ACMA represents over 700 member companies that contribute more than 85% of the total auto component output in the organized sector.

ACMA Centre for Technology (ACT) was founded in year 1989 with an objective to provide technical support to Indian auto component industry. It has helped improve the component industry's competitiveness through its various cluster programs. In keeping with industry needs, ACT has pioneered implementing quality projects in component manufacturing units. Since inception, ACT has helped more than 450 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.

In 2014-15, ACT completed 25 years in service to the Industry. To commemorate the successful completion of 25 glorious years of ACT, the First ACT Summit with the theme "Make in India - Beyond Zero Defect Quality: An ACT Approach" is scheduled on 16<sup>th</sup> & 17<sup>th</sup> February, 2015 at Hotel Westin, Pune. The summit will showcase the success stories and the growing capabilities of the auto component industry - in their quest From Best Practices to Next Practices.

Indian economy has become vibrant and globalization is occurring at a very fast pace. This requires re-calibration of all business processes. Improvements and breakthroughs have been achieved by various companies. These improvements can be brought on a common platform for every-one to share and benefit therefrom. While sharing, we can also look into the future and prepare accordingly. ACT summit is organized to show the essence of manufacturing excellence journey through competitions, case study presentations, panel discussions and addresses by best knowledge individuals from the industry. ACT Summit will bring unsung Heroes on stage to appreciate their contributions to build brand India.

The engineers fresh out of institutes today need a gestation period to start delivering to the industry. There is an imperative need to make these engineers and other college graduates "Industry ready" by

giving them the required inputs at the institute level. ACT will work with institutes/universities to design programs/course materials that will help our students become ready to be assimilated in the industry immediately after college. Another area where institutes can work with the industry is "research projects" – funded by industry. These projects will aim at developing innovative products/technologies for the industry.

Unlearning to Learn...... is passe'. Learn right first time and at right time is the current need for preparing the future to convert "Make in India" to a reality.

The highlights of the ACT Summit 2015 include:

#### **Panel Discussions**

Eminent speakers will share their valuable thoughts and experiences with participants. Names of these speakers will be announced in Mid-February, 2015, ahead of the summit. The topics of Panel Discussion will be:

- Zero Effect
- Beyond Zero Defect Quality
- Industry Institute Interface

### **ACT Competitions**

The event provides a platform to industry to share their achievements in the form of case study presentations. ACT Competitions will recognize outstanding performances from the shortlisted case studies. This will also provide an opportunity to the delegates to learn from the case studies presented at the summit. The four competition streams are:

- 1. Stream 1: Quality (Customer Delight)
- 2. Stream 2: Environment (Nature Delight)
- 3. Stream 3: TEI Total Employee Involvement (Employee Delight)
- 4. Stream 4: Innovations (Stakeholders' Delight)

Last date for submission of case study, in specified format, is 15<sup>th</sup> Jan, 2015.

### Showcasing of ACT Cluster Learning

ACT Clusters are a proven approach to evolve to world-class manufacturing excellence levels. The various cluster programs of ACT follow a defined roadmap to achieve step-by-step improvements. These roadmaps have been designed very





meticulously, keeping in mind the need of Indian industry and environment. To cater to varied manufacturing set-ups, ACT has designed various cluster programs – ranging from ACT SME, MSME Lean, Foundation, Advance & Engineering Cluster Program. These road maps are continually reviewed and modified based on industry requirements. Additionally, new programs are designed based on the feedback from the industry. The recently launched ACT New Product Development Program is one of such initiatives paving way for building robust new product development capabilities in auto component industry.

The cluster programs have a glorious history of 14 years now and have attained a very respectable position in the Indian industry. ACT cluster programs have a very strong methodology which helps the cluster companies in improving quality and productivity while saving costs. These programs are virtually free since the participating fee is returned back to the companies swiftly in the form of countless improvements and cost savings.

ACT Team has been working relentlessly to ensure that benefits of these programs reach maximum number of manufacturing companies. However, to achieve the goal of "Beyond Zero Defect Quality", it is imperative that these programs reach every manufacturing unit, whether it is tiny or a colossal enterprise.

The Summit will showcase the learning and achievements of ACT Cluster Programs. Individual cluster companies will share their achievements with the participants.

### Experience Sharing by ACMA Award Winners

ACMA Awards are now considered as one of the most sought after recognitions of the auto component industry. Over the years, the process has been revised to make it more robust to acknowledge the true essence of world-class manufacturing. The four categories of ACMA Awards are Export, Quality & Productivity, Technology and Manufacturing

Excellence. The ACT Summit will not only provide an opportunity to Gold Award winners of year 2014 to share their journey with industry but also guide future aspirants who aspire to achieve this coveted recognition.

# Recognition to Unsung Heroes – Individual and Company

India abounds in talent and unique practices. There are many companies and individuals who have directly or indirectly contributed a lot to the betterment of the industry. Many a time, recognition for these achievements remain limited to a particular company level or department level. There is a fervent need that these contributions are recognized at a much larger platform, not only to boost such initiatives, but also to extend the benefits of such achievements to entire industry. Acknowledging this need, ACT Summit has reserved a very special slot to recognize these Unsung Heroes of the industry. There will be separate recognitions for Individuals and Companies. Any company or Individual is welcome to send its/his/her nomination to ACMA Centre for Technology (ACT). The achievements and contributions will be meticulously reviewed by a panel of jury comprising of eminent personalities from industry. These nominations will be accepted till 15<sup>th</sup> January'2015.

### Who should attend as delegate?

### The Summit is very useful for:

Manufacturing professionals who desire to achieve superior performance in today's challenging business environment, CEOs, Sr. Executives, Practicing Engineers, Supervisors, Associates from manufacturing and service industry, BU Heads, Plant and Production Heads, Technical Professionals and Consultants.

Fee for Participation: The summit fee includes participation in summit, lunch & tea-coffee for both the days, cultural program & dinner on first day and delegate kit.

Sr. No.	Company Category	Category Criteria (Group Company Sales Turnover)		gate Fee * ount Policy)
		Sales Furliover)	ACMA Member companies	Non Member companies
1.	Small	Up to INR 50 Cr	INR 2000	INR 2500
2.	Medium	Between INR 50 Cr to INR 150 Cr	INR 3000	INR 3500
3.	Large	> INR 150 Cr	INR 4000	INR 4500

<sup>\*</sup> Service tax @ 12.36% will be levied



"Make in India - Beyond Zero Defect Quality: An ACT Approach"

Discount Policy - Delegate fees includes 12.36% service tax									
Sr. No.	Number of		Small Company		Medium	Company	Large Company		
	Delegate	Discount	ACMA Member	Non Member	ACMA Member	Non Member	ACMA Member	Non Member	
1	1	<b>'</b>	2247	2809	3371	3933	4494	5056	
2	3	<b>'</b>	6742	8427	10112	11798	13483	15169	
3	4	15%	7640	9551	11461	13371	15281	17191	
4	10	25%	16854	21068	25281	29495	33708	37922	
5	15	30%	23596	29495	35393	41292	47191	53090	
6	More than 15		1	6 (	delegates f	ree	1	1	

### **Brand Promotion Opportunities**

The summit will also provide various brand promotion opportunities to those desirous of reaching out to auto component industry. Since distinguished persons from the industry, academia and government will be present in this summit, this is a unique opportunity for brand promotion. For companies to showcase their prominence before such a select gathering, various sponsorship options have

been worked out, the details of which are as follows:

A) Titanium Sponsors -: INR 10,00,000

B) Platinum Sponsors -: INR 7,50,000

C) Gold sponsors -: INR 5,00,000

D) Silver Sponsors -: INR 3,00,000

E) Principal Sponsors -: INR 1,75,000

F) Associate sponsors -: INR 1,25,000

Please refer to table below for sponsorship benefits.

	Benefits for Sponsors							
Sr. No.	Sponsorship Category	Sponsorship Amount	Eligible for Free Delegate	Benefits for Sponsors				
A	Titanium Sponsor	INR 10 Lakh	15 Free	<ul> <li>One Discount coupon – Applicable between 1<sup>st</sup> April 2015 to 31<sup>st</sup> March 2016, 20 % discount in One ACT Cluster Program for one year fees for one plant</li> <li>Ten Discount Coupons - Applicable between 1<sup>st</sup> April 2015 to 31<sup>st</sup> March 2016 25 % discount for ACT certification courses (One Coupon for one participant to avail discount)</li> <li>One Time ACMA Awards Site Assessment fee waived off for one plant for one category for 2015</li> <li>Full page advertisement in ACT Now magazine in three issues (Apr 15, Sep 15 &amp; Dec 15)</li> <li>During Summit 2015</li> <li>Video Advertisement at summit (3 Min film)</li> <li>Permanent display on both side of screen</li> <li>Logo on Summit Invitation Card</li> <li>Documentation Pack</li> <li>Rolling Display on screen</li> </ul>				
В	Platinum Sponsor	INR 7.5 Lakh	12 Free	<ul> <li>One Discount coupon – Applicable between 1<sup>st</sup> April 2015 to 31<sup>st</sup> March 2016, 15 % discount in one ACT Cluster Program for one year fees for one plant</li> <li>SIX Discount Coupons - Applicable between 1<sup>st</sup> April 2015 to 31<sup>st</sup> March 2016, 25 % discount for ACT certification courses (One Coupon for one participant to avail discount)</li> <li>One Time ACMA Awards Site Assessment fee waived off for one plant for one category for 2015</li> <li>Full page advertisement in ACT Now magazine in three issues (Apr 15, Sep 15 &amp; Dec 15)</li> </ul>				



www.acma-act.in

\_ December 2014 | 6

"Make in India - Beyond Zero Defect Quality: An ACT Approach"

			T	
				During Summit 2015  Video Advertisement at summit (3 Min film)  Permanent display on both side of screen  Logo on Summit Invitation Card  Documentation Pack  Rolling Display on screen
· Airo	Gold Sponsor	INR 5 Lakh	9 Free	<ul> <li>One Discount coupon – Applicable between 1<sup>st</sup> April 2015 to 31<sup>st</sup> March 2016, 10 % discount in ACT Cluster Program for one year fees for one plant</li> <li>Three Discount Coupons – Applicable between 1<sup>st</sup> April 2015 to 31<sup>st</sup> March 2016, 25 % discount for ACT certification courses (One Coupon for one participant to avail discount)</li> <li>50 % Discount in ACMA Awards Site Assessment fees for one plant for one category for 2015</li> <li>Half page advertisement in ACT Now magazine in three issues (Apr 15, Sep 15 &amp; Dec 15)</li> <li>During Summit 2015</li> <li>Video Advertisement at summit (3 Min film)</li> <li>Permanent display on both side of screen</li> <li>Logo on Summit Invitation Card</li> <li>Documentation Pack</li> <li>Rolling Display on screen</li> </ul>
D	Silver Sponsor	INR 3 Lakh	6 Free	During Summit 2015 Logos at  Dinner Area Registration Area Theme Area Logo on Dinner Invitation Card Rolling Display on screen Documentation Pack Half page advertisement in ACT Now magazine in One Issue ( Apr 15)
E	Principal Sponsor	INR 1.75 Lakh	3 Free	During Summit 2015 Logos at  Registration Area Theme Area Rolling Display on screen Documentation Pack Half page advertisement in ACT Now magazine in One Issue (Apr 15)
F	Associate Sponsor	INR 1.25 Lakh	2 Free	During Summit 2015 Logos at  Registration Area Theme Area Rolling Display on screen Documentation Pack

Do kindly respond to ACT at the earliest about your preferred options as only a limited number of opportunities are available on a first-come-first-served basis.

### Sponsorship for Stall Booking

Fee for sponsorship for stall booking at ACT Summit is as follows-

a) 3 X 3 meters: INR 2,25,000 b) 2 X 3 Meters -: INR 1,75,000 Stall facility inclusive of-

- One system table
- Two folding direct chairs
- Three spotlights

- One name on the fascia
- One 5 ampere plug point
- Synthetic carpeting

The Summit provides a unique opportunity for the manufacturing professionals, who desire to achieve superior performance in today's challenging business environment. Also it will open new gates for academia and students to prosper together with the industry.





acma-act.in December 2014 | 7

### Engineerging

# **Engineering Excellence in Manufacturing**

(Part 2 of 2)

To Access Part 1 of 2

http://www.acma.in/pdf/Act\_Now\_April\_2014.pdf

### Dinesh Vedpathak

(Continued from ACT Now April 2014 Issue Vol. 7 No.1)

Dear Readers, Thank you for your response for part 1. Let us recap part 1. We discussed that for achieving excellence we should have a road map or you should get proven road map like ACMA Centre for Technology is driving under its cluster programs.

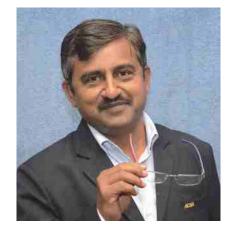
Today we are shedding some more light into methodology.

We ended previous part with "Do not use brains.... It does not mean as it is written.. Hidden meaning is "Follow System where already somebody has put brain.. and normally we use brain to find out escape routes which requires brain and here I have reservation.. in fact we should use brain for further improving.. Let us take day to day examples.. TV Remote control not working.... Here by default most of us try to hit the remote and here "Culture of Mistakes starts and child takes it from parents and he or she also repeats the same mostly in their life.

Achieving Excellence in manufacturing starts with building culture.. and culture can be built over the years.

In previous article you can very well judge that we have various types of cultures..like "Waiting





culture.. We never mind for delays". So question arises where is the birth place of Culture?

Answer is very much clear... IN BOARD ROOM...... Surprised.. OR Convinced.. No other option available. Board room discussion must start with happiness levels... of whom.. Board of Directors or Stake holders or society or Employees... Answer is ALL, Only sequence and importance matters.

Mr. C. Narasimhan, Past President, Sundaram Clayton Ltd (1st Deming Award Winning Company in India) and Chief Mentor, ACMA Centre for Technology always emphasizes that we should have MUST BE FACILITIES (if you need to know the details, write to us at act@acma.in) for Employees which should be in place prior to start of any new plant (for already in operation plants, we should provide this). Here Excellence starts with "Management Care for Employee needs". Like house builder handovers the key of your house /bungalow which is built as per your specifications... What about employee specifications and do we have the same in place?.. If you have.. You are a good company and should share with others starting with your own suppliers (Business partners) and nearby society areas.



Source: Wheels India Ltd, Chennai





www.acma-act.in December 2014 | 8

"Make in India - Beyond Zero Defect Quality: An ACT Approach"

# Clean to Cleanliness and Dirt to Dirtiness.

Hope we understand the meaning of cleanliness and if yes, then are we able to enjoy the tea by sitting in any corner of the company shop floor, anytime in the same dress like used for Business meetings... Please spend few minutes on this.

There is no magic in this world, similarly there is no fixed solution for achieving zero defect, However, Cleanliness helps you to reach nearer.

However, if you have a level of cleanliness like shown in pictures (Across company) then definitely you are one of the leading companies.

Defects are visible only in visible shop floor and ZERO Defect is possible when Employees clean their shoes before entering their work area (similar to holy places) and not other ways.. While leaving company.. We clean shoes as it may be carrying muck, metal particles and similar objects.

### Out of Box Thinking Or NO BOX Thinking

Out of box thinking means what?.. (I am not providing definition) and where it should be used and by whom... Employees got capability to think as they are not Robots... However we spend more time on programming Robots.. What about employee programming?..

Robots follow programs then if you want your employees to follow system.. Then we need to program employees similarly. Looks little confusing or abnormal?.. yes .. What we do not know, is either confusing or abnormal.. Like shown in



Source : Web



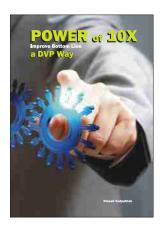
picture (source: Web).. Liquid is filled from bottom of glass and not from the TOP... No need to hold the bottle or open the tap...

Then, how we trigger this kind of thinking levels across organization which leads to achieve Excellence in Manufacturing. We need to start with first devising thoughts for moving forward with a quantitative benchmark for everything we do either within organization or our home front. We should provide appropriate resources for bringing a clean, transparent and open atmosphere which supports any kind of human beings to get molded for achieving higher levels. First step of Engineering Excellence starts with creating an environment where Employees feel happy to stay more time.

Wishing all readers a very happy new year and best wishes for taking this forward step.

### Dinesh Vedpathak

Head Cluster Program
ACMA Centre for Technology
dinesh.vedpathak@acma.in
+91 9545887799



Book your copies of "Power of 10X" By Dinesh Vedpathak





www.acma-act.in

"Make in India - Beyond Zero Defect Quality: An ACT Approach"

### Launch of ACT MSME Lean Clusters

Especially designed for small and medium enterprises at a very affordable cost of INR 1.0 to 1.6 lakhs\* for 12 months.

Many of the auto component manufacturers in India are small in size with low sales turnover. There is huge scope of improvement in these manufacturing units w.r.t quality and productivity. However, most of these companies find it difficult to initiate such initiatives due to high cost.

Keeping in mind the need of industry, ACMA Centre for Technology (ACT) has designed a special cluster program for the smaller companies at very affordable participation fee. The program has received wide acceptance from industry. This year, the following MSME clusters were launched by ACT:

\* Cost may vary depending upon location of the plant.

### Launch of ACT MSME Lean Cluster (NR)

13<sup>th</sup> September, 2014, New Delhi

Following 8 companies have joined this cluster:

### Sl. No Name of the company

- Meenakshi Polymers Pvt. Ltd., Dadri
- Neolite ZKW Lightings Pvt. Ltd., Bahadurgarh Plant 2
- 3 Neolite ZKW Lightings Pvt. Ltd., Gurgaon Plant
- New Swan Components Pvt. Ltd., Gurgaon
- New Swan Enterprises, Tapukara
- 6 Sellowrap Industries Pvt. Ltd., Gurgaon
- TKW Automotive Pvt. Ltd., Gurgaon
- 8 TKW Fasteners Pvt. Ltd., Gurgaon



Mr. SB Dokey, Expert-ACT Cluster Program will drive the cluster as counselor and Mr. VK Sharma, Principal Counselor ACT will mentor the program.

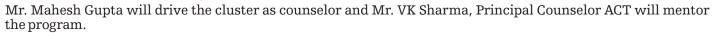
### **Launch of ACT MSME Lean Cluster (Pantnagar)**

15<sup>th</sup> September, 2014, Pantnagar

Following 7 companies have joined this cluster:

#### Name of the company

- Advik Hi-Tech Pvt. Ltd. (Plant 3), Pantnagar
- Advik Hi-Tech Pvt. Ltd. (Plant 9), Pantnagar 2
- Minda Industries Ltd. (Acoustic Division), Pantnagar
- Radiant Polymers Pvt. Ltd., Pantnagar 4
- 5 SBR Auto Components Ltd., Pantnagar
- Singla Forging, Pantnagar 6
- Trend Setters, Pantnagar



### **Launch of ACT MSME Lean Cluster (Satara)**

15<sup>th</sup> November, 2014, Satara

Following 7 companies have joined this cluster:

### Sl. No Name of the company

- R. C. Industries, Satara
- 2 Ashwini Industries, Satara
- 3 Jay Enterprises, Satara
- K. A. Enterprises, Satara







December 2014 | 10





- 5 Siddarth Engineering, Satara
- 6 Siddarth Industries, Satara
- Vardhman Industries, Satara

Mr. Aniket Khasnis will drive the cluster as counselor and Mr. Sunil Mutha, Senior Counselor ACT will mentor the program.

"Make in India - Beyond Zero Defect Quality: An ACT Approach"

### **Launch of ACT MSME Lean Cluster (Haridwar-Pantnagar)**

6<sup>th</sup> December, 2014, Pantnagar

Following 6 companies have joined this cluster:

### Sl. No Name of the company

- Amar Autotech Pvt. Ltd., Haridwar
- 2 Lumax Industries Ltd., Haridwar
- 3 PMP Auto Components Pvt. Ltd., Pantnatar
- Polar Auto & Engg. Industries Pvt. Ltd., Pantnatar 4
- 5 Sai Auto Industries, Pantnatar
- 6 SPM Automotive Pvt. Ltd., Pantnatar



Mr. Mahesh Gupta will drive the cluster as counselor and Mr. VK Sharma, Principal Counselor ACT will mentor the program

### **Launch of ACT MSME Lean Cluster (Ludhiana)**

9<sup>th</sup> December, 2014, Ludhiana

Following 6 companies have joined this cluster:

### Sr. No Name of the Company

- Amar Autotech Pvt. Ltd., Ludhiana
- 2 Apex Auto, Ludhiana
- 3 BINS Auto, Ludhiana
- 4 Chopra Autotech (Unit 1), Ludhiana
- 5 Chopra Autotech (Unit 2), Ludhiana
- Chopra Autotech (Unit 3), Ludhiana



Mr. Atul Gupta & Mr. S.B.Dokey will drive the cluster as counselors and Mr. VK Sharma, Principal Counselor ACT will mentor the program.

ACT wishes all the best to all the companies that have joined this improvement journey.

Compiled by



Aniket Khasnis – ACT

Atul Gupta - ACT

### Excellence in Manufacturing

### **Bosch Ltd., Diesel Systems Bangalore**







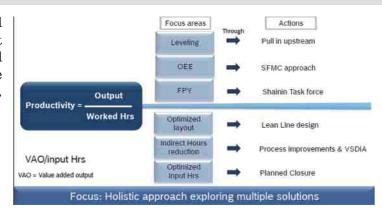


Gopikumar A Vice President, Commercial Plant Management



This case study is related to the "Diesel Injection: In-line Pump" used in Diesel applications such as Commercial Vehicles, Tractors, Generator sets, Earth movers etc. The In-line pump is at the end of its life cycle making any new investments impossible. The product is highly labour intensive and hence productivity improvement is a big challenge. At the operational level, since the value stream is more than 60 years old, it inherited legacy practices that adversely impacted issues such as First Pass Yield and OEE, type wise delivery fulfillment, delivery lead time and un-optimized machine layouts. Hence there was a need to improve the value stream holistically in line with the "Fit for Future" strategy.

Various elements that needed attention were: Pull in upstream processes, OEE improvement, First Pass Yield improvement, lay-out optimization and elimination of wastes in support processes. We adopted a holistic approach, at value stream level, as indicated in the picture, to improve productivity.



We adopted various approaches/techniques at different stages of the project as follows:

#### Following key actions have been taken:

- 1. Identification and implementation of Kaizen flashes in the complete value chain from Customer to Supplier.
- 2. Implementing Lean principles to improve leveling compliance.
- OEE improvement through Hourly monitoring of losses, A3 problem solving sheet, Pareto Analysis and systematic project implementation through
- 4. First Pass Yield improvement: Special project team

Project steps	Tools & Techniques
Problem identification & Deriving target condition	Value stream mapping     Brain storming     Value stream design – 2015     System CIP – A3 project sheet
Data collection	Bubble diagram     Hourly monitoring sheet     Pareto Analysis
Analysis & development solution	MTM analysis     Paper kaizen     Problem solving sheet     KPi tree     Lean line design
Validation & Testing	Mock line layout     Good-Bad Analysis
Sustenance	Point CIP     Layer process confirmation     Updation of - FMEA, Control plan, work     instruction sheet, Quality Assurance Matrix





### December 2014 | 12

was formed to carry out a bench marking study and implement the learning. Several statistical tools were leveraged during the project.

- 5. Layout optimization to reduce the operator loops and space optimization.
- 6. Implementation of Value Stream Design in Administration (VSDiA) projects in support processes to eliminate non-value added activities. This improved the lead times, cost reduction as well as inventory.

### **Achievements:**

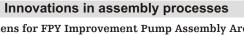
The unique overall value stream approach helped us to achieve various results:

# Focus areas UEE Output VAO - Value added output

Achievement of above results contributed to improve the productivity as shown in the following graph:







CASE STUDY OF ACMA AWARD WINNER

Kaizens for FPY Improvement Pump Assembly Area









### Shining Examples:

### Results of Layout optimisation

SI.No	Metrics	Initial State	Present State	Percentage Improvement
1	Productivity (Pumps/ associate/Shift)	12	18	50%
	Number operator (loops)	11.	9)	18%
3	Material movement (m)	34	21	38%
4	Space (m²)	112	64	56%

### Productivity improved by 50% w.r.t existing lines

### **Deployment of Lean Principles**



First Pass Yield improved & sustained

### Combining of stations: Old assembly live Vs New MTM line





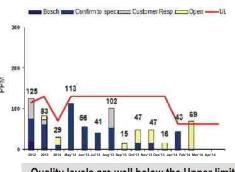
Coupling assembly -Tightening station



New MTM: Base cup station & Coupling Tightening station

Combined stations

No. Of operator loops reduced by 18%



Quality levels are well below the Upper limit





## Excellence in Quality & Productivity

### Delux Bearings Ltd. (PLANT - 1) Wadhwan, Gujarat



Kirti Rathod Chairman & Managing Director





High rejections in Bearing Noise at final assembly was reducing our output. Our SGIA team targeted to eliminate final assembly rejection PPM and improve quality & productivity by following systematic approach of LCA and Kaizen tools.

The learning of tools used for this project has been deployed for assembly of existing and new range of Ball & Roller Bearings, used in automotive and industrial applications.



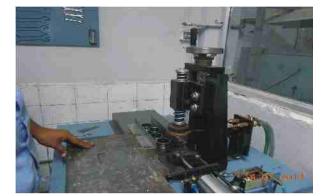
Before Condition of Bearings Assembly

High bearings Noise Rejection PPM (2700 PPM) during final assembly, Low Productivity,

High-Operator Stress & Unsafe Condition.

### Action taken to improve the situation

- Manual Controls replaced by Pneumatic Controls.
- Bearing Assembly by Induction Heating Method.
- Used Proxy Switches, Timer & Counter.
- Foot Switch Introduced for M/C on/off.



1st improvement Auto Unloading





www.acma-act.i

act.in

### December 2014 | 14

### SHOW 2

## 25

#### mako in maia Dojona zoro Doroce Quantyi An Aor Approac

### **Achievements:**

- Improved Quality & Rejection PPM to "0" (ZERO).
- Eliminated unsafe condition.
- 25 % Productivity Increased. (Before 1800 pcs/Shift After 2250 pcs/Shift)
- Cost Benefits Rs. 1, 50,000/- per annum.
- ROI within (one) month.
- Reduced operator Stress & Count Free M/C.
- Improved Knowledge.



### **Shining Examples**

### Before

### 5S Improvement

### After



Material lying in Gangway



Clear Gangway

### Productivity Improvement



Manual Roller Filling in Cage filling



LCA Done for Roller Filling In Cage

### Quality Improvement



Tips change Frequency monitored by Operator Manually





Tips Change Frequency monitored through Part Counter & Sound Alarm

Safe Company: Accident Free from more than 900 Days



## Excellence in Technology

**Litens Automotive (India) Pvt. Ltd. Chakan, Pune** 



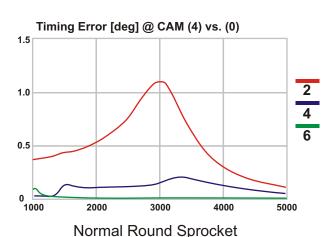


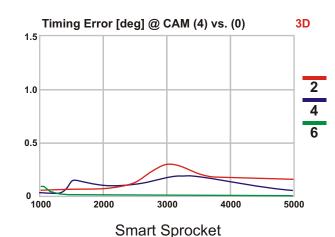
RajanbabuGovindan Director - India Operations

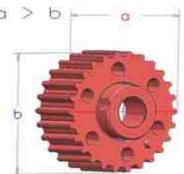


Litens Automotive (India) Pvt. Ltd. is a fully owned subsidiary of Litens Automotive partnership Canada. India plant started in 2009 with a mission of serving India and South East Asia customers with design, development and manufacturing services of critical engine accessory drive and timing drive parts. Smart sprocket is a nonround sprocket (oval, square, triangle etc) which induces opposite vibration as created by engines and thus cancel the valve train borne vibrations. Litens introduced this "Technology" in India First time with TATA Motors. NVH reduction and high durability are the most discrete advantages of smart sprocket.

Current engines in India have lead & lagging timing errors, which results in dynamic vibrations and increase in the system tension requirement. This also results in reduction of belt life significantly.











December 2014 | 16

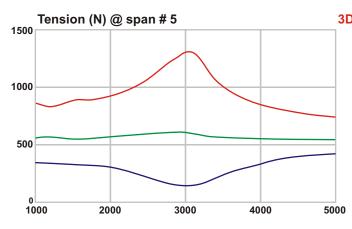


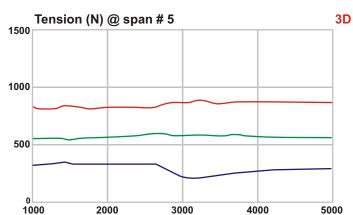
### Litens patented invention that provides improved control of timing system dynamics by reduction of system vibrations. Non- round Sprocket controls periodic excitations and reduction of significant dynamic system tensions.

Introduction of Smart sprocket in TATA 2.2 L Engines gave controlled vibrations and reduction in the dynamic vibrations. The added advantages are higher belt life, increase in fuel economy and improved system durability. Data for the improvements are with customers as per their internal validation tests.

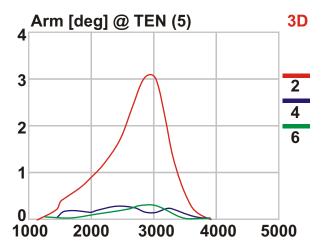
### Before and After Graphs

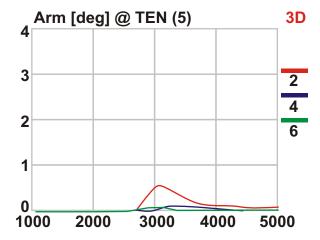
### **Dynamic Tension Reduction**





### **Timing Error Reduction**





### Advantages of Smart Sprocket.

- Reduction in tensioner arm movement up to 30%.
- Reduction in belt force at idler upto 30%.
- Reduction in belt forces at water pump upto 30%.



### Excellence in Technology

### **Lumax Industries Ltd.** Chakan, Pune

CASE STUDY OF ACMA AWARD WINNER







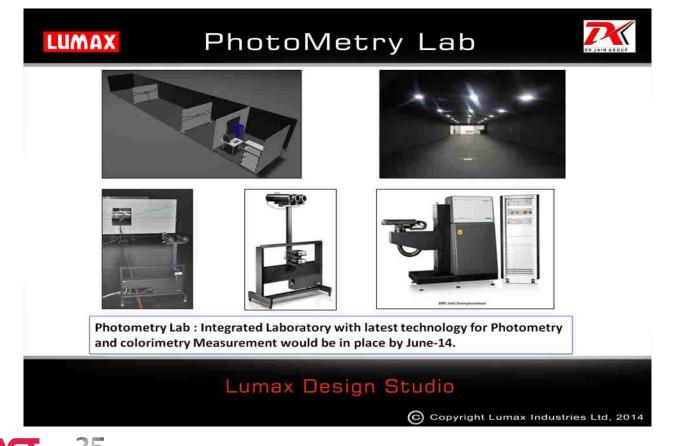
**Deepak Jain** Managing Director

Lumax being the market leader will sustain the position and grow through innovating products which meet the customer needs and their technology requirements @ affordable price. Lumax has been continuously focusing on elemental future technology of product so that it can easily integrate the technology between product, process and people.

Lumax has enhanced Self Reliance Journey so that customer can avail new technology products @ affordable cost on optimized time line with latest technology. Few considerations are:-

1) Complete In house product design

- 2) First to deploy the optimum technology in India by leveraging our global collaborator.
- 3) Promotion of New technology
- 4) Complete in house laboratory
- 5) Process cost reduction through new technology



### Lumax has:

- 1. Developed complete in house Laboratory
- 2. Formation on New technology group
- 3. Started state-of-the-art photometric Lab.
- 4. Introduction of vibration welding of Head Lamp.

"Make in India - Beyond Zero Defect Quality: An ACT Approach"

- 5. Started In-house Design Studio (Automotive Lighting) to introduce Idea to launch concept.
- 6. Concept proposals initiative from sketch to prototype preparation for customer demonstration.
- 7. In house electronics PCB design and manufacturing facility.

### Achievements

1) Through developing our human capital level, we had started designing product in-house through self reliance journey.



- 2) We have won reputed awards like:
  - a. First Prize in ACMA QC Story.
  - b. First Prize in co-creation, organized by Mahindra at domestic level.
  - c. Silver trophy by ACMA for designing light weight product in-house.
- 3) We had initiated in-house drive: CCC for improving process, increasing efficiency and save money of the organization through innovation ideas, horizontal deployment, cross functional team approach.
- Cost reduction of the product through innovation:-
- a. Enhanced Performance.
- b. Reduction in number of parts.
- c. Overall weight reduction by more than 50%, thus contributing to enhancing quality.



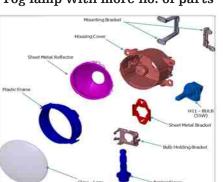




### **Shining Examples**

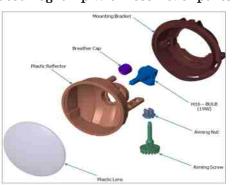
### Before

Fog lamp with more no. of parts



### Innovated Fog lamp with less no. of parts

After







### Excellence in Manufacturing

### **Lumax DK Auto Industries Ltd. Pantnagar**









Lumax vision is to be the preferred source for its customers. To ensure customer delight, we adopted TPM Philosophy under Bajaj Auto guidance in the Year 2008 and achieved the JIPM-TPM Award in the year 2012. Lumax became the first Indian auto lighting company to achieve this coveted award. During this journey towards excellence, Team Lumax also achieved BAL-TPM and BAL-TPM Excellence Awards. At the quality front, Lumax received various levels of awards from Bajaj Auto, e.g, Bajaj Quality Award - Bronze, Silver and Gold Categories. The improvement journey continued and Team Lumax won the Silver Award in ACMA Manufacturing Excellence in 2014 after winning ACMA Gold Award in Quality & Productivity in the year 2009. The team is now preparing for JIPM-TPM Consistency Award. My best wishes for creating the new milestones not only for Lumax Group but also for the entire Indian automotive industry.

Lumax DK plant was established in tax free zone as a single source for Bajaj Auto for supplying the complete assembly of front module of vehicle named as "Fairing Assembly" consisting of head lamp, blinkers, cowling and cluster assembly and "Rear Module" named as fender assembly consisting of blinkers, fenders, Number plate and tail lamp assembly.

With the great increase in production level, multiple launches of various models and stringent quality expectations by Bajaj Auto, it was the need of time for Lumax to improve in manufacturing flexibility, productivity and quality. Also focus on manufacturing space creation was imperative by use of vertical space.

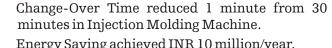
Lumax DK team adopted the TPM philosophy in manufacturing with the help of Bajaj Auto. To develop the TPM understanding, Senior Team Members were trained, external consultants were hired and the TPM kick off was done. Improvement was required in all areas of manufacturing as there was great demand from customer. For starting the improvement journey one highest problematic cell was selected and core team of TPM trained managers worked in this

cell and improved all POCDSM parameters. After getting satisfactory results, the improvements were horizontally deployed across all the manufacturing cells of plant. It took continuous four years for the team to achieve the JIPM TPM manufacturing Excellence Award and ACMA Manufacturing Excellence Award.

### **Achievements:**

By implementation of TPM, all PQCDSM parameters of each cell improved significantly:

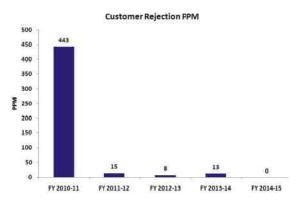
- The manufacturing cost of the plant is reduced by
- Plant achieved double sale from the same infrastructure.
- Manufacturing flexibility increased with the introduction of set-up free conveyorised assy. process to maintain 100% on-time delivery at customer end.
- With the implementation of Poka-yokes in manufacturing process and continuous training to the workforce, customer complaints eliminated and warranty complaints were reduced by 80%.
- Process Rejections reduced 70% in all processes.

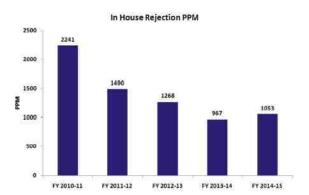


- Energy Saving achieved INR 10 million/year.
- Supplier rejection reduced by 97%.

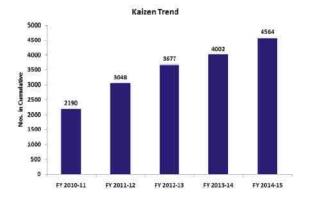
- Lumax training institute established to provide continuous training to associates.
- Continuous efforts to maintain injury free plant.
- Achieved ITR upto 50 level.

### Shining Examples



























### Excellence in Technology

### **Wheels India Limited** Padi, Chennai



Managing Director





The commercial vehicle wheel manufacturing division of Wheels India Limited, Padi, Chennai is into manufacture and supply of steel wheels for Trucks, Buses, Trailers and defense vehicles. We were facing stiff competition in the commercial vehicle wheel segment. The input material cost is significant part of wheel cost and yield improvement is a necessity. We have developed this patented innovative technology to reduce input material. Our team of talented engineers have successfully productionised the process and we have installed state of the art manufacturing line to use this technology. This will help us in competing better.

In the conventional disc process, the circular blank is cut from a rectangular plate. After pressing to the required shape, the center portion of the material is pierced to facilitate mounting the wheel on the vehicle. In this process of disc making, a substantial portion of the material is lost as design/engineering wastage. New methodology to be developed for reducing the wastage



To reduce the design/engineering wastage in the disc, a method of manufacturing the disc was developed comprising of circling the rectangular strip to form a band, flash butt welding the band to form hoop. A series of forming steps are performed to create the disc. The product was successfully validated for fatigue life and then we established an automated production facility.

### Achievements

Applied Hoop disc innovation in utility patent - App NO: 904/CHE/2011 Raw material (steel) requirement is reduced Fatigue life of the wheel is improved Won Gold award for ACMA Excellence in Technology award 2013-2014



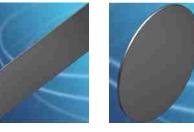


December 2014 | 22

### Shining Examples

### **Before - Conventional Process**





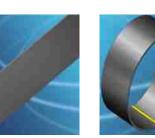
Strip







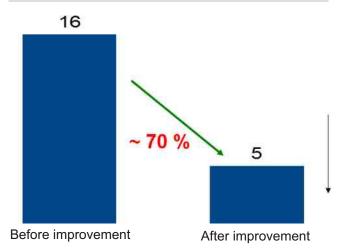
**After - Innovative Process** 





Disc Finishing

Manpower Reduction By Automation



#### **Before - Conventional Line**







## LUMAX

### **LUMAX DK AUTO INDUSTRIES LIMITED**



**Body Side** 

Moulding

Bumper

Corner

Protector

Exhaust

Finisher

**OSRVM** 

Blinker

Door

Viser

Puddle

Lamp

Mood

Light

PRODUCT RANGE

**ACCESSORIES DIVISION** 

### PRODUCT RANGE COMPLETE LIGHTING SOLUTION PROVIDER TO OEM



Fairing Assembly



Fender Assembly



lead Lamp Assembly



Tail Lamp **Assembly** 



FACILITY:

TECHNOLOGY:

AWARD:

**Conveyorize Assembly Line** 

Over head Conveyor for Material Handling Over head Conveyor for Finished good

ISO 14001 & OHSAS 18001 certify Company JIPM TPM Excellence award winner Company

Blinker **Assembly** 

Hardcoat machine for transparent coating on Head Lamp Lens Metalizing Machine for aluminium coating on Reflector surface

Paint shop Process for painting ABS Plastic component

33 Nos. of Plastic Injection moulding Machines ranging from 80Ton to 750Ton

Assembly process for assemblying all part for complete lighting solution

**Automatic Ultrasonic Welding Process & Vibration Welding Process** 

BAJAJ TPM award & Bajaj TPM Excellence award winer Company

Received Customer Quality Bronze, Silver, Gold Award Received ACMA Gold award for Quality & Productivity Received ACMA Silver award for Manufacturing Excellence

# CUSTOMERS











MARUTI

Plant :

Plot No. 12, Sec. 10, HE SIDCUL, Pantnagar. 263153 Phone: 09997192127,128

B 85 &86, Mayapuri Industrial area Phase I, New Delhi 110064 (India) Phone: 011 28111777,28116990

Web: www. lumaxdk.com

Dist: US Nagar (Uttrakhand) Web: www. lumaxdk.com Head Office:

Fax no: 011 28115779









ISO 14001 & OHSAS 18001





TPM-Lighting LUMAX, Lighting Life

"Make in India - Beyond Zero Defect Quality: An ACT Approach"

### **ACT News**

(September 2014 - December 2014)

### **Launch of 1st ACT New Product Development (NPD) Cluster**

29<sup>th</sup> September, 2014 in Chennai

Future manufacturing is much different than we understood it in past and we do not have time for this. Print to manufacture is getting back seat in- front of Design to Manufacture. This has got a deeper meaning and is a basic need of tomorrow. Right at First time, we know this requirement from long time, however, we use to make it right and today may be making. This is (was) ok for the past and not for the future. To get Right at First time, we need to design a system which ensures that you can get a product Right at First Time. For this we need to have a matured system in place for New Product Development. New Product does not mean entirely new product. Modifications in present products have to undergo the process again.

The much awaited NPD cluster program of ACT was launched on 29<sup>th</sup> September, 2014 in Chennai. The cluster program will focus on building new product development capabilities in members. Mr. Srivats Ram, Chairman ACT, Mr. C. Narasimhan, Chief Mentor ACT, Mr. Dinesh Vedpathak, ACT Head Cluster Programs, Mr. K. Chandrasekhar, National Program Coordinator (ACMA-UNIDO), Mr. VK Sharma, Principal Counselor ACT, Mr. S. Selvamani, Mentor, ACT NPD Cluster, Mr. R. Sharma & Mr. S. Narayanan (Expert – ACT NPD Cluster Program), ACT Team and CEOs from the participating companies attended the launch ceremony.

Chairman ACT mentioned that new product



development is an area where the Indian auto component industry has much scope of improvement. The cluster program has been designed keeping in mind the present and future needs of industry. Mr. Vedpathak shared the details of the cluster program with all the

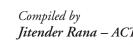
This program is mentored by Mr. S. Selvamani and counselled by two ACT Experts Mr. R S Sharma and Mr. S. Narayanan.

#### Deliverables:

- 1. Perpetuity Factor = NPD Sales / Total net sales (Credit for 3 Years from Launch Date)
- 2. Quality Early Complaints PPM Trend up to 6 Months Tracking. Zero PPM after 6 months
- 3. Cost Target Cost Vs Actual Cost

ACT wishes all success to all participating companies. Write us if you want to improve your NPD systems at dinesh.vedpathak@acma.in and act@acma.in

ACT NPD FOUNDATION CLUSTER ROAD MAP						PM_46_G8 ( Provisional ) Rev. No.: 0 May 2014 Page 1 of 1	
Time in Months	1 2 3 4 5 6	7 8 9 10 11 12 13	14 15 16 17 18 19	20 21 22	2 23 24	Deliverables	Expected Outcome during 2 years
DFM / DFA					I	Improved quality	
VA/VE			Prod	uct	I	Reduced cost	Deployment of all initiatives
Customer voice / QFD - basic concepts			Optimiz	Optimization		Improved customer satisfaction	for one product project.
DOE							
Target cost				Set	ting and achi	ieving target costs	A 1: m
Cost models	ost models Produ			ct Cost Management		Achieve Target cost for one product project	
Detail cost estimation							
Project management				On time deliv	ery of projec	ets	
Gate and Project reviews		<b>New Product Del</b>	ivery Assurance High perpetuity ratio			Achieve on time delivery of one product project	
Red box management							
Requirements management			First time right pro	ducts			
FMEA and control plan	New Produc	ct Quality Assura	Consistent product	quality			Achieve First Time Right and Consistent product
Product validation and quality proving	New 1 route	ct Quarrey 7133ura					Quality for one product
Technical reviews							
NPD process establishment	Basic NPD process	Controlled process					Parallia II NA
Organizational alignment	and organization						Establishing NPD process for one product
Cross functional teams	setup						
		Property of ACT (	ACMA Centre for Technol	ogy)			







### Closing of ACT SME Cluster (NR) & ACT SME Cluster (Pantnagar)

The closing ceremony of ACT SME Cluster (NR) was organized on 13<sup>th</sup> September, 2014 in ACMA Delhi office. The cluster was counselled by Mr. Atul Gupta, Counselor ACT and mentored by Mr. V.K. Sharma, Principal Counselor ACT.

Following companies were part of this cluster:

- 1. Amar Autotech Pvt. Ltd., Ludhiana
- 2. Meenakshi Polymers Pvt. Ltd., Dadri
- 3. New Swan Components Pvt. Ltd., Manesar
- 4. Neolite ZKW Lightings Pvt. Ltd., Gurgaon
- 5. Ranee Polymers Pvt. Ltd., Manesar
- 6. TKW Fasteners Pvt. Ltd., Gurgaon



Closing of ACT SME Cluster (NR)



Closing of ACT SME Cluster (Pantnagar)

Closing Ceremony of ACT SME Cluster (Pantnagar) was organized on 15<sup>th</sup> September, 2014 in Pantnagar. The Cluster was counselled by Mr. Mahesh Gupta, Counselor ACT and mentored by Mr. V.K. Sharma, Principal Counselor ACT.

Following companies were part of this cluster:

- 1. Eden Motors
- 2. Kusalava International Ltd.
- 3. Lumax Ancillary Ltd.
- 4. Mantri Metallics Pvt.Ltd.
- 5. Radiant Polymers
- 6. Singla Forgings
- 7. Technocrat Connectivity Systems Pvt. Ltd.

Mr. Dinesh Vedpathak, Head Cluster Program-ACT, Mr. VK Sharma, Principal Counselor ACT and respective counselors attended this program along with the CEOs & representatives of cluster member companies.

These cluster programs were initiated by ACT with a purpose to enhance performance of small enterprises. The Roadmap focuses on developing improvement culture in the organizations.

All participating companies made substantial progress in Work Place Improvements and Ownership which resulted in overall saving of INR 2 Crore (6 companies in NR Cluster) and INR 1.8 Crores (7 companies in Pantnagar cluster). As a part of Talent development, this cluster has developed a pool of experts for each topic covered under this cluster roadmap.

ACT congratulates all participating companies for successfully completing this improvement journey.







December 2014 | 26

Compiled by

Binny Tomy - ACT

"Make in India - Beyond Zero Defect Quality: An ACT Approach"

### Release of Book - 'Excellence in Manufacturing...Inestimable Mantras!!'

-Written by Mr. C. Narasimhan, Chief Mentor ACT

11<sup>th</sup> September, 2014 in New Delhi



(L - R) Ms. Sapana Baravkar, Counselor ACT, Mr. Srivats Ram, Chairman ACT & Past President ACMA, Mr. Harish Lakshman, President ACMA, Mr. Anant Geete, Union Minister of Heavy Industries & Public Enterprises, Mr. Vikram Kirloskar, Vice Chairman, Toyota Kirloskar Motors Ltd., Mr. Sumit Mazumder, President Designate, CII & Chairman & Managing Director, TIL, Dr. Rajan S. Kotoch, Secretary - Heavy Industry and Public Enterprises, Govt. of India, Mr. Ramesh Suri, Vice President ACMA, Mr. C. Narasimhan, Chief Mentor ACT and author of the book, Mr. Dinesh Vedpathak, Head Cluster Program ACT.

The book titled 'Excellence in Manufacturing... Inestimable Mantras!!' was released at ACMA Annual General Meeting and National Conference held on 11<sup>th</sup> September, 2014 in New Delhi. The book is authored by Chief Mentor ACT - Mr. C. Narasimhan, popularly known as CN. Mr. Narasimhan has a vast experience of industry and was the President of Sundaram Clayton when the company became the first Indian company to win the Deming Prize and the Japan Quality Medal. Post his retirement, CN has relentlessly worked with over 100 Indian manufacturing companies, for over 14 years, mentoring them - using concepts developed in TOM, TPM and Lean to improve their competitiveness.

While there is no shortage of books on manufacturing excellence, the lack of clarity of concepts inhibits actual implementation of learning on the shop-floor. In his book, CN has come to our rescue by simplifying complex manufacturing concepts. This simplification helps one to accomplish the same tasks with much less energy and resources. The book takes us through the basics of complex manufacturing systems in a common sense fashion. CN's incisive skills of

observation and logical explanation are eye-opening.

ACMA Center for Technology is grateful to Mr. Pravin Malhotra, Chairman - Nipman Fastener Industries Pvt. Ltd. for sponsoring first 1000 copies. Readers can visit www.acma-act.in to access soft copy of 'Excellence in Manufacturing... Inestimable Mantras' authored by Mr. C. Narasimhan.



Compiled by Sapana Baravkar – AC

One complimentary copy of book is being sent to all ACMA members. For booking additional copies, kindly contact:

> Ms. Sakshi Karkamkar +91 7387002181 sakshi.karkamkar@acma.in







"Make in India - Beyond Zero Defect Quality: An ACT Approach"

### **Launch of ACT Advance Cluster 5**

8<sup>th</sup> December, 2014, New Delhi

The 5th ACT Advance Cluster was launched on 8th December, 2014 at ACMA Delhi office.

Following 8 companies have joined this program:

- 1. AutofitPvt. Ltd., Dharuhera
- 2. Delux Bearings Ltd. (Plant 1), Wadhwan
- Gold Seal Saargummi India Pvt. Ltd., Daulet Abad
- 4. J.K.Fenner (India) Ltd., Hyderabad
- 5. Nipman Fastener Industries Pvt. Ltd., Bawal
- NTF (India) Pvt. Ltd., Manesar
- 7. Setco Automotive Ltd., Baroda
- 8. Wheels India Limited, Pune

Mr. VK Sharma, Principal Counselor ACT and Mentor of ACT Advance Cluster, welcomed everyone to the launch ceremony. He mentioned that all the participant companies have achieved certain level and now this cluster will help them to improve further and consolidate the gains. The ACT Advance cluster brings a cultural change in organizations which ultimately helps sustaining the gains. ACT Advance Cluster helps in improving the top and bottom line and that is what any business unit wants.

Mr. Pravin Malhotra, MD, Nipman Fastener Industries Pvt. Ltd., joined the session as Chief Guest. He advised that this is an opportunity for the companies and each need to follow the cluster roadmap strictly and with full confidence. He mentioned that his company has been associated with ACT Cluster programs since long, and the wish is to be in some of such initiatives of ACT always.



Mr. Vinnie Mehta, Director General ACMA mentioned that present Indian Govt. is focusing lot on improving manufacturing sector and this is a good time for companies also to focus on self-improvements.

Mr. Dinesh Vedpathak, Head Cluster Program ACT congratulated all the companies for taking this prudent decision of joining this cluster. He mentioned that Quality of Product and Cost of production are very important factor in the auto industry. Advance cluster is focused on lean practices.

Mr. SB Dokey, Expert – ACT Cluster Programs, will be providing the counselling support to this cluster. Mr. Dokey has a vast experience of implementing quality projects in auto component industry.

ACMA Centre for Technology (ACT) wishes the best to each company.

Compiled by

S.B. Dokey – ACT

### **ACT - AOTS - HIDA Training Workshop and Study Tour to Thailand on** "Essential Skills on Automotive Industry"

8<sup>th</sup> – 11<sup>th</sup> December, 2014. Thailand

ACMA Centre for Technology (ACT) in association with HIDA (Japan) and AOTS Alumni Society (Thailand) organized four days workshop and study tour to Thailand from 8<sup>th</sup> to 11<sup>th</sup> December, 2014. The topic of this study tour was "Essential Skills on Automotive Industry". 10 persons from Indian Auto Component Industry participated in this program. The participants were from following ACMA member companies:

- Goldy Precision Stampings Pvt. Ltd
- Lumax DK Auto Industries Ltd.
- Sandhar Technologies Ltd.
- Subros Ltd.
- Talbros Automotive Components Ltd.
- York Transport Equipment India Pvt. Ltd.

Mr. Mahesh Gupta, Counselor ACMA Centre for Technology (ACT) represented ACMA in this study tour.

In addition to Class Room Sessions and lectures by Thai

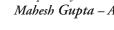


Plant visit at Toyota Motors, Thailand

Experts, the program also involved three plant visit to best manufacturing industries in Thailand, including Toyota Motors. The feedback received from all the participants is tremendous.



Compiled by Mahesh Gupta - ACT







December 2014 | 28

"Make in India - Beyond Zero Defect Quality: An ACT Approach"

### 72<sup>nd</sup> Session of GRE: held from 20<sup>th</sup> to 22<sup>nd</sup> October 2014 at Geneva. Switzerland

72<sup>nd</sup> session of GRE was held from 20<sup>th</sup> to 22<sup>nd</sup> October 2014 at Geneva, Switzerland, 21 countries participated along with 6 Non-Government Organizations. Indian delegation consisting of 4members participated in the session.

- Mr. B. V. Shamsundara, General Manager, ARAI, Member Secretary, India-GRE
- Mr. Uday S Harite, Expert-Technical Services, ACMA center for Technology (ACT), Pune
- Mr. Shivas Dhar, Senior Manager, Lighting Design-Maruti Suzuki India Limited, Gurgaon.
- > Mr. Feroz Khan, Assistant General Manager-Homologation, Tata Motors Limited

Following Issues were discussed:

UN Regulation Nos. 37 (Filament lamps), 99 (Gas discharge light sources) and 128 (Light emitting diodes light sources)

The above proposals were discussed and documents were adopted to send to WP.29 in its March 2015 Session for consideration.

- Installation requirements of Lighting and Light signaling Devices for 4 W (UNR 48)
- Automatic leveling devices for dipped beam headlamp having LED light source This document was discussed in conjunction with manual / automatic leveling devices, Poland new proposal and 2000 lumen cut off. Joint proposal was requested from Poland, France and Germany for next session of GRE
- Automatic activation of the hazard warning signal
  - It was agreed to adopt document to send to WP.29 in its March 2015 Session for consideration.
- Simultaneous lighting of both cornering lamps with reverse lamps
  - It was agreed to adopt document to send to WP.29 in its March 2015 Session for consideration.
- Alternative definition of photometric requirements It was suggested to consider this definition/theory while discussing or proposing any new documents further on glare subject.
- Collective amendments

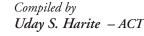


L to R: Mr. Shivas Dhar - Maruti Suzuki India Ltd, Mr. Udav Harite- ACMA, Mr. BV Shamsundara- ARAI (I). Mr. Feroz Khan - Tata Motors (I)

- Avoid intentional non-approved voltage variation of the passing and driving beam for halogen light sources: Germany agreed to review the documents and resubmit for the next session with better clarity and justification.
- Regulation No. 50 and 53: 4.2
- 4.2.1 Documents were adopted to send to WP.29 in its March 2015 Session for consideration.
- 4.2.2 Revised proposal requested from Germany for next session of GRE
- 5.0 Testing procedure for Reflex Reflector R No. 3:Proposal was adopted to send to WP.29 in its March 2015 Session for consideration
- Collective amendments for plastic lens test 6.0 :Finally it was agreed for the weight. With this change collective proposals were adopted to send to WP.29 in its March 2015 Session for consideration.

Election of officers

Mr. Michel LOCCUFIER (HoD) Director, Head of Unit, Regulation, Direction Générale Transport Ministry of Transport and Mobility, Belgium was elected as a chairman for the year 2015 sessions.











"Make in India - Beyond Zero Defect Quality: An ACT Approach"

## 6<sup>th</sup> ACT Meet 15<sup>th</sup> & 16<sup>th</sup> December, 2014: Chandigarh

6<sup>th</sup> ACT Meet was organised on 15<sup>th</sup> & 16<sup>th</sup> of December, 2014 in Chandigarh. Day one – An informative plant visit was organized in Godrej & Boyce Refrigerator & Compressor Plant in Mohali. Later in the day, another visit was organized at TVS Motors Plant at Nalagarh. On the second day a full day meet was organized in Hotel Re:Gen:Ta Central, Chandigarh. Mr. Srivats Ram, Chairman ACT, Mr. C. Narasimhan, Chief Mentor ACT, Mr. Dinesh Vedpathak, Head Cluster program along with entire ACT and UNIDO Team joined the meet. The highlights of this meet include:

- Mr. C. Narasimhan thanked Mr. Srivats Ram for guiding ACT as chairman for the 2nd term.
- Mr. Srivats Ram, emphasised on focusing 3 points (1) Change is important with changing need of industry. (2) Enhance the coverage of clusters to serve more companies in the auto component industry. (3) Improvement through assessment of the cluster programs is needed for continuous improvement.
- Chairman ACT presented special Trophies to Ms. Sapana Baravkar, Counselor ACT and Mr. Jitender Rana, Assistant Director ACT for their exemplary work for development of ACMA Awards Online Management System.
- Chairman also presented trophies to Mr. Atul Gupta and Mr. Mahesh Gupta, Counselors for their excellent contributions in promoting & providing counselling support to clusters in the Northern Region, especially in Pantnagar.
- Mr. Chandrasekhar, Mr. VK Sharma and Mr. Sunil Mutha delivered update and progress report on UNIDO project, ACT activities in northern region and south west region.
- Mr. Dinesh Vedpathak delivered a presentation updating the progress of ACT Summit, to be held in Pune on 16th& 17th February, 2015. The Summit will include Panel Discussions, Competitions, Case Study Presentations, Awards distributions.
- Mr. Selvamani, Mentor, ACT NPD Cluster made a presentation on the need for NPD in auto component industry and the need for Indian NPD System.
- Mr. Mrugesh Gandhi, Sr. (GM Mfg) & Mr. Rajbir Singh Virk, (AGM - Quality) along with their team were present during the session. Mr. Singh delivered  $presentation \, on \, Zero \, Defect \, Quality.$
- Mr. V. Kannan, Plant Head, TVS Motors Company Ltd., Nalagarh (HP) and Ms. Rajni, Head - TOM & Planning delivered presentation on "Building World-Class Company".
- Training on Beyond Zero Defect Quality given by Mr. C. Narasimhan. The highlights of this training include:
  - > We need to have skilled people to achieve zero defects.



- > Zero Defect means First time pass without any re-
- > Machine should be defect free with strong system of predictive maintenance
- > Quality Definition -product working for the purpose for which it is meant.
- > Who is Customer? -Your customer is the next operation during mfg. process and everybody need to ensure giving zero defect to the next operation.
- > Concept of 100% inspection without manual intervention.
- > Key issues that we are facing these days environment, Safety, IT, HR, Recyclability / Reusability, High Power Cost, Availability of raw materials at competitive price. All these issues need
- > Achieve ZED first if you desire to achieve Zero Defects.

Mr. Sunil Mutha, Sr. Counselor ACT delivered Vote of Thanks. He mentioned that it was really a very good experience of learning from the experience of Chairman ACT, CN, Godrej & Boyce, TVS Motors Team and other colleagues. ACT has been moving in the right direction as shown by the journey of ACT cluster programs is as

As a part of continuous improvement in response to industry needs, ACT will extend its services to incorporate global suppliers requirement in its forthcoming programs:

- 1. ACT export program to meet global supplier requirement.
- 2. ACT ZED (Zero Effect & Zero Defect) Cluster.
- 3. ACT handholding services (after cluster program).

To know more write to: act@acma.in

## **ACT Cluster Journey**













www.acma-act.in







### December 2014 | 30

NPD



Forthcoming ACT Activities

- January, 2015

Release of books:

2. ACT Summit

program).

1. Launch of ACT MSME Lean Cluster (Pune)

- 16<sup>th</sup> & 17<sup>th</sup> February, 2015: Pune

- 16<sup>th</sup> February, 2015: Pune

logistics, Green manufacturing.

Lakh per company per year).

11. ACT 5S implementation project for foundries.

10. ACT Lean One Year Projects.

available one to one.

Launch of ACT online management system.

• Indian Production System by Mr. C. Narasimhan

ACT Before and After improvement book

ACT Zed Cluster Program (Zero Effect & Zero Defect).

ACT Hand holding services (Sustenance after cluster

ACT Certification Courses - Lean Machines, Lean

Inventory, Lean Tooling, Lean Parts Handling and

ACT Improvement Projects. These services will be

ACT MSME Lean Cluster Programs (Companies can enroll

their suppliers (Fees for one year is Rs. 1.0 Lakh to 1.8

12. Launch of ACT Foundation Cluster 9 - September 2015

Power of 10 X - Improve bottom line by Mr. Dinesh

### 13. Launch of ACT Advance Cluster 6

- September 2015
- 14. Closing of ACT Engineering Cluster 2 February, 2015
- 15. ACT Professional Certification Course on Quality Management - Move Towards Zero Defect Quality Culture (PCC) Day 1: February, 2015
- 16. Launch of ACT Engineering Cluster 3 (N & SW)
  - March, 2015
- 17. Release of ACMA Awards Circular to invite applications for 2015 - March, 2015

#### Recently held activities of ACT

- 1. Launch of ACT MSME Lean Cluster (NR)
  - 13<sup>th</sup> September, 2014: New Delhi
- 2. Launch of ACT MSME Lean Cluster (Pantnagar)
- 15<sup>th</sup> September, 2014: Pantnagar
- Launch of ACT NPD Foundation Cluster
  - 29<sup>th</sup> September, 2014: Chennai
- Launch of ACT MSME Lean Cluster (Satara)
  - 15<sup>th</sup> November, 2014: Satara
- 5. Launch of ACT MSME Lean Cluster (Haridwar-Pantnagar) - 6<sup>th</sup> December, 2014: Pantnagar
- Launch of ACT Advance Cluster 5
- 8<sup>th</sup> December, 2014: New Delhi
- Launch of ACT MSME Lean Cluster (Ludhiana)
  - 9<sup>th</sup> December, 2014, Ludhiana.

ACT now Advertisement Tariff from Dec, 14 onwards								
		Advertisement for Single issue (INR)  Advertisement for one year (three issues) (INR)			Advertisement for two years (six 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:

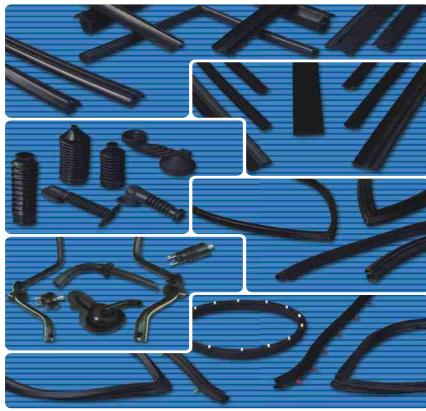
- Advertisement should be an open file with all fonts and links with a color reference printout.
- 2. Advertiser should ensure that the size of advt. material provided by him is as per the size of the advt. space booked by him.
- 3. In case of a mismatch between size of material provided and space booked,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





# Bohra Rubber Pvt. Ltd.

End to End Sealing solutions in Rubber Polymers for **Automotive Industry** 











24/4 Milestone, Delhi-Mathura Highway, Sector-59, Faridabad-121004, Haryana, India. Phone: +91-129-4181500 E-mail: marketing2@bohra.com Website: www.bohra.com





