

ACMA

Automotive Component Manufacturers Association of India

IMPACT

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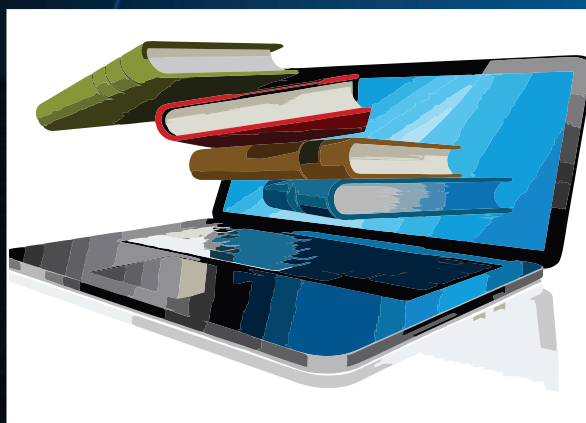
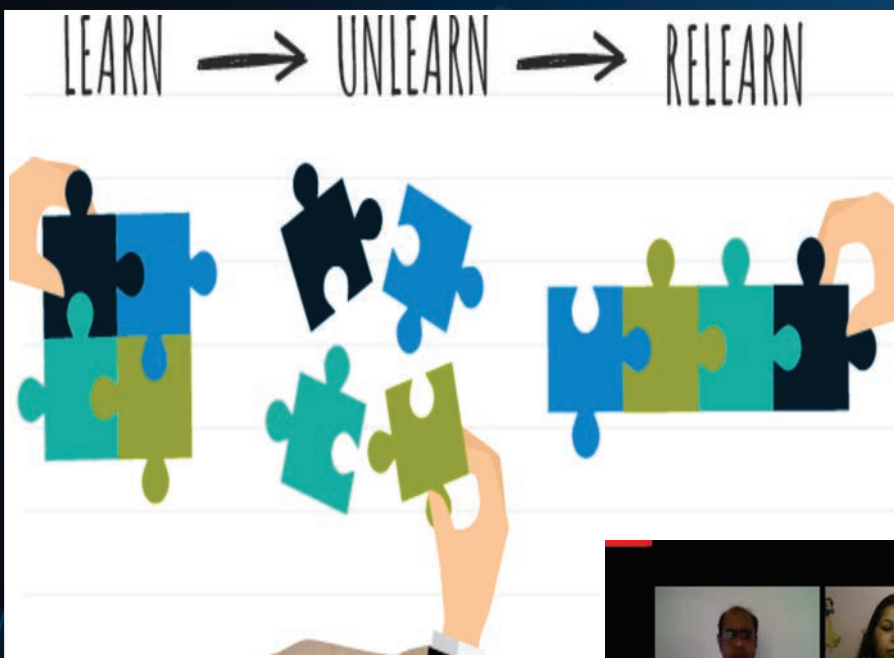


Distribution Redefined

Vol. 13, No. 1

April-May 2020

New Mantra For Skilling - Learn, Unlearn, Relearn



COVID-SAFE KEY

A CROWDSOURCED PROJECT



During the COVID-19 pandemic, the problem of contamination of common surfaces becomes critical, This can spread virus infections, Keeping your safety in mind, we have developed a safe key in order to tackle these problems, This key will protect you from catching an infection.



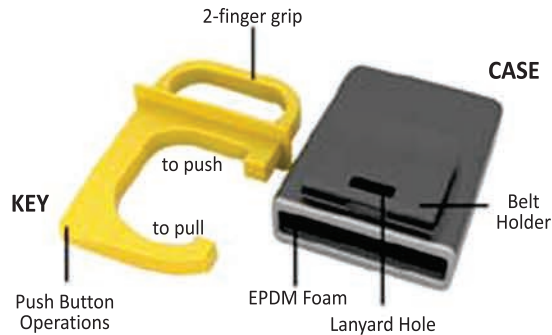
Safe Key ensures protection against coronavirus

PARTS OF THE SAFE KEY

The device consists of a case where the key is slotted into and surrounded by a foam piece which releases disinfectant to keep the key clean,

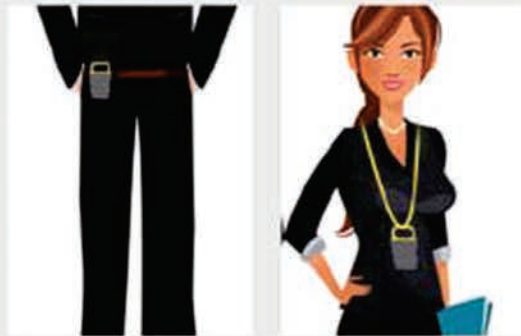


Spray disinfectant on the foam around 3 times / 10 ml
(CAUTION : Do not exceed above 15 ml)



CAUTION
Avoid hand contact over infected edge or surface of the key

USAGE AND APPLICATIONS



Applications of the safe key are as follows:

- Push / Pull Door
- Using elevator
- Operating devices
- Capacitive touch screen
- Belt Holder
- Lanyard Tag

The safe key can be fitted onto the card holder or onto the belt.



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Chairman's Message ACMA – Skilling & Training

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Dear Reader,

I am happy to share with you the Volume 13 - Issue 1 of IMPACT, themed "New Mantra of Skilling – Learn, Unlearn, Relearn".

This new year started on a high note, with Indian Automotive Industry launching BS VI compliant vehicles, much ahead of the deadline of 31st March, serving a morale booster to the industry struggling with economic slowdown. But what happened in next few months, have shaken humanity to its core, with the magnitude of COVID19 Pandemic covering continents in matter of days. More than the disease, deaths and lockdown, it is the fear of unknown that has made nations, leaders and people nervous. Whatever the industry pundits predict for future it is a fact that post-COVID world will not be the same again and aglobal realignment among nations is imminent. You may call it Karma, or Nature's revenge, whatever it may be, this invisible entity has got the better of us, forcing us indoors for last two months. Social distancing, Work from home is new normal so does Digital connect – meetings, training, coaching, socializing. Each one of us has learnt "digitization" in a new way.

Again, times like these are real test for leadership. It is for the leaders to looks to the future and see the opportunity this pandemic has thrown open for them – realignment of industrialfootprint, imports giving way to localization, preference for localized components by OEMs, personal mobility gaining traction as also demand from agriculture sector. Who would have thought government asking automotive giants to make ventilators and within days M&M readying a prototype at fraction of cost of imported ventilator, really inspiring. I call upon Automotive Industry leaders to seize this opportunity and convert each challenge into an opportunity and lay the foundation of a New India.

Political leadership of the country will provide support to the industry in their own way but supporting your people to learn new skills in this "digitally" enabled world is your responsibility as industry leaders. ACMA is committed to its membership and ready to help component makers sail through these trying times. My team, has designed and launched few highly focused, fast track profitability building programs which will help the companies reach their competitive levels rapidly. Some of them are - Reducing Break-even point, Working Capital Management, Express New product development, Productivity Improvement through layout changes and Managing activities within available resources. Additionally, with a specific focus on helping our MSME partners, several "100 Days Turnaround Projects" are also on offer, in a phygital mode – physical and digital. ACMA Centre of Excellence, is conducting various webinars on industry-oriented topics including resurgent restart after lockdown. These webinars are quite popular with the members and non-members alike and I invite you to be a part of this new learning through Digital medium. We are also scheduled to launch new certification programs and webinars on demand. Please feel free to give us your suggestions on the kind of programs you will like to attend towards making it a collaborative learning experience.

I am sure you will take advantage of the above opportunities and will be part of ACMA's initiatives for all future endeavors.

Lastly, COVID-19 can only be defeated by our individual resolve to keep ourselves and everyone around us safe. I urge all of you to follow all safety guidelines issued from time to time by the regulatory authorities and by your own companies. Be safe & keep others safe.

I wish you all a happy (digital) learning and look forward to receiving your feedback on our publication to improve it further.

Best wishes
FR Singhvi



Dinesh Vedpathak,
CEO- Skilling & Training, ACMA

“Avoiding product recalls by stopping defects at Source”



Quality of product, services is gaining new meaning compared to past requirements as fit to function. This is now the expectation from end user who is more digitized, fast and need quick response and finally need a connected response.

I pose three question here, to all of us....

1. Can we achieve zero customer complaints?
2. Is it possible to stop defect at source?
3. Is it possible to avoid recalls?

I think that you might have answers for above questions as Yes or No. However, kindly hold for some time and we will come back to this shortly.

Let me begin with product Development stage till product traceability stage.

POINT NO. 1 PRODUCT DEVELOPMENT STAGE :

You may be a design company or a print to manufacture company, both need to have design integrity.

Product development process is for achieving Right at First time for each new product you develop after proving. Think about your new products and if you are not able to achieve RFT (Right At First Time) for New Products, then you need to revisit you NPD process and Quality

Proving steps once again. You may repeat for running products also.

Timely design review is the key by ensuring 100 % closure of all actions planned.

POINT NO. 2 ROBUST PRODUCT TESTING :

Anything tested and proven is always perfect. In Today's context, only testing is not enough and it is difficult to conduct complete life testing, that's why we need smart testing methods where one can use various softwares to ensure all testing.

Ensuring full specifications testing will lead to success. You may revisit your current testing methods to check what percent of full specification tests are conducted.

POINT NO. 3 DESIGN GOOD PROCESSES :

Here I would like mention that we need to have a total shift from current mode of control swchich is for ensuring that process is controlled to effective Controls. Meaning of Effective word is “Am I getting zero defect quality, consistently”? Also, am I controlling the process manually??? Manual control may lead to mistakes and in turn lead to defects, hence we need to adopt auto controls with mechanism to get advance information so that we can take actions prior to defect occurrence.

POINT NO. 4 CUSTOMER COMMITMENTS :

When we initiate business with customers, we always have quality agreement based on the drawing parameters which in turn we convert into SOPs for processes and we ship products based on the tolerances provided in the product drawing.

However, do we really adhere to agreed quality? this is a 100-million-rupee question and this is the 1st step for avoiding product recalls by attacking the defects at source. What should we do? Answers to this question is very simple and which is as follow:

We should use Customer Requirement Validation sheet where we capture all parameters mentioned in the customer drawing along with which are not mentioned in the drawing but we need to add these also which a recalled "IMPLICIT" requirements.

For example: Customer said.... in packing box, components are loose ... Now Customer had not mentioned "how much loose". This parameter needs to be added in Customer requirement Validation sheet.

Secondly, Customer said. No sharp corners. but how much sharp corners? Now, we need to capture similar Customer voice and bring it on paper.

POINT NO. 5 STEPS TO ARREST DEFECTS AT SOURCE :

It is always advisable to work from customer end side to arrest the defects. This is always ok for a new product and at the beginning, but what about regular and matured products. How many days we can do policing role of catching the

issues.

One fine day, we need to initiate the process of arresting defects at source. And this becomes a proactive step for avoiding recalls or achieving zero customer complaints.

Now let us go inside source or a particular operation or a process stage. There are 2 main components in this area, 1st component is CTC- Critical to customer and 2nd one is Critical to Quality.

Most of the time, we all work for special characteristics or critical parameters either suggested by Customers or we have decided with experience. Here, I am appealing that let us be clear that Customer complaint is not only related to special characteristics but it can be from any parameters mentioned by customer. So, we need to understand that all parameters will become CTC – Critical to customer and we need to finalize CTQ- Critical to Quality which is nothing but process parameters which directly affect CTC.

Let me explain through example.

We have one defect "Bore Diameter oversized in a CNC machine- Now this is CTC – critical to customer, now we need to find out process CTQ- Critical to quality. There can be one or more CTQs. In this case Job clamping pressure can be CTQ or Tool condition or feed rate can be CTQ. Hope this is very clear from this example.

And let me make you happy here that you may have to work in very details for one defect initially, but good news is that this is only one-time detailed exercise which is applicable for all similar operations.

So, let us do this in depth. Start with all defects where you have Customer complaints or you have rework. Finally, we have to do this for all defects.

POINT NO. 6 WHAT IS MEASURED GETS IMPROVED :

This is very important step as it is seen that most of the time, we put our efforts based on results like Defect and how to filter it.

Here, I am bringing new dimension to word "Measurement". Measurement is considered here for process parameters like ... just now we discussed Bore diameter oversize and process parameter could be Clamping pressure. Now what measurements we are carrying out for Clamping pressure and how effective are our measurements.

Effectiveness check is very simple ... Plot run chart if you are not having any digital tool to record. If Clamping pressure is within set tolerance and you are not getting defects then this is ok to continue.

In case, you are getting defects / rework, then revisit the process to find out the tolerance band for same process parameter.

POINT NO. 7 MANUAL CONTROL LEADS TO MISTAKES :

As discussed in the above point, we need to have controls for all CTQs – Process parameters, either manual or automatic. The best is adaptive control.

Let me explain one by one:

Manual Control: means human is involved in ensuring CTQ parameters manually, e.g. monitoring closely. In any control there are 3 main steps as Identification, Decision and modification. In this case, Identification of Problem like Clamping Pressure less or more,

then taking a decision – what to do and finally taking action for necessary modifications. This needs a lot of skill and attention. Any delay or mistake in this will certainly lead to defects.

In auto control, we do not guarantee zero defect quality because once CTQ is out of control, it will lead to defect / rework. So, the best way is to have adaptive control, where machine itself decides the correction and necessary modifications before the problem arises.

This does not need high knowledge or high technology most of the time. What it needs is - a clear thinking by use of 5 senses – See, hear, smell, Touch and feel. Here we should be practical, not to use experience unless you have proven it.

In general, I feel that in a proven process, defects are occurring as decisions are based on experience and not on facts. What is most important - Are we having zero rework and zero defects. If answer is YES, then no issue at this point. Then next question, Quality, at what cost and answer should be the Minimum. So, revisit your all processes as a group, like CNC Turning, Drilling and so on and build controls for all CTQs, to have defect free products to customers with an ease at manufacturing setup.

POINT NO. 8 ESTABLISH PROCESS TO CATCH DEFECTS IN A LOT:

For any activity to prove, we always establish a process and we must have a written SOP–Standard Operating procedure. Let us ask a question our selves, do we have a SOP for in case we get a complaint from market. If answer is yes, FINE, then check its effectiveness. And if not available, either develop yourself or seek guidance from right authorities.

ACMA can be one solution provider as, at ACMA we are driving Zero Defect Quality, Product design and Development and innovation from last two decades.

Let us dwell here little more ...

Add a defective product deliberately with some simple identification and pass through all processes till PDI – pre dispatch Inspection and you must catch this at PDI and make announcement that we have a major issue and we need to recall all products in pipe line. Here someone should watch / Note down the entire situation and response from involved people which will help us to design / revise SOP for product recall.

POINT NO. 9 ENSURE A SYSTEM TO TRACE :

In past, Delivery of products with best possible quality and possible lowest cost was considered as the most preferred qualities of any suppliers. Today also these are valid, but there are new dimensions added like “ How fast you can trace your products not only from entire supply chain but also from end users. Here use of latest tools play an important role.

Today there are various software's are available which make this quite easy as all data will be available on your finger tips and we all need this.

You may contact ACMA in case you are unable to find suitable solution providers for all points for killing defects at Source.

POINT NO. 10 MANAGEMENT PRIORITY FOR DEFECTS IS THE KEY :

We all speak very good language of PPM and till we speak PPM language, Zero- Defect quality will be a dream as PPM is a result of volume, more volume means less PPM. So, at initial stage, when production numbers are very less, we can use PPM as it will be a huge number. But for regular supplies with high volumes (You may decide what makes you awake “10 PPM or 10 defects)

Example - In a restaurant, you have ordered one bowl rice and while eating you found one stone and when you enquire, the management of

restaurant, replied, it is 1 PPM only and we are well below world class levels. Such stones will come in one of the bowls and not all.



What is your reaction here.....? You will definitely ask restaurant management to move from PPM to defects monitoring.

Hope I am right, I am also saying the same thing. If management speaks defects and have priority to eliminate all defects, then you are in very safe hands.

Quality is not an option but a choice for pride. If you are aiming for pride for zero defect, then you will either do it yourself or you will search for some Sensei / Guru who can show you right path at right time.

To conclude, I started with three questions –

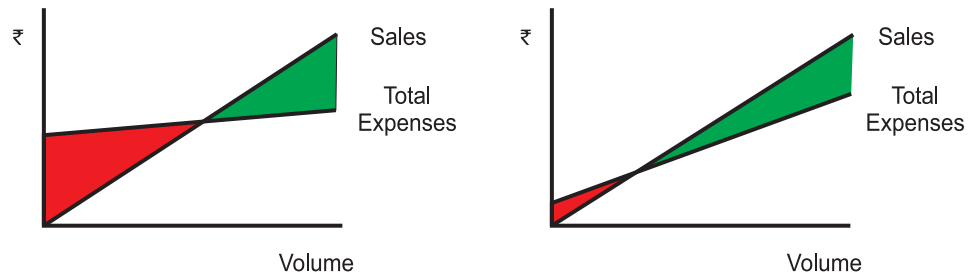
1. Can we achieve zero customer complaints?
2. Is it possible to stop defect atsource?
3. Is it possible to avoid recalls?

I truly believe that after reading this, your answers to all three questions are “YES”. Best wishes to all.



V. K. Sharma
Head Cluster Program, ACMA

Reducing Break Even Point



Break-Even Analysis

Break-even analysis helps you to determine at what stage your company, or a new product, will become profitable. It is a calculation for determining the number of products a company should sell to cover its costs, both fixed & variable. Break-even point is a situation where you are neither making money nor losing money.

Break-even analysis is useful in studying the relation between the variable cost, fixed cost and revenue. A company with low fixed costs will have a low break-even point of sale. If a company has a fixed cost of Rs.0 (zero), it will automatically breakeven upon the first sale of its product.

Elements of Break-Even Analysis

Fixed costs

Fixed costs are also called as the overhead cost. These overhead costs occur after the decision to start an economic activity is taken and these costs are directly related to the level of production, but not the quantity of production. Fixed costs include

- Interest,
- Taxes,
- Salaries,
- Rent,
- Depreciation Costs,
- Labour Costs,
- Energy Costs Etc.

These costs are fixed no matter how much you sell.

Variable costs

Variable costs are costs that will increase or decrease in direct relation to the production volume.

This cost includes

- Cost of raw material,
- Packaging cost,
- Fuel
- Other costs that are directly related to the production.

Contribution Margin

Break-even analysis also deals with the contribution margin of a product. The difference between the selling price and variable cost per unit is known as contribution margin per unit.

For example : If the selling price of a product is INR 1,000, total variable costs are INR 600 per unit and fixed cost is INR 250 per unit, the contribution margin of the product is INR 400 (1000 – 600). This INR 400 represents the revenue collected to cover the fixed costs. In the calculation of the contribution margin, fixed costs are not considered.

Calculation of Break-Even Point

The basic formula for break-even point is derived by dividing the total fixed costs of production by the contribution per unit (sales price - variable cost).

$$\text{Contribution per unit} = \text{Selling price per unit} - \text{Variable cost per unit}$$

$$\text{Break Even Point (in units)} = \frac{\text{Total Fixed Costs}}{\text{Contribution per unit}} = \frac{\text{Total Fixed Costs}}{(\text{sales price/ unit} - \text{Variable cost/ unit})}$$

$$\text{Break Even Point (in Sales)} = (\text{Total Fixed Costs} / (\text{sales price/ unit} - \text{Variable cost / unit})) \times \text{Selling price/ unit}$$

Example:

Total fixed costs = INR 50,00,000

Selling price per unit - INR 1,200

Variable cost per unit = INR 7,00

Calculations:

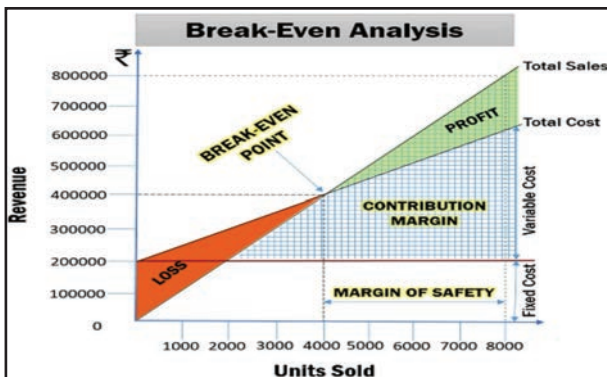
Contribution per unit = $1200 - 700 = \text{INR } 500$

Break Even Point (Quantity) = $50,00,000 / 500$
= 10,000 Nos.

Break Even Sales (INR) = $10,000 \times 1,200$
= INR 1,20,00,000

In today's market scenario, Breakeven analysis can help determine

- The amount of losses that could be sustained if there is a sales downturn.
- The impact on profit on changing to automation from manual (converting a fixed cost to a variable cost).
- The maximum profit on a particular product that can be generated (by assessing capacity utilisation for break-even).
- The change in profits if the price of a product is altered.



Additionally, break-even analysis is very useful for knowing the overall ability of a business to generate profit. In case of a company whose breakeven point is near to the maximum sales level, this signifies that it is nearly impractical for the business to earn profit even under the best circumstances.

Ways to reduce Break-even point

• Fixed Cost Monitoring & Review

Fixed costs are fixed in relation to a particular scale of operations. As the scale changes fixed costs need to be reviewed to check what can be reduced and what can be eliminated. For example if a two shift operation changes to a one shift operation, fixed

costs will need to be reviewed. Some of the ways to look at fixed cost reduction may be:

1. Rent reviews, space reduction, moving to a different location
2. Man power redeployment
3. Outsourcing
4. Review insurance premiums
5. Review advertising budgets
6. Re-finance debts
7. Negotiate EMIs
8. Telecommute

Reviewing all fixed costs constantly to verify if any thing can be eliminated or reduced will help. Reduction in fixed costs reduces the breakeven point.

• Variable Cost Monitoring & Review:

A reduction in variable costs increase contribution margin & bringing down break-even point. Some of the ways to look at variable cost reduction may be:

1. Leverage technology to increase efficiency
2. Increase capacities at no extra cost
3. Review buying decisions – Follow JIT
4. Right fit – use of talent for maximizing output
5. Sell spare capacities
6. Automate
7. Passive energy saving measures
8. Pool resources

A continuous real time monitoring system measuring variable costs will help to analyse what can be reduced and what can be eliminated.

• Product Mix Review:

Make and sell more of the high margin (high contribution earning) products and pay close attention to product margins, thus reducing the breakeven point.

• Discounting policies:

• Review discounting policies:

- Volume discounts
- Cash discounts
- Bill discounting

• Review pricing policies:

- Minimize or eliminate price reductions offers - since such promotional strategies increase the breakeven point.

Write to us for more details - act@acma.in

ACMA 6th National Case Study Competition

ACMA Pillar 3: Skilling & Training - 6th National Case Study Competition Winners

11th Feb, 2020 (Tuesday), Hotel Ramee Grand, Apte Road, Pune

Company Name	Location	Category A: Plant Turnover < INR 100 Cr Category B: Plant Turnover > INR 100 Cr	Project Name
Stream A1 : Best in Class HR Practices			
Gabriel India Limited	Pune	Category B	Development of Operating Engineers through robust Skill building process
Lumax Industries Ltd	New Delhi	Category B	Salary Structure Standardisation
Stream A2 : CSR- Activities			
Cummins India Limited	Kothrud	Category B	Driving Sustainable Solutions to beat pollution during festivals
JK Fenner India Limited	Madurai, Tamil Nadu	Category B	CSR – Reaching The Unreached
Stream A3 : Energy Conservation - Suraj Shakti			
Huf India Pvt. Ltd.	Pune	Category B	Energy Saving through implementation of energy saving projects in different area.
Lumax Industries Ltd	Bawal	Category B	Modification of chilled water pipe network with 50KL insulated tank with primary and secondary pump
Metalman Auto Pvt Ltd	Aurangabad	Category B	Energy Saving by adding air receiver tank
Stream A4 : Out of Box Ideas			
Cummins India Limited	Kothrud	Category B	Inhouse development of special geometry insert to reduce tool cost and lead time of supply.
Endurance Technologies Limited (Braking Division)	Aurangabad	Category B	Productivity Improvement through Cycle time reduction .(Productivity Improvement)
JK Fenner India Limited	Sriperumbudur, Kanchipuram	Category B	Breakthrough Productivity Through Semi-Automated Unloader Mechanism
Lumax Industries Ltd	New Delhi	Category B	Lumax Employee App
Lumax Industries Ltd	Bawal	Category B	To achieve Zero Defect
Metalman Microturners	Dharuhera, Distt. - Rewari, Haryana	Category A	Collection of Fumes from generation source and its purification in Robotic MIG welding
Varroc Polymer Pvt Ltd. (VPPL-BN)	Binola	Category B	Floor space optimization by trolley modification
Stream A5 : RTM - Industry 4.0			
JK Fenner India Limited	Hyderabad	Category B	Enhancing Learning Effectiveness By Leveraging Technology
Metalman Auto Pvt Ltd	Aurangabad	Category B	Quality Improvement through LOT
Ultra Engineers	Pune	Category A	Real Time Data Monitoring
Wheels India Limited	Padi, Chennai	Category B	Advanced Failure Warning System For Pumps & Spinning Unit & Head Stock Lubrication
Stream A6 : Water Conservation - Jal Shakti			
Cummins India Limited	Kothrud	Category B	Environmental Sustainability- Reduce water footprint
Lucas – TVS Limited	Padi, Chennai	Category B	Raw water consumption reduction in shaft induction hardening machine by using 3R concept.
Wheels India Limited	Rampur	Category B	Water & coolant wastage elimination

Must have book with you

Excellence in Manufacturing.....Inestimable mantras!!

Book your
copy today

By Mr. Chakravarti Narasimhan (CN)

English & Hindi
version available

विनिर्माण क्षेत्र में उत्कृष्टता...
अतुल्य मंत्र !!



चक्रवर्ती नरसिंहन

Globalization of the markets put great competitive pressure on the industry. The key to sustained economic success will be consistent quality of products and services that delight the customer. Quality does not happen by chance; it has to be managed. TQM helps us in achieving and maintaining benchmark quality levels.

While organisation claim to have thoroughly understood TQM concepts, clearly issues crop up during implementation of these concepts at the shop floor. Through his book "Excellence in manufacturing – Inestimable mantras" CN has come to our rescue. The effort in this book is in the direction of simplicity. People make too complex an affair out of their daily work. The simplification of concept helps one to accomplish the same tasks with much less energy and resources.

This book simplifies the basic concepts in a jargon free manner. These words come from CN's own hands-on experience in implementing the TQM concepts. The mantras perform the same magic as

the real ones do when you chant them with devotion.

CN allows us to share in his discoveries while taking us through the basics of the manufacturing system in a common sense fashion. There is plenty of knowledge here for all of us to re-confirm, clarify and add to our understanding.

I urge all readers to take advantage of the beautifully presented 'mantras' and embark on their respective journey to excellence.

INR 300/- Member, INR 350/- Non-Member (Inclusive of Taxes & Courier Charges)

PI write on sanket.jadhav@acma.in or call on 8180909401, 7768046868

Clusters Culmination

ACMA Zero Defect Zero Effect Cluster - 3

(January 2018 – December 2019)

This cluster aims at making participating companies globally competitive by helping them to achieve Zero Defect product, have environmentally efficient systems and devise mechanism to protect environment for future generations.

Team-



V. K. Sharma
Head Cluster Program & Mentor

Cluster Launch - December, 2017
Cluster Culmination - February, 2020

Participating Companies:

- Best Koki Automotive Pvt. Ltd., Bilaspur
- IP Rings Ltd., Chennai
- Minda Kyoraku Ltd., Bawal
- MJ Castings Ltd., Bawal
- Sterling Tools Ltd., Palwal



Sushil Sharma
Counselor



Tanu Ahuja
Counselor

Feedback Analysis -

	Best Koki	IP Rings	MKL	STL	MJCL
Counselor visit	10	10	10	10	10
Inputs Received	10	9	10	10	10
Relevance of input	10	9	10	10	10
Delivery as per plan	10	8	9	9	9
Learning from model plant visit	10	9	9	9	9
Total score	50	45	48	48	48
% age	100%	90%	96%	96%	96%

Significant Improvements
Defect elimination : finer position variation

Before **After**

Manual Clamp Lever Engage Clamping (Ref.)
Auto Clamping

Benefits : 1. Rejection reduced to zero from 14%
2. Cost Saving Up to 18 Lacs in a year
3. Production got increased

Savings (in lacs)-

S. No.	Company	Savings
1	Best Koki	396
2	IP Rings	247
3	MKL	90
4	STL	45
5	MJCL	35

Five Tatvas Energy

Before **After**

Delta Connection Star Connection

Spindle connection Delta Consumed 14 Amps
Spindle Connection in Star Consumed 5 Amps Saving Rs. 180000 / year

Key Improvements-

Significant Improvements 5 Tatvas - Air

Before



After



Pneumatic Air Grinder used for removing burr
In Cut Off machine was replace with Electric
Grinder

In total 10 CFM Saved

Waste Management system



Value Yard



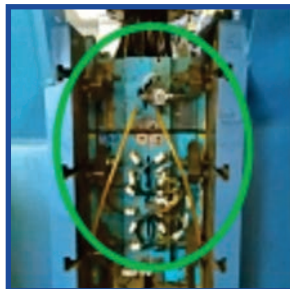
Significant Improvements 5 SENSES - SEE

Before



Single mould on
machine (Single part
produced).

After



Mould combination
done (2 mould on
single machine double
part produced on same
cycle time).

Benefits : 1. Time save
2. Production improves
3. Space saved

LCA POKA YOKE

Before



Packing of material
by weighing scale, no
auto shut gate. Mix
up parts reached to
the customer.

After



Now Auto shut installed
along with counter. Mix
up of parts eliminated.

ACMA Zero Defect Zero Effect Cluster - 4

(January 2018 – December 2019)

This cluster aims at making participating companies globally competitive by helping them to achieve Zero Defect product, have environmentally efficient systems and devise mechanism to protect environment for future generations.

Cluster Launch - December, 2017
Cluster Culmination - February, 2020

Participating Companies:

- JK Fenner India Ltd., Hyderabad
- JK Fenner India Ltd., Sriperumbudur
- Minda Industries Ltd., Chakan
- Wheels India Ltd., Chennai
- Wheels India Ltd., Padi
- Wheels India Ltd., Sriperumbudur

Team-



V. K. Sharma
Head Cluster Program



Sunil Mutha
Principal Counselor
& Mentor



Sushil Sharma
Counselor



Arup Kumar Basu
Counselor

Feedback Analysis-

Cluster Feedback by Participating Companies

Sr. No	Topic	WIL-FAW	J.K.Fenner Sriperumbudur	Minda Inds-SAC Pune	WIL, Sriperumbudur	J.K.Fenner, Hyderabad	WIL-EEPD
1	Counselor Visits	10	10	10	10	10	10
2	Quality inputs Received	10	10	9	10	9	10
3	Relevance of Inputs	10	10	10	10	10	10
4	Delivery As Per Roadmap	9	9	9	9	10	10
5	Learning: Model Company Visits	10	9	9	9	10	8
6	Total score (out of 50)	49	48	47	48	49	48
7	% Score	98	96	94	96	98	96

Savings (in Lacs)-

Cluster Feedback by Participating Companies								
Sr. No	Topic	WIL-FAW Chennai	J.K.Fenner Sriperumbudur	Minda Inds-SAC Pune	WIL, Sriperumbudur	J.K.Fenner, Hyderabad	WIL-EEPD Chennai	Total
1	Red Tag	29		28.8				57.8
2	Non moving items	61					23	84
3	Five senses	58.5	30.14	8.5		10.2	52.2	159.54
4	Parts handling	41.2		2.4				43.6
5	Re work cost	69.5	252.28	6	17.47	8.5	36.9	138.37
6	Defects elimination	75.4	43.91	30		66	54.4	478.08
7	Panch Tatvas-Air	15.7	49.22		25.96	9.8	11.5	106.87
8	Panch Tatvas-Liquid	14.9	49.24		1.54	21.1	12.4	99.16
9	Panch Tatvas-Fire	14.25		16.6	26.5	60.6	9.5	176.69
10	Panch Tatvas-Space	12.2					7.7	19.9
11	Panch Tatvas-Soil	14			45.58		9.8	69.38
12	Productivity	65.5		12	15		11.5	104
13	Others	40.7		6			19.5	66.2
	Total Rs.	511.9	424.8	110.3	132.1	176.2	248.4	1603.6

Summary-

1. Out of total 97 defects , 96 Defects eliminated or in positive trend in Model line.
2. Out of total 670 defects , 571 Defects eliminated or in positive trend in total plant.
3. A total of 2661 nos. Irreversible actions have been implemented as DRVMEs action.
4. 107 Nos Poka yoke implemented and 69 are under process.
5. 151469 and 131929 nos. abnormality captured and eliminated respectively using 5 senses
6. 54 Operations Deskilld (Ceased Quality from Human dependency)
7. Quality war room and ZED Logo made in all six companies
8. ZED Logo competition organized for the same for awareness and TEI.
9. All companies improved in undesirable habits & practices score by min 60%
10. All companies improved in undesirable habits & practices score by min 60%
11. All companies achieved Hospital Clean shop floor and Garden Green Outskirts.
12. In star diagram 87 actions implemented and 21 storage locations deleted.
13. QA and QC organization created in all six companies
14. All the companies have received various customer appreciations

ZED LOGO Creation



J.K.Fenner (I) Ltd,Hyderabad



Wheels (I) Ltd,FAW Chennai



J.K.Fenner (I) Ltd,Chennai



Minda Inds, Pune



Wheels (I) Ltd,Chennai



Wheels (I) Ltd,-EEPD Chennai

ACMA Engineering Excellence Cluster - 4

(January 2018 – December 2019)

This cluster aims at making participating companies globally competitive by helping them to achieve Zero Defect product, have environmentally efficient systems and devise mechanism to protect environment for future generations.

Cluster Launch - December, 2017
Cluster Culmination - February, 2020

Team-



V. K. Sharma
Head Cluster Program



Sunil Mutha
Principal Counselor & Mentor

Participating Companies:

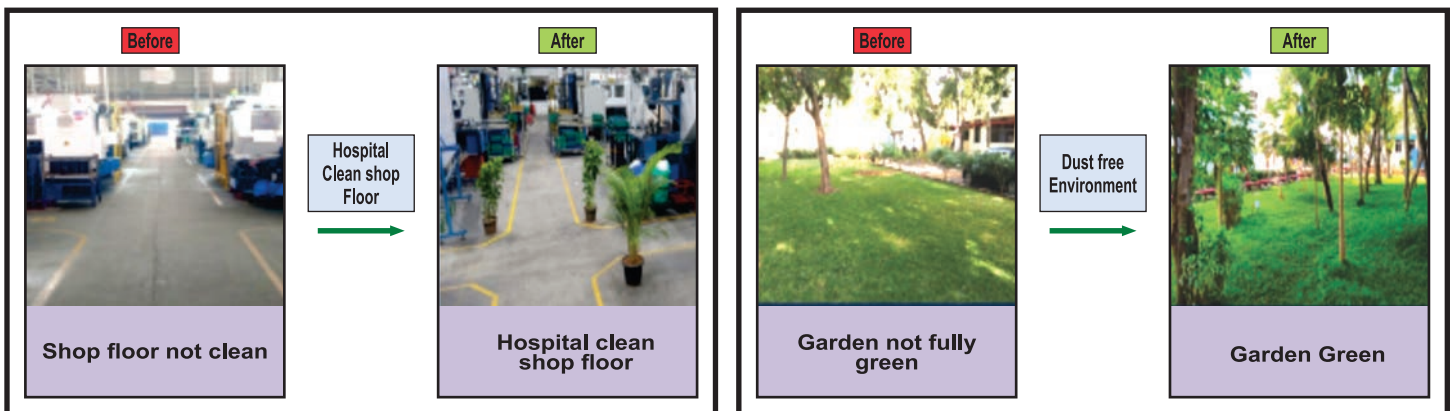
- IP Rings Ltd., Maraimalainagar
- Wheels India Ltd., Padi
- Wheels India Ltd., Pune
- Wheels India Ltd., Rampur
- WIL Car Wheels Ltd., Bawal

Feedback Analysis-

Cluster Feedback by Participating Comanies

Sr. No	Topic	IP Rings Chennai	WIL Pune	WIL Rampur	WCWL Bawal	WIL DC Padi	WIL-EEPD
1	Counselor Visits	10	10	10	10	10	10
2	Quality inputs Received	9.7	9	9	8	10	9.14
3	Relevance of Inputs	10	9	9	8	9	9
4	Delivery As Per Roadmap	8.4	9	9	10	9	9.08
5	Learning: Model Company Visits	10	8	8	8	10	8.8
6	Total score (out of 50)	48.1	45	45	44	48	46.02
	% Score	96.2	90	90	88	96	92.04

Hospital Clean / Garden Green / Dust Free















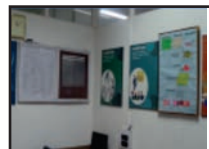



Clean / Green / Dust Free environment

Savings (in Lacs)-

Cost Saving by EEC4 Companies in Lacs During Cluster Period							
Sr. No	Topic	IP Rings Ltd., Chennai	Wheels India Ltd., Pune	Wheels India Ltd., Rampur	WCWL Bawal	Wheels India Ltd., Padi, DC	Total Cost Saving
1	Red Tag	2.22	8.74	10.5	60.7	0	82.16
2	Non moving inventory	14	3.86	21	49.5	0	88.36
3	Parts handling	0	0	18.53	10.8	0	29.33
4	Coolant	10	0	4.25	7.4	13.56	35.21
5	Lubrication	11	0.6	2.44	5.5	7.2	26.74
6	Electrical	70.4	84.89	25.2	6.4	7.52	194.41
7	Hydraulic	62	0.37	11	10.9	16.52	100.79
8	Elimination Power pack	76	0	0	0	0	76
9	Quality	17	20.09	22	18.7	21.46	82.25
10	Productivity	185	222.86	124	102.4	296.73	930.99
11	Converting old m/c or fixture	11.43	19.14	16	26.6	0	73.17
12	Tool Cost	57	44.26	49.91	42.7	17.81	211.68
13	Total	219.37	54.85	97	138.4	8.05	517.67
		735.4	459.7	401.8	480	388.85	2449

Key Improvements-

Safety Improvements	Undesirable Habits and Practices	QCC / Kaizen Improvements
<p>Before </p> <p>High Operator fatigue due to manual loading of bottom tool in tool loading fixture. In past 4 month 7 near misses & 2 incidents reported.</p> <p>After </p> <p>Less operator fatigue because of fixture made for loading of bottom tool. So, near miss & incident become zero.</p>	<p>Before </p> <p>No standardized dustbin is used for garbage at shop floor</p> <p>Good Practice </p> <p>Dustbin color coding done & displayed for different of garbage.</p>	<p>Before </p> <p>Shifting of TR wheels from Assy line to Paint plant by Forklift.</p> <p>After </p> <p>Shifting of TR wheels from Assy line to Paint plant by Electric Tow Truck.</p>
<p></p> <p>Marathon pack resting on wooden pallet with the help of forklift & possibility of incident to fall of marathon pack.</p> <p></p> <p>Marathon pack resting on trolley with PU wheel. So, it can be easily movable & possibility of accident is eliminated.</p>	<p></p> <p>Wooden pallet used for unloading of coil</p> <p>Good Practice </p> <p>Stair provided for safe unloading of coil.</p>	<p></p> <p>Due to the slide movement Coolant outlet pipe is coming out and causing spillage</p> <p></p> <p>In place of flexible pipe permanent tray has been provided.</p>
<p></p> <p>Welding fumes are spreading in the shop-floor due to no fumes extractor.</p> <p></p> <p>Fumes extract of provided. So, now fumes spreading is eliminated.</p>	<p>Highlights :</p> <ol style="list-style-type: none"> 1. Different color dustbin used for different types of garbage. 2. Proper & safe stand used for un-loading coil. 	<p></p> <p>QCC Room</p> <p></p> <p>QCC Meeting</p> <p>TEI by QCC / Kaizen activities</p>

ACMA Advance Plus Cluster (MFCA + Innovation)

(January 2018 – December 2019)

This Program would primarily focus on applying innovative concepts to manufacturing and beyond manufacturing.

Cluster Launch - December, 2017 **Team-**
Cluster Culmination - January, 2020

Participating Companies:

- Chopra Autotech Pvt. Ltd., Haridwar
- Chopra Industries Pvt. Ltd., Ludhiana
- J K Fenner Ltd., Madurai
- Nipman Fastner Industries Pvt. Ltd., Haridwar



V. K. Sharma
Head Cluster Program & Mentor



Atul Kumar Gupta
Counselor

Feedback Analysis-

Score (on a scale of 10)						
Sr. No	Particulars	Chopra Autotech-Haridwar	Chopra Industries-Ludhiana	J K Fenner-Madurai	Nipman Fastenera-haridwar	Overall feedback
1	Counselor Visits	10	10	10	10	10
2	Training hours provided	9.7	10	10	10	10
3	Training topics coverage	10	10	10	10	10
4	Delivery as per plane (roadmap)	8.4	10	10	10	10
5	Learning from MRMs	10	10	10	10	10
6	Learning from model plant visits	8.1	10	10	10	10
7	Total score (out of 60)	56.2	60	60	60	59
	% Score	93.6%	100%	100%	100%	98%

Savings (in Lacs)-




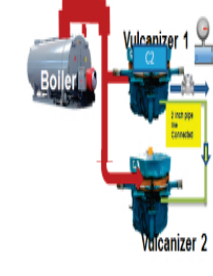
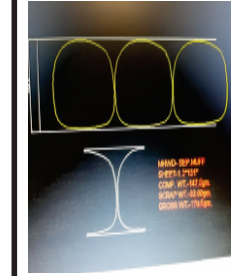
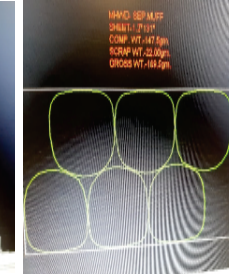
Sr. No	Company Name	Savings in Lacs (Rs.)
1	Chopra Autotech Pvt. Ltd. Haridwar	47.1
2	Chopra Industries Pvt. Ltd. Ludhiana	81.40
3	J K Fenner Ltd. Madurai	614.3
4	Nipman Fasteners Industries Pvt. Ltd. - Haridwar	52.97
	Total in Rs. Lacs	795.77

Before	After
Excess length used for all variety of hoses	Waste reduced after standardizing length for individual part number
Benefits : Pouch wastage reduced from 85 mm to 15 mm 80% waste reduction.	

Key Improvements-

<p>Before</p>  <p>SCM Patch single blank per pcs gross weight - 0.066 kg consumption/month- 6000x26x0.066=10296 kg</p> <p>After</p>  <p>Develop double blank tool SCM Patch Double Blank Strip/pcs gross weight -0.063 Kg consumption/month- 6000x26x0.063=9828 kg</p> <p>Result-Save 468 Kg primary material / month</p>	<p>Before</p>  <p>Sreip Size Was 73.00mm & Material consumption was 12224 Kg / month</p> <p>After</p>  <p>Modify the tool & reduce the strip size from 73.00mm to 69.00mm, material consumption is 11692 Kg / month</p> <p>Result-Save 532 Kg primary material / month</p>	<p>Before</p>  <p>Trimming scrap was in Bolt Flange Special M6x25</p> <p>After</p>  <p>Angle provide on collar 17° to 20° by tool design change from trimming to forming.</p> <p>Benefits : 1. Trimming Scrap saved 0.5 Gms / pcs. 2. Monthly Trimming Scrap Saved @ 800000 x 0.5 Gms = 400 Kgs.</p>
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<p>Before</p>  <p>End Wire length 2 meter scrap</p> <p>After</p>  <p>Wire Straightner assembly Design change and modified with sliding</p> <p>Benefits : 1. Daily End wire saved 120 gm / one Feet every coil. 2. Monthly Wire saved @ 30 feet x 120 gms x 25 Working days = 90 Kgs</p>	<p>Before</p>  <p>Poly bag Size 14x14" being used for packing. (Weight = 19.34 Gm / Polybag)</p> <p>After</p>  <p>Reduced from 14x14" to 14x10" for Bolt "A" and "B" Cylinder stud and long length item. (Weight = 18.86 Gm / Polybag)</p> <p>Benefits : 1. Polythene weight reduced 480 gm/1000 Polythene & Polybag 25 no saved / 1000 poly bags.</p>	<p>Before</p>  <p>Electro Plating with baking Oven</p> <p>After</p>  <p>Baking Oven Removed from Electro Plating after Passivation</p> <p>Benefits : Daily Electricity Saved = 200 unit Yearly Saving 69600 unit Takt time reduce by 10 Minutes</p>
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<p>Before</p>  <p>Fabric cut without proper measurement</p> <p>After</p>  <p>Template provided to cut exact size</p> <p>Benefits : Fabric waste reduced from 128 gram to 24 gram 80% wastage reduction.</p>	<p>Before</p>  <p>Stream is vent out without recovering the heat</p> <p>After</p>  <p>Exhaust steam is transfer from Vulcanizer 1 to Vulcanizer 2 by a sequencing valve opening system.</p> <table border="1"> <thead> <tr> <th></th> <th>Benefits</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Water Savings</td> <td>171 KL / annum</td> <td>0.72 lacs</td> </tr> <tr> <td>Fuel Saving</td> <td>11.7 KL / annum</td> <td>3.9 lacs</td> </tr> <tr> <td>Carbon Reduction</td> <td>3.9 ton</td> <td></td> </tr> <tr> <td>Environmental / Visual Impact</td> <td>50% heat exhaust reduced</td> <td></td> </tr> </tbody> </table>		Benefits	Value	Water Savings	171 KL / annum	0.72 lacs	Fuel Saving	11.7 KL / annum	3.9 lacs	Carbon Reduction	3.9 ton		Environmental / Visual Impact	50% heat exhaust reduced		<p>Before</p>  <p>Bank of Cover Stay Muffler MHWD was produced from single blank Layout with gross Wt - 0.180 KGS</p> <p>After</p>  <p>Layout Revised with Double Place Blank with which gross wt reduced 0.169 kgs and 2 nos produced in one stroke</p> <p>Benefits : Material Saved / Annum - 0.011 x 15000 x 12 = 1980 KGS</p>
	Benefits	Value															
Water Savings	171 KL / annum	0.72 lacs															
Fuel Saving	11.7 KL / annum	3.9 lacs															
Carbon Reduction	3.9 ton																
Environmental / Visual Impact	50% heat exhaust reduced																

ACMA Advance Cluster 11

(January 2018 – December 2019)

This Cluster Programs would primarily focus on Lean **Team-** Manufacturing.

Cluster Launch - December, 2017

Cluster Culmination - January, 2020

Participating Companies:

- Autofit Pvt. Ltd., Manesar
- Lucas TVS Ltd., Pantnagar
- Neolite ZKW Lightings Pvt. Ltd., Noida
- Sterling Tools Ltd., Faridabad



V. K. Sharma
Head Cluster Program & Mentor



Mahesh Gupta
Counselor

Feedback Analysis-

Score (on a scale of 10)						
Sr. No	Particulars	Autofit	Sterling Tools	Lucas Tvs	Neokraft	Overall Score Out of 10
1	Counselor Visits	10	10	10	10	10
2	Input received	9	10	10	10	9.7
3	Relevance of Input	9	10	10	9	9.5
4	Delivery as per plane (roadmap)	9	9	10	9	9.2
5	Learning from Model Company Visit	10	9	10	9	9.5
6	Total score (out of 50)	47	48	50	47	47.9
7	Score in % (out of 100)	94	96	100	94	96

Savings (in Lacs)-

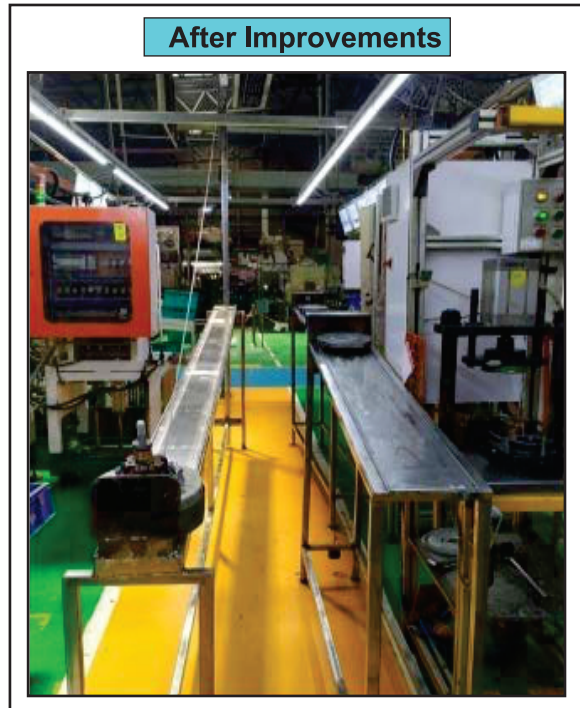
Sr. No	Company Name	Savings in Lacs (Rs.)
1	Autofit Pvt. Ltd., Manesar	79.1
2	Lucas TVS Ltd., Pant Nagar, Uttrakhand	467
3	Neokraft Globle Pvt. Ltd., Noida	96.2
4	Sterling Tools Ltd., Faridabad	69.1
Total in Rs. Lacs		711.4

Key Improvements-





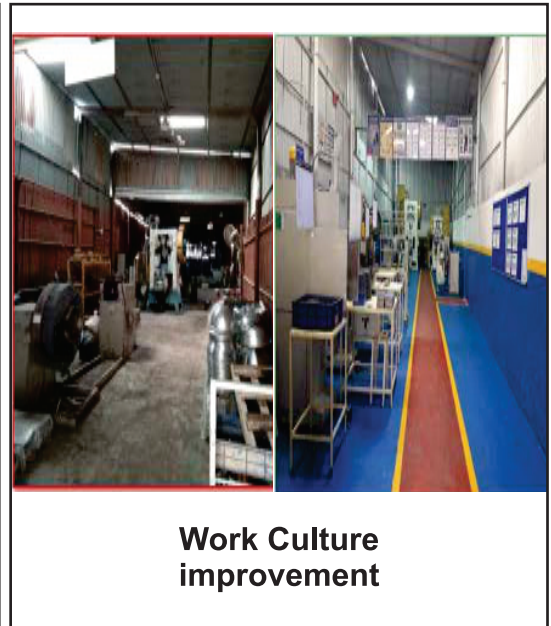
Total 1950 Nos. Tree Plantation Done



Sterling Tools Limited, Faridabad

ACMA Lean Room

<p>Before</p> <p>Weight :- 76 g</p>	<p>After</p> <p>Weight :- 60 g</p>
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14214 UNCHAHAR EXP 05:17 A 1
A1 A2 A3 A4 A5 A6 S1 PC S2 S3 S4 S5
GEN A7



14731 Bhatinda Exp. 15:11 A 06
12057 Jan Shatabdi 15:23 A 02
12472 Swaraj Exp. 19:25 A 03

AT-A-GLANCE DISPLAY BOARD

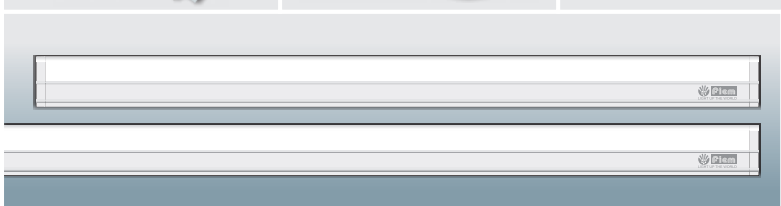
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14033 जम्मू मैल 05:10 A 05
12990 अजमेर मुम्बई एक्सप्रेस 01:05 A 01

बि स्वयं हिफाजत करे

LED Display Inside AC Coaches



Coach Guidance Display Board



Fiem Industries Ltd.

Corporate Office: Plot No. 1915, Rai Industrial Estate, Phase-V, Sonapat-131029, Haryana E-mail: fiemunit7@fiemindustries.com
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Factories: Kundli & Rai (Haryana), Tapukara (Rajasthan), Nalagarh (Himachal Pradesh), Mysore (Karnataka), Hosur (Tamil Nadu) & Ahmedabad (Gujarat)
R&D Centres: India (Rai-Haryana), Japan, Italy



ACMA Advance Cluster 12

(January 2018 – December 2019)

These Cluster Programs would primarily focus on **Team-Lean Manufacturing**.

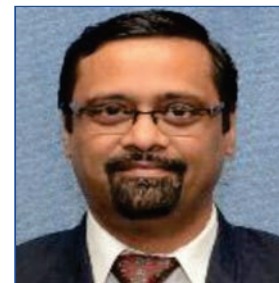
Cluster Launch - December, 2017
Cluster Culmination - January, 2020

Participating Companies:

- Cummins India Ltd., Pune
- KCTR Varsha Automotive Pvt. Ltd., Pune
- Kores (India) Ltd., Chakan
- Kores (India) Ltd., Bhosari
- Metalman Auto Pvt. Ltd., Pithampur
- Ultra Engineers, Bhosari
- Windals Precision Pvt. Ltd., Chakan



V. K. Sharma
Head Cluster Program



Sunil Mutha
Principal Counselor & Mentor



Hemant Dike
Counselor



Aniket Khasnis
Counselor

Feedback Analysis-

S. No.	Particulars	Cummins India Ltd. CL Kothrud , Pune	KCTR Varsha Automotive Pvt. Ltd.	Kores (I) Ltd. Chakan Foundry Division	Kores (I) Ltd. Pefco Foundry Division.	Metalman Auto Pvt Ltd - (Plant no. 1,Pithampur)	Ultra Engineers, Unit-2, Bhosari.	Windals Precision Pvt. Ltd. Chakan , Pune
1	Counsellor Visits	10	10	10	10	10	10	9
2	Inputs Received	10	10	9	10	10	10	9
3	Relevance of Inputs	10	10	9	10	10	10	9
4	Delivery as per Plan (Roadmap)	9	9	9	9	10	9	9
5	Learning From Model Company Visits	9	9	9	9	10	9	9
6	Total score (out of 50)	48	48	46	48	50	48	45
Score in % (Out of 100)		96%	96%	92%	96%	100%	96%	90%

Savings (in Lacs)-

Sr. No	Company Name	Savings in Lacs (Rs.)
1	Cummins India Ltd. CIL Kothrud, Pune	1320.5
2	KCTR Varsh automotive Pvt. Ltd.	270.4
3	Kores (I) Ltd. Chakan Foundry Division	102.0
4	Kores (I) Ltd. Pefco Foundry Division	Undisclosed
5	Metalman auto Pvt. Ltd. - (Plant no. 1, Pithampur)	700.6
6	Ultra Engineers, Unit-2, Bhosari	696.8
7	Windals Precision Pvt. Ltd. Chakan, Pune	531.0

Key Improvements-

TEI – Suggestion / Kaizen

As seen above no proper facility for operation of coolant cock resulting ergo issue for the person involved

Proper provision eliminating the excess bending by providing increased height operating lever as shown above.

Concept:
Ergonomic concern addressed with implementation of low cost kaizen.

As seen above no proper facility for operation of coolant cock resulting ergo issue for the person involved

Proper provision eliminating the excess bending by providing increased height operating lever as shown above.

Concept:
Ergonomic concern addressed with implementation of low cost kaizen.

TEI – Suggestion / Kaizen

Improvement

Not able to produce Ø35 end body in-house Induction machine

Made in-house fixture for production of Ø35 end body

Inventory control

No accountability of inventory

Daily monitoring with BIN-Card system

TEI – Suggestion / Kaizen

Visual controls to reduce Breakdown

Interlock for Safety, Process control, waste Elimination

Before

- When furnace start fume extraction also start.
- After furnace OFF manually required to OFF fume blower.
- Any reason furnace OFF, blower remain ON as manual operation

After

- After furnace start, fume extraction automatically ON after 30min delay.
- As soon as furnace OFF, fume blower automatically OFF.
- Now linked with furnace operation as furnace OFF, blower also OFF.

TEI – Suggestion / Kaizen

BEFORE **AFTER**

Productivity Improvement and Cost Saving through Indigenous development Multicooler bond dosing Screw conveyor.

Reduction in Operator's fatigue through Hammering Elimination

Advance 5S

BEFORE **AFTER**

No Prefix location of pallets . Kept anywhere

Prefix Location to each Pallet

No Prefix location & 3C concept of material handling

Prefix Location of Pallets with 3C Concept

2S Audit

ACMA Foundation Cluster 12

(January 2018 – December 2019)

The Foundation Cluster program provides a solution to eliminate waste of all kinds observed in the shop-floor of any company. ACMA Foundation Cluster focuses on Building Capability throughout the organisation.

Cluster Launch - December, 2017
Cluster Culmination - January, 2020

Participating Companies:

- Chopra Industries (P) Ltd., Vadodara
- Meenakshi Polymers Pvt. Ltd., Neemrana
- Munjal Auto Industries Ltd., Vadodara
- Munjal Auto Industries Ltd., Bawal
- Munjal Auto Industries Ltd., Dharuhera
- Sellowrap Industries Pvt. Ltd., Gurugram

Team-



V. K. Sharma
Head Cluster Program & Mentor



Sanjay Pal
Counselor

Feedback Analysis-


Sr. No	Particulars	Muljal Auto Bawal	Muljal Auto Dharuhera	Muljal Auto Vadodara	Minakashi Polymer, Neemrana	Chopra Inds. Vadodara	Sellowrap Inds. Pvt. Ltd. Gurgaon
1	Counselor Visits	10	10	10	10	10	10
2	Training hours provided	10	10	10	10	10	10
3	Training topics coverage	10	10	10	10	10	10
4	Delivery as per plane (roadmap)	10	10	10	10	10	10
5	Learning from MRMs	10	10	10	10	10	10
6	Learning from model plant visits	10	10	10	9	9	9
7	Total score (out of 60)	60	60	60	59	59	59
	% Score	100%	100%	100%	98.33%	98.33%	98.33%

Savings (in Lacs)-


Sr. No	Company Name	Savings in Lacs (Rs.)
1	Chopra Inds. Pvt. Ltd., Vadodara	52.36
2	Minakashi Polymers Pvt. Ltd. Neemrana	39.35
3	Munjal Auto Inds Ltd., Bawal	100.80
4	Munjal Auto Inds Ltd., Dharuhera	186.00
5	Munjal Auto Inds Ltd., Vadodara	140.51
6	Sellowrap Inds. Pvt. Ltd., Gurgaon	89.61

Key Improvements-

Before



After




Stopper Block with downward fitting taking 14 min. for the replacement (TIG welding SPM)

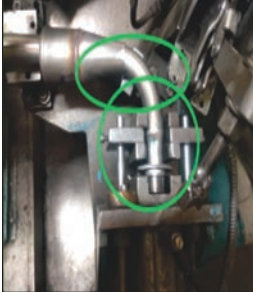
Sliding Stopper Block with front side bolting taking 7 min. for the change by just sliding to another position as per length of muffler body.

Benefits :
Change over time reduced from 14 min. to 7 min.

Before



After

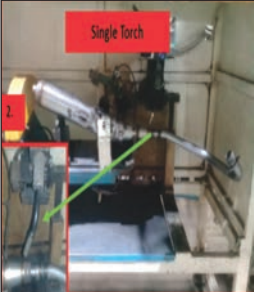


Short length of PCE welding happened due to one side support of the part.

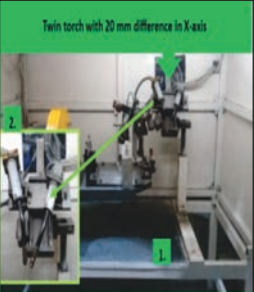
The problem of short length welding was completely eliminated by providing support from two sides.

Benefits : 1. Short length defect problem eliminated from 1500 PPM to 0.
2. Saving of Rs. 1.5 Lacs / Year

Before



After



Single Torch

Twin torch with 20 mm difference in X-axis


Due to single torch producing FTR IS 59%

Twin torch placed at on PCE machine with difference of 20 mm in X-axis.

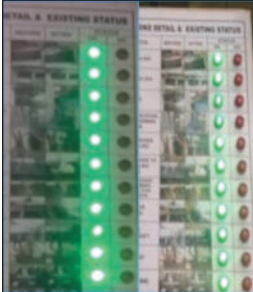
Benefits :

1. FTR was improved from 59 to 93.50%
2. Productivity improved by 5%
3. Total Saving Rs. 7.69 Lacs / Year

Before



After




Single side digital poka yoke board displayed on the shop floor create on side visibility

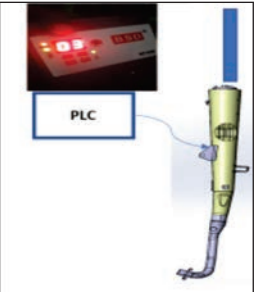
Two side digital poka yoke board displayed on the shopfloor helps to see from both sides.

Benefits :
Visualization increase for poka yoke display

Before



After



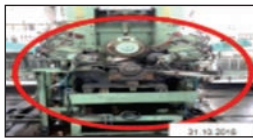
Build miss in issy

PLC controlling based poka Yoke provided at essy Area.


Benefits :
Customer complaint eliminated through poka yoke

Significant Improvements : Safety

Before



After



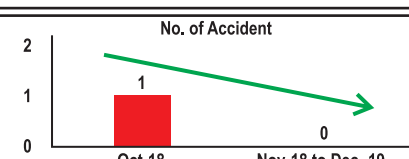
Statement : No Safety guard at Roll Forming Machine to restrict.

Statement : Photo sensor guard provided to restrict manual operation

Benefits :

1. Finger injury accident on the roll forming during production process is eliminated.
2. Providing safe working environment is upto the moral of operating person and will improve the productivity.

No. of Accident



Period	No. of Accident
Oct-18	1
Nov-18 to Dec-19	0

ACMA Foundation Cluster 13

(January 2018 – December 2019)

The Foundation Cluster program provides a solution to eliminate waste of all kinds observed in the shop-floor of any company. ACMA Foundation Cluster focuses on Building Capability throughout the organisation.

Cluster Launch - December, 2017
Cluster Culmination - January, 2020

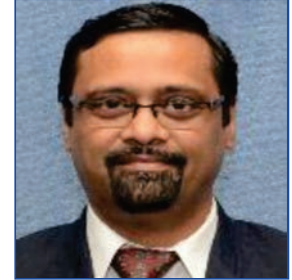
Participating Companies:

- Autocomp Corporation Panse Pvt. Ltd.- Unit No. I, Chakan
- Autocomp Corporation Panse Pvt. Ltd.- Unit No. II, Chakan
- Sandhar Components Unit-1, Attibele
- Sundaram Hydraulics Ltd., Chennai
- Supercraft Foundry Pvt. Ltd., Jaysingpur
- Swift Enterprise Pvt. Ltd., Jaysingpur
- Ultra Engineers, Unit-3, Solar Div., Nighoje, Chakan

Team-



V. K. Sharma
Head Cluster Program



Sunil Mutha
Principal Counselor & Mentor



Vivek Haridas
Counselor



K. Bhoopalan
Counselor

Feedback Analysis-

Sr. No	Particulars	Autocomp Corporation Panse Pvt. Ltd. Unit No. I	Autocomp Corporation Panse Pvt. Ltd. Unit No. II	Sandhar Components Unit-1, Attibele	Sundaram Hydraulics Ltd.	Super Craft Foundry Pvt. Ltd.	Swift Enterprises Pvt. Ltd.	Ultra Engineers Soal Div.
1	Counselor Visits	10	10	10	10	10	10	10
2	Inputs Received	9	10	10	10	10	10	8
3	Relevance of Inputs	9	10	10	10	10	10	8
4	Delivery as per plan (Roadmap)	9	10	9	9	9	9	9
5	Learning from Model Company visits	9	9	9	9	9	10	5
6	Total score (out of 50)	46	49	48	48	48	49	40
7	Score in % (Out of 100)	92.00	98.00	96.00	96.00	96.00	98.00	80.00
8	Over all Rating	93.71						

Savings (in Lacs)-

Sr. No	Particulars	Autocomp Corporation Pansa Pvt. Ltd. Unit No. I	Autocomp Corporation Pansa Pvt. Ltd. Unit No. II	Sandhar Components Unit-1, Attibele	Sundaram Hydraulics Ltd.	Super Craft Foundry Pvt. Ltd.	Swift Enterprises Pvt. Ltd.	Ultra Engineers Soal Div.
1	Red Tag	23.00	7.06	2.72	3.21	15.61	4.96	12.28
2	Non Moving Inventory	5.20	4.72	0	0	0.70	6.00	0
3	Waste Elimination	4.40	13.32	0	5.04	8.98	9.80	0
4	Suggestion	1.8	7.14	1.21	9.07	0.53	1.50	0.45
5	Kaizen	0.6	9.49	17.81	323.64	29.73	38.00	122.2
6	QCC	14.3	2.84	39.3	44.74	11.55	4.20	64.14
7	SMED	3.5	5.00	0	0	1.50	4.00	0
8	POKAYOKE	2.00	5.58	0	0	13.40	9.90	0
9	Tool Cost/Inventory	10.00	0.29	61.24	0	150.00	13.10	0
10	Others	0	0.31	0	59.56	0.00	9.00	0
11	Total	64.80	55.75	122.28	445.26	232.00	100.46	199.57
12	Total Over all Saving in Lacs	1220.12						

Key Improvements-

Safety : Pride Improvements

Before → **After**

2 'S' → Trolley Made
Improper Location

2 'S' → Rack Made
Improper Location

2 'S' → Rack Made
Improper Location

Suggestion and Kaizen : Pride Improvements

Before → **After**

Concept → Rib introduced to eliminate leakages
Gate area leakages

Concept → Drilling operation incorporated in die casting tool itself
Drilling operation done by out source

Concept → New design fixture introduced with safe condition
Unsafe drilling method

Suggestion and Kaizen : Pride Improvements

Before → **After**

Suggestion → CCMT Replaced by WNMG (6 Corners) for life improvement & tool changing frequency reduced
CCMT (2 Corners) insert used for boring operation (CNC)

Kaizen → Oil collected & restored in the oil tank through filter
Oil flow from the Tube & spill on the floor

Suggestion : Pride Improvements

Work Safety → Staircase removed providing space for easy worker movement
Staircase was obstacle for workers movement, possibility of head injury

Fatigue Reduction → Provided a movable trolley with storage eliminating worker bending movement
Worker fatigue during movement from removing metal from molding box to tin

Inspection time Reduction → Molding box material inspection trolley provided
Random collection of material for molding box checking

ACMA NPD Bridge Cluster - 1

(January 2019 – December 2019)

ACMA New Product Development Bridge cluster is useful to understand the implications of becoming a design company, to invest in people and infrastructure in an effective and lean way, to implement robust design processes.

This leads to flawless designs with negligible rework, high level of customer acceptance, assured manufacturability, low product cost, delivered on time, knowledge-based learning organization.

Cluster Launch - October, 2018
Cluster Culmination - February, 2020

Team-



V. K. Sharma
Head Cluster Program



Vishal Saxena
Counselor

Participating Companies:

- JK Fenner (India) Ltd., Sriperumbudur
- JK Fenner (India) Ltd., EPD Division, Hyderabad
- Sundaram Auto Components Ltd., Hosur

Customer Feedback-

Overall, 89% customer feedback received from all three participating companies.

Benefits-

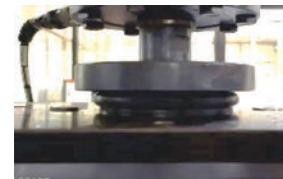
Parameter	UOM	Quantity
Investment made by 4 companies	INR Lakhs	49.2
Projects Initiated during cluster	Number	18
Business potential generated during cluster	INR Crores / year	17
Cost saving potential identified	INR Crores / year	1.5
Design guidelines prepared	Number	13
Technical Report preparation	Number	32

Key Improvements-

Since this was a learning cluster and most of the concepts were practiced first time by all participating companies, all of them learned and implemented cluster concepts and strengthen their ability for

1. Organising for Product Design through concepts of Design office setup, Document management and drawing preparation & checking.
2. Product design for function and prevent failures through concepts of Reverse Engineering, design for function, design to prevent failure and design verification.
3. Learning from competition through concepts of competitor analysis, Tear down room and product library.
4. Product cost management through concept of Design to cost.
5. Organisational competency development through concepts of failure directory and Design guidelines.

Shining Examples -



JK Fenner carried out accelerated test for Impact testing of a new product resulting shorter testing lead time for critical tests selection of right compound.



Tear down room created in all companies for reverse engineering activities and learning competitor's products.

Clusters Launched

Launch Date	Name of the program	Duration	Benefits of Program
24 th January 2020	ZED Plus	12 months	<ul style="list-style-type: none"> ▶▶ Keeping house in order and Introduction to ZED ▶▶ ZED Tools, ZERO Effect. Develop Employee Skill ▶▶ Delivering Zero Defect Quality and Holding gains
22 nd January 2020	Advance Cluster 15	24 months	<ul style="list-style-type: none"> ▶▶ Employee & Customer & Satisfaction & TEI. Designing of Cells / Single piece flow layouts. ▶▶ Improvement in VAR (Value Added Ratio) though VSM implementation. ▶▶ Implementation of 14 Steps of Lean & Low Cost Automation. ▶▶ Multi-fold productivity improvements permanent ▶▶ Quality Improvement - Reduction in Customer Complaints / Returns / In-house rejection / Rework ▶▶ Resource optimization through Advance 5S

New Projects Launched :

S. No.	Project Name	Launch	Plants	Location
1	<u>Uptime Improvement Project- WIL</u>	<u>July, 2019</u>	<u>1</u>	<u>Chennai</u>
2	<u>IPCL Quality Improvement Project</u>	<u>July, 2019</u>	<u>1</u>	<u>Bhavnagar</u>
3	<u>IPCL Productivity Improvement Project</u>	<u>July, 2019</u>	<u>1</u>	<u>Bhavnagar</u>
4	<u>Asset Turn Improvement Project- JK Fenner</u>	<u>Oct. 2019</u>	<u>3</u>	<u>Sriperumbudur, Madurai, Hyderabad</u>
5	<u>HIM Teknoforge Improvement Project</u>	<u>November, 2019</u>	<u>1</u>	<u>Baddi</u>
6	<u>Lean Implementation in AKP Ferrocast</u>	<u>December, 2019</u>	<u>1</u>	<u>Belgaum</u>
7	<u>Lean Implementation in Kusalava International</u>	<u>December, 2019</u>	<u>1</u>	<u>Visakhapatnam</u>
8	<u>Uptime Improvement Project- WIL</u>	<u>December, 2019</u>	<u>1</u>	<u>Rampur</u>
9	<u>Lean Improvement Project- Lucas TVS</u>	<u>January, 2020</u>	<u>1</u>	<u>Pantnagar</u>
10	<u>Engineering Improvement Project- Metalman</u>	<u>February, 2020</u>	<u>1</u>	<u>Pithampur</u>
11	<u>Inventory Improvement Project- Highway Ind.</u>	<u>February, 2020</u>	<u>1</u>	<u>Ludhiana</u>

UDAY-PRIDE COVID -19 ACTION FOR AUTO SECTOR

Background

The global COVID-19 pandemic and the nation-wide lock down brought manufacturing and much of the economy in India to a stand-still, leaving many businesses, particularly Micro, Small and Medium Enterprises (MSMEs). MSMEs particularly Tier-II and below in Auto sector reported concerns to address the many challenges that have popped up to return to business in terms of employee safety, sales, supplies, manpower, operations and finances.

During the lock down period UNIDO reached out to some 20 auto component manufacturers (Tier-II and below) enrolled under it's ongoing Uday-Pride programme to take the pulse of auto sector.

Firms are first and foremost concerned about immediate cash flows, i.e. how to pay wages, rent, interest and other fixed costs in the absence of business output and income. Henceforth, auto component manufacturers are expecting a fiscal and/or financial support package to overcome their immediate cash flow concerns.

Businesses cannot be simply switched back on, and indeed getting back into business at the current scale is unprecedented. Both the success of the lock down (in terms of breaking the spread of COVID19 infections) as well as its socio-economic costs (to businesses, communities and society at large) will depend on the critical efforts to get the economy moving again. Under the present partnership, the United Nations Industrial Development Organization (UNIDO), ACMA (Automotive Components Manufacturers Association) and DHI (Department of Heavy Industry and Public Enterprises, Government of India) in India seek to offer hands-on advice to auto component manufacturers based on best insights from their projects and global expertise.

To help Auto MSMEs navigate their way to restart, recover and revitalize business, UNIDO with input from its partner ACMA, put together a knowledge and collaboration platform to Build Back Business from Crisis (B3C) and developed a Rapid comeback Roadmap for auto cluster companies currently participating in Uday-Pride programme.

Approach

During the Lock Down :

UNIDO's B3C (Build Back Business from Crisis) initiative is based on the assumption that advance planning and proactive strategizing helps MSMEs to focus on those things that really matter to revive their business and thus contribute to the success in recovery of their business, in terms of business value and profitability; scale and quality of employment; and contributions to communities, including protecting their health. This may be through recovery of previous business, pivoting into new business and/or quitting business operations that have become unviable. As a first proxy, this revival of business may follow a five staged revival roadmap, respectively: Plan for recovery; Ready the workplace; Restart to recover; Revive for growth; and Future proof. At the same time the crisis recovery is also an opportunity to cultivate and drive business excellence, to build back better, in the areas of Entrepreneurship; Finances; Customers; Supply chain; Operations; Manpower and Occupational safety and health. Details of each module is given inAnnexure-2.

Knowledge and Collaboration Portal

UNIDO's Building Business Back post Crisis (B3C) initiative aims to assist MSMEs to get back into business at the earliest possibility after (partial) lifting of restrictions in a strategic and planned manner with the dual objectives of contributing to ongoing Infection Prevention & Control (IPC) (to minimize and contain the spread of COVID-19 and prevent resurgence) and facilitating and accelerating the revival of business and the economy.

UNIDO has developed the B3C (<http://www.b3cmsme.org>) an online knowledge and business collaboration platform. The modular platform comprises of a core package of brief online tutorials supported by hands-on guidelines and fact sheets. The content is embedded in an interactive web portal with a dynamic delivery interface, for outreach and delivery; on line delivery through webinars with experts; and an engagement help desk.

In parallel though, firms have started to recognize that business before, during and after the COVID19 pandemic and associated lockdown will be different. Fighting the spread of pandemic through social distancing, improved hygiene and early detection will require changes in workplaces and practices. Moreover, depending on products, sector and location, MSMEs are faced with dwindled demand for their products, including cancellation of orders, migration of workforce, interrupted supply of materials and critical parts, etc. The ability to bounce back into business with a support package will depend on proactive planning, focus and adaptation to a 'new normal'.

Rapid Comeback After COVID:

While 20 companies were surveyed to take the pulse of auto sector it was felt the need for post Covid support remains high for auto cluster companies. In line with the feedback provided by participating companies, Uday-Pride has developed a technical support Rapid Comeback Programme through an intensive plan which needs to be delivered for over a 6-month period.

The auto component manufacturers will be given handholding support by the means of following roadmap:

ACMA		RAPID COMEBACK ROADMAP AFTER COVID						UNIDO	
Time in Months	1	2	3	4	5	6		Culture	
1. DWM - Daily Work Management 2. Monitoring / Review Mechanism -						Sustenance	Consistency in: 1. Quality 2. Delivery 3. Cost Monitoring & Control	Sustained Quality & Delivery	
1. Identify 7 Wastes & 3M Concepts 2. understanding Changeover Time (SMED) - Plans for Quick Changeover 3. Production Planning 4. SOP for manufacturing Processes	Productivity Improvement						1. Improved Delivery 2. Reduced Inventory & Improved Cash flow	Reduced Wastes	
1. Establish strong Firewall. 2. Synchronisation of inspection methods with customer. 3. Introduction of Poka yoke	Quality Improvement					1. Improved & Consistent Product Quality 2. Reduced Customer Returns & Inhouse Rejections		Quality Products & Satisfied Customers	
1. Checklist for Opening the plant after COVID 19 2. Safety - Own, co-workers & company's property 3. Implementation of 1s, 2s, 3s 4. My Machine Campaign-step 1 & 2 abnormalities	Work Place in Order					1. Safe and Clean workplace 2. Elimination of mix up 3. Capturing Machine abnormalities		Joyful Workplace	
Time in Months	1	2	3	4	5	6	ACMA-UNIDO	18/4/2020 Rev.0.0	

<https://www.sundayguardianlive.com/news/getting-msmes-back-business-perspectives-indian-manufacturing-clusters>

Annexure-1

B3C KNOWLADGE PORTAL MODULES:

	Topic	Main Message
Getting You Back into Business	1. Plan for Recovery	Review the impacts of lock down on critical assets, review likely scenarios, prioritize bussiness operations and set 'back into business' targets
	2. Ready the Workspace	Make your workplace safe through vigorous infection prevention and Control at workplace (through social distancing, improved work and people flow and better hygiene) and perform pre-start maintenance and servicing
	3. Restart to Recover	Restart and debottleneck earlier business operation and supply chains, serving lead buyers first
	4. Revive for Growth	Pivot new business employing core competencies and critical assets with new products, services and / or markets
	5. Future Proof	Create capacity in your business to respond and recover from adverse events
Persue Business Excellence	1. Entrepreneurship	Further develop entrepreneurship skills to succeed in changing business and societal environment
	2. Customers	Engage with customers and work towards making your business part of their success
	3. Supply Chain	Understand supply chain and strengthen partnership for critical supplies
	4. Operations	Strive for manufacturing excellence, through lean manufacturing, resource efficiency and quality management
	5. Manpower	Create culture of productivity and quality and provide decent conditions of work and employment
	6. Finances	Sure-up cash flows to focus spending on things that matter for your business
	7. Occupational Health & Safety	Maintain healthy and productive workforce and minimize risks to business



Creative Vision

Services Simplified



Graphic Design

Business Stationary,
Marketing Stationary,
Brochures, Catalogues,
Newsletters



Corporate Events

Conferences, Summits,
Award Functions
Meetings (GB)
Product Launches



Softwares

Website Design
Web Applications,
Mobile Applications
(IOS, Android),
UI/UX



Multimedia

Virtual Reality Solutions,
E brochure, E Mailers,
PPT, Corporate Presentation,
Machine / Product / Process
Animation



Trade Shows

Stall Designing & Installation
(All major cities in India & world over)



Printing

Offset
Large Format
Decals

Creative Vision

📍 No.102, 1298 Sadashiv Peth, Nr. Chimnya Ganpati, Pune 411030. India.

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🌐 www.creativevision.co.in

ACMA Centre of Excellence (ACoE) SAKSHAM- IITD Campus, Sonipat -(Haryana)



“The purpose of a writer is to keep civilization from destroying it self.”
— Albert Camus



EMINENT STEERING LEADERS FROM INDUSTRY COMMITTEE MEMBERS

Mr. Deepak Jain,
President, ACMA
Chairman & Managing Director
Lumax Industries Ltd.

Mr. Sunjay Kapur
Vice President, ACMA
Chairman - Sona Comstar

Mr. Ashok K Taneja
Advisor, ACoE & Past President, ACMA
Managing Director & CEO -
Shriram Pistons & Rings Ltd.

Mr. F R Singhvi
Chairperson – Pillar 3
Joint Managing Director
Sansera Engineering Ltd.

Mr. Srivats Ram
*Advisor, Pillar 3 &
Past President, ACMA*
Managing Director Wheels India Ltd

Mr. Sanjay Sabherwal
Chairperson – ER
Managing Director
Metaldyne Industries Ltd.

Mr. Deepak Chopra
Chairperson – NR
Chairman of Board Spicer
India Ltd.

Mr. Piyush I. Tamboli
Chairperson - WR
Chairman & Managing Director
Investment & Precision
Castings Ltd.

Ms. Subha Kumar
Chairperson - SR
Managing Director - Natesan
Synchrocones Pvt Ltd

STEERING COMMITTEE & ITS 1st MEETING AT ACOE (SONIPAT) ON 25th FEB, 2020



I-TECHPARK, IIT-D FACILITY- LODGING & BOARDING



Learning atmosphere



500 seater Auditorium
Tariff. 30,000/day + GST



100 seater Lecture Room
Tariff- 5,000/day + GST



30 seater Conference Room
Tariff- 5,000/day + GST



Suite room
Tariff-3,500/day + GST



Double occupancy Deluxe Room
Tariff-2,500/day + GST



IIT-D Canteen

Rates
Breakfast - 150+ GST
Lunch-180 + GST
Dinner-180 + GST

ACMA Centre of Excellence (ACoE) Lab Facility at Sonipat - Details & Charges

Sr. No.	Lab Facility	Per Day charges (8 hours) *		Details - Lab facility is available for Usage /Customized Trainings. (charges are approx. 50% less than market)
		Plant Turnover < INR 150 Cr	Plant Turnover > INR 150 Cr	
1	Mechatronics Lab	INR 8,000	INR 16,000	7 Stations equipped with training equipment for fluidics lab (pneumatics), advance pneumatic training kit, basics and advance electro pneumatic training kit, servo motor drive training system with linear drive and sensor for object detection.
2	3 D scanner	INR 2,000	INR 4,000	Scanning -Upto 2-meter size component at accuracy of 2 micron for FOV (Field of View) 200 & 7 micron for FOV 500.
3	Design Lab	INR 10,000	INR 20,000	16 High End Design Workstation equipped with Design tools & Simulation tools.
4	ACoE Faculty	INR 15,000	INR 30,000	Expert Guidance available for Automation, Scanning and Product Design & Development, Companies can avail these services.

* Applicable GST will be levied

Conferencing & Stay Facility at ACoE, Sonipat - Details & Charges

Sr. No.	Conferencing Facility	Rental Charges per day (8 hours) *	Facility Details
1	Auditorium #	INR 30,000	500-seater, Theatre, Air conditioned
2	Lecture Room #	INR 5,000	100-seater, Theatre, Air conditioned
3	Conference Room	INR 5,000	40-seater, classroom, Air conditioned
4	Conference Room #	INR 5,000	30-seater, classroom, Air conditioned
5	Board Room- 1	INR 4,000	20-seater, classroom, Air conditioned
6	Board Room- 2	INR 2,000	10-seater, classroom, Air conditioned

Sr. No.	Stay Facility #	Tariff per night *	Facility Details
1	Suite	INR 3,500	Residential Accommodation- 10 Suites, 140 Deluxe rooms, TV, AC, WIFI
2	Deluxe Rooms- Single / Double occupancy	INR 2,500	
3	Catering Services	(No room service): Breakfast = INR 150, Lunch= INR 180, Dinner= INR 180	

*Applicable GST will be levied # Facility Operations managed by FITT.

Conferencing facility is available for Use and Customized Trainings. Each facility is equipped with complementary amenities such as:

1) Interactive digital whiteboard	2) Wall mounted white board	3) LCD projector & screen
4) Laptop	5) Flip chart board & Board Markers	6) Slide changer
7) Hand Mike	8) Collar Mike	9) Podium Microphone
10) Audio & Sound System		

Exclusion in Rental charges- Travel, Wi-fi, Photo-copying, Printing, Video shooting, Photography, Extra mikes, Stationary & Admin services.

Recreational facilities : Table Tennis, Carrom Board, Chess , Badminton ,Jogging track & Library

HIGHLIGHTS OF ACoE WORKSHOP / TRAINING (December to March 2020)

Sr. No.	Workshop / Event	To	From	Venue
1	EV : eMobility Scope, Policy and Technology	18-Nov-19	18-Nov-19	Sonipat
2	A Breakthrough Approach to Achieve Zero DEFECT at Shop-Floor and Offices	19-Nov-19	19-Nov-19	Sonipat
3	Mechatronics (Factory Automation)	21-Nov-19	22-Nov-19	Sonipat
4	Technical Round Table on Cognitive (Intelligent) Enterprise - Reinvent enterprise with Artificial intelligent and Innovative digital solutions	21-Jan-20	21-Jan-20	Sonipat
5	Achieving Zero Customer Complaints by addressing CTC and CTQs with Process Improvements (ZED -IV)	22-Jan-20	22-Jan-20	Sonipat

ACoE VIRTUAL TRAINING PROGRAMS AT GLANCE

PROFESSIONALS BENEFITTED

Attendees 8000+Participants	March - 2020	April - 2020	May - 2020
	Total Number of Virtual Programs Conducted	2	12
Total number of Participants for the month	299	6692	993

March 2020	S.No.	Date	Topic	Faculty	No. of Attendees	Income Generating/Non-Income Generating
	1	12-March-20	Low Cast Automation	Dinesh Vedpathak	194	Non-Income Generating
	2	23-March-20	Effective Project Management & Design Control for NPD Process	Vishal Saxena	105	Non-Income Generating

PROGRAMS IN APRIL 2020	S.No.	Date	Topic
	1	10-Apr-20	Methods for Inventory less production
	2	13-Apr-20	Preparedness for restart after lockdown of Covid-19
	3	14-Apr-20	NPD Quality Control to achieve stable initial product quality
	4	16-Apr-20	Way to Operate with in Available Recourses
	5	17-Apr-20	Methods for Inventory Less Production part – 2
	6	20-Apr-20	Way to Manage Supply Chain in Adverse condition
	7	22-Apr-20	EV - AT a Glance to Major Components, Li-ion Battery & BMS
	8	24-Apr-20	Driving New Product Development in Express Mode
	9	27-Apr-20	Preparedness for restart after lockdown of Covid-19
	10	28-Apr-20	Introduction to 3D experience platform
	11	29-Apr-20	A curtain raiser on various new programs
12	30-Apr-20	Inspirational talk and learn ways to get motivated	

PROGRAMS IN MAY 2020	Sr.No.	Date	Topic
	1	05-May-20	Ways to keep employees motivated in turbulent times
	2	07-May-20	Metal 3D Printing Simulation
	3	08-May-20	Quality improvements through Shainin DOE technique
	4	12-May-20	Principles of Quality Management
	5	14-May-20	Welding & Brazing Simulation
	6	15-May-20	Ways to stabilize New Product Quality at initial production
	7	19-May-20	EV - At a Glance Major Components - Powertrain
	8	20-May-20	Re-commendation for Lubricants for Various Industrial applications
	9	22-May-20	Methods for Inventory less production & New Shop floor Layouts
	10	26-May-20	Mathematics of Productivity and Synchronization of supply chain
	11	29-May-20	Planning and Capacity Building for Automotive component makers

PROGRAMS IN JUNE 2020

Sr. No.	Date	Name of program
1	5th June 2020, Friday (3:00 PM to 4:30 PM)	Free Webinar on - Resilience for Auto Component Industry – “When the going gets tough, the Tough gets going”
2	6th June, 2020, Saturday (3:00 pm to 6:00 Pm)	FREE Virtual Town Hall – sharing practices by company to keep workplace safe against COVID 19
3	9th June 2020, Tuesday (3:00 PM to 4:30 PM)	Paid Webinar on - Cost Reduction through Waste Management Techniques
4	13th June 2020, Saturday (3:00 PM to 4:30 PM)	Paid Webinar on - Efficient Project Management Techniques for New Product Development
5	15th June 2020, Monday (3:00 PM to 3:30 PM) (3:30 PM to 4:30 PM)	Session 1 – Free Webinar on - Roadmap to Sustainability – Industry 4.0 Session 2 – Free Webinar on - Seeding Innovation in the Organizations
6	16th June 2020, Thursday (3:00 PM to 4:30 PM)	Paid Webinar on - Cost and Design Optimization using Ansys Tools
7	18th June 2020, Thursday (3:00 PM to 4:30 PM)	Paid Webinar on - Techniques to achieve Zero Customer complaints
8	20th June 2020, Saturday (3:00 PM to 4:30 PM)	Free Webinar on - Vendor assessment: Assessing the roots and nerves of the automotive industry.
9	23rd June 2020, Tuesday (11:00 AM to 11:30 AM) (11:30 AM to 12:30 PM)	Session 1 – Free Webinar on – Let's Grow together Session 2 – Free Webinar on - Role of Leadership, Inspiration & Partnerships in Current crisis for professionals & Entrepreneurs
10	25th June 2020, Thursday (3:00 PM to 3:30 PM) (3:30 PM to 4:30 PM)	Session 1 – Free Webinar on – I am Manufacturing 4.0 Session 2 – Free Webinar on - Collaborative Design on Cloud
11	26th June 2020, Friday (03:00 PM to 04:30 PM)	Paid Webinar on – Electric Vehicle Lithium Battery Pack design & Assembly Process
12	27th June, 4th July & 11th July 2020, (Saturdays) (3:00 PM to 4:30 PM)	Paid Certification course on - Techniques of Levelled Production
13	29th June 2020 , Monday (2nd BATCH)	Paid Certification program on smart manufacturing 4.0 (Marshall)
14	30th June, 7th July & 14th July 2020, (Tuesdays) (3:00 PM to 4:30 PM)	Paid Certification course on -Communication and Presentation skills

Note:

- For Paid Webinars, Fees per Registration (Excluding 18% GST)
 - INR 1200/- (For ACMA Members, ACMA - UNIDO Cluster members)
 - INR 1320/- (For Non - Members)
- For Paid Certification Courses, Fees per Registration (Excluding 18% GST)
 - INR 4000/- (For ACMA Members, ACMA - UNIDO Cluster members)
 - INR 4400/- (For Non - Members)
- Please send duly filled reply form to enable us sharing webinar link

Discount Policy:

Webinars: Discount on number of participants can be availed as per below table.

Sr.No.	Number of paid participants from group company for any webinar	Number of invitee / complimentary participant for any webinar
1	2	1
2	3 or more	2
3	6 or more	4
4	9 or more	6
5	12 or more	9

Certification Courses: Discount on number of participants can be availed as per below table. This is the maximum available discount.

Sr.No.	Number of paid participants from group company for any certification course	Discount on per participant Fees
1	3 or more	10%
2	6 or more	20%

Training content:

A PDF copy of the presentation will be shared to Paid webinar/certification course participants only. However, the same copy is available for other participants with same charges as per paid programs.

Webinar Annual Subscription:

Companies can also avail an annual subscription at the rate of INR 50000/- (Extra 18% GST), where they will get total 200 registrations for any ACoE paid webinar during FY 2020-21 (**Only for webinars, not applicable for any other program**).

Company specific Webinar :

Companies can opt for a specific webinar dedicated for their company and their different plant locations, where company will suggest webinar topic and the same will be delivered by ACoE faculty for one hour at mutually decided date at the rate of INR 25000/- (Extra 18% GST). Maximum 90 participants will be allowed.

BRAND PROMOTION OPPRTUNITY - ACoE VIRTUAL PROGRAM

Sr. No.	BENEFITS	GOLD (INR 1 LAKH)	SILVER (INR 0.5 LAKH)	Bronze (INR 0.25 LAKH)	SPECIAL (INR 0.40 LAKH)
1	Promotion of company name & logo on webinar registration page	12 webinars	6 webinars	3 webinars	1 dedicated webinar
2	Opportunity to run a company promotional film (max. 3 minutes) during webinars	12 webinars	6 webinars	3 webinars	1 dedicated webinar
3	Direct reach to registration - access to webinar "registered participants' details	12 webinars	6 webinars	3 webinars	1 dedicated webinar
4	Dedicated webinars for sponsor to market company products / services	3 webinars (max. slot duration of 30 minutes)	2 webinars (max. slot duration of 30 minutes)	1 webinar (max. slot duration of 30 minutes)	1 dedicated webinar (max. duration of 1.5 hrs.)
5	Complimentary registrations for attending webinar (PI make use of Reply form to submit delegates details)	12 registrations for 3 webinars	6 registrations for 2 webinars	3 registrations for 1 webinar	NIL
6	Business highlights and marketing platform for sponsors in ACoE e-News Letter (e-News Letter will be circulated to ACMA members & OEMs). (Advertisement to be provided by company)	For 1 year	For 6 months	For 3 months	NIL

Sponsors May contact to know more :

- ❖ Mr. Vishal Saxena, Technical Head, ACoE +91 9650988154 (vishal.saxena@acma.in)
- ❖ Ms. Raginee Singh, Admin Head, ACoE +91 9999197693 (raginee.singh@acma.in)
- ❖ Mr. Deepak Jain, Lab Head, ACoE + 91 9810606125 (deepak.jain@acma.in)

ACMA

Automotive Component Manufacturers Association of India

Series
2020

*Specially
developed
programs*

*Solutions
to dilute
challenges*



**Working capital
management**

Duration
4 Quarters



**Productivity improvement
through improved factory layouts**

Duration
4 Quarters



**Reducing
break-even point**

Duration
5 Quarters



**Managing activities
within available resources**

Duration
4 Quarters



**Express New Product
Development**

Duration
2 Quarters

Adding Value to Membership

ACMA PROGRAMS 2020 AC (After COVID - 19)

WORKING CAPITAL MANAGEMENT

1. Zeroing in on suitable working capital management policy/strategy
2. Direct inventory management
3. Indirect inventory management
4. Reducing lead time of production
5. Reducing lead time of procurement
6. Reducing total cash flow cycletime

PRODUCTIVITY IMPROVEMENT THROUGH IMPROVED FACTORY LAYOUTS

1. Implementing safety precautions
2. Layouts to meet social distancing criteria
3. Improve flow speed of material
4. Improve lead time efficiencies
5. Improve line efficiency
6. Improve formation ratio

REDUCING BREAK - EVEN POINT

1. Create cost conscious culture across company
2. Challenge current cost structure
3. Fixed cost reduction (Employee productivity, Overheads, Depreciation, Utilities, Premiums)
4. Variable cost reduction (Sub-contracting Logistics, Energy, Primary & Secondary)
5. Convert waste to sale, Maintain productivity

MANAGING ACTIVITIES WITHIN AVAILABLE RESOURCES

1. Implementing safety precautions
2. Multiskilling & multitasking
3. Improve machine efficiency
4. Optimise new layout capacities
5. JIT RM & BOP availability
6. Sharing of resources
7. Flexible production

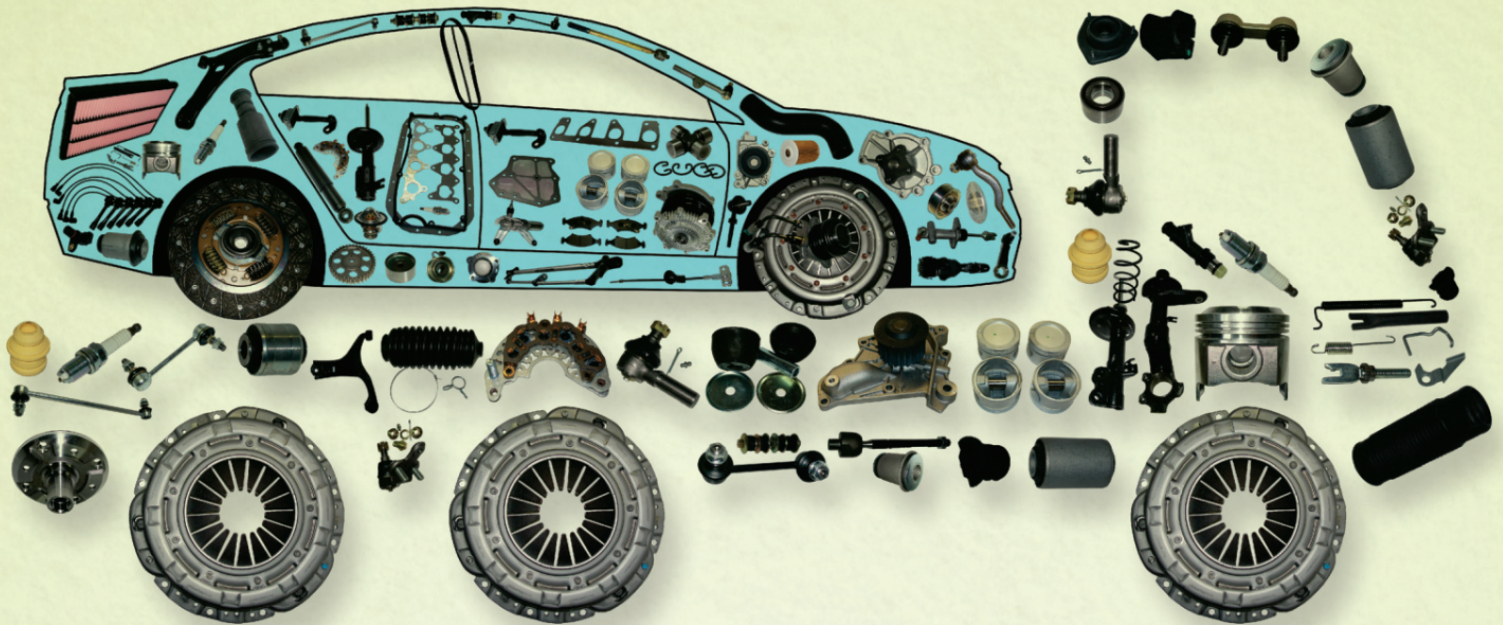
EXPRESS NEW PRODUCT DEVELOPMENT

1. Restructuring NPD organisation
2. Agile project management (Alignment with Customers, Suppliers)
3. Compressed lead times
4. First time right samples
5. Burst mode development

For more details please contact:

Ms. Sangeeta Sharma | ✉ sangeeta.sharma@acma.in | 📞 8802848888

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- ◆ Outbound Delivery Solutions
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- ◆ Marketplace Distribution Solutions
- ◆ Appointment Delivery Solutions
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Safexpress has India's largest logistics network covering **all 30,338 Pincodes** of the country. We excel in Automotive Aftermarket Logistics. You can significantly reduce your Vehicle Off Road (VOR) Time by leveraging our supply chain & distribution expertise.



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