



CMA VIDYARTHI

सीएमए
विद्यार्थी

Editor: CMA Shrenik S. Shah
1. CMA Malav Dalwadi
2. CMA Darshan Vohra
3. CMA Rahul Jain

E-Bulletin Vol. 1 For CMA Students Only January 2014

From the Desk of Chairman



Dear All Students,

It is really a pleasure to talk to you all at the end of every month. I know you all are excited about your results which will be declared any time between 22nd February to 23rd February 2014 of-course exact date will be given by

examination department of HQ. I wish you all the best for the results. On the other hand our foundation and CAT students have already received the results, many congratulations to successful students! Welcome on the path of becoming a professional. I am sure you must have felt some heat on this first hurdle of your professional journey.

On 1st January, we inaugurated our oral coaching classes at various places in Mumbai by WIRC and on different dates at various chapters of WIRC. You may feel little relax for first few days of your studies but that is very dangerous. This time you all should utilize on planning and scheduling. Planning can be of time, quantum of studies, reference books etc. I am sure your seniors, friends, guides and teachers will help you in getting the same. The first set of question papers are available for new syllabus including RTPs for December Term. Please make full usage of the same.

I was fortunate to attend Placement Committee Meeting at New Delhi with my counter parts of other region. We have drawn very exciting plans for the successful students in future. Once they are finalized we will keep on giving you information about the same.

I am sure you all are keeping view on what is happening on the front of Draft Cost Audit and Compliance Rules. We, at WIRC, are putting our best efforts to ensure that we will impress the law makers on this front. We have met many Members of Parliament and appraised them about the situation. To have latest updates on this issue I request you to be in touch with WIRC and HQ website.

I wish you all the very best for results in February!

With Warm Regards

CMA Ashish Thatte



We are what our thoughts have made us; so take care about what you think. Words are secondary. Thoughts live; they travel far.

- Swami Vivekananda





OEE (Overall Equipment Effectiveness)

CMA Ulka Deshpande

OEE (Overall Equipment Effectiveness) throws a light on the performance and efficiency of a manufacturing unit. **Overall Equipment Effectiveness (OEE)** is developed by Seiichi Nakajima in the 1960s to evaluate how effectively a manufacturing operation is utilized.

It is based on the three production related factors - Availability, Performance, and Quality that is machine availability, production performance & quality of the product produced. OEE can be applied to any individual Work Center, or group of work centers or Plant levels. This tool enables drilling down to specific analysis, such as a particular Part Number, Shift or batch.

No manufacturing unit operates at 100% efficiency, there are 'N' of factors which affects the manufacturing performance. For example – machine break down, material unavailability, substandard quality material, inexperienced workers, defective materials, machine problems etc etc. It is hence generally common that 85% operational efficiency is targeted.

Major causes of Production efficiency losses are –

- Down time losses such as Tools failure, Equipment failure etc
- Down time losses such as unplanned maintenance, set up & change over losses etc
- Product quality related such as scrap, reworks, rejections etc
- Short stops such as speed losses due to misfeeds, delivery blocked, cleaning etc
- Operator inefficiency
- External reasons like power failure etc
- Nature of the produce

OEE is a major KPI (Key Performance Indicator) that considers three elements – Availability, Performance & Quality.

Availability of the machine is a percentage of time that machine is available (this is exclusive of preventive maintenance, planned down time activities trials, setting time etc) against the production time.

The formulae is –

Availability = Operating time / Planned production time

Performance indicates the rate at which actual no of units produced against the standard rate for no of units which can be produced in the operating time. The formulae is –

Performance = Ideal Cycle time / Actual Operating time

Ideal cycle time is also known as theoretical cycle time, design cycle time.

Quality is the percentage of products which is first time correct. The formulae is –

Quality = Good pieces / Total Pieces

And then considering above three factors OEE is calculated as -

OEE = Availability * Performance* Quality *100

It is very important to note that always increased OEE is better, one need to analyze the three factors which indicates the three different areas of efficiency that is availability, quality & performance.

In the following example even if the OEE of shift one is on the higher side if we study the situations carefully we can come to know that the actual better is the performance of second shift. Availability one can improve but the quality 99.5% is very good achievement in this case.

	Availability	Quality	Performance	OEE
Shift 1	95.0%	96.5%	96.0%	88.0%
Shift 2	90.0%	99.5%	95.1%	85.2%

By analyzing the three factors one can come to know the areas for improvement such as production processes, equipment or tools performance, maintenance, rejection etc.

OEE helps in –

- Reducing quality costs,
- Reducing Down time costs,
- Reducing maintenance costs,
- Improved material, machine & labour efficiencies.
- Improved bottom lines

Example for calculating OEE -

Example of OEE for a Machine		Actual 1st Week Jan-14		STD	
A	Available Time (8Hrs * 60 Min)	480	Min	480	Min
B	Scheduled Maintenance	15	Min	20	Min
C	Scheduled Production Break	20	Min	18	Min
D	Active Time (A-B-C)	445	Min	442	Min
E	Recorded Breakdown Time	20	Min	0	Min
F	Machine Setting Time	10	Min	10	Min
G	Production change over time	10	Min	5	Min
H	Operating Time	405	Min	427	Min
I	Availability Rate	91.0%		96.6%	
J	Gross Production	569	Nos		Nos
K	Rework	9	Nos	-	Nos
L	Start up defective pieces	5	Nos	5	Nos
M	Process defects	5	Nos	3	Nos
N	Total Defective pieces	19	Nos	8	Nos]
O	OK Production	550	Nos	659	Nos
P	Quality Rate	96.7%		98.8%	
S	Standard Cycle time	0.64	Min	0.64	Min
T	Actual Production time	0.71	Min	0.68	Min
U	Performance Rate	89.9%		94.1%	
V	OEE	79.10%		89.83%	

Means of Improving OEE -

There can be number of ways by which one can improve the OEE, some of them can be -

- Operators training
- Technical improvements in the bottleneck machines
- Fine tuning in the production planning
- Product redesigning
- Proper Operating instructions
- Maintaining the machines in good operating conditions
- Proper & effective inventory planning
- Proper understanding of production process

For any unit one of the objective is to improve the bottom-lines. There can be two ways for improving the profits, either by increasing the selling price or by reducing the costs. In this competitive era one cannot take a risk of increasing the selling prices, but definitely can think of means of reducing the costs. As OEE increases the utilization efficiencies in almost all critical areas it can be used as one of the important tool for reducing the costs.

TWO DAYS WORKSHOP ON MS-OFFICE

Date :

Saturday 8th & Sunday, 9th February 2014

Venue:

Aruna Manharlal Shah Institute of Management and Research
R. B. Kadam Marg (Road leading to Bhattwadi), Off. L.B.S. Marg
(Land Mark- M.T.N.L exchange on L.B.S. Marg), Ghatkopar (W), Mumbai 400 086.

Fees:

Rs.2500/- per student / Members - (including Service Tax and Refreshment)

Cheque should be drawn in favour of ICAI-WIRC

Time :

9.00 a.m. to 5.00 p.m.(Lunch Break from 1.00 p.m. to 2.00 p.m.)

Details of Workshop:

MS-Office is a very essential tool in our Industry or Corporate life. It includes applications Like Excel, Word, PowerPoint, Outlook etc. Apart from our regular study of ICWAI course, having adequate knowledge of MS-Office is what the recruiters are looking for. More than 90% of the managerial work is carried either on MS-Excel and Mail box (Outlook).

Who all can participate:

- All students who are doing professional courses
- All faculty members
- All Non-teaching members

Eminent Faculties from the field

For details & Registration Contact:

Rohit Chambers, 4th Floor, Janmabhoomi Marg, Fort, Mumbai 400 001.

Tel. 022 - 2204 3406

E.mail: wirc@icmai.in • Website: www.icmai-wirc.in

Limited Seats • First Come First Serve Basis

Congratulations!

*All Successful students of Foundation Course Examination held
in December 2013.*



To

If undelivered please return to:

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
WESTERN INDIA REGIONAL COUNCIL,
Rohit Chambers, Janmabhoomi Marg, Fort, Mumbai 400 001.
Tel.: 2204 3406 / 2204 3416 / 2284 1138 • Fax : 2287 0763
E-mail : wirc@icmai.in • Website : www.icmai-wirc.in

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