

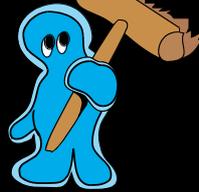


OVERALL EQUIPMENT EFFECTIVENESS

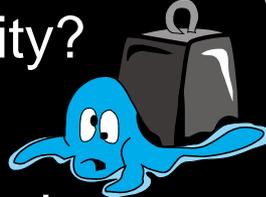
AfriLean Consulting @ www.AfriLean.com

OEE QUESTIONS

- How much time is spent on cleaning, lubricating and checking for faults?



- How much time is spent attending to breakdowns or other non value-adding activity?



- Are your teams and equipment running at maximum performance? (including quality)



- Do you have 'holes' in your production schedules?



SET THE BENCHMARK

O.E.E.'s

Date: 25 May 2001

MACHINE NAME

		Monday	Tuesday	Wednesday	Thursday	Friday
A	Working Hours (often 480 minutes per shift)	480	480	480	480	480
B	Scheduled Shutdown (planned maintenance/breaks/etc.)	30	30	30	30	30
C	Loading Time (running time) (A-B)	450	450	450	450	450
D	Downtime Losses (breakdowns/setups/adjustments/etc.)	23	37	43	51	131
E	Operating Time (C-D)	427	413	407	399	319
F	Availability (E divided by C x 100)	94,89%	91,78%	90,44%	88,67%	70,89%
G	Output during operating time (total processed amount)	12091	11196	12171	10178	8925
H	Theoretical Standard Cycle Time (pieces/min/)	30	30	30	30	30
I	Performance Efficiency (G divided by (H x E) x 100)	94,39%	90,36%	99,68%	85,03%	93,26%
J	Rejects during operating time	1026	781	805	650	67
K	Rate of quality products (G - J divided by G x 100)	91,51%	93,02%	93,39%	93,61%	99,25%
Overall O.E.E. (F x I x K x 100)		81,96%	77,15%	84,19%	70,58%	65,61%

SMED & 1st line maintenance for improvements

QMS for improvements

World Class OEE

85%

- You cannot improve what you cannot measure
- Teams learn how to calculate OEE's

TEAM MOTIVATION

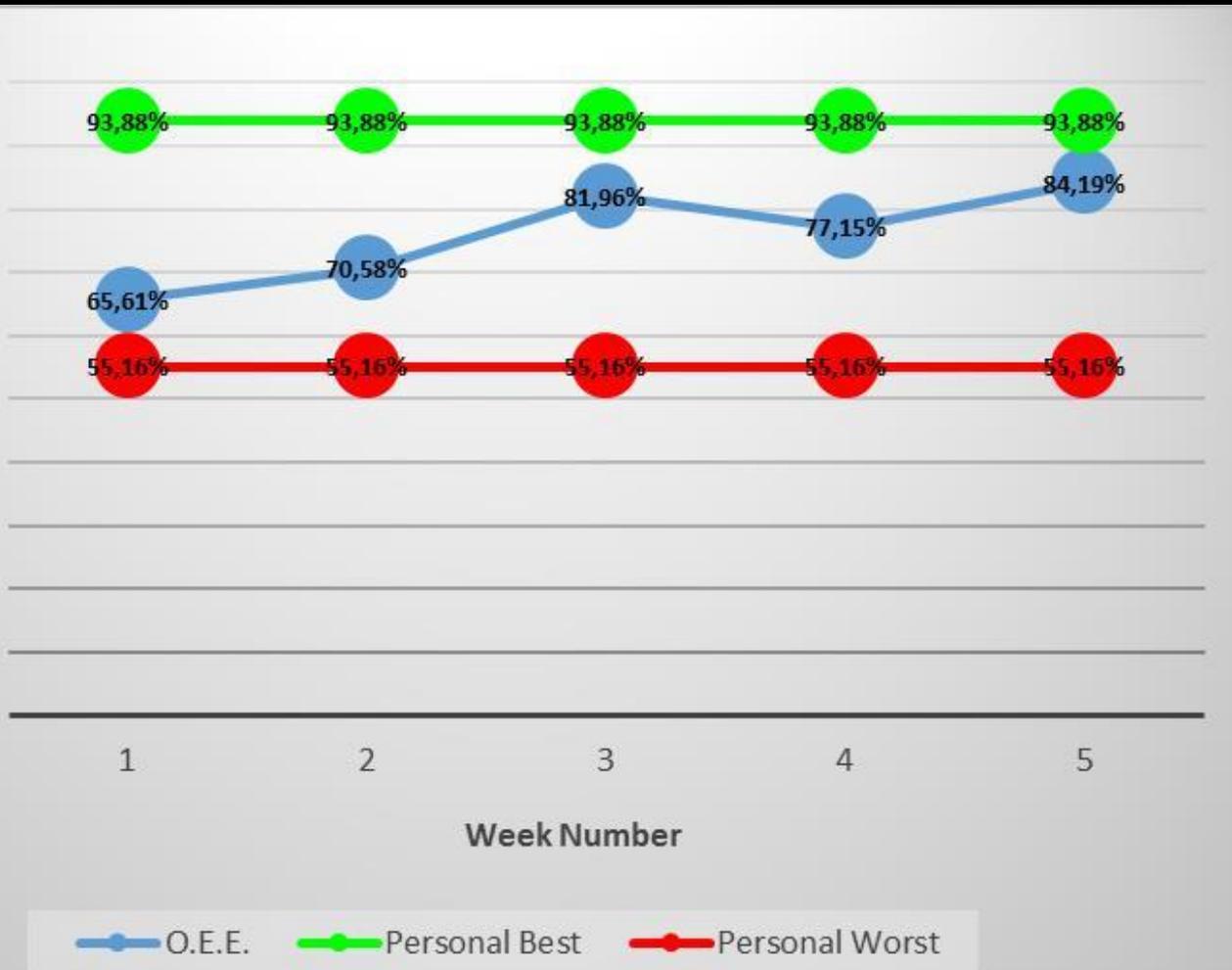
- ❑ Most equipment efficiency measurements are based on either international standards or 'Management Calculations'
- ❑ Teams (operators) feel dis-empowered because they often feel that the goals are unachievable
- ❑ Every time they fail to reach the goal they feel more demotivated

- ❑ Imagine teams creating their own benchmarks and being measured against their own historical performance

IN-HOUSE ATHLETES

- ❑ For world class athletes the challenge of beating their 'personal best times' is often greater than winning
- ❑ Winning may not always be achievable...but the challenge of creating a NEW 'personal best' is there with every race
- ❑ The secret to continually improving equipment efficiencies and create motivated teams is to treat them like in-house athletes...thus creating ownership
- ❑ 'BOB' charts will continually challenge your teams 'beat their best'

'BOB' CHARTS



□ 'BOB' charts highlight focus areas for continuous improvement

WORKSHOP CONTENT

- ❑ 1 day practical workshop will include the following:
 - ❑ Understanding the importance and impact of performance measurements (OEE)
 - ❑ Communications through Visual Management Techniques
 - ❑ Practical OEE calculations on plant equipment
 - ❑ Identify pilot machine (bottleneck)
 - ❑ Benchmark using BOB chart
 - ❑ Identify performance gaps using OEE charts
 - ❑ 5S and Red Tag exercise
 - ❑ Create performance improvement action sheet