

GLOBAL LEADER IN FILTRATION



November, 2010 QUALITY MONTH

PRODUCT QUALITY WEEK

Better Air is Our Business®



GLOBAL LEADER IN FILTRATION

AAF is Focused on Quality!



**AAF is focused and determined to
have excellent Product Quality.**

Better Air is Our Business®



Quality team of AAF International



Cramlington

Eco- parc

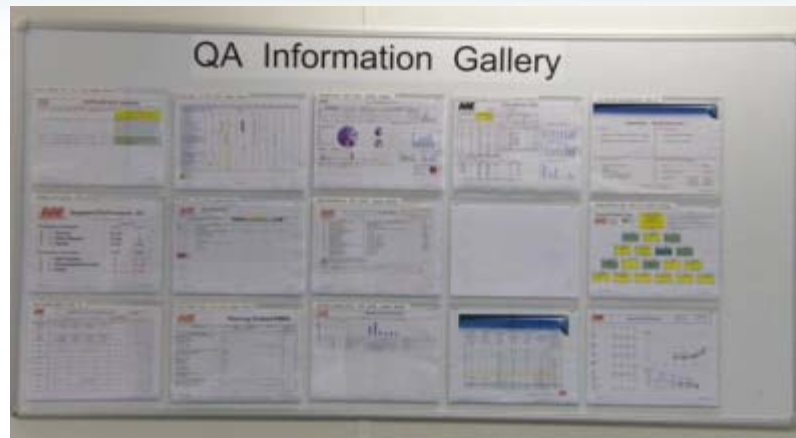
EMMEN

NOVE MESTO NAD VAHOM



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Visual Management - efficiency & transparency



AAF Emmen



AAF Slovakia



AAF France

Better Air is Our Business®



Important in Lean is to eliminate

Defects
Overproduction
Transport
Waiting
Inventory
Movement
Processes (over)



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Lean Implementation

AAF UK



before



after

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5S - Sort

Simplify

Systematic Clean



Standardize

Sustain



TPM – the goal is to get to scheduled maintenance



aims to achieve 4 Zeros:

Zero Defects

Zero Breakdowns

Zero Wastes


Zero Accidents



OEE – Overall Equipment Effectiveness

OEEberekening FP3

3-11-2010

 OEE FP3 Folding line			
Vul in de groen gemarkeerde velden uw eigen productiedata in per ploeg. In sommige gevallen kan het zijn dat je de eenheden met een paar eenvoudige formules moet converteren, zoals 3.600 eenheden / uur in plaats van 60 eenheden / minuut.			
Shift Lengte	8 Uren =	480	Minuten
Kortere pauzes, het aantal	2 Stops van	15	Minuten = 30
Lunch	1 Stop van	30	Minuten = 30
Stop Time	41	Minuten	Minuten totaal
Ideale lijnsnelheid	10	PPM (eenheden per minuut)	
Totaal aantal eenheden	3 713	Eenheden	
Afgedankte eenheden	265	Eenheden	
Andere variabelen			
Geplande productietijd	Shift Lengte - Breaks	420	Minuten
Uptime	Geplande productietijd - Stop Time	379	Minuten
Goedgekeurde eenheden	Totaal aantal eenheden - Afgedankte eenheden	3 448	Eenheden
OEE KPI's			
Beschikbaarheid	Operating Time / Geplande productietijd	90.2%	
Prestatie	(Totaal aantal eenheden / Operating Time) / Ideale lijnsnelheid	98.1%	
Kwaliteit	Goedgekeurde eenheden / Totaal eenheden	92.9%	
Totaal OEE	Beschikbaarheid x Prestatie x Kwaliteit	82.2%	
OEE factoren			
Beschikbaarheid	Master Class OEE	90.00%	90.2%
Prestatie		95.00%	98.1%
Kwaliteit		99.90%	92.9%
Totaal OEE		85.00%	82.2%
Master Class OEE voor discrete industrie zijn in het algemeen beschouwd als 85% of beter. Studies hebben aangetoond dat de OEE vaak niet meer dan 60% in de meeste productiescenario's.			

OEE	=	Operational Availability	x	Speed Factor	x	Yield
OEE	=	$\frac{\text{Production Time}}{\text{Planned Time}}$	x	$\frac{\text{Average demonstrated machine time}}{\text{Theoretical machine time}}$	x	$\frac{\text{Qty Good Units}}{\text{Total Qty units produced}}$
OEE	=	92,1%	x	101,7%	x	100,0%

Availability:

A	Planned time	2 220	min
B	Planned down time (set-ups, maintenance, breaks, meetings)	175	min
C	Non planned downtime 1+2+3 =	0	min
1.	Breakdowns		min
2.	Non planned set-ups		min
3.	Induced downtimes		min
D	Production Time : D = A - B - C =	2 045	min

E Operational Availability: D/A x 100

92%

Speed Factor:

F	Quantity of produced parts	2 772	units
G	Theoretical machine time:	0.75	min/unit

H Speed Factor [(F x G)/D]x100

102%

RTY

I	Number of scrapped and reworked units	0	units
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J Roll Throughput Yield [(F - I)/F]x100

100%

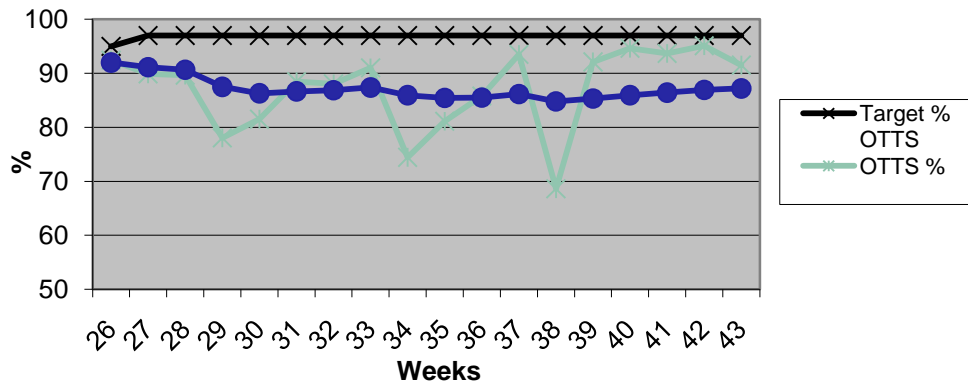
OEE

K Overall Equipment Efficiency = E x H x J =

94%

Normal Lead Time

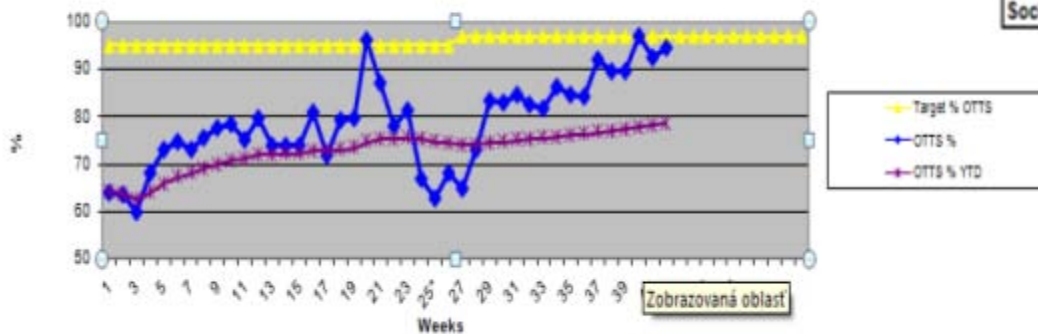
OTTS CORRECTED - AAF Slovakia- 2010



Air Filters Ltd - Cramlington (UK) NLT

	NLT	Actual	Last week	Comments
Dri-Paks	5 Days	8 Days	4 Days	Sickness - Over time being worked
Am-Airs	5 Days	5 Days	5 Days	
Al/Glass	5 Days	5 Days	5 Days	
Pads	5 Days	8 Days	7 Days	Sickness - Over time being worked
DRF	5 Days	8 Days	5 Days	Sickness - Over time being worked
Metal Cased	5 Days	5 Days	5 Days	
Siemens DP's	10 Days	10 Days	10 Days	
MDF Cased	5 Days	5 Days	5 Days	
Socks	5 Days	8 Days	5 Days	Sickness - Over time being worked

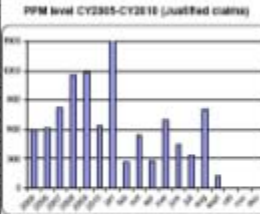
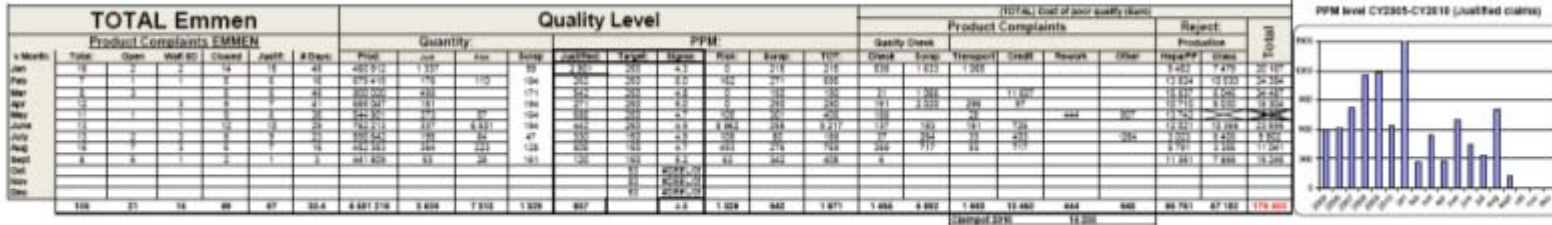
OTTS CORRECTED - AAF Emmen - 2010



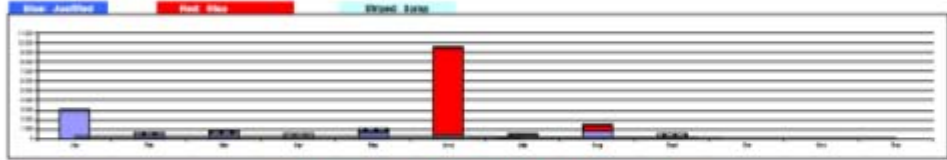
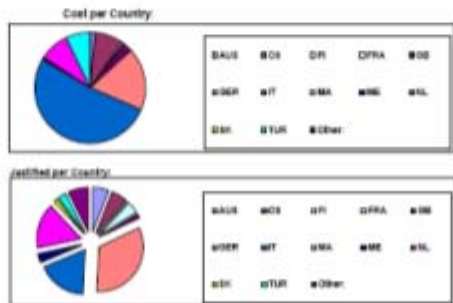
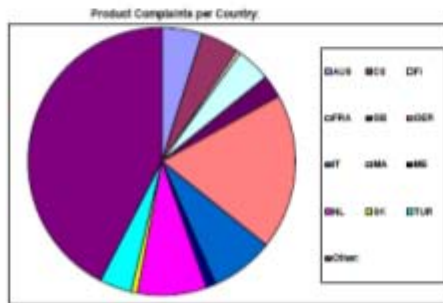
Scoreboards



Quality Assurance Weekly Report 2010

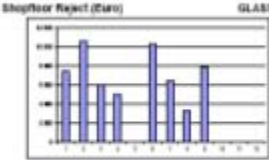
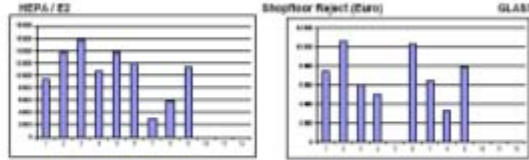


Country	# Claims	Tot Cost	Justif
TOTAL	108	20847	67
AUS	34	392	4
GB	32	1991	4
FI	9		
FRA	29	160	3
IR	18	897	1
ISR	130	6122	12
IT	43	12288	12
MA			
ME	8	140	2
NL	38	2239	11
PL	5		
TUR	27	1888	2
Other	293	9	8



OPEN ON STOCK, FOR WHICH INLET FROM SALES IS REQUIRED !!

Open Issues	Partnumber	PAC	Risk	Action	Act. St.	Reason
PG 0800-104	101210331	1-74.8	210	Sales AAF Germany	210	210
PG 0800-104	101210332	2048.8	433	Sales AAF Germany	882	71 gsm swapped from Block I
PG 0800-104	101210333	87.28	18	Sales AAF Germany	18	18
PG 0800-104	101210334	7848	140	Sales AAF Germany	140	101210334 - PG



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Trade Show Slovakia



Better Air is Our Business®



In 2011 we will start upgrading all AAF factories to a green heart factory

Green Heart for Everyone



Better Air is Our Business®

Green Heart for Everyone



GREEN HEART FACTORY

Green: environment
Heart : involvement with society

What does green heart factory mean:

- Make advanced efforts to create a factory which strategy and systems reduces environmental loads.
- Conduct self-evaluations and second-party evaluations in accordance with evaluation standards and clarify strengths and weaknesses.
- Issue certifications with the seal of the president.
- Certification standard.:

Super Green Heart Factory (SGHF) 95 and higher.
Green Heart Factory (GHF) 85-95

Setting the right important step into the future

