

## BAB VI

### KESIMPULAN DAN SARAN

#### 6.1 KESIMPULAN

Berdasarkan data dan hasil pengolahan serta analisis yang telah dilakukan didapat kesimpulan sebagai berikut:

1) Peningkatan nilai Overall Equipment Effectiveness terlihat pada bulan Maret 2012. Dimana nilai OEE telah mengalami peningkatan diatas 85%, yang artinya mencapai nilai efektif.

- Mesin Stay Fuel Tank 2 proses bending dan forming, dari nilai OEE 82% (availability 86%) menjadi 86% (availability 91%).
- Mesin RR Cushion 5D9 proses bending 1 dan 2, dari nilai OEE 81% (availability 86%) menjadi 88% (availability 91%).
- Mesin Brkt D38A proses bending, dari nilai OEE 83% (availability 86%) menjadi 87% (availability 91%).
- Mesin Brkt Air Cleaner proses bending, dari nilai OEE 83% (availability 86%) menjadi 87% (availability 91%).

2) Dengan naiknya nilai dari OEE maka akan meningkatkan kapasitas produksi efektif secara otomatis :

- Mesin Stay Fuel Tank 2 proses bending dan forming, dari ±9000 pcs menjadi ±9400 pcs.
- Mesin RR Cushion 5D9 proses bending 1 dan 2, dari ±8200 menjadi ±8900 pcs.

- Mesin Brkt D38A proses bending, dari nilai  $\pm 13600$  pcs menjadi  $\pm 14300$  pcs.
- Mesin Brkt Air Cleaner proses bending, dari  $\pm 10900$  pcs menjadi  $\pm 11400$  pcs.

## 6.2 SARAN

Adapun saran-saran yang dapat diberikan berdasarkan hasil penelitian yang telah dilakukan adalah sebagai berikut:

- 1) Usulan perbaikan untuk mengurangi loss time yang selama ini terjadi, terutama pada cara dandori.
- 2) Pengurangan tersebut dapat dilakukan dengan mengelompokkan menjadi *aktifitas tambahan*, dengan mengurangi atau menghilangkan aktifitas yang *tidak bernilai tambah*. Sehingga dapat kita bagi seminimal mungkin waktu yang bisa dikurangi dan dihilangkan dari 60 menit menjadi 40 menit.
- 3) Perlunya kerjasama dan koordinasi dari masing-masing divisi untuk menjalankan aktifitas ini, yang kemudian dapat diaplikasikan di line lain.

## DAFTAR PUSTAKA

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- Owada, Kunio. TQC & TPM, Portland : Productivity Press, Inc, 1994.
- Simatupang, Togar, M. Teori Sistem Suatu Pendekatan Perspektif Teknik Industri, Andi Offset, Yogyakarta, 1993.
- Suzuki, Takutaro. TPM In Process Industries, Portland : Productivity Press, Inc, 1994.
- Vorne Industries, The Fast Guide to OEE, USA, 2008.

# LAMPIRAN 1

## GAMBAR PRODUK



Stay Fuel Tank 2:



RR Cushion 5D9 :



Brkt D38A :

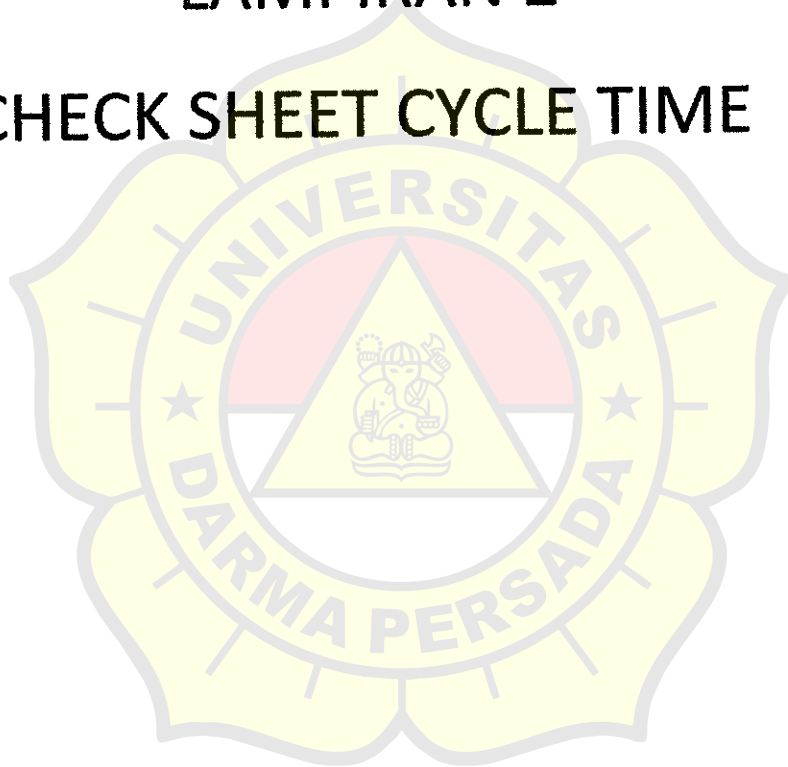


Brkt Air Cleaner BZ090



# LAMPIRAN 2

## CHECK SHEET CYCLE TIME



\*Sample check sheet bulan Oktober 2011 Stay Fuel Tank 2 (Bending):

Part Name		Stay Fuel Tank 2			<b>CHECK SHEET CYCLE TIME</b>			
Model		3C1			PT. SETIA GUNA SEJATI			
Part No.		3C1-F8356-00			Approved by, Checked by, Issued by.			
Process		BENDING						
DD/MM/YY		Oct-11						
WEEK	I	II	III	IV				
Sample No.	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)
1	7.2	7.2	7.4	7.2				
2	7.3	7.3	7.2	7.3				
3	7.2	7.4	7.4	7.2				
4	7.3	7.2	7.2	7.3				
5	7.4	7.4	7.3	7.2				
6	7.2	7.2	7.2	7.3				
7	7.3	7.3	7.3	7.3				
8	7.3	7.3	7.2	7.3				
9	7.2	7.2	7.3	7.2				
10	7.3	7.3	7.3	7.3				
11	7.4	7.3	7.3	7.3				
12	7.2	7.2	7.2	7.2				
13	7.4	7.3	7.3	7.3				
14	7.2	7.2	7.2	7.2				
15	7.3	7.3	7.3	7.3				
16	7.3	7.2	7.2	7.2				
17	7.2	7.3	7.3	7.3				
18	7.3	7.3	7.3	7.3				
19	7.3	7.2	7.2	7.3				
20	7.2	7.3	7.3	7.2				
21	7.3	7.3	7.3	7.3				
22	7.4	7.2	7.2	7.2				
23	7.2	7.3	7.3	7.3				
24	7.4	7.2	7.2	7.2				
25	7.2	7.3	7.3	7.3				
26	7.3	7.2	7.2	7.3				
27	7.3	7.3	7.3	7.3				
28	7.4	7.3	7.3	7.2				
29	7.2	7.2	7.3	7.3				
30	7.4	7.3	7.2	7.3				

\*Sample check sheet bulan Oktober 2011 Stay Fuel Tank 2 (Forming):

Part Name		Stay Fuel Tank 2			<b>CHECK SHEET CYCLE TIME</b>			
Model		3C1						
Part No.		3C1-F8356-00			PT. SETIA GUNA SEJATI			
Process		FORMING			Approved by,	Checked by,	Issued by,	
DD/MM/YY		Oct-11						
WEEK	I	II	III	IV				
Sample No.	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)
1	7.2	7.2	7.4	7.3				
2	7.2	7.3	7.2	7.2				
3	7.3	7.2	7.4	7.3				
4	7.4	7.3	7.2	7.2				
5	7.4	7.2	7.3	7.2				
6	7.4	7.2	7.2	7.3				
7	7.2	7.3	7.3	7.3				
8	7.4	7.3	7.2	7.3				
9	7.2	7.2	7.2	7.3				
10	7.3	7.4	7.3	7.2				
11	7.4	7.2	7.2	7.3				
12	7.2	7.4	7.2	7.3				
13	7.4	7.3	7.4	7.3				
14	7.2	7.2	7.2	7.2				
15	7.3	7.3	7.3	7.3				
16	7.3	7.2	7.2	7.2				
17	7.2	7.3	7.3	7.3				
18	7.3	7.3	7.2	7.3				
19	7.3	7.2	7.3	7.3				
20	7.2	7.3	7.2	7.2				
21	7.3	7.2	7.3	7.3				
22	7.4	7.3	7.2	7.2				
23	7.3	7.2	7.3	7.3				
24	7.2	7.3	7.2	7.3				
25	7.3	7.2	7.3	7.2				
26	7.3	7.3	7.2	7.3				
27	7.2	7.2	7.3	7.2				
28	7.3	7.2	7.2	7.3				
29	7.2	7.3	7.3	7.3				
30	7.2	7.3	7.2	7.3				



\*Sample check sheet bulan Oktober 2011 RR Cushion 5D9 (Bending 1):

Part Name		RR CUSHION 5D9			<b>CHECK SHEET CYCLE TIME</b>			
Model		5D9			PT. SETIA GUNA SEJATI			
Part No.		5D9-XF111-00			Approved by, Checked by, Issued by.			
Process		BENDING 1						
DD/MM/YY		Oct-11						
WEEK	I	II	III	IV				
Sample No.	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)
1	7.8	7.7	7.7	7.9				
2	7.7	7.7	7.2	7.9				
3	7.9	7.7	7.8	7.9				
4	7.9	7.7	7.8	7.9				
5	7.9	7.7	7.8	7.9				
6	7.7	7.7	7.9	7.9				
7	7.7	7.9	7.9	7.9				
8	7.7	7.7	7.9	7.9				
9	7.7	7.9	7.7	7.9				
10	7.7	7.9	7.7	7.7				
11	7.7	7.9	7.9	7.7				
12	7.7	7.9	7.7	7.9				
13	7.9	7.9	7.9	7.9				
14	7.7	7.9	7.9	7.9				
15	7.7	7.9	7.9	7.7				
16	7.7	7.9	7.7	7.9				
17	7.7	7.9	7.7	7.7				
18	7.7	7.7	7.7	7.7				
19	7.7	7.7	7.7	7.9				
20	7.7	7.7	7.7	7.9				
21	7.7	7.2	7.7	7.9				
22	7.7	7.8	7.9	7.9				
23	7.7	7.8	7.7	7.9				
24	7.9	7.8	7.9	7.7				
25	7.7	7.9	7.9	7.9				
26	7.9	7.9	7.9	7.7				
27	7.9	7.9	7.9	7.7				
28	7.7	7.9	7.7	7.7				
29	7.7	7.9	7.7	7.9				
30	7.7	7.9	7.7	7.9				

\*Sample check sheet bulan Oktober 2011 RR Cushion 5D9 (Bending 2):

Part Name		RR CUSHION 5D9		CHECK SHEET CYCLE TIME					
Model		5D9		PT. SETIA GUNA SEJATI					
Part No.		5D9-XF111-00			Approved by,			Checked by,	Issued by.
Process		BENDING 2							
DD/MM/YY		Oct-11							
WEEK	I	II	III	IV					
Sample No.	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	
1	7.7	7.7	7.7	7.9					
2	7.7	7.7	7.2	7.9					
3	7.7	7.7	7.8	7.9					
4	7.7	7.7	7.8	7.8					
5	7.9	7.7	7.8	7.8					
6	7.7	7.7	7.9	7.8					
7	7.7	7.9	7.9	7.8					
8	7.7	7.7	7.9	7.9					
9	7.7	7.9	7.7	7.9					
10	7.7	7.9	7.7	7.7					
11	7.8	7.9	7.9	7.7					
12	7.8	7.9	7.7	7.9					
13	7.8	7.9	7.9	7.9					
14	7.8	7.9	7.9	7.9					
15	7.8	7.9	7.9	7.7					
16	7.8	7.9	7.7	7.9					
17	7.7	7.9	7.7	7.7					
18	7.7	7.7	7.7	7.7					
19	7.7	7.7	7.7	7.9					
20	7.7	7.7	7.7	7.9					
21	7.7	7.2	7.7	7.9					
22	7.7	7.8	7.9	7.9					
23	7.7	7.8	7.7	7.9					
24	7.9	7.8	7.9	7.9					
25	7.8	7.9	7.9	7.9					
26	7.8	7.9	7.7	7.9					
27	7.7	7.9	7.7	7.7					
28	7.7	7.9	7.7	7.7					
29	7.7	7.9	7.7	7.9					
30	7.8	7.9	7.7	7.9					

\*Sample check sheet bulan Oktober 2011 Brkt D38A (Bending ):

Part Name		BRKT D38A		<b>CHECK SHEET CYCLE TIME</b>				
Model		D38A						
Part No.		D38A-XE511-00			PT. SETIA GUNA SEJATI			
Process		BENDING			Approved by,	Checked by,	Issued by,	
DD/MM/YY		Oct-11						
WEEK	I	II	III	IV				
Sample No.	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	
1	4.9	4.8	4.7	4.8				
2	4.7	4.8	4.7	4.8				
3	4.7	4.8	4.7	4.8				
4	4.8	4.8	4.7	4.9				
5	4.8	4.8	4.7	4.9				
6	4.8	4.8	4.8	4.7				
7	4.8	4.9	4.9	4.7				
8	4.8	4.9	4.9	4.7				
9	4.8	4.8	4.8	4.7				
10	4.8	4.7	4.7	4.7				
11	4.9	4.8	4.7	4.7				
12	4.9	4.8	4.7	4.8				
13	4.8	4.8	4.8	4.8				
14	4.8	4.8	4.9	4.8				
15	4.8	4.7	4.9	4.8				
16	4.8	4.7	4.9	4.8				
17	4.9	4.7	4.9	4.9				
18	4.9	4.7	4.8	4.9				
19	4.7	4.9	4.7	4.8				
20	4.7	4.8	4.7	4.7				
21	4.7	4.8	4.7	4.7				
22	4.7	4.8	4.8	4.7				
23	4.9	4.9	4.8	4.9				
24	4.9	4.9	4.9	4.9				
25	4.7	4.7	4.9	4.8				
26	4.7	4.9	4.9	4.7				
27	4.8	4.8	4.9	4.7				
28	4.8	4.8	4.8	4.7				
29	4.9	4.8	4.7	4.9				
30	4.9	4.8	4.7	4.8				

\*Sample check sheet bulan Oktober 2011 Brkt Air Cleaner BZ090 (Bending):

Part Name		BRKT AIR CLEANER BZ090		<b>CHECK SHEET CYCLE TIME</b>				
Model		D01N						
Part No.		BZ090		PT. SETIA GUNA SEJATI				
Process		BENDING		Approved by,	Checked by,	Issued by,		
DD/MM/YY		Oct-11						
WEEK	I	II	III	IV				
Sample No.	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)	Result (second)
1	6	6.1	5.9	6.1				
2	6	6	5.9	6.1				
3	6.1	5.9	5.9	6.1				
4	6.1	5.9	5.9	6.1				
5	6	5.9	6.1	6.1				
6	5.9	5.9	6	6.1				
7	5.9	5.9	6.1	6.1				
8	5.9	5.9	6	6				
9	5.9	5.9	6.1	6.1				
10	5.9	5.9	6	6				
11	5.9	6.1	5.9	6.1				
12	5.9	6	5.9	6				
13	6.1	6.1	5.9	5.9				
14	6	6	5.9	5.9				
15	5.9	5.9	5.9	5.9				
16	5.9	5.9	6.1	6				
17	5.9	6.1	6	5.9				
18	5.9	6	5.9	5.9				
19	5.9	5.9	5.9	6.1				
20	5.9	5.9	5.9	6				
21	6.1	6.1	5.9	5.9				
22	6	6	5.9	5.9				
23	6.1	6.1	5.9	5.9				
24	6	6	5.9	6.1				
25	5.9	5.9	5.9	6				
26	5.9	6	5.9	5.9				
27	5.9	6	6.1	5.9				
28	5.9	6.1	6.1	6.1				
29	6.1	6	6	6				
30	6	6.1	5.9	5.9				