

DAFTAR PUSTAKA

- Arini, D., Luciana A., dan Widia J. (2016). Pengurangan *Waste of Motion* pada Proses Layanan Material *Sheet* di Gudang Metal PT Dirgantara Indonesia dengan Menggunakan Pendekatan *Lean Warehousing*. E-Proceeding of Engineering : Vol.3, No.2. 2516
- Arwani, A. (2009). *Warehouse Check UP. Edisi-1*. Penerbit PPM, Jakarta.
- Francis, R. L., Leon, F. M., White Jr. (1992). *Facility Layout And Location : An Analytical Approach*. New Jersey: Prentice Hall.
- Gaspersz. (2007). *Lean Six Sigma For Manufacturing and Service Industries*. Jakarta: Gramedia Pustaka Utama.
- Hadiguna, R. A., & Setiawan, H. (2008). *Tata Letak Pabrik*. Yogyakarta: Andi.
- Hakami, Muhammad Ubaidillah Al. (2019). Analisis *Lean Warehouse* Guna Mengurangi *Waste* Pada Gudang *Sparepart* (Studi Kasus: PT Petro Jordan Abadi). *Undergraduate Thesis*, Universitas Muhammadiyah Gresik.
- Harrell, C. (2016). *Simulation Using Problem*. McGraw Hill Higher Education.
- Heizer, Barry, R., and Chuck, M. (2019). *Operation Management: Sustainability And Supply Chain Management*. Canada: Pearson Education.
- Heragu, S. S. (1997). *Facilities Design*. Boston: PWS Publishing Company.
- Heragu, S. S. (2008). *Facilities Design*. New York: CRS Press.
- Hines, P dan N, Rich. (1997). The Seven Value Stream Mapping Tools. *International Journal of Operations dan Production Management*, Vol. 17 Edisi. 1. Hlm. 46-64
- Hines, P., dan Taylor, D. (2000). *Going Lean*. Cardiff UK: Lean Enterprise Research Centre Cardiff Business School.
- Karonsih, S. N., Nasir, W. S., dan Ceria, F. M. T. (2011). Perbaikan Tata Letak Penempatan Barang Di Gudang Penyimpanan Material Berdasarkan *Class Based Storage Policy*. *Jurnal Teknik Industri Universitas Brawijaya*.
- Khunaifi, A., Rangga, P., & Sugoro, B. S. (2022). Implementasi *Lean Manufacturing* untuk Meminimasi Pemborosan (*Waste*) Menggunakan Metode *Value Stream Mapping* di PT. Pura Barutama. *Jurnal Rekayasa Industri*. Vol. 4, No. 2. 2714-8874.
- Lee dan Snyder, B. (2006). *Value Stream Mapping*. Bellingham: Enna Product Corporation.

- Nugraha, K. A., Dewi, S., dan Claudia, A. P. (2022). Perancangan Tata Letak Gudang Dengan Metode Class Based Storage Pada Gudang Beras Yayasan Dharma Bhakti Berau Coal. *Jurnal Teknologi Rekayasa Logistik*. Vol 26(2).
- Pandiangan, Syarifuddin (2017). *Operasional Manajemen Pergudangan*. Jakarta: Mitra Wacana Media.
- Pratiwi, Y., Noveicalistis, H. D., Pepy, A. 2018. Penerapan *Lean Manufacturing* Untuk Meminimasi Pemborosan (Waste) Dengan Menggunakan Metode *Value Stream Mapping* (VSM) Pada PT. X, *Jurnal Teknik Industri Universitas Tanjungpura*.
- Rawabdeh, Ibrahim. (2005). A Model for The Assessment Of Waste In Job Shop Environments. *International Journal of Operations & Production Management*. 28(5).
- Tischler, L. (2006). Bringing Lean To the Office. *Journal of Organizational Change Management*.
- Tompkins, White, Bozer & Tanchoco. (2010). *Facilities Planning*: Fourth Edition, Wiley, New York.
- Wahab, A. N. A., Mukhtar, M., & Sulaiman, R. (2013). A Conceptual Model of Lean Manufacturing Dimensions. *Procedia Technology*, 11, 1292-1298.
- Womack, J. P., & Jones, D. T. (2003). *Lean Thinking: Banish Waste And Create Wealth In Your Corporation*. New York, NY: Free Press.
- Zhenyuan, J., Xiaohong, L., Wei. W., Jie, ,D. & Wang, L. (2011). Design ad Implementation of Lean Facility Layout System of a Productin Line. *International Journal of Industrial Engineering*. Vol.18(5), 260-269.

LAMPIRAN

Lampiran 1 Kuesioner *Seven Waste Relationship*

Berikut ini adalah kuesioner tentang hubungan antara *waste* yang terjadi di bagian *warehouse* PT. XYZ.

Instruksi pengisian : terdapat 6 butir pertanyaan pada 1 tabel kuesioner WRM. Isilah jawaban dari pertanyaan pada tabel di bawah ini dengan melingkari pilihan jawaban yang ada sesuai dengan yang terjadi di bagian *warehouse* PT. XYZ.

1. Hubungan *Overproduction* dengan *Waste* Lainnya

Tabel 25 Hubungan antara *waste production* dengan *inventory*

No	Pertanyaan	Pilihan Jawaban
1	Apakah <i>overproduction</i> menghasilkan <i>inventory</i>	a. Selalu b. Kadang-kadang c. Jarang
2	Bagaimanakah jenis hubungan antara <i>overproduction</i> dan <i>inventory</i>	a. Jika <i>overproduction</i> naik maka <i>inventory</i> naik b. Jika <i>overproduction</i> naik maka <i>inventory</i> tetap c. Tidak tentu tergantung keadaan
3	Dampak terhadap <i>inventory</i> karena <i>overproduction</i>	d. Tampak secara langsung dan jelas e. Butuh waktu untuk muncul f. Tidak sering muncul
4	Menghilangkan dampak <i>overproduction</i> terhadap <i>inventory</i> dapat dicapai dengan cara....	d. Metode <i>engineering</i> e. Sederhana dan langsung f. Solusi instruksional
5	Dampak <i>overproduction</i> terhadap <i>inventory</i> terutama mempengaruhi.....	h. Kualitas produk i. Produktifitas sumber daya j. Waktu proses k. Kualitas dan produktifitas l. Kualitas dan waktu proses m. Produktifitas dan waktu proses n. Kualitas, produktifitas dan waktu proses
6	Sebesar apa dampak <i>overproduction</i> terhadap <i>inventory</i> akan meningkatkan <i>lead time</i>	d. Sangat tinggi e. Sedang f. Rendah

2. Hubungan *Inventory* dengan *Waste* Lainnya

Tabel 26 Hubungan antara *waste inventory* dengan *production*

No	Pertanyaan	Pilihan Jawaban
1	Apakah <i>inventory</i> menghasilkan <i>production</i>	a. Selalu b. Kadang-kadang c. Jarang
2	Bagaimanakah jenis hubungan antara <i>inventory</i> dan <i>production</i>	a. Jika <i>inventory</i> naik maka <i>production</i> naik b. Jika <i>inventory</i> naik maka <i>production</i> tetap c. Tidak tentu tergantung keadaan
3	Dampak terhadap <i>production</i> karena <i>inventory</i>	a. Tampak secara langsung dan jelas b. Butuh waktu untuk muncul c. Tidak sering muncul

4	Menghilangkan dampak <i>inventory</i> terhadap <i>production</i> dapat dicapai dengan cara....	a. Metode <i>engineering</i> b. Sederhana dan langsung c. Solusi instruksional
5	Dampak <i>inventory</i> terhadap <i>production</i> terutama mempengaruhi.....	a. Kualitas produk b. Produktifitas sumber daya c. Waktu proses d. Kualitas dan produktifitas e. Kualitas dan waktu proses f. Produktifitas dan waktu proses g. Kualitas, produktifitas dan waktu proses
6	Sebesar apa dampak <i>inventory</i> terhadap <i>production</i> akan meningkatkan <i>lead time</i>	a. Sangat tinggi b. Sedang c. Rendah

3. Hubungan *Transportation* dengan Waste Lainnya

Tabel 27 Hubungan antara *waste transportation* dengan *process*

No	Pertanyaan	Pilihan Jawaban
1	Apakah <i>transportation</i> menghasilkan <i>process</i>	a. Selalu b. Kadang-kadang c. Jarang
2	Bagaimana jenis hubungan antara <i>transportation</i> dan <i>process</i>	a. Jika <i>transportation</i> naik maka <i>process</i> naik b. Jika <i>transportation</i> naik maka <i>process</i> tetap c. Tidak tentu tergantung keadaan
3	Dampak terhadap <i>process</i> karena <i>transportation</i>	a. Tampak secara langsung dan jelas b. Butuh waktu untuk muncul c. Tidak sering muncul
4	Menghilangkan dampak <i>transportation</i> terhadap <i>process</i> dapat dicapai dengan cara....	a. Metode <i>engineering</i> b. Sederhana dan langsung c. Solusi instruksional
5	Dampak <i>transportation</i> terhadap <i>process</i> terutama mempengaruhi.....	a. Kualitas produk b. Produktifitas sumber daya c. Waktu proses d. Kualitas dan produktifitas e. Kualitas dan waktu proses f. Produktifitas dan waktu proses g. Kualitas, produktifitas dan waktu proses
6	Sebesar apa dampak <i>transportation</i> terhadap <i>process</i> akan meningkatkan <i>lead time</i>	a. Sangat tinggi b. Sedang c. Rendah

4. Hubungan *Waiting* dengan Waste Lainnya

Tabel 28 Hubungan antara *waste waiting* dengan *process*

No	Pertanyaan	Pilihan Jawaban
1	Apakah <i>waiting</i> menghasilkan <i>process</i>	a. Selalu b. Kadang-kadang c. Jarang
2	Bagaimana jenis hubungan antara <i>waiting</i> dan <i>process</i>	a. Jika <i>waiting</i> naik maka <i>process</i> naik b. Jika <i>waiting</i> naik maka <i>process</i> tetap c. Tidak tentu tergantung keadaan
3	Dampak terhadap <i>process</i> karena <i>waiting</i>	a. Tampak secara langsung dan jelas b. Butuh waktu untuk muncul c. Tidak sering muncul

4	Menghilangkan dampak <i>waiting</i> terhadap <i>process</i> dapat dicapai dengan cara....	a. Metode <i>engineering</i> b. Sederhana dan langsung c. Solusi instruksional
5	Dampak <i>waiting</i> terhadap <i>process</i> terutama mempengaruhi.....	a. Kualitas produk b. Produktifitas sumber daya c. Waktu proses d. Kualitas dan produktifitas e. Kualitas dan waktu proses f. Produktifitas dan waktu proses g. Kualitas, produktifitas dan waktu proses
6	Sebesar apa dampak <i>waiting</i> terhadap <i>process</i> akan meningkatkan <i>lead time</i>	a. Sangat tinggi b. Sedang c. Rendah

5. Hubungan *Motion* dengan *Waste* Lainnya

Tabel 29 Hubungan antara *waste motion* dengan *production*

No	Pertanyaan	Pilihan Jawaban
1	Apakah <i>motion</i> menghasilkan <i>production</i>	a. Selalu b. Kadang-kadang c. Jarang
2	Bagaimana jenis hubungan antara <i>motion</i> dan <i>production</i>	a. Jika <i>motion</i> naik maka <i>production</i> naik b. Jika <i>motion</i> naik maka <i>production</i> tetap c. Tidak tentu tergantung keadaan
3	Dampak terhadap <i>production</i> karena <i>motion</i>	a. Tampak secara langsung dan jelas b. Butuh waktu untuk muncul c. Tidak sering muncul
4	Menghilangkan dampak <i>motion</i> terhadap <i>production</i> dapat dicapai dengan cara....	a. Metode <i>engineering</i> b. Sederhana dan langsung c. Solusi instruksional
5	Dampak <i>motion</i> terhadap <i>production</i> terutama mempengaruhi.....	a. Kualitas produk b. Produktifitas sumber daya c. Waktu proses d. Kualitas dan produktifitas e. Kualitas dan waktu proses f. Produktifitas dan waktu proses g. Kualitas, produktifitas dan waktu proses
6	Sebesar apa dampak <i>motion</i> terhadap <i>production</i> akan meningkatkan <i>lead time</i>	a. Sangat tinggi b. Sedang c. Rendah

6. Hubungan *Process* dengan *Waste* Lainnya

Tabel 30 Hubungan antara *waste process* dengan *waiting*

No	Pertanyaan	Pilihan Jawaban
1	Apakah <i>process</i> menghasilkan <i>waiting</i>	a. Selalu b. Kadang-kadang c. Jarang
2	Bagaimana jenis hubungan antara <i>process</i> dan <i>waiting</i>	a. Jika <i>process</i> naik maka <i>waiting</i> naik b. Jika <i>process</i> naik maka <i>waiting</i> tetap c. Tidak tentu tergantung keadaan
3	Dampak terhadap <i>waiting</i> karena <i>process</i>	a. Tampak secara langsung dan jelas b. Butuh waktu untuk muncul c. Tidak sering muncul

4	Menghilangkan dampak <i>process</i> terhadap <i>waiting</i> dapat dicapai dengan cara....	a. Metode <i>engineering</i> b. Sederhana dan langsung c. Solusi instruksional
5	Dampak <i>process</i> terhadap <i>waiting</i> terutama mempengaruhi.....	a. Kualitas produk b. Produktifitas sumber daya c. Waktu proses d. Kualitas dan produktifitas e. Kualitas dan waktu proses f. Produktifitas dan waktu proses g. Kualitas, produktifitas dan waktu proses
6	Sebesar apa dampak <i>process</i> terhadap <i>waiting</i> akan meningkatkan <i>lead time</i>	a. Sangat tinggi b. Sedang c. Rendah

7. Hubungan *Defect* dengan *Waste* Lainnya

Tabel 31 Hubungan antara *waste defect* dengan *inventory*

No	Pertanyaan	Pilihan Jawaban
1	Apakah <i>defect</i> menghasilkan <i>inventory</i>	a. Selalu b. Kadang-kadang c. Jarang
2	Bagaimanakah jenis hubungan antara <i>defect</i> dan <i>inventory</i>	a. Jika <i>defect</i> naik maka <i>inventory</i> naik b. Jika <i>defect</i> naik maka <i>inventory</i> tetap c. Tidak tentu tergantung keadaan
3	Dampak terhadap <i>inventory</i> karena <i>defect</i>	a. Tampak secara langsung dan jelas b. Butuh waktu untuk muncul c. Tidak sering muncul
4	Menghilangkan dampak <i>defect</i> terhadap <i>inventory</i> dapat dicapai dengan cara....	a. Metode <i>engineering</i> b. Sederhana dan langsung c. Solusi instruksional
5	Dampak <i>defect</i> terhadap <i>inventory</i> terutama mempengaruhi.....	a. Kualitas produk b. Produktifitas sumber daya c. Waktu proses d. Kualitas dan produktifitas e. Kualitas dan waktu proses f. Produktifitas dan waktu proses g. Kualitas, produktifitas dan waktu proses
6	Sebesar apa dampak <i>defect</i> terhadap <i>inventory</i> akan meningkatkan <i>lead time</i>	a. Sangat tinggi b. Sedang c. Rendah

Lampiran 2 Waste Assesment Questionnare

Berikut ini adalah kuesioer yang bertujuan untuk mengidentifikasi dan mengalokasikan *waste* yang terjadi pada proses aktivitas *warehousing* PT. XYZ. Kuesioner ini terdiri dari 68 pertanyaan yang mewakili suatu aktivitas, suatu kondisi, atau perilaku yang dapat menyebabkan *waste* tertentu.

Instruksi pengisian: Isilah jawaban dari pertanyaan pada tabel di bawah ini dengan memberi tanda centang pada kolom jawaban “IYA”, “KADANG”, dan “TIDAK” sesuai dengan yang terjadi di *warehouse* PT. XYZ.

Tabel 32 Kuesioner WAQ

No	Kategori	Pertanyaan	Kategori Pertanyaan	Jenis Pertanyaan	Jawaban		
					Iya	Kadang	Tidak
1	Man	Apakah sering dilakukan rolling pekerjaan	B	To Motion		√	
2		Apakah karyawan bekerja sesuai dengan standar operasional prosedur (SOP)	B	From Motion	√		
3		Apakah dilakukan pengawasan kualitas pekerjaan	B	From Defect	√		
4		Apakah dilakukan kegiatan dalam meningkatkan semangat kerja karyawan	B	From Motion	√		
5		Apakah dilakukan program pelatihan untuk karyawan	B	From Motion		√	
6		Apakah karyawan memiliki rasa tanggungjawab dalam bekerja	B	From Defect	√		
7		Apakah karyawan senantiasa menggunakan APD pada saat bekerja	B	From Process	√		
8	Material	Apakah telah diterapkan lead time untuk penjadwalan pengiriman material	B	To Waiting	√		
9		Apakah dilakukan pengecekan material sebelum digunakan dalam proses services	B	From Waiting	√		
10		Material/sparepart diambil dalam satu kali proses	B	From Transportation			√
11		Terdapat laporan mengenai aktifitas penyimpanan barang di gudang	B	From Inventory	√		
12		Apakah dilakukan pemberitahuan jika terdapat perubahan inventory	B	From Inventory	√		
13		Apakah terdapat akumulasi material yang berlebihan, menunggu perbaikan, atau pengembalian ke vendor	A	From Defect		√	
14		Apakah terjadi penumpukan material di area penerimaan	A	From Inventory		√	
15		Apakah pekerja menunggu material datang di area penerimaan	B	From Waiting			√
16		Apakah terjadi pemindahan material yang berlebihan	A	To Defect	√		

17	Apakah terjadi kerusakan material saat proses pemindahan	A	From Defect	√
18	Apakah suatu material bercampur dengan material yang memiliki karakteristik berbeda	A	From Transportation	√
19	Apakah proses bongkar muat material dilakukan secara manual	A	To Motion	√
20	Apakah terdapat suatu wadah/penyimpanan terpisah untuk mempermudah proses perhitungan dan pemindahan material	B	From Waiting	√
21	Apakah dilakukan pengecekan material yang diterima	B	From Defect	√
22	Apakah pada material diberi label atau nama untuk mempermudah identifikasi	B	From Motion	√
23	Apakah barang sejenis disimpan dalam satu area untuk memudahkan proses pencarian	B	From Motion	√
24	Apakah dilakukan penyimpanan barang untuk material yang belum selesai di inspeksi	A	From Inventory	√
25	Apakah dilakukan pemindahan material berulang kali	B	From Transportation	√
26	Apakah dilakukan pemesanan material yang belum dibutuhkan	A	From Inventory	√
27	Apakah terjadi pengerjaan ulang atau perbaikan barang yang rusak/ tidak sesuai	A	From Defect	√
28	Apakah terjadi penumpukan barang karena menunggu user mengambil barang	A	From Overproduction	√
29	Apakah barang disimpan dengan benar sesuai dengan SOP	B	To Motion	√
30	Apakah material datang tepat waktu	B	From Waiting	√
31	Apakah dilakukan pengujian terhadap efisiensi mesin secara berkala	B	From Process	√
32	Apakah beban kerja setiap mesin sudah diprediksi dengan jelas	B	To Waiting	√
33	Apakah dilakukan pengujian mesin sebelum digunakan	B	From Process	√
34	Apakah digunakan material handling dalam membawa material berat	B	From Transportation	√
35	Apakah kapasitas material sudah sesuai pada saat pemindahan menggunakan material handling	B	To Motion	√
36	Machine Apakah mesin sering mengalami gangguan	A	To Waiting	√
37	Apakah alat-alat yang dibutuhkan telah tersedia dan cukup untuk support kegiatan warehouse	B	From Waiting	√
38	Apakah penggunaan Material Handling berisiko pada kerusakan material	A	To Defect	√
39	Apakah terjadi penundaan pekerjaan karena lamanya waktu setup mesin	A	From Waiting	√
40	Apakah terdapat alat yang rusak atau tidak digunakan dalam area kerja	A	To Motion	√

41	Apakah dilakukan pengurangan waktu setup mesin dengan menyesuaikan penjadwalan	B	From Process	√
42	Apakah luas area penyimpanan tercukupi	B	To Transportation	√
43	Apakah dilakukan pemberian label pada material untuk memudahkan dalam pengambilan dan penyimpanan	B	From Motion	√
44	Apakah penggunaan ruang penyimpanan sudah efektif dengan bantuan rak	B	From Waiting	√
45	Apakah penggunaan troli memudahkan pengambilan barang	B	From Waiting	√
46	Apakah terdapat pembagian area gudang, area aktif untuk orderan yang paling sering dan area cadangan untuk orderan yang lainnya	B	To Motion	√
47	Apakah dilakukan penyesuaian waktu pengantaran dengan jumlah kebutuhan dan permintaan user	B	To Waiting	√
48	Apakah informasi tentang jadwal service unit dibagikan ke semua bagian di warehouse	B	To Defect	√
49	Apakah dilakukan pembuatan standar operasional prosedur (SOP) untuk menggunakan mesin dalam proses warehousing	B	From Motion	√
50	Apakah diterapkan sistem Quality Control	B	From Defect	√
51	Method Apakah dilakukan penetapan waktu standar untuk setiap pekerjaan	B	From Motion	√
52	Apakah diberikan informasi jika terjadi delay atau pengunduran jadwal service	B	To Waiting	√
53	Apakah dilakukan pengaturan jadwal untuk tiap material agar tidak terjadi pengulangan pemesanan ataupun proses lainnya	B	From Process	√
54	Apakah dilakukan penggabungan langkah-langkah proses pengerjaan menjadi lebih sederhana	B	From Process	√
55	Apakah dilakukan prosedur pemeriksaan terhadap material yang dikembalikan	B	To Defect	√
56	Apakah arsip inventory digunakan untuk menentukan pembelian material	B	From Inventory	√
57	Apakah lorong-lorong selalu dibersihkan dan dirapikan dengan baik	B	To Transportation	√
58	Apakah dilakukan pemberian label pada area penyimpanan tertentu	B	To Motion	√
59	Apakah luas lorong cukup untuk pergerakan transportasi dengan bebas	B	To Transportation	√
60	Apakah dilakukan penyimpanan material yang seharusnya tidak disimpan di area gudang	A	To Motion	√

61	Apakah dilakukan penjadwalan rutin untuk membersihkan area gudang secara keseluruhan	B	To Motion	√
62	Apakah aliran produksi mengalir ke satu arah	B	From Motion	√
63	Manajemen fokus pada desain, konstruksi komponen, draft dan standarisasi waktu kerja	B	From Motion	√
64	Apakah dilakukan penetapan tujuan standar kerja yang jelas dan spesifik	B	From Motion	√
65	Apakah sudah mempertimbangkan keseimbangan kerja	B	From Overproduction	√
66	Apakah prosedur kerja yang ada mampu menghilangkan pekerjaan yang berlebihan	B	From Process	√
67	Apakah hasil quality control, uji material dan evaluasi dilakukan dengan ilmu keteknikan	B	From Defect	√
68	Apakah terjadi penumpukan material karena jadwal pengantaran kurang sesuai	A	From Overproduction	√



Lampiran 3 Rincian Isi Rak Pada Tata Letak Awal Warehouse PT XYZ

Tabel 33 Isian rak awal warehouse PT XYZ

Rak	Baris	Kolom	Isian Rak		
			Kode Material	Material Deskripsi	Kategori Sparepart
209	A	1	ST-RL-005	RELAY,ND,24V	Air Conditioner Unit
			ST-TH-001	THERMOSTAT,CAT 24V	Air Conditioner Unit
			ST-TH-006	THERMOSTAT,24V	Air Conditioner Unit
			ST-CVT-002	CONVERTER,DC,30A	Air Conditioner Unit
			ST-EX-011	VALVE,EXPANSION	Air Conditioner Unit
			MF200-0365PM	GAUGE,VAC,LIQUID FILLED,2-1/2IN	Main Pump Unit
			ST-PS-006	SWITCH,MALE BINARY,W/ O.E RECTANGLE	Air Conditioner Unit
		2	ST-SP-003	CUTTER,HOSE	Air Conditioner Unit
			VBB48	V-BELT,B48,TOOTHED (GERIGI)	Air Conditioner Unit
			VBB57	V-BELT,B57,TOOTHED (GERIGI)	Air Conditioner Unit
			VBB46	V-BELT,B46,TOOTHED (GERIGI)	Air Conditioner Unit
			VBB54	V-BELT,B54,TOOTHED (GERIGI)	Air Conditioner Unit
			04120-21747-NGE	V-BELT (ITC)	Part Develop Unit
		3	ST-CP-011	COMPRESSOR ASSY,HD 465-7 & PC 1250	Air Conditioner Unit
			ST-CP-065	COMPRESSOR ASSY,PC200	Air Conditioner Unit
		4	ST-CP-070	COMPRESSOR ASSY	Air Conditioner Unit
			ST-CP-069	COMPRESSOR ASSY,FOR CAT 740B/6015	Air Conditioner Unit
			ST-CP-046	COMPRESSOR ASSY,FOR CAT 740 & 980H	Air Conditioner Unit
		5	ST-CC-009	CORE,EVAPORATOR	Air Conditioner Unit
			ST-CC-010	EVAPORATOR COIL,1L,FOR KOMATSU PC 400	Air Conditioner Unit
		6	ST-EM-052	MOTOR,BLOWER,FOR KOMATSU	Air Conditioner Unit
209	B	1	ST-RL-002	RELAY,BOSCH,24V	Air Conditioner Unit
			ST-RL-011	RELAY,4 PIN	Air Conditioner Unit
			ST-FT-011	FITTING,1/2IN	Air Conditioner Unit
			ST-SL-002A	FERRULE,1/5IN,AL,R134A	Air Conditioner Unit
			ST-SL-003A	FERRULE,5/8IN,AL,R134A	Air Conditioner Unit
			ST-SL-004A	FERRULE,12IN,R134A	Air Conditioner Unit
			ST-SL-001A	FERRULE,3/8IN,AL,R134A	Air Conditioner Unit
			ST-SP-048	O-RING SET	Air Conditioner Unit
		2	VBA74	V-BELT,A74,TOOTHED (GERIGI)	Air Conditioner Unit
			VBA42	V-BELT,A42,TOOTHED (GERIGI)	Air Conditioner Unit
			VBB41	V-BELT,B41,TOOTHED (GERIGI)	Air Conditioner Unit
			VBA46	V-BELT,A46,TOOTHED (GERIGI)	Air Conditioner Unit
			VBA40	V-BELT,A40,TOOTHED (GERIGI)	Air Conditioner Unit
		3	ST-CP-049	COMPRESSOR ASSY	Air Conditioner Unit
			ST-CP-014	COMPRESSOR ASSY	Air Conditioner Unit
		4	ST-CP-026	COMPRESSOR ASSY,SD 7H15 8042	Air Conditioner Unit
			ST-RD-002	DRIER,FOR CAT LONG	Air Conditioner Unit
			ST-CP-067	COMPRESSOR	Air Conditioner Unit
		5	ST-RD-001	DRIER,3/8IN LG	Air Conditioner Unit
			ST-RD-036	DRIER,FOR KOMATSU	Air Conditioner Unit
			ST-RD-022	DRIER,ND	Air Conditioner Unit
			ST-RD-032	DRIER,FOR CAT 777	Air Conditioner Unit
			ST-EF-009	FAN,ENGINE,EXTRA,SD,24V,10IN	Air Conditioner Unit
	C	1	ST-EM-046A	MOTOR ASSY,ELECT,24V,FOR CAT777D	Air Conditioner Unit
			ST-EM-002	MOTOR ASSY,ELECT,24V	Air Conditioner Unit
			ST-RL-001	RELAY,BOSCH,12V	Air Conditioner Unit
			ST-EK-007	VALVE,EXPANSION	Air Conditioner Unit

		ST-EK-013	EXPANSION BLOCK,FOR PC 400	Air Conditioner Unit
		ST-DN-001C	O-RING,DOUBLE NIPPLE,5/8IN,R12	Air Conditioner Unit
		ST-SP-019K	FUSE,BLADE,MINI,15A	Air Conditioner Unit
		ST-SP-020K	FUSE,BLADE,MINI,20A	Air Conditioner Unit
		ST-SP-018K	FUSE,BLADE,MINI,10A	Air Conditioner Unit
		ST-SP-019	FUSE,BLADE,BIG,15A	Air Conditioner Unit
		ST-SP-020	FUSE,BLADE,BIG,20A	Air Conditioner Unit
		ST-SP-058	SERVICE KIT,CAP & SEAL,HIGH SIDE,R134A	Air Conditioner Unit
		ST-SP-059	SERVICE KIT,CAP & SEAL,LOW SIDE,R134A	Air Conditioner Unit
	2	ST-EM-027	MOTOR,RADIATOR GRADER 705	Air Conditioner Unit
		ST-MC-001	CLUTCH ASSY,FOR HD (DS)	Air Conditioner Unit
		ST-EM-056	MOTOR,BLOWER	Air Conditioner Unit
		ST-EM-025	MOTOR,ELECT,24V,FOR KOMATSU	Air Conditioner Unit
	3	ST-CP-051	VALVE ASSY,GRADER SERVICE,GDKM	Air Conditioner Unit
		ST-CP-027	COMPRESSOR ASSY,SD 7H15 8044	Air Conditioner Unit
		MFH4973	BASE,RELAY,ELECT,CON UNIV (AME VM)(SM)	Main Pump Unit
		FF025S14	GASKET,END COVER	Main Pump Unit
	4	53T126N353	O-RING	Main Pump Unit
		F109S10	O-RING	Main Pump Unit
		203194	RING,V-RING,SLINGER,V150	Main Pump Unit
		MF203196	O-RING	Main Pump Unit
		MF110091	MODULE,VACUUM PUMP KENSHO	Main Pump Unit
		ST-RD-052A	RECEIVER,DRIER,CAT D6R	Air Conditioner Unit
	5	ST-RD-015	DRIER,FOR VOLVO AA	Air Conditioner Unit
		ST-RD-041	DRIER,FOR GRADER 14M,281MM H,64MM DIA	Air Conditioner Unit
		ST-EM-046	MOTOR,ELECT,24V,FOR CAT 773 & 777	Air Conditioner Unit
	6	ST-EM-055	MOTOR ASSY,ELECT,24V	Air Conditioner Unit
		ST-EM-065	MOTOR,BLOWER,FOR D155 & PC400	Air Conditioner Unit
		ST-FT-O-012	FITTING,90DEG,3/8IN,AL,R12	Air Conditioner Unit
		ST-FC-012	FITTING,1/2IN,R134	Air Conditioner Unit
		ST-FT-O-013	FITTING,90DEG,1/2IN,AL,R12	Air Conditioner Unit
		ST-FT-007	FITTING,90DEG,3/8IN,AL,R134	Air Conditioner Unit
	1	ST-FS-017	FITTING,5/8IN	Air Conditioner Unit
		ST-QP-003	COUPLER,QUICK DISCONNECT,FOR CAT	Air Conditioner Unit
		ST-SH-002	VALVE	Air Conditioner Unit
		ST-SH-001	VALVE	Air Conditioner Unit
		ST-PT-001	VALVE	Air Conditioner Unit
D	2	ST-KP-003	VALVE,REMOVING CARES ON BOTH,R134A & R12	Air Conditioner Unit
		600-825-9330-NGE	ALTERNATOR (PULLEY SISIR)	Electrical
	3	ST-EM-036	MOTOR,ELECT	Air Conditioner Unit
		ST-CP-066	COMPRESSOR ASSY,24V	Air Conditioner Unit
	4	MF101233	RELAY,TIMER,24V,40A,4 PIN (DS)	Main Pump Unit
	5	ST-CC-012	COOLING COIL	Air Conditioner Unit
		ST-EM-064	MOTOR,ELECT,24V,FOR KOMATSU	Air Conditioner Unit
		ST-SP-002	SEAL,AUTO,UNICLA	Air Conditioner Unit
	6	ST-EM-006A	MOTOR ASSY,ELECT,24V	Air Conditioner Unit
		ST-EV-016	EVAPORATOR,KF ASSY ND,24V	Air Conditioner Unit
		ST-SP-001	TAPE,ADHESIVE,FOAM,AEROTAPE	Air Conditioner Unit
E	3	ST-SP-004	GUARD,HOSE,7MM	Air Conditioner Unit
		ST-SP-005T	GUARD,HOSE,FULL,10MM	Air Conditioner Unit

210	A	1	ST-EM-006	MOTOR,ELECT,24V	Air Conditioner Unit
			ST-QP-001	COUPLER SET,QD,R134A,SET/2EA	Air Conditioner Unit
		3	ST-CP-038	COMPRESSOR,DAEWOO NDA 4PV	Air Conditioner Unit
		4	ST-CP-028	COMPRESSOR ASSY,SD SCANIA	Air Conditioner Unit
	B		MF200BFV-KGO	VALVE,BUTTERFLY,200MM	Main Pump Unit
			ST-WR-010	FAN SPEED RESISTOR,HD 465-7/785-7	Air Conditioner Unit
			ST-KP-001	TOOL CORE,VALVE CORE	Air Conditioner Unit
			ST-WR-007	RESISTOR,BLOWER	Air Conditioner Unit
			ST-KP-002	TOOL CORE,VALVE CORE	Air Conditioner Unit
		1	ST-IP-006	BEARING,SINGLE SECTION	Air Conditioner Unit
			ST-IP-002	PULLEY,IDLER,ND	Air Conditioner Unit
			ST-EK-018	EXPANSION BLOCK,FOR MERCY	Air Conditioner Unit
			ST-EK-015	VALVE,EXPANSION	Air Conditioner Unit
			ST-IP-004	PULLEY,IDLER	Air Conditioner Unit
			VBB51	V-BELT,B51,TOOTHED (GERIGI)	Air Conditioner Unit
		2	ST-CP-025ND	COMPRESSORS ASSY,SD 7H15 8034 (SM)	Air Conditioner Unit
			ST-CP-026A	COMPRESSOR ASSY,AC,12A	Air Conditioner Unit
		3	ST-EM-019	MOTOR,ELECT,24V,F/ PC 1250 & D 375 (SM)	Air Conditioner Unit
			ST-CP-013	COMPRESSOR ASSY,ND,15A	Air Conditioner Unit
		4	ST-EV-004	EVAPORATOR,FOR D85/PC200	Air Conditioner Unit
			ST-CP-058	COMPRESSOR ASSY,ND,FOR PC200	Air Conditioner Unit
		5	ST-CP-062	COMPRESSOR ASSY	Air Conditioner Unit
			ST-CP-005A	COMPRESSOR ASSY,ND,24V	Air Conditioner Unit
		6	ST-RD-018	RECEIVER,DRIER	Air Conditioner Unit
			ST-CP-023	COMPRESSOR ASSY,SD 508,R134A,12V	Air Conditioner Unit
			ST-PS-005	SWITCH,MALE BINARY	Air Conditioner Unit
			ST-KN-001	KNOB,SWITCH	Air Conditioner Unit
			ST-EX-001	VALVE,EXPANSION	Air Conditioner Unit
			ST-PT-002	VALVE CORE,R-12	Air Conditioner Unit
			ST-PT-006	VALVE CORE,R134A	Air Conditioner Unit
		1	ST-SW-003	SWITCH,ROTARY FAN,5 PIN	Air Conditioner Unit
			ST-PT-005	VALVE CORE	Air Conditioner Unit
			ST-PS-007	SWITCH,MALE BINARY,W/ 2 BLADE TERM	Air Conditioner Unit
	C		ND499000-6160-NGE	SENSOR ASSY,PRESSURE,FUEL (ITC)	Part Develop Unit
			ST-CP-110	COMPRESSOR,NISSAN QUESTER	Air Conditioner Unit
		3	ST-CC-013	COOLING COIL,FOR PC-1250 & PC-300	Air Conditioner Unit
			ST-CP-040	COMPRESSOR ASSY,FOR HITACHI	Air Conditioner Unit
			ST-EF-006	FAN,ENGINE,EXTRA,12V,10IN,10 BLADE	Air Conditioner Unit
		4	ST-EF-003	MOTOR,CONDENSER	Air Conditioner Unit
			ST-EF-011	FAN,ENGINE,EXTRA,24V,14IN,10 BLADE	Air Conditioner Unit
		1	ST-WR-012	FAN SPEED RESISTOR,FOR MERCY	Air Conditioner Unit
			ST-PS-003	SWITCH,MALE BINARY	Air Conditioner Unit
		2	ST-CC-019	EVAPORATOR,FOR MERCY	Air Conditioner Unit
	D	3	MF202596	GASKET,200NB,TABLE H,NRV VALVE	Main Pump Unit
			ST-EF-013	FAN,ENGINE,EXTRA,24V,8 SICKLE BLADE	Air Conditioner Unit
		4			
			ST-EM-042	MOTOR,ELECT,24V,FOR VOLVO FM-12	Air Conditioner Unit
211	A	1	Z00100006222	WORK LAMP,LED,FLOOD,SQUARE,HD,20KLM UP	Electrical
			Z00100006221	WORK LAMP,LED,SPOT,SQUARE,HD,7000-10KLM	Electrical

212		02-223-12270-7	ADAPTER,HOSE,SSV 1/8INX6M	Hydraulic System	
		2	06030-06317-NGE BEARING	Electrical	
			01-270635	SCREW,FLAT HEAD	Hydraulic System
	3	MF203193E62	CAP,BEARING	Main Pump Unit	
		MF202584	FLAP,NRV 200,3500KPA	Main Pump Unit	
	B	1	Z00100006217	WORK LAMP,LED,FLOOD,SQUARE,3000-4000LM	Electrical
		2	225-3099-NGE	GASKET,CYLINDER HEAD (ITC)	Part Develop Unit
			F129ME62	BOLT SET,W/ NUT CLAMP RING (DS)	Main Pump Unit
		3	SYGSM184E62	DEFLECTOR,FLINGER	Main Pump Unit
			FFY184DE62	DEFLECTOR,FLINGER	Main Pump Unit
			MFMK583681J37	SLEEVE,J37,HARD	Main Pump Unit
	C	1	Z00100006219	WORK LAMP,LED,FLOOD,SQUARE,4000-5000LM	Electrical
		2	MA625 330 01 19	REPAIR KIT,STEERING KNUCKLE, TOP	Filter Unit
			MA942 317 20 12	BUFFER,RUBBER	Filter Unit
			MN000000 005729	SCREW	Filter Unit
			MA000 326 44 81	MOUNTING,RUBBER	Filter Unit
			MA942 317 02 74	PIN	Filter Unit
	D	1	Z00100006216	WORK LAMP,LED,FLOOD,SQUARE,2000-3000LM	Electrical
		3	01-090471	FITTING ASSY	Hydraulic System
	E	1	Z00100006223	WORK LAMP,LED,FLOOD,SQUARE,500W,73KLM	Electrical
213	A	3	S009 BEARING	Main Pump Unit	
			MFMK413241AJ32	SLEEVE,SHAFT,C78/V37,MULTIFLO MF-420E	Main Pump Unit
		B	2	7E-2631-NGE	GASKET KIT (ITC)
			03-000921	PUMP,HYD,HIGH CHIEF	Hydraulic System
			MF04B001450	GASKET,SUCTION ADAPTER,14IN	Main Pump Unit
			FG10132S01	RING,JOINT,SUCTION	Main Pump Unit
	3		FX6124S00	SEAL,BOWL (DS)	Main Pump Unit
			F8132S01	JOINT,INTAKE (DS)	Main Pump Unit
			MF203195E62	LABYRINTH	Main Pump Unit
			FFY008E62	SPACER	Main Pump Unit
	C	2	390-34N	NUT,OFF SET,52MM,AF BRASS	Main Pump Unit
			F045MC23	BOLT SET,GLAND,W/ NUT & WASHER	Main Pump Unit
			S009D	BEARING	Main Pump Unit
			20569151-NGE	BEARING,RELEASE (ITC)	Part Develop Unit
			20581089-NGE	JOINT,BALL (ITC)	Part Develop Unit
			1652986-NGE	BEARING,ROLLER	Part Develop Unit
		3	MF04B001585	GASKET,DISCHARGE PIPE	Main Pump Unit
			MF202598	GASKET,LID NRV 200,3500KPA	Main Pump Unit
	F6132S01		JOINT,DISCHARGE,RUBBER	Main Pump Unit	
	214	A	1	ST-CD-024	CONDENSER,FOR HD 785-7
2			ST-CD-016	CONDENSER	Air Conditioner Unit
B		1	ST-CD-009	CONDENSER,14X23X44MM,FLARE	Air Conditioner Unit
			ST-CD-006	CONDENSER,14X12X44MM	Air Conditioner Unit
C		1	MFR24VCOAS-01	RELAY,CHANGE OVER (SM)	Main Pump Unit
			ST-CD-039	CONDENSER,12X23X44MM	Air Conditioner Unit
			M12A2-30H	NIPPLE,GREASE	Main Pump Unit
2		ST-CD-040	CONDENSER,FOR GRADER	Air Conditioner Unit	
D	2	ST-FL-008	FILTER	Air Conditioner Unit	
214	A	1	MF258494	SLEEVE,SHAFT,100XHV J3,MF-125MV	Main Pump Unit
			ST-CD-033	CONDENSER	Air Conditioner Unit
			ST-CD-018	CONDENSER,FOR PC 400	Air Conditioner Unit

215	B	2	ST-CD-041	CONDENSER, FOR GD825	Air Conditioner Unit
			MA000 350 27 05	ARM, CONTROL (SM)	Filter Unit
		2	02-504-36033-3	TUBE, GREASE FILLED, 8MM	Hydraulic System
			4W-3027-NGE	BREATHER (ITC)	Part Develop Unit
	C	2	6261-81-6810-NGE	V-BELT SET, TOOTHED (GERIGI), C/O2EA (ITC)	Part Develop Unit
	D	1	141-7116-NGE	V-BELT (ITC)	Electrical
			9S-8005-NGE	PLUG (ITC)	Part Develop Unit
			9S-8004-NGE	PLUG (ITC)	Part Develop Unit
		2	5H-1504-NGE	WASHER (ITC)	Part Develop Unit
			5M-6708-NGE	WASHER (ITC)	Part Develop Unit
			298-6387-NGE	O-RING (ITC)	Part Develop Unit
	A	1	561-20-71100-NGE	UNIVERSAL JOINT, SPIDER, FR SHAFT	Electrical
			561-27-61940-NGE	BEARING, INNER	Electrical
			03-CVF-04-JSG-L	VALVE, CHECK, OUTLET	Hydraulic System
			01-270735	FITTING, ORIFICE, FOR FLOWMASTER	Hydraulic System
		2	04-SCR-4	SCREW, ALLEN HEAD	Hydraulic System
			02-432-24162-1	STUD, HOSE, STR	Hydraulic System
			L-AC-1206	REDUCER, BUSH	Hydraulic System
			QNV-M08	COUPLER, HOSE, QD, 1/2IN BSPPM	Hydraulic System
		3	01-250158	REPAIR KIT	Hydraulic System
			03-003000	VALVE, HYD	Hydraulic System
			04-PG1000-4B	GAUGE, PRESS, 1000PSI	Hydraulic System
			MFF117C21	SPACER, SHAFT	Main Pump Unit
			MFF075J32	SLEEVE, SHAFT, C78/V37	Main Pump Unit
		4	ELBRB125	ELECTRO LUBER MINI 125GR	Main Pump Unit
			M-2MA180/240RR	RETAINER, TOOTH (GET)	Part Attachment
			M-2MA180PR	PIN, TOOTH	Part Attachment
			M-2MA240PR	PIN ASSY, TOOTH	Part Attachment
		5	6A-33	PACKING, GLAND	Main Pump Unit
			21051052-NGE	ROD, REACTING	Part Develop Unit
			5D-0764-NGE	WASHER (ITC)	Part Develop Unit
			8H-5306-NGE	KEY (ITC)	Part Develop Unit
		6	3S-1349-NGE	WASHER, CAT 777 (ITC)	Part Develop Unit
			123-7271-NGE	O-RING, SEAL RING, CAT 777 (ITC)	Part Develop Unit
			2A-3398-NGE	GASKET (ITC)	Part Develop Unit
			8J-8879-NGE	O-RING (ITC)	Part Develop Unit
			1W-3601-NGE	GASKET (ITC)	Part Develop Unit
	B		421-20-32621-NGE	UNIVERSAL JOINT, SPIDER, FR SHAFT, W/ BOLT	Electrical
		1	235-27-11190-NGE	BEARING	Electrical
			01-270673	HOUSING, PUMP	Hydraulic System
			13-002500-2	WIRING HARNESS, TIMER SG G2	Hydraulic System
		2	HCA-04	HAMMER, 99% SOLID COPPER, 4LB, ALLUGORO	Tools
			01-270692	VALVE, PRESSURE REDUCING	Hydraulic System
			01-270693	VALVE, CONTROL, FLOW (PDS)	Hydraulic System
		3	13-532-30738-7/16	FITTING, THREADED SLEEVE, 7/6IN JIC, 90DEG	Hydraulic System
			MF03B004319	BALL, FLOAT, CF-45MV	Main Pump Unit
			03-000013-5-CS	CARTRIDGE, VALVE, HIGH CHIEF 2/4	Hydraulic System
			M2STK02	TUBE KIT, FIRE SENSOR, 8M LG	Hydraulic System
			MF215500	STUD, 140MM, MULTIFLO MF-420E (DS)	Main Pump Unit
		4	MFGTE200	GASKET, FLANGE, DN 200 TE FF, RUBBER, 3MM	Main Pump Unit
			FH122S01	O-RING, SEAL RING (DS)	Main Pump Unit

C	5	ELBRB500	ELECTRO LUBER JUMBO 500GR	Main Pump Unit
		MF540-140-700-24	CLUTCH,COMPLETE,ROBATIC,24V (SM)	Main Pump Unit
	6	2W-8837-NGE	ELBOW (ITC)	Part Develop Unit
		2W-8848-NGE	ELBOW (ITC)	Part Develop Unit
		6732-61-3871-NGE	V-BELT (ITC)	Part Develop Unit
		4B-8407-NGE	GASKET (ITC)	Part Develop Unit
		2N-0876-NGE	GASKET (ITC)	Part Develop Unit
	1	G-L-1208	NIPPLE	Hydraulic System
		G-L-90-0702	NIPPLE,ELBOW,90DEG	Hydraulic System
		L-L-0808	NIPPLE	Hydraulic System
	2	01-005000	FITTING	Hydraulic System
		01-034572	SEAL	Hydraulic System
		01-270670	PIN,OUTLET	Hydraulic System
		01-270674	BEARING,BRONZE	Hydraulic System
		01-272180	STRAINER,INLET	Hydraulic System
		01-275186	PUMP KIT,FLOWMASTER PUMP	Hydraulic System
		03-000100	COVER,INJECTOR GREASE,PLASTIC	Hydraulic System
	3	03-000920-9V	SEAL KIT,HYD CYLINDER	Hydraulic System
		04-PC-4	CLAMP-P,1/4IN	Hydraulic System
		04-PC-8	CLAMP-P,1/2IN	Hydraulic System
		02-223-12567-1	SWIVEL,ANGLE	Hydraulic System
		04-SB-6	BOLT STUD,3/8IN	Hydraulic System
		G-G-0707	NIPPLE,UNION,JIC X JIC	Hydraulic System
		L-AC-0402	REDUCER,BUSH	Hydraulic System
	4	MK586070C23	RING,NECK	Hydraulic System
		PAK02	TOOL,INSTALL&REMOVE,PACKING GLAND	Main Pump Unit
		MA000 090 20 51	FILTER,INSERT	Filter Unit
		MA000 326 56 81	MOUNTING,RUBBER	Filter Unit
		MF11B014500	COUPLING,INSERT,SAMIFLEX A7 (SM)	Main Pump Unit
	5	MFPK-DWF193	PACKING KIT	Main Pump Unit
		6G-7339-NGE	PLATE (ITC)	Part Develop Unit
	6	ESP6/6	PUSH BUTTON,EMER STOP,63.5MM,1NO+1NC,RED	Electrical
		04120-21740-NGE	V-BELT (ITC)	Part Develop Unit
		5P-3108-NGE	O-RING (ITC)	Part Develop Unit
		8M-4438-NGE	O-RING (ITC)	Part Develop Unit
		4J-2506-NGE	SEAL (ITC)	Part Develop Unit
		9X-7381-NGE	O-RING (ITC)	Part Develop Unit
D	1	G-N-0707	NIPPLE	Hydraulic System
		G-N-0909	NIPPLE	Hydraulic System
		L-06	PLUG	Hydraulic System
		L-AC-1204	REDUCER,BUSH	Hydraulic System
		L-L-0204	NIPPLE	Hydraulic System
		01-086234	REPAIR KIT	Hydraulic System
	2	01-061041	CYLINDER,AIR	Hydraulic System
		AC-AC-0404	CONNECTOR,HOSE	Hydraulic System
		01-090942	PUMP,LINCOLN UNLOADER (4000PSI)	Hydraulic System
	3	L-AC-AC-040404	TEE,1/4IN NPT M X NPT F X NPT F	Hydraulic System
		G-L-90-1206	NIPPLE,ELBOW 90DEG	Hydraulic System
		G-L-0704	NIPPLE	Hydraulic System
	4	01-083001	REPAIR KIT,TUBE,LOWER PUMP	Hydraulic System
		04-PG5000-4B	GAUGE,PRESS,0 TO 5000PSI	Hydraulic System
		04-BV-8	VALVE,BALL,1/2IN NPT,KITZ	Hydraulic System
	5	9S-2760-NGE	GASKET (ITC)	Part Develop Unit
		9Y-6089-NGE	GASKET (ITC)	Part Develop Unit

216	E	6	7S-8767-NGE	GASKET (ITC)	Part Develop Unit
			9F-2247-NGE	PLUG (ITC)	Part Develop Unit
			129-3719-NGE	O-RING,CAT 777 (ITC)	Part Develop Unit
			4W-9839-NGE	GASKET (ITC)	Part Develop Unit
			04120-21757-NGE	V-BELT (ITC)	Part Develop Unit
			118-3534-NGE	SWITCH ASSY (ITC)	Part Develop Unit
			2N-2766-NGE	NUT,LOCK (ITC)	Part Develop Unit
		6	04120-21741-NGE	V-BELT (ITC)	Part Develop Unit
			9M-8546-NGE	GASKET (ITC)	Part Develop Unit
			129-9452-NGE	GASKET (ITC)	Part Develop Unit
			4F-2612-NGE	GASKET (ITC)	Part Develop Unit
			2N-2765-NGE	BOLT (ITC)	Part Develop Unit
			106-1792-NGE	STUD,TAPERLOCK (ITC)	Part Develop Unit
			04121-22264-NGE	V-BELT SET,C/O 2EA	Part Develop Unit
	A	1	6V-8260-NGE	SEAL (ITC)	Part Develop Unit
			7D-7519-NGE	O-RING,CAT 777 (ITC)	Part Develop Unit
			5K-5959-NGE	O-RING (ITC)	Part Develop Unit
			114-5477-NGE	PLUNGER (ITC)	Part Develop Unit
			6V-8676-NGE	O-RING (ITC)	Part Develop Unit
			247-3796-NGE	GASKET (ITC)	Part Develop Unit
			6V-8400-NGE	O-RING (ITC)	Part Develop Unit
		2	467-8535-NGE	SWITCH ASSY,STARTER (ITC)	Part Develop Unit
			299-3401-NGE	NUT,HEX (ITC)	Part Develop Unit
			9M-1503-NGE	RING (ITC)	Part Develop Unit
			8T-6703-NGE	CLAMP (ITC)	Part Develop Unit
			9D-3432-NGE	WASHER,THRUST (ITC)	Part Develop Unit
			9N-1941-NGE	CLAMP (ITC)	Part Develop Unit
			9X-2201-NGE	CLAMP (ITC)	Part Develop Unit
		3	8X-6729-NGE	BEARING (ITC)	Part Develop Unit
			5J-9451-NGE	BEARING (ITC)	Part Develop Unit
			248-5513-NGE	REGULATOR (ITC)	Part Develop Unit
			3S-2909-NGE	RING (ITC)	Part Develop Unit
			2K-4472-NGE	O-RING (ITC)	Part Develop Unit
			2N-8374-NGE	GASKET (ITC)	Part Develop Unit
			3F-5792-NGE	O-RING (ITC)	Part Develop Unit
		4	2S-4078-NGE	O-RING (ITC)	Part Develop Unit
			337-1943-NGE	SEAL,RECTANGULAR,CAT 777 (ITC)	Part Develop Unit
			4D-8695-NGE	BOLT,CAT 777 (ITC)	Part Develop Unit
			6V-0444-NGE	BEARING,SPHERICAL (ITC)	Part Develop Unit
			442-1340-NGE	GASKET KIT,CYLINDER HEAD,SINGLE (ITC)	Part Develop Unit
			7J-3297-NGE	BEARING (ITC)	Part Develop Unit
			8J-8906-NGE	BEARING,SPHERICAL (ITC)	Part Develop Unit
	B	5	8X-8414-NGE	WASHER (ITC)	Part Develop Unit
			114-9299-NGE	BRAKE LINING ASSY	Part Develop Unit
			04120-21735-NGE	V-BELT	Part Develop Unit
			04120-21748-NGE	V-BELT	Part Develop Unit
		6	04120-21760-NGE	V-BELT (ITC)	Part Develop Unit
			04120-21951-NGE	V-BELT	Part Develop Unit
			8M-8157-NGE	O-RING (ITC)	Part Develop Unit
			5D-4311-NGE	SEAL (ITC)	Part Develop Unit
		1	2S-2182-NGE	O-RING (ITC)	Part Develop Unit
			117-5268-NGE	GASKET (ITC)	Part Develop Unit
			9S-3581-NGE	CUP,BEARING (ITC)	Part Develop Unit
			9S-3582-NGE	CONE,BEARING,ROLLER (ITC)	Part Develop Unit

C		2H-3931-NGE	O-RING (ITC)	Part Develop Unit
		4D-6578-NGE	STUD (ITC)	Part Develop Unit
		1H-9696-NGE	O-RING (ITC)	Part Develop Unit
		8M-4986-NGE	O-RING (ITC)	Part Develop Unit
		3E-5239-NGE	RELAY (ITC)	Part Develop Unit
		5P-5299-NGE	SEAL (ITC)	Part Develop Unit
		2K-0337-NGE	NUT,CAT 777 (ITC)	Part Develop Unit
	2	1T-0210-NGE	BEARING (ITC)	Part Develop Unit
		8T-4986-NGE	CLAMP (ITC)	Part Develop Unit
		9D-2319-NGE	BEARING (ITC)	Part Develop Unit
		8H-9789-NGE	BEARING (ITC)	Part Develop Unit
		8J-8905-NGE	RING,LOCK (ITC)	Part Develop Unit
	3	8P-2019-NGE	O-RING,SEAL RING (ITC)	Part Develop Unit
		7D-5435-NGE	COVER (ITC)	Part Develop Unit
		134-1935-NGE	BLADE,WIPER (ITC)	Part Develop Unit
		160-6387-NGE	SEAL (ITC)	Part Develop Unit
		160-6386-NGE	SEAL (ITC)	Part Develop Unit
	4	4N-9680-NGE	GOVERNOR ASSY (ITC)	Part Develop Unit
		114-5333-NGE	SWITCH ASSY (ITC)	Part Develop Unit
		8T-4985-NGE	CLAMP (ITC)	Part Develop Unit
		2G-9491-NGE	SEAL (ITC)	Part Develop Unit
		9H-6832-NGE	SEAL (ITC)	Part Develop Unit
		6F-8146-NGE	SEAL (ITC)	Part Develop Unit
		3K-0360-NGE	O-RING (ITC)	Part Develop Unit
	5	5P-0840-NGE	O-RING (ITC)	Part Develop Unit
		297-6849-NGE	SEAL KIT,CYLINDER HYD (ITC)	Part Develop Unit
		04121-21740-NGE	V-BELT	Part Develop Unit
	6	04120-21762-NGE	V-BELT (ITC)	Part Develop Unit
		6212-85-6840-NGE	V-BELT SET,C/O 2EA (ITC)	Part Develop Unit
		6215-61-3690-NGE	V-BELT SET,C/O 5EA (ITC)	Part Develop Unit
		6245-81-6360-NGE	V-BELT (ITC)	Part Develop Unit
	1	6F-4855-NGE	SEAL (ITC)	Part Develop Unit
		8L-2786-NGE	O-RING (ITC)	Part Develop Unit
		6V-8398-NGE	O-RING (ITC)	Part Develop Unit
		2M-9780-NGE	O-RING,CAT 777 (ITC)	Part Develop Unit
		3J-7354-NGE	O-RING (ITC)	Part Develop Unit
		4W-0530-NGE	RING (ITC)	Part Develop Unit
		6V-3319-NGE	O-RING (ITC)	Part Develop Unit
		9S-8307-NGE	O-RING (ITC)	Part Develop Unit
		8M-4446-NGE	O-RING (ITC)	Part Develop Unit
		114-9305-NGE	SEAL KIT,BRAKE	Part Develop Unit
	2	7J-9108-NGE	O-RING (ITC)	Part Develop Unit
		235-2484-NGE	SEAL,LIP (ITC)	Part Develop Unit
		1S-2174-NGE	O-RING (ITC)	Part Develop Unit
		245-4907-NGE	SEAL,FUEL (ITC)	Part Develop Unit
		235-3546-NGE	O-RING (ITC)	Part Develop Unit
		214-7568-NGE	O-RING (ITC)	Part Develop Unit
		2D-8009-NGE	O-RING (ITC)	Part Develop Unit
		294-9583-NGE	SEAL KIT (ITC)	Part Develop Unit
	3	8N-3248-NGE	GASKET (ITC)	Part Develop Unit
		175-7897-NGE	O-RING (ITC)	Part Develop Unit
		259-4598-NGE	O-RING	Part Develop Unit
		8F-8733-NGE	SEAL (ITC)	Part Develop Unit
		2H-3932-NGE	O-RING (ITC)	Part Develop Unit
		5F-0304-NGE	PLUG,CAT 777 (ITC)	Part Develop Unit

D	4	8M-4435-NGE	O-RING (ITC)	Part Develop Unit
		133-4297-NGE	SEAL (ITC)	Part Develop Unit
		5F-3144-NGE	O-RING (ITC)	Part Develop Unit
		5S-2106-NGE	SEAL (ITC)	Part Develop Unit
		5H-6734-NGE	O-RING (ITC)	Part Develop Unit
		5F-3999-NGE	SEAL (ITC)	Part Develop Unit
		6B-9664-NGE	VALVE (ITC)	Part Develop Unit
		5H-6005-NGE	O-RING (ITC)	Part Develop Unit
		6D-9157-NGE	O-RING (ITC)	Part Develop Unit
		6H-3977-NGE	O-RING (ITC)	Part Develop Unit
	5	5P-0597-NGE	CLAMP (ITC)	Part Develop Unit
		5P-8210-NGE	O-RING (ITC)	Part Develop Unit
		6J-2680-NGE	O-RING (ITC)	Part Develop Unit
		111-3820-NGE	RING,RETAINING (ITC)	Part Develop Unit
		6M-5218-NGE	SEAL,CAT 777 (ITC)	Part Develop Unit
		7J-3296-NGE	RING,LOCK (ITC)	Part Develop Unit
		274-9256-NGE	RACE,BEARING,INNER (ITC)	Part Develop Unit
		391-2167-NGE	NUT,LOCK,FLANGE (ITC)	Part Develop Unit
		5D-0765-NGE	NUT,BOLT (ITC)	Part Develop Unit
		04120-21763-NGE	V-BELT	Part Develop Unit
	6	04121-22271-NGE	V-BELT SET,C/O 2EA (ITC)	Part Develop Unit
		17A-911-4680-NGE	V-BELT,COMPRESSOR (ITC)	Part Develop Unit
		272-0758-NGE	SEAL,PIPE (ITC)	Part Develop Unit
		4N-0848-NGE	SLEEVE (ITC)	Part Develop Unit
		123-7272-NGE	SEAL,CAT 777 (ITC)	Part Develop Unit
		124-3520-NGE	O-RING,SEAL RING,CAT 777 (ITC)	Part Develop Unit
		272-0760-NGE	SEAL,PIPE (ITC)	Part Develop Unit
		5S-4629-NGE	GASKET (ITC)	Part Develop Unit
		7D-3462-NGE	O-RING,SEAL RING (ITC)	Part Develop Unit
		245-4908-NGE	SEAL,FUEL (ITC)	Part Develop Unit
	1	5K-9090-NGE	O-RING (ITC)	Part Develop Unit
		5F-7054-NGE	O-RING (ITC)	Part Develop Unit
		6V-6353-NGE	O-RING (ITC)	Part Develop Unit
		6K-6307-NGE	O-RING (ITC)	Part Develop Unit
		8C-3089-NGE	O-RING (ITC)	Part Develop Unit
		4J-5267-NGE	O-RING (ITC)	Part Develop Unit
		4J-0519-NGE	O-RING (ITC)	Part Develop Unit
		123-2941-NGE	SEAL,CAT 777 (ITC)	Part Develop Unit
		1J-2859-NGE	O-RING (ITC)	Part Develop Unit
		1P-3709-NGE	SEAL (ITC)	Part Develop Unit
	2	161-8068-NGE	O-RING (ITC)	Part Develop Unit
		2D-8364-NGE	O-RING,CAT 777 (ITC)	Part Develop Unit
		109-2332-NGE	O-RING (ITC)	Part Develop Unit
		3S-9643-NGE	SEAL (ITC)	Part Develop Unit
		2K-8257-NGE	O-RING (ITC)	Part Develop Unit
		7X-7655-NGE	VALVE (ITC)	Part Develop Unit
		8T-3013-NGE	SEAL,CAT 777 (ITC)	Part Develop Unit
		9M-2092-NGE	O-RING (ITC)	Part Develop Unit
		1P-3704-NGE	SEAL (ITC)	Part Develop Unit
		127-4422-NGE	GASKET (ITC)	Part Develop Unit
	3	1H-5728-NGE	O-RING (ITC)	Part Develop Unit
		7N-6494-NGE	GASKET (ITC)	Part Develop Unit
		4F-5607-NGE	O-RING (ITC)	Part Develop Unit
	4	4J-0525-NGE	O-RING (ITC)	Part Develop Unit

E	5	4J-0520-NGE	O-RING (ITC)	Part Develop Unit
		4J-8251-NGE	GROMMET (ITC)	Part Develop Unit
		5F-0149-NGE	O-RING (ITC)	Part Develop Unit
		4J-0522-NGE	O-RING (ITC)	Part Develop Unit
		7N-4927-NGE	GASKET (ITC)	Part Develop Unit
		7G-1594-NGE	GASKET (ITC)	Part Develop Unit
		5P-3345-NGE	BOLT (ITC)	Part Develop Unit
		5P-8245-NGE	WASHER,HARD,CAT 777 (ITC)	Part Develop Unit
		8T-4167-NGE	WASHER (ITC)	Part Develop Unit
		109-0077-NGE	O-RING (ITC)	Part Develop Unit
		9N-2038-NGE	CLAMP ASSY,TURBINE (ITC)	Part Develop Unit
		5P-8500-NGE	KEY (ITC)	Part Develop Unit
	6	4J-0526-NGE	O-RING (ITC)	Part Develop Unit
		228-7090-NGE	O-RING,CAT 6020 (ITC)	Part Develop Unit
		258-4521-NGE	SENSOR GP (ITC)	Part Develop Unit
		6V-0973-NGE	SEAL (ITC)	Part Develop Unit
		5P-8356-NGE	SEAL (ITC)	Part Develop Unit
		269-7885-NGE	O-RING (ITC)	Part Develop Unit
		3H-3385-NGE	O-RING,CAT 777 (ITC)	Part Develop Unit
		6V-6609-NGE	SEAL (ITC)	Part Develop Unit
		198-6068-NGE	SEAL,INTEGRAL (ITC)	Part Develop Unit
		112-1574-NGE	O-RING (ITC)	Part Develop Unit
		5H-2824-NGE	SEAL (ITC)	Part Develop Unit
		1P-3708-NGE	SEAL (ITC)	Part Develop Unit
	1	4J-3815-NGE	GASKET (ITC)	Part Develop Unit
		1P-3705-NGE	SEAL (ITC)	Part Develop Unit
		109-0076-NGE	O-RING (ITC)	Part Develop Unit
		2D-6533-NGE	O-RING (ITC)	Part Develop Unit
	2	8P-2022-NGE	O-RING,SEAL RING (ITC)	Part Develop Unit
		107-3758-NGE	SEAL,AFTERCOOLER (ITC)	Part Develop Unit
		7G-4817-NGE	O-RING,SEAL RING (ITC)	Part Develop Unit
		3P-2793-NGE	O-RING,SEAL RING (ITC)	Part Develop Unit
		125-9740-NGE	RESISTOR (ITC)	Part Develop Unit
	3	3P-2794-NGE	O-RING,SEAL RING (ITC)	Part Develop Unit
		4T-2565-NGE	GASKET (ITC)	Part Develop Unit
		3P-0751-NGE	GASKET (ITC)	Part Develop Unit
		224-7506-NGE	SEAL,ISOLATION (ITC)	Part Develop Unit
	4	6V-5048-NGE	O-RING (ITC)	Part Develop Unit
		6J-1080-NGE	GROMMET,6X1-5/16X7/16,SOFT BLACK (ITC)	Part Develop Unit
	5	136-7227-NGE	O-RING (ITC)	Part Develop Unit
		6V-5066-NGE	O-RING (ITC)	Part Develop Unit
		6V-3917-NGE	O-RING (ITC)	Part Develop Unit
		6V-5101-NGE	O-RING (ITC)	Part Develop Unit
		6V-6809-NGE	SEAL (ITC)	Part Develop Unit
		6V-3965-NGE	NIPPLE ASSY,CAT 777 (ITC)	Part Develop Unit
		7H-2444-NGE	O-RING (ITC)	Part Develop Unit
		126-2702-NGE	SEAL (ITC)	Part Develop Unit
	5	238-5082-NGE	O-RING (ITC)	Part Develop Unit
		5E-8771-NGE	O-RING (ITC)	Part Develop Unit
		166-2904-NGE	O-RING (ITC)	Part Develop Unit
		2H-6338-NGE	O-RING (ITC)	Part Develop Unit
		8T-1919-NGE	SEAL (ITC)	Part Develop Unit
		238-5081-NGE	O-RING (ITC)	Part Develop Unit
		7M-8485-NGE	O-RING (ITC)	Part Develop Unit

6	238-5080-NGE	O-RING (ITC)	<i>Part Develop Unit</i>
	6N-0634-NGE	GASKET (ITC)	<i>Part Develop Unit</i>
	5P-8068-NGE	SEAL (ITC)	<i>Part Develop Unit</i>
	5P-5846-NGE	O-RING (ITC)	<i>Part Develop Unit</i>
	7X-4810-NGE	O-RING (ITC)	<i>Part Develop Unit</i>
	288-5476-NGE	O-RING (ITC)	<i>Part Develop Unit</i>
	123-7268-NGE	O-RING,SEAL RING,CAT 777 (ITC)	<i>Part Develop Unit</i>
	214-7566-NGE	O-RING (ITC)	<i>Part Develop Unit</i>
	9M-2151-NGE	STUD (ITC)	<i>Part Develop Unit</i>
	112-3540-NGE	O-RING (ITC)	<i>Part Develop Unit</i>
	234-8937-NGE	SEAL,INTEGRAL (ITC)	<i>Part Develop Unit</i>
	118-7226-NGE	SENSOR GP (ITC)	<i>Part Develop Unit</i>
	6L-1883-NGE	GASKET (ITC)	<i>Part Develop Unit</i>
	4F-3765-NGE	GASKET (ITC)	<i>Part Develop Unit</i>
Total		533	



Lampiran 4 Data Frekuensi Pengeluaran Sparepart

Tabel 34 Data frekuensi pengeluaran sparepart

Rak	No	Material	Pengeluaran												Grand Total	
			Mei-22	Jun-22	Jul-22	Agu-22	Sep-22	Okt-22	Nov-22	Des-22	Jan-23	Feb-23	Mar-22	Apr-23		Mei-23
209	1	04120-21747-NGE	0	0	1	0	0	0	3	1	2	0	1	1	0	9
	2	203194	0	1	0	0	0	0	0	1	0	2	4	5	0	13
	3	53T126N353	0	1	0	0	0	0	0	0	0	1	1	3	0	6
	4	600-825-9330-NGE	0	0	0	0	0	2	0	0	0	1	0	0	0	3
	5	F109S10	0	30	0	39	2	30	29	6	22	20	18	10	18	224
	6	FF025S14	0	2	0	0	0	0	0	0	0	2	4	5	5	18
	7	MF101233	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	MF110091	0	0	2	0	0	0	0	0	0	0	0	0	0	2
	9	MF200-0365PM	0	1	0	0	0	0	0	2	3	2	0	0	1	9
	10	MF203196	0	2	0	0	0	0	0	1	0	2	4	4	0	13
	11	MFH4973	0	0	3	0	0	0	0	0	0	9	0	0	0	12
	12	ST-CC-009	0	0	1	1	0	2	0	2	2	2	0	2	0	12
	13	ST-CC-010	0	0	2	1	2	0	0	0	0	1	0	0	2	8
	14	ST-CC-012	0	2	0	0	0	1	0	0	0	0	2	1	1	7
	15	ST-CP-011	2	4	7	3	6	4	13	3	5	6	4	6	4	67
	16	ST-CP-014	2	4	1	2	1	0	0	0	1	2	3	0	2	18
	17	ST-CP-026	0	0	4	0	2	0	1	0	1	0	0	1	1	10
	18	ST-CP-027	0	0	0	0	0	0	0	0	1	0	1	0	0	2
	19	ST-CP-046	0	0	0	1	0	0	2	0	1	0	0	0	0	4
	20	ST-CP-049	0	0	0	0	1	1	0	0	0	0	0	0	0	2
	21	ST-CP-051	3	4	0	0	3	2	1	2	1	3	4	2	2	27
	22	ST-CP-065	0	1	1	0	0	1	0	0	0	0	0	0	0	3
	23	ST-CP-066	3	0	0	5	1	0	4	2	1	0	0	1	0	17
	24	ST-CP-067	0	1	0	1	1	0	0	1	0	0	1	0	0	5
	25	ST-CP-069	1	1	0	1	2	2	3	1	4	2	2	3	2	24
	26	ST-CP-070	0	0	0	0	1	0	1	0	1	0	0	1	0	4
	27	ST-CVT-002	3	6	7	10	7	10	4	1	11	4	6	5	4	78
	28	ST-DN-001C	0	0	0	0	0	0	0	0	2	0	0	0	0	2
	29	ST-EF-009	1	1	3	2	1	0	0	1	1	0	0	0	0	10
	30	ST-EK-007	5	3	1	1	3	3	1	6	0	0	5	1	1	30
	31	ST-EK-013	1	4	3	0	1	1	7	5	2	5	0	1	0	30
	32	ST-EM-002	0	0	0	0	0	0	0	0	1	0	0	2	2	5
	33	ST-EM-006A	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	34	ST-EM-025	0	0	0	1	1	0	1	0	0	0	0	0	0	3
	35	ST-EM-027	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	36	ST-EM-036	0	0	0	0	1	1	0	0	2	0	1	0	0	5
	37	ST-EM-046	0	0	1	0	0	3	1	0	0	1	0	1	2	9
	38	ST-EM-046A	0	0	2	0	1	0	1	0	1	0	0	0	0	5
	39	ST-EM-052	2	6	1	9	1	5	0	7	4	9	0	4	6	54
	40	ST-EM-055	0	1	0	1	0	3	0	1	0	0	1	0	1	8
	41	ST-EM-056	4	1	0	1	0	0	1	0	3	1	2	0	1	14
	42	ST-EM-064	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	43	ST-EM-065	0	0	1	0	0	0	3	0	0	1	0	0	1	6
	44	ST-EV-016	0	2	2	1	2	2	3	1	1	1	0	4	1	20
	45	ST-EX-011	2	2	5	0	1	2	4	1	0	2	5	0	3	27
	46	ST-FC-012	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	47	ST-FS-017	0	0	1	0	0	0	0	0	1	0	0	0	0	2
	48	ST-FT-007	2	1	0	0	0	3	0	2	0	0	2	0	14	24

49	ST-FT-011	0	0	0	0	0	0	0	0	0	0	0	0	10	10
50	ST-FT-O-012	0	0	0	0	2	0	0	0	0	0	0	0	0	2
51	ST-FT-O-013	0	1	1	0	2	0	0	0	0	0	0	0	0	4
52	ST-KP-003	0	0	16	1	8	0	0	0	5	3	5	0	0	38
53	ST-MC-001	0	2	0	0	0	0	0	0	0	0	2	0	0	4
54	ST-PS-006	0	0	0	0	4	1	0	0	0	1	0	0	0	6
55	ST-PT-001	0	30	15	26	15	5	0	15	10	12	17	20	20	185
56	ST-QP-003	0	10	0	0	0	5	0	4	0	0	0	0	0	19
57	ST-RD-001	0	0	2	1	2	2	2	1	0	0	0	0	6	16
58	ST-RD-002	12	6	16	5	12	11	16	15	13	6	5	8	7	132
59	ST-RD-015	0	0	1	0	0	0	0	0	0	0	0	0	0	1
60	ST-RD-022	11	17	22	13	9	16	18	25	8	17	9	14	18	197
61	ST-RD-032	0	0	0	0	0	1	0	1	2	0	3	0	0	7
62	ST-RD-036	7	20	20	24	26	12	17	27	29	33	21	13	22	271
63	ST-RD-041	2	0	0	0	0	0	0	0	0	0	0	0	0	2
64	ST-RD-052A	0	0	0	0	0	0	0	3	1	2	0	0	0	6
65	ST-RL-001	0	0	5	0	2	0	0	0	2	4	0	7	3	23
66	ST-RL-002	0	0	0	9	3	5	4	0	0	0	9	0	0	30
67	ST-RL-005	4	5	0	3	10	0	11	0	0	13	0	2	4	52
68	ST-RL-011	0	7	6	4	2	4	9	0	0	2	5	6	1	46
69	ST-SH-001	0	0	0	0	0	0	0	0	1	0	0	0	5	6
70	ST-SH-002	0	0	0	0	0	1	0	0	0	0	0	0	5	6
71	ST-SL-001A	0	2	2	0	3	11	14	8	2	0	6	10	22	80
72	ST-SL-002A	3	2	4	7	12	14	18	0	3	0	19	4	16	102
73	ST-SL-003A	4	0	4	6	0	17	6	12	0	0	12	10	12	83
74	ST-SL-004A	0	0	2	0	0	0	11	0	3	0	6	6	6	34
75	ST-SP-001	9	24	23	12	22	27	37	16	14	23	22	9	35	273
76	ST-SP-002	0	0	0	0	0	0	0	0	0	2	0	0	0	2
77	ST-SP-003	0	0	0	0	0	0	0	0	0	0	0	0	1	1
78	ST-SP-004	0	0	0	4	0	1	1	1	0	0	2	0	2	11
79	ST-SP-005T	0	0	0	1	1	1	0	0	0	0	0	0	2	5
80	ST-SP-018K	0	0	0	30	10	10	0	15	0	0	0	0	0	65
81	ST-SP-019	0	0	10	30	0	0	0	0	0	35	0	0	0	75
82	ST-SP-019K	0	0	0	30	10	10	0	0	0	0	0	0	0	50
83	ST-SP-020	0	5	0	30	0	10	0	0	0	25	0	0	52	122
84	ST-SP-020K	0	0	0	30	10	10	0	15	0	15	0	0	0	80
85	ST-SP-048	0	0	0	0	1	0	1	1	0	0	0	2	0	5
86	ST-SP-058	10	0	30	18	15	15	6	50	50	10	0	0	0	204
87	ST-SP-059	10	0	30	18	15	15	6	50	50	10	0	10	0	214
88	ST-TH-001	17	10	8	3	11	9	12	8	6	7	5	8	7	111
89	ST-TH-006	1	5	3	11	10	8	10	12	14	9	11	3	4	101
90	VBA40	2	0	0	2	2	0	0	2	0	0	1	0	0	9
91	VBA42	0	1	0	2	0	0	0	2	0	0	1	0	0	6
92	VBA46	2	0	0	0	1	2	0	0	0	0	1	3	0	9
93	VBA74	0	0	0	0	0	0	0	2	0	0	2	0	0	4
94	VBB41	0	0	0	0	0	0	0	0	0	0	1	0	0	1
95	VBB46	0	0	1	0	0	0	0	1	0	0	0	0	0	2
96	VBB48	0	0	0	0	0	0	0	1	0	0	1	1	0	3
97	VBB54	0	0	0	0	0	0	0	0	0	3	0	0	0	3
98	VBB57	0	0	0	0	3	0	0	0	0	0	0	0	3	6

Lampiran 5 Klasifikasi ABC Sparepart Berdasarkan Aturan Class Based Storage

Tabel 35 Klasifikasi ABC sparepart

No	Material	Frekuensi	Persentase	Kumulatif	Class	Persentasi Item	Nilai
1	02-504-36033-3	1931	9,31%	9,31%	A	21,20%	79,89%
2	8L-2786-NGE	745	3,59%	12,90%			
3	5H-6005-NGE	670	3,23%	16,13%			
4	G-L-90-0702	593	2,86%	18,98%			
5	01-005000	577	2,78%	21,77%			
6	Z00100006217	529	2,55%	24,32%			
7	3H-3385-NGE	390	1,88%	26,20%			
8	4B-8407-NGE	347	1,67%	27,87%			
9	4J-0522-NGE	340	1,64%	29,51%			
10	3K-0360-NGE	281	1,35%	30,86%			
11	ST-SP-001	273	1,32%	32,18%			
12	ST-RD-036	271	1,31%	33,48%			
13	04120-21951-NGE	250	1,20%	34,69%			
14	04120-21748-NGE	239	1,15%	35,84%			
15	2N-2766-NGE	238	1,15%	36,99%			
16	M-2MA180/240RR	229	1,10%	38,09%			
17	5F-0149-NGE	228	1,10%	39,19%			
18	F109S10	224	1,08%	40,27%			
19	ST-SP-059	214	1,03%	41,30%			
20	ST-SP-058	204	0,98%	42,28%			
21	ST-RD-022	197	0,95%	43,23%			
22	6V-8398-NGE	195	0,94%	44,17%			
23	M-2MA240PR	191	0,92%	45,09%			
24	Z00100006216	190	0,92%	46,01%			
25	166-2904-NGE	188	0,91%	46,92%			
26	ST-PT-001	185	0,89%	47,81%			
27	106-1792-NGE	184	0,89%	48,69%			
28	7J-9108-NGE	177	0,85%	49,55%			
29	5P-8245-NGE	175	0,84%	50,39%			
30	3J-7354-NGE	165	0,80%	51,19%			
31	114-9299-NGE	152	0,73%	51,92%			
32	2M-9780-NGE	150	0,72%	52,64%			
33	214-7568-NGE	148	0,71%	53,35%			
34	ST-RD-002	132	0,64%	53,99%			
35	Z00100006219	124	0,60%	54,59%			
36	04120-21735-NGE	122	0,59%	55,18%			
37	ST-SP-020	122	0,59%	55,76%			
38	161-8068-NGE	119	0,57%	56,34%			
39	4J-0520-NGE	118	0,57%	56,91%			
40	ND499000-6160-NGE	115	0,55%	57,46%			
41	ST-TH-001	111	0,53%	58,00%			
42	6212-85-6840-NGE	104	0,50%	58,50%			
43	7M-8485-NGE	102	0,49%	58,99%			
44	ST-SL-002A	102	0,49%	59,48%			
45	ST-TH-006	101	0,49%	59,97%			
46	4J-0519-NGE	100	0,48%	60,45%			
47	8X-8414-NGE	97	0,47%	60,92%			
48	G-G-0707	97	0,47%	61,38%			
49	1P-3709-NGE	91	0,44%	61,82%			
50	4J-2506-NGE	91	0,44%	62,26%			
51	G-L-0704	90	0,43%	62,70%			

52	6H-3977-NGE	90	0,43%	63,13%
53	1J-2859-NGE	83	0,40%	63,53%
54	ST-SL-003A	83	0,40%	63,93%
55	ST-SP-020K	80	0,39%	64,31%
56	ST-SL-001A	80	0,39%	64,70%
57	ST-CVT-002	78	0,38%	65,08%
58	8C-3089-NGE	76	0,37%	65,44%
59	5K-9090-NGE	76	0,37%	65,81%
60	Z00100006223	75	0,36%	66,17%
61	ST-SP-019	75	0,36%	66,53%
62	6V-8400-NGE	74	0,36%	66,89%
63	02-223-12567-1	74	0,36%	67,25%
64	7J-3296-NGE	73	0,35%	67,60%
65	6J-1080-NGE	73	0,35%	67,95%
66	2D-8364-NGE	70	0,34%	68,29%
67	160-6387-NGE	69	0,33%	68,62%
68	1H-5728-NGE	68	0,33%	68,95%
69	ST-CP-011	67	0,32%	69,27%
70	5P-3108-NGE	66	0,32%	69,59%
71	ST-SP-018K	65	0,31%	69,90%
72	ST-CP-038	64	0,31%	70,21%
73	4J-0526-NGE	62	0,30%	70,51%
74	1P-3704-NGE	61	0,29%	70,80%
75	ST-PT-002	59	0,28%	71,09%
76	6V-3965-NGE	59	0,28%	71,37%
77	1P-3705-NGE	59	0,28%	71,66%
78	01-034572	57	0,27%	71,93%
79	M-2MA180PR	57	0,27%	72,20%
80	8T-3013-NGE	57	0,27%	72,48%
81	391-2167-NGE	56	0,27%	72,75%
82	5P-5846-NGE	55	0,27%	73,01%
83	238-5081-NGE	54	0,26%	73,27%
84	8J-8906-NGE	54	0,26%	73,53%
85	ST-EM-052	54	0,26%	73,80%
86	238-5082-NGE	53	0,26%	74,05%
87	ST-RL-005	52	0,25%	74,30%
88	ESP6/6	51	0,25%	74,55%
89	299-3401-NGE	51	0,25%	74,79%
90	1P-3708-NGE	51	0,25%	75,04%
91	03-000100	50	0,24%	75,28%
92	1S-2174-NGE	50	0,24%	75,52%
93	ST-SP-019K	50	0,24%	75,76%
94	7S-8767-NGE	49	0,24%	76,00%
95	8T-4167-NGE	49	0,24%	76,23%
96	ELBRB125	48	0,23%	76,47%
97	3S-1349-NGE	47	0,23%	76,69%
98	5F-3999-NGE	46	0,22%	76,91%
99	126-2702-NGE	46	0,22%	77,14%
100	ST-RL-011	46	0,22%	77,36%
101	Z00100006221	44	0,21%	77,57%
102	2H-3932-NGE	43	0,21%	77,78%
103	198-6068-NGE	43	0,21%	77,98%
104	PAK02	42	0,20%	78,19%
105	6V-0444-NGE	42	0,20%	78,39%
106	160-6386-NGE	41	0,20%	78,59%

107	4J-5267-NGE	40	0,19%	78,78%
108	9S-8307-NGE	39	0,19%	78,97%
109	7J-3297-NGE	39	0,19%	79,15%
110	6245-81-6360-NGE	39	0,19%	79,34%
111	4T-2565-NGE	38	0,18%	79,53%
112	ST-KP-003	38	0,18%	79,71%
113	8H-9789-NGE	38	0,18%	79,89%
114	5D-0764-NGE	36	0,17%	80,07%
115	3P-2793-NGE	36	0,17%	80,24%
116	04-SCR-4	35	0,17%	80,41%
117	03-000920-9V	35	0,17%	80,58%
118	9M-1503-NGE	35	0,17%	80,75%
119	6F-8146-NGE	34	0,16%	80,91%
120	8M-4438-NGE	34	0,16%	81,07%
121	ST-SL-004A	34	0,16%	81,24%
122	5P-8356-NGE	33	0,16%	81,40%
123	03-003000	33	0,16%	81,55%
124	04-PC-8	33	0,16%	81,71%
125	G-L-90-1206	33	0,16%	81,87%
126	5E-8771-NGE	32	0,15%	82,03%
127	8F-8733-NGE	32	0,15%	82,18%
128	248-5513-NGE	32	0,15%	82,34%
129	01-250158	32	0,15%	82,49%
130	238-5080-NGE	32	0,15%	82,64%
131	3S-9643-NGE	31	0,15%	82,79%
132	6J-2680-NGE	31	0,15%	82,94%
133	114-9305-NGE	31	0,15%	83,09%
134	9M-2092-NGE	31	0,15%	83,24%
135	04-PG1000-4B	31	0,15%	83,39%
136	5D-0765-NGE	30	0,14%	83,54%
137	ST-RL-002	30	0,14%	83,68%
138	5F-7054-NGE	30	0,14%	83,82%
139	8T-4985-NGE	30	0,14%	83,97%
140	HCA-04	30	0,14%	84,11%
141	337-1943-NGE	30	0,14%	84,26%
142	ST-EK-013	30	0,14%	84,40%
143	109-0077-NGE	30	0,14%	84,55%
144	ST-EK-007	30	0,14%	84,69%
145	2N-2765-NGE	29	0,14%	84,83%
146	ST-EF-003	29	0,14%	84,97%
147	4J-8251-NGE	29	0,14%	85,11%
148	112-3540-NGE	28	0,13%	85,25%
149	01-083001	28	0,13%	85,38%
150	04120-21760-NGE	28	0,13%	85,52%
151	2A-3398-NGE	27	0,13%	85,65%
152	04-PG5000-4B	27	0,13%	85,78%
153	ELBRB500	27	0,13%	85,91%
154	9M-8546-NGE	27	0,13%	86,04%
155	ST-CP-051	27	0,13%	86,17%
156	ST-EX-011	27	0,13%	86,30%
157	8J-8905-NGE	26	0,13%	86,42%
158	9S-8004-NGE	26	0,13%	86,55%
159	6B-9664-NGE	26	0,13%	86,67%
160	9D-3432-NGE	26	0,13%	86,80%
161	5F-3144-NGE	25	0,12%	86,92%

B **27,48%** **15,05%**

162	ST-CP-013	25	0,12%	87,04%
163	MFPAK-DWF193	24	0,12%	87,16%
164	ST-FT-007	24	0,12%	87,27%
165	ST-CP-069	24	0,12%	87,39%
166	04-SB-6	24	0,12%	87,50%
167	2K-0337-NGE	23	0,11%	87,61%
168	ST-CP-040	23	0,11%	87,72%
169	2K-4472-NGE	23	0,11%	87,83%
170	ST-RL-001	23	0,11%	87,95%
171	L-AC-0402	23	0,11%	88,06%
172	1T-0210-NGE	22	0,11%	88,16%
173	134-1935-NGE	22	0,11%	88,27%
174	4J-3815-NGE	22	0,11%	88,37%
175	129-3719-NGE	22	0,11%	88,48%
176	5S-2106-NGE	22	0,11%	88,59%
177	7D-7519-NGE	22	0,11%	88,69%
178	9Y-6089-NGE	21	0,10%	88,79%
179	2N-8374-NGE	21	0,10%	88,90%
180	MF258494	21	0,10%	89,00%
181	224-7506-NGE	21	0,10%	89,10%
182	123-2941-NGE	21	0,10%	89,20%
183	3P-2794-NGE	21	0,10%	89,30%
184	ST-PT-006	20	0,10%	89,40%
185	8T-6703-NGE	20	0,10%	89,49%
186	228-7090-NGE	20	0,10%	89,59%
187	2K-8257-NGE	20	0,10%	89,69%
188	7G-4817-NGE	20	0,10%	89,78%
189	9H-6832-NGE	20	0,10%	89,88%
190	ST-EV-016	20	0,10%	89,97%
191	01-090942	20	0,10%	90,07%
192	8M-8157-NGE	19	0,09%	90,16%
193	6G-7339-NGE	19	0,09%	90,25%
194	1H-9696-NGE	19	0,09%	90,35%
195	ST-QP-003	19	0,09%	90,44%
196	03-000013-5-CS	19	0,09%	90,53%
197	01-270693	19	0,09%	90,62%
198	4D-8695-NGE	18	0,09%	90,71%
199	5P-0597-NGE	18	0,09%	90,79%
200	6V-3917-NGE	18	0,09%	90,88%
201	17A-911-4680-NGE	18	0,09%	90,97%
202	5P-5299-NGE	18	0,09%	91,05%
203	6732-61-3871-NGE	18	0,09%	91,14%
204	FF025S14	18	0,09%	91,23%
205	ST-CP-014	18	0,09%	91,31%
206	6M-5218-NGE	18	0,09%	91,40%
207	13-532-30738-7/16	18	0,09%	91,49%
208	9M-2151-NGE	17	0,08%	91,57%
209	5P-8068-NGE	17	0,08%	91,65%
210	ST-CP-066	17	0,08%	91,73%
211	04121-22264-NGE	17	0,08%	91,82%
212	6261-81-6810-NGE	17	0,08%	91,90%
213	5J-9451-NGE	17	0,08%	91,98%
214	8P-2019-NGE	17	0,08%	92,06%
215	2S-4078-NGE	16	0,08%	92,14%
216	6V-6609-NGE	16	0,08%	92,22%

217	MK586070C23	16	0,08%	92,29%
218	03-CVF-04-JSG-L	16	0,08%	92,37%
219	ST-RD-001	16	0,08%	92,45%
220	109-0076-NGE	15	0,07%	92,52%
221	5P-8500-NGE	15	0,07%	92,59%
222	225-3099-NGE	15	0,07%	92,66%
223	274-9256-NGE	15	0,07%	92,74%
224	9X-2201-NGE	15	0,07%	92,81%
225	5K-5959-NGE	15	0,07%	92,88%
226	4F-5607-NGE	15	0,07%	92,95%
227	ST-KP-002	15	0,07%	93,03%
228	123-7271-NGE	15	0,07%	93,10%
229	123-7268-NGE	15	0,07%	93,17%
230	5H-2824-NGE	15	0,07%	93,24%
231	3S-2909-NGE	14	0,07%	93,31%
232	288-5476-NGE	14	0,07%	93,38%
233	3P-0751-NGE	14	0,07%	93,45%
234	123-7272-NGE	14	0,07%	93,51%
235	124-3520-NGE	14	0,07%	93,58%
236	6V-5048-NGE	14	0,07%	93,65%
237	6V-8260-NGE	14	0,07%	93,72%
238	ST-EM-056	14	0,07%	93,78%
239	04-PC-4	14	0,07%	93,85%
240	ST-KN-001	13	0,06%	93,91%
241	203194	13	0,06%	93,98%
242	214-7566-NGE	13	0,06%	94,04%
243	9N-2038-NGE	13	0,06%	94,10%
244	8X-6729-NGE	13	0,06%	94,16%
245	8M-4986-NGE	13	0,06%	94,23%
246	8P-2022-NGE	13	0,06%	94,29%
247	01-270692	13	0,06%	94,35%
248	MF203196	13	0,06%	94,41%
249	F6132S01	13	0,06%	94,48%
250	294-9583-NGE	12	0,06%	94,53%
251	6V-6353-NGE	12	0,06%	94,59%
252	ST-SW-003	12	0,06%	94,65%
253	9S-2760-NGE	12	0,06%	94,71%
254	9N-1941-NGE	12	0,06%	94,77%
255	ST-CD-024	12	0,06%	94,82%
256	ST-CC-009	12	0,06%	94,88%
257	01-275186	12	0,06%	94,94%
258	MFH4973	12	0,06%	95,00%
259	7D-5435-NGE	11	0,05%	95,05%
260	4J-0525-NGE	11	0,05%	95,10%
261	MFMK583681J37	11	0,05%	95,16%
262	MF200BFV-KGO	11	0,05%	95,21%
263	04121-22271-NGE	11	0,05%	95,26%
264	ST-SP-004	11	0,05%	95,32%
265	MF202596	11	0,05%	95,37%
266	5F-0304-NGE	11	0,05%	95,42%
267	01-061041	11	0,05%	95,47%
268	ST-FT-011	10	0,05%	95,52%
269	F045MC23	10	0,05%	95,57%
270	9S-8005-NGE	10	0,05%	95,62%
271	8M-4435-NGE	10	0,05%	95,67%

C 50,10% 5,06%

272	6K-6307-NGE	10	0,05%	95,72%
273	6L-1883-NGE	10	0,05%	95,76%
274	01-272180	10	0,05%	95,81%
275	ST-CP-026	10	0,05%	95,86%
276	ST-EF-009	10	0,05%	95,91%
277	6215-61-3690-NGE	10	0,05%	95,96%
278	S009	10	0,05%	96,00%
279	MFR24VCOAS-01	10	0,05%	96,05%
280	04120-21757-NGE	9	0,04%	96,10%
281	L-AC-AC-040404	9	0,04%	96,14%
282	MF200-0365PM	9	0,04%	96,18%
283	ST-KP-001	9	0,04%	96,23%
284	VBA40	9	0,04%	96,27%
285	04120-21747-NGE	9	0,04%	96,31%
286	VBA46	9	0,04%	96,36%
287	ST-EM-046	9	0,04%	96,40%
288	7H-2444-NGE	8	0,04%	96,44%
289	6V-0973-NGE	8	0,04%	96,48%
290	MFF117C21	8	0,04%	96,52%
291	8J-8879-NGE	8	0,04%	96,55%
292	5M-6708-NGE	8	0,04%	96,59%
293	4D-6578-NGE	8	0,04%	96,63%
294	6V-3319-NGE	8	0,04%	96,67%
295	6V-8676-NGE	8	0,04%	96,71%
296	S009D	8	0,04%	96,75%
297	ST-EM-055	8	0,04%	96,79%
298	ST-CC-010	8	0,04%	96,82%
299	MF215500	8	0,04%	96,86%
300	118-3534-NGE	7	0,03%	96,90%
301	MFF075J32	7	0,03%	96,93%
302	6V-5066-NGE	7	0,03%	96,96%
303	9D-2319-NGE	7	0,03%	97,00%
304	118-7226-NGE	7	0,03%	97,03%
305	MA942 317 20 12	7	0,03%	97,06%
306	ST-CP-062	7	0,03%	97,10%
307	7G-1594-NGE	7	0,03%	97,13%
308	5D-4311-NGE	7	0,03%	97,17%
309	ST-RD-032	7	0,03%	97,20%
310	Z00100006222	7	0,03%	97,23%
311	ST-CD-018	7	0,03%	97,27%
312	L-AC-1206	7	0,03%	97,30%
313	01-270674	7	0,03%	97,33%
314	ST-CC-012	7	0,03%	97,37%
315	8H-5306-NGE	6	0,03%	97,40%
316	129-9452-NGE	6	0,03%	97,43%
317	MFMK413241AJ32	6	0,03%	97,46%
318	269-7885-NGE	6	0,03%	97,48%
319	390-34N	6	0,03%	97,51%
320	ST-SH-002	6	0,03%	97,54%
321	G-L-1208	6	0,03%	97,57%
322	4F-2612-NGE	6	0,03%	97,60%
323	259-4598-NGE	6	0,03%	97,63%
324	04120-21740-NGE	6	0,03%	97,66%
325	53T126N353	6	0,03%	97,69%
326	ST-WR-012	6	0,03%	97,72%

327	ST-CD-016	6	0,03%	97,74%
328	4W-3027-NGE	6	0,03%	97,77%
329	QNV-M08	6	0,03%	97,80%
330	2D-6533-NGE	6	0,03%	97,83%
331	ST-RD-052A	6	0,03%	97,86%
332	VBB57	6	0,03%	97,89%
333	ST-PS-006	6	0,03%	97,92%
334	ST-SH-001	6	0,03%	97,95%
335	VBA42	6	0,03%	97,98%
336	ST-EM-065	6	0,03%	98,00%
337	M2STK02	6	0,03%	98,03%
338	ST-CD-041	6	0,03%	98,06%
339	109-2332-NGE	5	0,02%	98,09%
340	5P-8210-NGE	5	0,02%	98,11%
341	ST-PT-005	5	0,02%	98,13%
342	4F-3765-NGE	5	0,02%	98,16%
343	ST-QP-001	5	0,02%	98,18%
344	4W-9839-NGE	5	0,02%	98,21%
345	ST-SP-048	5	0,02%	98,23%
346	5H-1504-NGE	5	0,02%	98,26%
347	ST-CD-009	5	0,02%	98,28%
348	117-5268-NGE	5	0,02%	98,30%
349	136-7227-NGE	5	0,02%	98,33%
350	ST-EK-015	5	0,02%	98,35%
351	561-20-71100-NGE	5	0,02%	98,38%
352	4N-0848-NGE	5	0,02%	98,40%
353	ST-CP-067	5	0,02%	98,42%
354	133-4297-NGE	5	0,02%	98,45%
355	ST-EM-036	5	0,02%	98,47%
356	ST-SP-005T	5	0,02%	98,50%
357	ST-CD-033	5	0,02%	98,52%
358	13-002500-2	5	0,02%	98,54%
359	MF11B014500	5	0,02%	98,57%
360	ST-EM-002	5	0,02%	98,59%
361	ST-EM-046A	5	0,02%	98,62%
362	ST-FL-008	5	0,02%	98,64%
363	04121-21740-NGE	5	0,02%	98,66%
364	G-N-0909	5	0,02%	98,69%
365	G-N-0707	5	0,02%	98,71%
366	111-3820-NGE	4	0,02%	98,73%
367	8N-3248-NGE	4	0,02%	98,75%
368	02-223-12270-7	4	0,02%	98,77%
369	7N-6494-NGE	4	0,02%	98,79%
370	8T-4986-NGE	4	0,02%	98,81%
371	112-1574-NGE	4	0,02%	98,83%
372	234-8937-NGE	4	0,02%	98,85%
373	8M-4446-NGE	4	0,02%	98,87%
374	ST-FT-O-013	4	0,02%	98,89%
375	ST-IP-002	4	0,02%	98,91%
376	247-3796-NGE	4	0,02%	98,93%
377	125-9740-NGE	4	0,02%	98,94%
378	ST-CP-046	4	0,02%	98,96%
379	ST-CP-070	4	0,02%	98,98%
380	ST-PS-003	4	0,02%	99,00%
381	03-000921	4	0,02%	99,02%

382	7D-3462-NGE	4	0,02%	99,04%
383	VBA74	4	0,02%	99,06%
384	F129ME62	4	0,02%	99,08%
385	MF202584	4	0,02%	99,10%
386	02-432-24162-1	4	0,02%	99,12%
387	ST-MC-001	4	0,02%	99,14%
388	01-270670	4	0,02%	99,16%
389	L-AC-1204	4	0,02%	99,18%
390	272-0758-NGE	3	0,01%	99,19%
391	2N-0876-NGE	3	0,01%	99,20%
392	2D-8009-NGE	3	0,01%	99,22%
393	2W-8848-NGE	3	0,01%	99,23%
394	7E-2631-NGE	3	0,01%	99,25%
395	ST-PS-005	3	0,01%	99,26%
396	2W-8837-NGE	3	0,01%	99,28%
397	ST-CD-006	3	0,01%	99,29%
398	L-06	3	0,01%	99,31%
399	127-4422-NGE	3	0,01%	99,32%
400	600-825-9330-NGE	3	0,01%	99,33%
401	ST-EF-006	3	0,01%	99,35%
402	ST-EF-013	3	0,01%	99,36%
403	ST-EX-001	3	0,01%	99,38%
404	MA942 317 02 74	3	0,01%	99,39%
405	ST-CD-039	3	0,01%	99,41%
406	175-7897-NGE	3	0,01%	99,42%
407	ST-CP-065	3	0,01%	99,44%
408	ST-EM-025	3	0,01%	99,45%
409	VBB48	3	0,01%	99,47%
410	VBB54	3	0,01%	99,48%
411	FG10132S01	3	0,01%	99,49%
412	FFY184DE62	3	0,01%	99,51%
413	SYGSM184E62	3	0,01%	99,52%
414	01-270673	3	0,01%	99,54%
415	MF202598	3	0,01%	99,55%
416	2G-9491-NGE	2	0,01%	99,56%
417	ST-FS-017	2	0,01%	99,57%
418	297-6849-NGE	2	0,01%	99,58%
419	5H-6734-NGE	2	0,01%	99,59%
420	6V-5101-NGE	2	0,01%	99,60%
421	04120-21763-NGE	2	0,01%	99,61%
422	107-3758-NGE	2	0,01%	99,62%
423	7X-4810-NGE	2	0,01%	99,63%
424	MF04B001585	2	0,01%	99,64%
425	6F-4855-NGE	2	0,01%	99,65%
426	1652986-NGE	2	0,01%	99,66%
427	20581089-NGE	2	0,01%	99,67%
428	M12A2-30H	2	0,01%	99,68%
429	421-20-32621-NGE	2	0,01%	99,69%
430	7N-4927-NGE	2	0,01%	99,70%
431	ST-CP-027	2	0,01%	99,71%
432	ST-RD-018	2	0,01%	99,72%
433	01-086234	2	0,01%	99,73%
434	MF110091	2	0,01%	99,73%
435	ST-CP-049	2	0,01%	99,74%
436	ST-DN-001C	2	0,01%	99,75%

437	ST-FT-O-012	2	0,01%	99,76%
438	ST-SP-002	2	0,01%	99,77%
439	MF203193E62	2	0,01%	99,78%
440	MFGTE200	2	0,01%	99,79%
441	ST-RD-041	2	0,01%	99,80%
442	VBB46	2	0,01%	99,81%
443	FFY008E62	2	0,01%	99,82%
444	MF203195E62	2	0,01%	99,83%
445	L-L-0204	2	0,01%	99,84%
446	MF540-140-700-24	2	0,01%	99,85%
447	9F-2247-NGE	1	0,00%	99,86%
448	9X-7381-NGE	1	0,00%	99,86%
449	ST-SP-003	1	0,00%	99,87%
450	442-1340-NGE	1	0,00%	99,87%
451	235-27-11190-NGE	1	0,00%	99,87%
452	258-4521-NGE	1	0,00%	99,88%
453	ST-CC-013	1	0,00%	99,88%
454	L-L-0808	1	0,00%	99,89%
455	114-5333-NGE	1	0,00%	99,89%
456	2H-3931-NGE	1	0,00%	99,90%
457	7X-7655-NGE	1	0,00%	99,90%
458	9S-3581-NGE	1	0,00%	99,91%
459	9S-3582-NGE	1	0,00%	99,91%
460	ST-RD-015	1	0,00%	99,92%
461	ST-CC-019	1	0,00%	99,92%
462	561-27-61940-NGE	1	0,00%	99,93%
463	MF03B004319	1	0,00%	99,93%
464	4N-9680-NGE	1	0,00%	99,94%
465	6N-0634-NGE	1	0,00%	99,94%
466	ST-EV-004	1	0,00%	99,95%
467	20569151-NGE	1	0,00%	99,95%
468	298-6387-NGE	1	0,00%	99,96%
469	01-270735	1	0,00%	99,96%
470	04-BV-8	1	0,00%	99,97%
471	ST-EM-006A	1	0,00%	99,97%
472	ST-EM-027	1	0,00%	99,98%
473	ST-FC-012	1	0,00%	99,98%
474	VBB41	1	0,00%	99,99%
475	04120-21762-NGE	1	0,00%	99,99%
476	F8132S01	1	0,00%	100,00%
477	FH122S01	1	0,00%	100,00%
478	235-2484-NGE	0	0,00%	100,00%
479	VBB51	0	0,00%	100,00%
480	272-0760-NGE	0	0,00%	100,00%
481	MA000 090 20 51	0	0,00%	100,00%
482	3E-5239-NGE	0	0,00%	100,00%
483	5P-0840-NGE	0	0,00%	100,00%
484	ST-PS-007	0	0,00%	100,00%
485	245-4907-NGE	0	0,00%	100,00%
486	5P-3345-NGE	0	0,00%	100,00%
487	5S-4629-NGE	0	0,00%	100,00%
488	ST-EK-018	0	0,00%	100,00%
489	FX6124S00	0	0,00%	100,00%
490	8T-1919-NGE	0	0,00%	100,00%
491	MN000000 005729	0	0,00%	100,00%

492	1W-3601-NGE	0	0,00%	100,00%
493	MA000 350 27 05	0	0,00%	100,00%
494	6A-33	0	0,00%	100,00%
495	114-5477-NGE	0	0,00%	100,00%
496	235-3546-NGE	0	0,00%	100,00%
497	245-4908-NGE	0	0,00%	100,00%
498	2S-2182-NGE	0	0,00%	100,00%
499	3F-5792-NGE	0	0,00%	100,00%
500	4W-0530-NGE	0	0,00%	100,00%
501	6D-9157-NGE	0	0,00%	100,00%
502	ST-EM-064	0	0,00%	100,00%
503	ST-CP-005A	0	0,00%	100,00%
504	ST-CP-023	0	0,00%	100,00%
505	ST-CP-028	0	0,00%	100,00%
506	ST-CP-058	0	0,00%	100,00%
507	ST-CP-110	0	0,00%	100,00%
508	ST-EF-011	0	0,00%	100,00%
509	ST-IP-004	0	0,00%	100,00%
510	ST-IP-006	0	0,00%	100,00%
511	ST-WR-007	0	0,00%	100,00%
512	ST-WR-010	0	0,00%	100,00%
513	01-090471	0	0,00%	100,00%
514	01-270635	0	0,00%	100,00%
515	06030-06317-NGE	0	0,00%	100,00%
516	MF04B001450	0	0,00%	100,00%
517	ST-CD-040	0	0,00%	100,00%
518	141-7116-NGE	0	0,00%	100,00%
519	21051052-NGE	0	0,00%	100,00%
520	MA000 326 56 81	0	0,00%	100,00%
521	2H-6338-NGE	0	0,00%	100,00%
522	467-8535-NGE	0	0,00%	100,00%
523	MF101233	0	0,00%	100,00%
524	ST-CP-025ND	0	0,00%	100,00%
525	ST-CP-026A	0	0,00%	100,00%
526	ST-EM-006	0	0,00%	100,00%
527	ST-EM-019	0	0,00%	100,00%
528	ST-EM-042	0	0,00%	100,00%
529	MA000 326 44 81	0	0,00%	100,00%
530	MA625 330 01 19	0	0,00%	100,00%
531	04120-21741-NGE	0	0,00%	100,00%
532	AC-AC-0404	0	0,00%	100,00%
533	6V-6809-NGE	0	0,00%	100,00%

Lampiran 6 Hasil Perhitungan Jarak Tempuh Tata Letak Awal

Tabel 36 Rincian perhitungan jarak tempuh tata letak awal

Rak	Baris	Kolom	Material	Xi	Xj	Yi	Yj	Dij	Frekuensi	Jarak Tempuh
209	A	1	ST-RL-005	18,5	0	10,5	0	29	52	1508
			ST-TH-001	18,5	0	10,5	0	29	111	3219
			ST-TH-006	18,5	0	10,5	0	29	101	2929
			ST-CVT-002	18,5	0	10,5	0	29	78	2262
			ST-EX-011	18,5	0	10,5	0	29	27	783
			MF200-0365PM	18,5	0	10,5	0	29	9	261
			ST-PS-006	18,5	0	10,5	0	29	6	174
			ST-SP-003	18,5	0	10,5	0	29	1	29
		2	VBB48	18,5	0	13,5	0	32	3	96
			VBB57	18,5	0	13,5	0	32	6	192
			VBB46	18,5	0	13,5	0	32	2	64
			VBB54	18,5	0	13,5	0	32	3	96
			04120-21747-NGE	18,5	0	13,5	0	32	9	288
		3	ST-CP-011	18,5	0	16,5	0	35	67	2345
			ST-CP-065	18,5	0	19,5	0	38	3	114
		4	ST-CP-070	18,5	0	19,5	0	38	4	152
			ST-CP-069	18,5	0	19,5	0	38	24	912
			ST-CP-046	18,5	0	19,5	0	38	4	152
		5	ST-CC-009	18,5	0	22,5	0	41	12	492
			ST-CC-010	18,5	0	22,5	0	41	8	328
		6	ST-EM-052	18,5	0	25,5	0	44	54	2376
	B	1	ST-RL-002	18,5	0	10,5	0	29	30	870
			ST-RL-011	18,5	0	10,5	0	29	46	1334
			ST-FT-011	18,5	0	10,5	0	29	10	290
			ST-SL-002A	18,5	0	10,5	0	29	102	2958
			ST-SL-003A	18,5	0	10,5	0	29	83	2407
			ST-SL-004A	18,5	0	10,5	0	29	34	986
			ST-SL-001A	18,5	0	10,5	0	29	80	2320
			ST-SP-048	18,5	0	10,5	0	29	5	145
		2	VBA74	18,5	0	13,5	0	32	4	128
			VBA42	18,5	0	13,5	0	32	6	192
			VBB41	18,5	0	13,5	0	32	1	32
			VBA46	18,5	0	13,5	0	32	9	288
			VBA40	18,5	0	13,5	0	32	9	288
		3	ST-CP-049	18,5	0	16,5	0	35	2	70
			ST-CP-014	18,5	0	19,5	0	38	18	684
		4	ST-CP-026	18,5	0	19,5	0	38	10	380
			ST-RD-002	18,5	0	19,5	0	38	132	5016
			ST-CP-067	18,5	0	19,5	0	38	5	190
		5	ST-RD-001	18,5	0	22,5	0	41	16	656
			ST-RD-036	18,5	0	22,5	0	41	271	11111
			ST-RD-022	18,5	0	22,5	0	41	197	8077
			ST-RD-032	18,5	0	22,5	0	41	7	287
		6	ST-EF-009	18,5	0	25,5	0	44	10	440
			ST-EM-046A	18,5	0	25,5	0	44	5	220
			ST-EM-002	18,5	0	25,5	0	44	5	220
	C	1	ST-RL-001	18,5	0	10,5	0	29	23	667
			ST-EK-007	18,5	0	10,5	0	29	30	870
			ST-EK-013	18,5	0	10,5	0	29	30	870
			ST-DN-001C	18,5	0	10,5	0	29	2	58
			ST-SP-019K	18,5	0	10,5	0	29	50	1450

			ST-SP-020K	18,5	0	10,5	0	29	80	2320
			ST-SP-018K	18,5	0	10,5	0	29	65	1885
			ST-SP-019	18,5	0	10,5	0	29	75	2175
			ST-SP-020	18,5	0	10,5	0	29	122	3538
			ST-SP-058	18,5	0	10,5	0	29	204	5916
			ST-SP-059	18,5	0	10,5	0	29	214	6206
	2		ST-EM-027	18,5	0	13,5	0	32	1	32
			ST-MC-001	18,5	0	13,5	0	32	4	128
			ST-EM-056	18,5	0	13,5	0	32	14	448
			ST-EM-025	18,5	0	13,5	0	32	3	96
	3		ST-CP-051	18,5	0	16,5	0	35	27	945
			ST-CP-027	18,5	0	16,5	0	35	2	70
	4		MFH4973	18,5	0	19,5	0	38	12	456
			FF025S14	18,5	0	19,5	0	38	18	684
			53T126N353	18,5	0	19,5	0	38	6	228
			F109S10	18,5	0	19,5	0	38	224	8512
			203194	18,5	0	19,5	0	38	13	494
			MF203196	18,5	0	19,5	0	38	13	494
			MF110091	18,5	0	19,5	0	38	2	76
	5		ST-RD-052A	18,5	0	22,5	0	41	6	246
			ST-RD-015	18,5	0	22,5	0	41	1	41
			ST-RD-041	18,5	0	22,5	0	41	2	82
	6		ST-EM-046	18,5	0	25,5	0	44	9	396
			ST-EM-055	18,5	0	25,5	0	44	8	352
			ST-EM-065	18,5	0	25,5	0	44	6	264
D	1		ST-FT-O-012	18,5	0	10,5	0	29	2	58
			ST-FC-012	18,5	0	10,5	0	29	1	29
			ST-FT-O-013	18,5	0	10,5	0	29	4	116
			ST-FT-007	18,5	0	10,5	0	29	24	696
			ST-FS-017	18,5	0	10,5	0	29	2	58
			ST-QP-003	18,5	0	10,5	0	29	19	551
			ST-SH-002	18,5	0	10,5	0	29	6	174
			ST-SH-001	18,5	0	10,5	0	29	6	174
	2		ST-PT-001	18,5	0	13,5	0	32	185	5920
			ST-KP-003	18,5	0	13,5	0	32	38	1216
			600-825-9330-NGE	18,5	0	13,5	0	32	3	96
	3		ST-EM-036	18,5	0	16,5	0	35	5	175
			ST-CP-066	18,5	0	16,5	0	35	17	595
	4		MF101233	18,5	0	19,5	0	38	0	0
			ST-CC-012	18,5	0	22,5	0	41	7	287
	5		ST-EM-064	18,5	0	22,5	0	41	0	0
			ST-SP-002	18,5	0	25,5	0	44	2	88
	6		ST-EM-006A	18,5	0	25,5	0	44	1	44
			ST-EV-016	18,5	0	25,5	0	44	20	880
			ST-SP-001	18,5	0	25,5	0	44	273	12012
E	3		ST-SP-004	18,5	0	16,5	0	35	11	385
			ST-SP-005T	18,5	0	16,5	0	35	5	175
210	A	1	ST-EM-006	20,325	0	10,5	0	30,825	0	0
			ST-QP-001	20,325	0	10,5	0	30,825	5	154,125
		3	ST-CP-038	20,325	0	16,5	0	36,825	64	2356,8
			ST-CP-028	20,325	0	19,5	0	39,825	0	0
	B	1	MF200BFV-KGO	20,325	0	19,5	0	39,825	11	438,075
			ST-WR-010	20,325	0	10,5	0	30,825	0	0
			ST-KP-001	20,325	0	10,5	0	30,825	9	277,425
			ST-WR-007	20,325	0	10,5	0	30,825	0	0

211			ST-KP-002	20,325	0	10,5	0	30,825	15	462,375		
			ST-IP-006	20,325	0	10,5	0	30,825	0	0		
			ST-IP-002	20,325	0	10,5	0	30,825	4	123,3		
			ST-EK-018	20,325	0	10,5	0	30,825	0	0		
			ST-EK-015	20,325	0	10,5	0	30,825	5	154,125		
			ST-IP-004	20,325	0	10,5	0	30,825	0	0		
			2	VBB51	20,325	0	13,5	0	33,825	0	0	
				ST-CP-025ND	20,325	0	13,5	0	33,825	0	0	
				ST-CP-026A	20,325	0	13,5	0	33,825	0	0	
			3	ST-EM-019	20,325	0	16,5	0	36,825	0	0	
				ST-CP-013	20,325	0	16,5	0	36,825	25	920,625	
			4	ST-EV-004	20,325	0	19,5	0	39,825	1	39,825	
				ST-CP-058	20,325	0	19,5	0	39,825	0	0	
			5	ST-CP-062	20,325	0	22,5	0	42,825	7	299,775	
				ST-CP-005A	20,325	0	22,5	0	42,825	0	0	
			6	ST-RD-018	20,325	0	25,5	0	45,825	2	91,65	
				ST-CP-023	20,325	0	25,5	0	45,825	0	0	
			C	1	ST-PS-005	20,325	0	10,5	0	30,825	3	92,475
					ST-KN-001	20,325	0	10,5	0	30,825	13	400,725
					ST-EX-001	20,325	0	10,5	0	30,825	3	92,475
					ST-PT-002	20,325	0	10,5	0	30,825	59	1818,675
					ST-PT-006	20,325	0	10,5	0	30,825	20	616,5
					ST-SW-003	20,325	0	10,5	0	30,825	12	369,9
					ST-PT-005	20,325	0	10,5	0	30,825	5	154,125
					ST-PS-007	20,325	0	10,5	0	30,825	0	0
					ND499000-6160-NGE	20,325	0	10,5	0	30,825	115	3544,875
					3	ST-CP-110	20,325	0	16,5	0	36,825	0
			ST-CC-013	20,325		0	16,5	0	36,825	1	36,825	
			ST-CP-040	20,325		0	16,5	0	36,825	23	846,975	
			4	ST-EF-006	20,325	0	19,5	0	39,825	3	119,475	
				ST-EF-003	20,325	0	19,5	0	39,825	29	1154,925	
				ST-EF-011	20,325	0	19,5	0	39,825	0	0	
			D	1	ST-WR-012	20,325	0	10,5	0	30,825	6	184,95
					ST-PS-003	20,325	0	10,5	0	30,825	4	123,3
				2	ST-CC-019	20,325	0	13,5	0	33,825	1	33,825
				3	MF202596	20,325	0	16,5	0	36,825	11	405,075
				4	ST-EF-013	20,325	0	19,5	0	39,825	3	119,475
					ST-EM-042	20,325	0	19,5	0	39,825	0	0
			A	1	Z00100006222	20,325	0	10,5	0	30,825	7	215,775
					Z00100006221	20,325	0	10,5	0	30,825	44	1356,3
					02-223-12270-7	20,325	0	10,5	0	30,825	4	123,3
				2	06030-06317-NGE	20,325	0	13,5	0	33,825	0	0
					01-270635	20,325	0	13,5	0	33,825	0	0
				3	MF203193E62	20,325	0	16,5	0	36,825	2	73,65
					MF202584	20,325	0	16,5	0	36,825	4	147,3
			B	1	Z00100006217	20,325	0	10,5	0	30,825	529	16306,425
					225-3099-NGE	20,325	0	13,5	0	33,825	15	507,375
				3	F129ME62	20,325	0	16,5	0	36,825	4	147,3
					SYGSM184E62	20,325	0	16,5	0	36,825	3	110,475
					FFY184DE62	20,325	0	16,5	0	36,825	3	110,475
					MFMK583681J37	20,325	0	16,5	0	36,825	11	405,075
					1	Z00100006219	20,325	0	10,5	0	30,825	124
			C	2	MA625 330 01 19	20,325	0	13,5	0	33,825	0	0
					MA942 317 20 12	20,325	0	13,5	0	33,825	7	236,775
					MN000000 005729	20,325	0	13,5	0	33,825	0	0

			MA000 326 44 81	20,325	0	13,5	0	33,825	0	0
			MA942 317 02 74	20,325	0	13,5	0	33,825	3	101,475
	D	1	Z00100006216	20,325	0	10,5	0	30,825	190	5856,75
		3	01-090471	20,325	0	16,5	0	36,825	0	0
	E	1	Z00100006223	20,325	0	10,5	0	30,825	75	2311,875
	A	3	S009	21,975	0	16,5	0	38,475	10	384,75
			MFMK413241AJ32	21,975	0	16,5	0	38,475	6	230,85
			7E-2631-NGE	21,975	0	13,5	0	35,475	3	106,425
		2	03-000921	21,975	0	13,5	0	35,475	4	141,9
			MF04B001450	21,975	0	13,5	0	35,475	0	0
	B		FG10132S01	21,975	0	16,5	0	38,475	3	115,425
			FX6124S00	21,975	0	16,5	0	38,475	0	0
		3	F8132S01	21,975	0	16,5	0	38,475	1	38,475
			MF203195E62	21,975	0	16,5	0	38,475	2	76,95
			FFY008E62	21,975	0	16,5	0	38,475	2	76,95
212			390-34N	21,975	0	13,5	0	35,475	6	212,85
			F045MC23	21,975	0	13,5	0	35,475	10	354,75
		2	S009D	21,975	0	13,5	0	35,475	8	283,8
			20569151-NGE	21,975	0	13,5	0	35,475	1	35,475
	C		20581089-NGE	21,975	0	13,5	0	35,475	2	70,95
			1652986-NGE	21,975	0	13,5	0	35,475	2	70,95
			MF04B001585	21,975	0	16,5	0	38,475	2	76,95
		3	MF202598	21,975	0	16,5	0	38,475	3	115,425
			F6132S01	21,975	0	16,5	0	38,475	13	500,175
	A	1	ST-CD-024	20,325	0	22,5	0	42,825	12	513,9
		2	ST-CD-016	20,325	0	25,5	0	45,825	6	274,95
	B	1	ST-CD-009	20,325	0	22,5	0	42,825	5	214,125
			ST-CD-006	20,325	0	22,5	0	42,825	3	128,475
213			MFR24VCOAS-01	20,325	0	22,5	0	42,825	10	428,25
	C	1	ST-CD-039	20,325	0	22,5	0	42,825	3	128,475
			M12A2-30H	20,325	0	22,5	0	42,825	2	85,65
		2	ST-CD-040	20,325	0	25,5	0	45,825	0	0
	D	2	ST-FL-008	20,325	0	25,5	0	45,825	5	229,125
			MF258494	21,975	0	22,5	0	44,475	21	933,975
	A	1	ST-CD-033	21,975	0	22,5	0	44,475	5	222,375
			ST-CD-018	21,975	0	22,5	0	44,475	7	311,325
		2	ST-CD-041	21,975	0	25,5	0	47,475	6	284,85
			MA000 350 27 05	21,975	0	25,5	0	47,475	0	0
	B	2	02-504-36033-3	21,975	0	25,5	0	47,475	1931	91674,225
			4W-3027-NGE	21,975	0	25,5	0	47,475	6	284,85
214	C	2	6261-81-6810-NGE	21,975	0	25,5	0	47,475	17	807,075
		1	141-7116-NGE	21,975	0	22,5	0	44,475	0	0
			9S-8005-NGE	21,975	0	25,5	0	47,475	10	474,75
	D		9S-8004-NGE	21,975	0	25,5	0	47,475	26	1234,35
		2	5H-1504-NGE	21,975	0	25,5	0	47,475	5	237,375
			5M-6708-NGE	21,975	0	25,5	0	47,475	8	379,8
			298-6387-NGE	21,975	0	25,5	0	47,475	1	47,475
		1	561-20-71100-NGE	21,975	0	10,5	0	32,475	5	162,375
			561-27-61940-NGE	21,975	0	10,5	0	32,475	1	32,475
			03-CVF-04-JSG-L	21,975	0	13,5	0	35,475	16	567,6
215	A		01-270735	21,975	0	13,5	0	35,475	1	35,475
		2	04-SCR-4	21,975	0	13,5	0	35,475	35	1241,625
			02-432-24162-1	21,975	0	13,5	0	35,475	4	141,9
			L-AC-1206	21,975	0	13,5	0	35,475	7	248,325
		3	QNV-M08	21,975	0	16,5	0	38,475	6	230,85

		01-250158	21,975	0	16,5	0	38,475	32	1231,2
		03-003000	21,975	0	16,5	0	38,475	33	1269,675
		04-PG1000-4B	21,975	0	19,5	0	41,475	31	1285,725
		MFF117C21	21,975	0	19,5	0	41,475	8	331,8
		MFF075J32	21,975	0	19,5	0	41,475	7	290,325
	4	ELBRB125	21,975	0	19,5	0	41,475	48	1990,8
		M-2MA180/240RR	21,975	0	19,5	0	41,475	229	9497,775
		M-2MA180PR	21,975	0	19,5	0	41,475	57	2364,075
		M-2MA240PR	21,975	0	19,5	0	41,475	191	7921,725
	5	6A-33	21,975	0	22,5	0	44,475	0	0
		21051052-NGE	21,975	0	22,5	0	44,475	0	0
		5D-0764-NGE	21,975	0	25,5	0	47,475	36	1709,1
		8H-5306-NGE	21,975	0	25,5	0	47,475	6	284,85
		3S-1349-NGE	21,975	0	25,5	0	47,475	47	2231,325
	6	123-7271-NGE	21,975	0	25,5	0	47,475	15	712,125
		2A-3398-NGE	21,975	0	25,5	0	47,475	27	1281,825
		8J-8879-NGE	21,975	0	25,5	0	47,475	8	379,8
		1W-3601-NGE	21,975	0	25,5	0	47,475	0	0
		421-20-32621-NGE	21,975	0	10,5	0	32,475	2	64,95
	1	235-27-11190-NGE	21,975	0	10,5	0	32,475	1	32,475
		01-270673	21,975	0	10,5	0	32,475	3	97,425
	2	13-002500-2	21,975	0	13,5	0	35,475	5	177,375
		HCA-04	21,975	0	13,5	0	35,475	30	1064,25
		01-270692	21,975	0	16,5	0	38,475	13	500,175
		01-270693	21,975	0	16,5	0	38,475	19	731,025
	3	13-532-30738-7/16	21,975	0	16,5	0	38,475	18	692,55
		MF03B004319	21,975	0	16,5	0	38,475	1	38,475
		03-000013-5-CS	21,975	0	16,5	0	38,475	19	731,025
B		M2STK02	21,975	0	19,5	0	41,475	6	248,85
	4	MF215500	21,975	0	19,5	0	41,475	8	331,8
		MFGTE200	21,975	0	19,5	0	41,475	2	82,95
		FH122S01	21,975	0	19,5	0	41,475	1	41,475
	5	ELBRB500	21,975	0	22,5	0	44,475	27	1200,825
		MF540-140-700-24	21,975	0	22,5	0	44,475	2	88,95
		2W-8837-NGE	21,975	0	25,5	0	47,475	3	142,425
		2W-8848-NGE	21,975	0	25,5	0	47,475	3	142,425
	6	6732-61-3871-NGE	21,975	0	25,5	0	47,475	18	854,55
		4B-8407-NGE	21,975	0	25,5	0	47,475	347	16473,825
		2N-0876-NGE	21,975	0	25,5	0	47,475	3	142,425
		G-L-1208	21,975	0	10,5	0	32,475	6	194,85
	1	G-L-90-0702	21,975	0	10,5	0	32,475	593	19257,675
		L-L-0808	21,975	0	10,5	0	32,475	1	32,475
		01-005000	21,975	0	13,5	0	35,475	577	20469,075
		01-034572	21,975	0	13,5	0	35,475	57	2022,075
	2	01-270670	21,975	0	13,5	0	35,475	4	141,9
		01-270674	21,975	0	13,5	0	35,475	7	248,325
		01-272180	21,975	0	13,5	0	35,475	10	354,75
		01-275186	21,975	0	13,5	0	35,475	12	425,7
C		03-000100	21,975	0	16,5	0	38,475	50	1923,75
		03-000920-9V	21,975	0	16,5	0	38,475	35	1346,625
		04-PC-4	21,975	0	16,5	0	38,475	14	538,65
	3	04-PC-8	21,975	0	16,5	0	38,475	33	1269,675
		02-223-12567-1	21,975	0	16,5	0	38,475	74	2847,15
		04-SB-6	21,975	0	16,5	0	38,475	24	923,4
		G-G-0707	21,975	0	16,5	0	38,475	97	3732,075

216	A	D	E	A	L-AC-0402	21,975	0	16,5	0	38,475	23	884,925
					MK586070C23	21,975	0	19,5	0	41,475	16	663,6
					PAK02	21,975	0	19,5	0	41,475	42	1741,95
					MA000 090 20 51	21,975	0	19,5	0	41,475	0	0
					MA000 326 56 81	21,975	0	19,5	0	41,475	0	0
					MF11B014500	21,975	0	22,5	0	44,475	5	222,375
					MFPAK-DWF193	21,975	0	22,5	0	44,475	24	1067,4
					6G-7339-NGE	21,975	0	25,5	0	47,475	19	902,025
					ESP6/6	21,975	0	25,5	0	47,475	51	2421,225
					04120-21740-NGE	21,975	0	25,5	0	47,475	6	284,85
					5P-3108-NGE	21,975	0	25,5	0	47,475	66	3133,35
					8M-4438-NGE	21,975	0	25,5	0	47,475	34	1614,15
					4J-2506-NGE	21,975	0	25,5	0	47,475	91	4320,225
					9X-7381-NGE	21,975	0	25,5	0	47,475	1	47,475
					G-N-0707	21,975	0	10,5	0	32,475	5	162,375
					G-N-0909	21,975	0	10,5	0	32,475	5	162,375
					L-06	21,975	0	10,5	0	32,475	3	97,425
					L-AC-1204	21,975	0	10,5	0	32,475	4	129,9
					L-L-0204	21,975	0	10,5	0	32,475	2	64,95
					01-086234	21,975	0	10,5	0	32,475	2	64,95
					01-061041	21,975	0	13,5	0	35,475	11	390,225
					AC-AC-0404	21,975	0	16,5	0	38,475	0	0
					01-090942	21,975	0	16,5	0	38,475	20	769,5
					L-AC-AC-040404	21,975	0	16,5	0	38,475	9	346,275
					G-L-90-1206	21,975	0	16,5	0	38,475	33	1269,675
					G-L-0704	21,975	0	16,5	0	38,475	90	3462,75
					01-083001	21,975	0	19,5	0	41,475	28	1161,3
					04-PG5000-4B	21,975	0	19,5	0	41,475	27	1119,825
					04-BV-8	21,975	0	19,5	0	41,475	1	41,475
					9S-2760-NGE	21,975	0	22,5	0	44,475	12	533,7
					9Y-6089-NGE	21,975	0	22,5	0	44,475	21	933,975
					7S-8767-NGE	21,975	0	22,5	0	44,475	49	2179,275
					9F-2247-NGE	21,975	0	25,5	0	47,475	1	47,475
					129-3719-NGE	21,975	0	25,5	0	47,475	22	1044,45
					4W-9839-NGE	21,975	0	25,5	0	47,475	5	237,375
					04120-21757-NGE	21,975	0	25,5	0	47,475	9	427,275
					118-3534-NGE	21,975	0	25,5	0	47,475	7	332,325
					2N-2766-NGE	21,975	0	25,5	0	47,475	238	11299,05
					04120-21741-NGE	21,975	0	25,5	0	47,475	0	0
					9M-8546-NGE	21,975	0	25,5	0	47,475	27	1281,825
					129-9452-NGE	21,975	0	25,5	0	47,475	6	284,85
					4F-2612-NGE	21,975	0	25,5	0	47,475	6	284,85
					2N-2765-NGE	21,975	0	25,5	0	47,475	29	1376,775
					106-1792-NGE	21,975	0	25,5	0	47,475	184	8735,4
					04121-22264-NGE	21,975	0	25,5	0	47,475	17	807,075
216	A	1	2	A	6V-8260-NGE	23,65	0	10,5	0	34,15	14	478,1
					7D-7519-NGE	23,65	0	10,5	0	34,15	22	751,3
					5K-5959-NGE	23,65	0	10,5	0	34,15	15	512,25
					114-5477-NGE	23,65	0	10,5	0	34,15	0	0
					6V-8676-NGE	23,65	0	10,5	0	34,15	8	273,2
					247-3796-NGE	23,65	0	10,5	0	34,15	4	136,6
					6V-8400-NGE	23,65	0	10,5	0	34,15	74	2527,1
					467-8535-NGE	23,65	0	13,5	0	37,15	0	0
					299-3401-NGE	23,65	0	13,5	0	37,15	51	1894,65
					9M-1503-NGE	23,65	0	13,5	0	37,15	35	1300,25

		8T-6703-NGE	23,65	0	13,5	0	37,15	20	743
		9D-3432-NGE	23,65	0	13,5	0	37,15	26	965,9
		9N-1941-NGE	23,65	0	13,5	0	37,15	12	445,8
		9X-2201-NGE	23,65	0	13,5	0	37,15	15	557,25
		8X-6729-NGE	23,65	0	13,5	0	37,15	13	482,95
		5J-9451-NGE	23,65	0	13,5	0	37,15	17	631,55
		248-5513-NGE	23,65	0	16,5	0	40,15	32	1284,8
		3S-2909-NGE	23,65	0	16,5	0	40,15	14	562,1
		2K-4472-NGE	23,65	0	16,5	0	40,15	23	923,45
	3	2N-8374-NGE	23,65	0	16,5	0	40,15	21	843,15
		3F-5792-NGE	23,65	0	16,5	0	40,15	0	0
		2S-4078-NGE	23,65	0	16,5	0	40,15	16	642,4
		337-1943-NGE	23,65	0	16,5	0	40,15	30	1204,5
		4D-8695-NGE	23,65	0	16,5	0	40,15	18	722,7
	4	6V-0444-NGE	23,65	0	19,5	0	43,15	42	1812,3
		442-1340-NGE	23,65	0	19,5	0	43,15	1	43,15
		7J-3297-NGE	23,65	0	22,5	0	46,15	39	1799,85
	5	8J-8906-NGE	23,65	0	22,5	0	46,15	54	2492,1
		8X-8414-NGE	23,65	0	22,5	0	46,15	97	4476,55
		114-9299-NGE	23,65	0	22,5	0	46,15	152	7014,8
		04120-21735-NGE	23,65	0	25,5	0	49,15	122	5996,3
	6	04120-21748-NGE	23,65	0	25,5	0	49,15	239	11746,85
		04120-21760-NGE	23,65	0	25,5	0	49,15	28	1376,2
		04120-21951-NGE	23,65	0	25,5	0	49,15	250	12287,5
		8M-8157-NGE	23,65	0	10,5	0	34,15	19	648,85
		5D-4311-NGE	23,65	0	10,5	0	34,15	7	239,05
		2S-2182-NGE	23,65	0	10,5	0	34,15	0	0
		117-5268-NGE	23,65	0	10,5	0	34,15	5	170,75
		9S-3581-NGE	23,65	0	10,5	0	34,15	1	34,15
		9S-3582-NGE	23,65	0	10,5	0	34,15	1	34,15
	1	2H-3931-NGE	23,65	0	10,5	0	34,15	1	34,15
		4D-6578-NGE	23,65	0	10,5	0	34,15	8	273,2
		1H-9696-NGE	23,65	0	10,5	0	34,15	19	648,85
		8M-4986-NGE	23,65	0	10,5	0	34,15	13	443,95
		3E-5239-NGE	23,65	0	10,5	0	34,15	0	0
		5P-5299-NGE	23,65	0	10,5	0	34,15	18	614,7
		2K-0337-NGE	23,65	0	10,5	0	34,15	23	785,45
		1T-0210-NGE	23,65	0	13,5	0	37,15	22	817,3
		8T-4986-NGE	23,65	0	13,5	0	37,15	4	148,6
	2	9D-2319-NGE	23,65	0	13,5	0	37,15	7	260,05
		8H-9789-NGE	23,65	0	13,5	0	37,15	38	1411,7
		8J-8905-NGE	23,65	0	13,5	0	37,15	26	965,9
		8P-2019-NGE	23,65	0	16,5	0	40,15	17	682,55
		7D-5435-NGE	23,65	0	16,5	0	40,15	11	441,65
	3	134-1935-NGE	23,65	0	16,5	0	40,15	22	883,3
		160-6387-NGE	23,65	0	16,5	0	40,15	69	2770,35
		160-6386-NGE	23,65	0	16,5	0	40,15	41	1646,15
		4N-9680-NGE	23,65	0	19,5	0	43,15	1	43,15
		114-5333-NGE	23,65	0	19,5	0	43,15	1	43,15
		8T-4985-NGE	23,65	0	19,5	0	43,15	30	1294,5
	4	2G-9491-NGE	23,65	0	19,5	0	43,15	2	86,3
		9H-6832-NGE	23,65	0	19,5	0	43,15	20	863
		6F-8146-NGE	23,65	0	19,5	0	43,15	34	1467,1
		3K-0360-NGE	23,65	0	19,5	0	43,15	281	12125,15
		5P-0840-NGE	23,65	0	19,5	0	43,15	0	0

C	5	297-6849-NGE	23,65	0	22,5	0	46,15	2	92,3
		04121-21740-NGE	23,65	0	25,5	0	49,15	5	245,75
		04120-21762-NGE	23,65	0	25,5	0	49,15	1	49,15
	6	6212-85-6840-NGE	23,65	0	25,5	0	49,15	104	5111,6
		6215-61-3690-NGE	23,65	0	25,5	0	49,15	10	491,5
		6245-81-6360-NGE	23,65	0	25,5	0	49,15	39	1916,85
	1	6F-4855-NGE	23,65	0	10,5	0	34,15	2	68,3
		8L-2786-NGE	23,65	0	10,5	0	34,15	745	25441,75
		6V-8398-NGE	23,65	0	10,5	0	34,15	195	6659,25
		2M-9780-NGE	23,65	0	10,5	0	34,15	150	5122,5
		3J-7354-NGE	23,65	0	10,5	0	34,15	165	5634,75
		4W-0530-NGE	23,65	0	10,5	0	34,15	0	0
		6V-3319-NGE	23,65	0	10,5	0	34,15	8	273,2
		9S-8307-NGE	23,65	0	10,5	0	34,15	39	1331,85
		8M-4446-NGE	23,65	0	10,5	0	34,15	4	136,6
		114-9305-NGE	23,65	0	13,5	0	37,15	31	1151,65
		7J-9108-NGE	23,65	0	13,5	0	37,15	177	6575,55
		235-2484-NGE	23,65	0	13,5	0	37,15	0	0
		1S-2174-NGE	23,65	0	13,5	0	37,15	50	1857,5
		245-4907-NGE	23,65	0	13,5	0	37,15	0	0
		235-3546-NGE	23,65	0	13,5	0	37,15	0	0
	2	214-7568-NGE	23,65	0	13,5	0	37,15	148	5498,2
		2D-8009-NGE	23,65	0	13,5	0	37,15	3	111,45
		294-9583-NGE	23,65	0	13,5	0	37,15	12	445,8
		8N-3248-NGE	23,65	0	16,5	0	40,15	4	160,6
		175-7897-NGE	23,65	0	16,5	0	40,15	3	120,45
	3	259-4598-NGE	23,65	0	16,5	0	40,15	6	240,9
		8F-8733-NGE	23,65	0	16,5	0	40,15	32	1284,8
		2H-3932-NGE	23,65	0	16,5	0	40,15	43	1726,45
		5F-0304-NGE	23,65	0	16,5	0	40,15	11	441,65
		8M-4435-NGE	23,65	0	16,5	0	40,15	10	401,5
		133-4297-NGE	23,65	0	16,5	0	40,15	5	200,75
		5F-3144-NGE	23,65	0	19,5	0	43,15	25	1078,75
	4	5S-2106-NGE	23,65	0	19,5	0	43,15	22	949,3
		5H-6734-NGE	23,65	0	19,5	0	43,15	2	86,3
		5F-3999-NGE	23,65	0	19,5	0	43,15	46	1984,9
		6B-9664-NGE	23,65	0	19,5	0	43,15	26	1121,9
		5H-6005-NGE	23,65	0	19,5	0	43,15	670	28910,5
		6D-9157-NGE	23,65	0	19,5	0	43,15	0	0
		6H-3977-NGE	23,65	0	19,5	0	43,15	90	3883,5
		5P-0597-NGE	23,65	0	22,5	0	46,15	18	830,7
	5	5P-8210-NGE	23,65	0	22,5	0	46,15	5	230,75
		6J-2680-NGE	23,65	0	22,5	0	46,15	31	1430,65
		111-3820-NGE	23,65	0	22,5	0	46,15	4	184,6
		6M-5218-NGE	23,65	0	22,5	0	46,15	18	830,7
		7J-3296-NGE	23,65	0	22,5	0	46,15	73	3368,95
		274-9256-NGE	23,65	0	22,5	0	46,15	15	692,25
		391-2167-NGE	23,65	0	22,5	0	46,15	56	2584,4
		5D-0765-NGE	23,65	0	25,5	0	49,15	30	1474,5
	6	04120-21763-NGE	23,65	0	25,5	0	49,15	2	98,3
		04121-22271-NGE	23,65	0	25,5	0	49,15	11	540,65
		17A-911-4680-NGE	23,65	0	25,5	0	49,15	18	884,7
		272-0758-NGE	23,65	0	25,5	0	49,15	3	147,45
		4N-0848-NGE	23,65	0	25,5	0	49,15	5	245,75
		123-7272-NGE	23,65	0	25,5	0	49,15	14	688,1

D	1	124-3520-NGE	23,65	0	25,5	0	49,15	14	688,1
		272-0760-NGE	23,65	0	25,5	0	49,15	0	0
		5S-4629-NGE	23,65	0	10,5	0	34,15	0	0
		7D-3462-NGE	23,65	0	10,5	0	34,15	4	136,6
		245-4908-NGE	23,65	0	10,5	0	34,15	0	0
		5K-9090-NGE	23,65	0	10,5	0	34,15	76	2595,4
		5F-7054-NGE	23,65	0	10,5	0	34,15	30	1024,5
		6V-6353-NGE	23,65	0	10,5	0	34,15	12	409,8
		6K-6307-NGE	23,65	0	10,5	0	34,15	10	341,5
		8C-3089-NGE	23,65	0	10,5	0	34,15	76	2595,4
	2	4J-5267-NGE	23,65	0	10,5	0	34,15	40	1366
		4J-0519-NGE	23,65	0	10,5	0	34,15	100	3415
		123-2941-NGE	23,65	0	13,5	0	37,15	21	780,15
		1J-2859-NGE	23,65	0	13,5	0	37,15	83	3083,45
		1P-3709-NGE	23,65	0	13,5	0	37,15	91	3380,65
		161-8068-NGE	23,65	0	13,5	0	37,15	119	4420,85
		2D-8364-NGE	23,65	0	13,5	0	37,15	70	2600,5
		109-2332-NGE	23,65	0	13,5	0	37,15	5	185,75
		3S-9643-NGE	23,65	0	13,5	0	37,15	31	1151,65
		2K-8257-NGE	23,65	0	13,5	0	37,15	20	743
	3	7X-7655-NGE	23,65	0	16,5	0	40,15	1	40,15
		8T-3013-NGE	23,65	0	16,5	0	40,15	57	2288,55
		9M-2092-NGE	23,65	0	16,5	0	40,15	31	1244,65
		1P-3704-NGE	23,65	0	16,5	0	40,15	61	2449,15
		127-4422-NGE	23,65	0	16,5	0	40,15	3	120,45
		1H-5728-NGE	23,65	0	16,5	0	40,15	68	2730,2
E	4	7N-6494-NGE	23,65	0	16,5	0	40,15	4	160,6
		4F-5607-NGE	23,65	0	19,5	0	43,15	15	647,25
		4J-0525-NGE	23,65	0	19,5	0	43,15	11	474,65
		4J-0520-NGE	23,65	0	19,5	0	43,15	118	5091,7
		4J-8251-NGE	23,65	0	19,5	0	43,15	29	1251,35
		5F-0149-NGE	23,65	0	19,5	0	43,15	228	9838,2
		4J-0522-NGE	23,65	0	19,5	0	43,15	340	14671
		7N-4927-NGE	23,65	0	19,5	0	43,15	2	86,3
		7G-1594-NGE	23,65	0	22,5	0	46,15	7	323,05
		5P-3345-NGE	23,65	0	22,5	0	46,15	0	0
	5	5P-8245-NGE	23,65	0	22,5	0	46,15	175	8076,25
		8T-4167-NGE	23,65	0	22,5	0	46,15	49	2261,35
		109-0077-NGE	23,65	0	22,5	0	46,15	30	1384,5
		9N-2038-NGE	23,65	0	22,5	0	46,15	13	599,95
		5P-8500-NGE	23,65	0	22,5	0	46,15	15	692,25
		4J-0526-NGE	23,65	0	22,5	0	46,15	62	2861,3
	6	228-7090-NGE	23,65	0	25,5	0	49,15	20	983
		258-4521-NGE	23,65	0	25,5	0	49,15	1	49,15
		6V-0973-NGE	23,65	0	25,5	0	49,15	8	393,2
		5P-8356-NGE	23,65	0	25,5	0	49,15	33	1621,95
		269-7885-NGE	23,65	0	25,5	0	49,15	6	294,9
		3H-3385-NGE	23,65	0	25,5	0	49,15	390	19168,5
		6V-6609-NGE	23,65	0	25,5	0	49,15	16	786,4
		198-6068-NGE	23,65	0	25,5	0	49,15	43	2113,45
		112-1574-NGE	23,65	0	25,5	0	49,15	4	196,6
		5H-2824-NGE	23,65	0	10,5	0	34,15	15	512,25
E	1	1P-3708-NGE	23,65	0	10,5	0	34,15	51	1741,65
		4J-3815-NGE	23,65	0	10,5	0	34,15	22	751,3
		1P-3705-NGE	23,65	0	10,5	0	34,15	59	2014,85

	109-0076-NGE	23,65	0	10,5	0	34,15	15	512,25
	2D-6533-NGE	23,65	0	10,5	0	34,15	6	204,9
2	8P-2022-NGE	23,65	0	13,5	0	37,15	13	482,95
	107-3758-NGE	23,65	0	13,5	0	37,15	2	74,3
	7G-4817-NGE	23,65	0	13,5	0	37,15	20	743
	3P-2793-NGE	23,65	0	13,5	0	37,15	36	1337,4
	125-9740-NGE	23,65	0	13,5	0	37,15	4	148,6
3	3P-2794-NGE	23,65	0	16,5	0	40,15	21	843,15
	4T-2565-NGE	23,65	0	16,5	0	40,15	38	1525,7
	3P-0751-NGE	23,65	0	16,5	0	40,15	14	562,1
	224-7506-NGE	23,65	0	16,5	0	40,15	21	843,15
4	6V-5048-NGE	23,65	0	19,5	0	43,15	14	604,1
	6J-1080-NGE	23,65	0	19,5	0	43,15	73	3149,95
	136-7227-NGE	23,65	0	19,5	0	43,15	5	215,75
	6V-5066-NGE	23,65	0	19,5	0	43,15	7	302,05
	6V-3917-NGE	23,65	0	19,5	0	43,15	18	776,7
	6V-5101-NGE	23,65	0	19,5	0	43,15	2	86,3
	6V-6809-NGE	23,65	0	19,5	0	43,15	0	0
	6V-3965-NGE	23,65	0	19,5	0	43,15	59	2545,85
	7H-2444-NGE	23,65	0	19,5	0	43,15	8	345,2
	126-2702-NGE	23,65	0	22,5	0	46,15	46	2122,9
5	238-5082-NGE	23,65	0	22,5	0	46,15	53	2445,95
	5E-8771-NGE	23,65	0	22,5	0	46,15	32	1476,8
	166-2904-NGE	23,65	0	22,5	0	46,15	188	8676,2
	2H-6338-NGE	23,65	0	22,5	0	46,15	0	0
	8T-1919-NGE	23,65	0	22,5	0	46,15	0	0
	238-5081-NGE	23,65	0	22,5	0	46,15	54	2492,1
	7M-8485-NGE	23,65	0	22,5	0	46,15	102	4707,3
	238-5080-NGE	23,65	0	22,5	0	46,15	32	1476,8
6	6N-0634-NGE	23,65	0	25,5	0	49,15	1	49,15
	5P-8068-NGE	23,65	0	25,5	0	49,15	17	835,55
	5P-5846-NGE	23,65	0	25,5	0	49,15	55	2703,25
	7X-4810-NGE	23,65	0	25,5	0	49,15	2	98,3
	288-5476-NGE	23,65	0	25,5	0	49,15	14	688,1
	123-7268-NGE	23,65	0	25,5	0	49,15	15	737,25
	214-7566-NGE	23,65	0	25,5	0	49,15	13	638,95
	9M-2151-NGE	23,65	0	25,5	0	49,15	17	835,55
	112-3540-NGE	23,65	0	25,5	0	49,15	28	1376,2
	234-8937-NGE	23,65	0	25,5	0	49,15	4	196,6
	118-7226-NGE	23,65	0	25,5	0	49,15	7	344,05
	6L-1883-NGE	23,65	0	25,5	0	49,15	10	491,5
	4F-3765-NGE	23,65	0	25,5	0	49,15	5	245,75
Total Material		533				Total Jarak Tempuh		829172

Lampiran 7 Hasil Perhitungan Jarak Tempuh Tata Letak Metode *Class Based Storage* Alternatif 1

Tabel 37 Rincian perhitungan jarak tempuh tata letak metode *class based storage* alternatif 1

Rak	Baris	Kolom	Kode Material	Xi	Xj	Yi	Yj	Dij	Frekuensi	Jarak Tempuh
209	A	1	ST-CP-011	18,5	0	10,5	0	29	67	1943
			ST-RD-002	18,5	0	10,5	0	29	132	3828
		2	ST-CP-014	18,5	0	13,5	0	32	18	576
			ST-RD-001	18,5	0	13,5	0	32	16	512
		3	ST-CP-066	18,5	0	13,5	0	32	17	544
			ST-EM-006	18,5	0	16,5	0	35	0	0
			ST-QP-001	18,5	0	16,5	0	35	5	175
			ST-CP-025ND	18,5	0	16,5	0	35	0	0
			ST-CP-026A	18,5	0	16,5	0	35	0	0
		4	ST-EV-004	18,5	0	16,5	0	35	1	35
			ST-EM-036	18,5	0	19,5	0	38	5	190
			ST-CC-010	18,5	0	19,5	0	38	8	304
			ST-EM-065	18,5	0	19,5	0	38	6	228
		5	MF200BFV-KGO	18,5	0	22,5	0	41	11	451
			ST-EM-042	18,5	0	25,5	0	44	0	0
		6	ST-CP-023	18,5	0	25,5	0	44	0	0
			MF202596	18,5	0	25,5	0	44	11	484
209	B	1	ST-RD-036	18,5	0	10,5	0	29	271	7859
			ST-RD-022	18,5	0	10,5	0	29	197	5713
		2	ST-CP-069	18,5	0	13,5	0	32	24	768
			ST-EM-056	18,5	0	13,5	0	32	14	448
			ST-EV-016	18,5	0	13,5	0	32	20	640
			ST-WR-010	18,5	0	16,5	0	35	0	0
		3	ST-KP-001	18,5	0	16,5	0	35	9	315
			ST-WR-007	18,5	0	16,5	0	35	0	0
			ST-IP-006	18,5	0	16,5	0	35	0	0
			ST-IP-002	18,5	0	16,5	0	35	4	140
			ST-EK-018	18,5	0	16,5	0	35	0	0
			ST-EK-015	18,5	0	16,5	0	35	5	175
		4	ST-IP-004	18,5	0	16,5	0	35	0	0
			ST-CP-065	18,5	0	19,5	0	38	3	114
			ST-EM-046A	18,5	0	19,5	0	38	5	190
			ST-CP-049	18,5	0	19,5	0	38	2	76
		5	ST-EM-027	18,5	0	19,5	0	38	1	38
			ST-CP-046	18,5	0	22,5	0	41	4	164
			ST-EM-002	18,5	0	22,5	0	41	5	205
			ST-CP-070	18,5	0	22,5	0	41	4	164
		6	ST-EM-025	18,5	0	22,5	0	41	3	123
			ST-CP-028	18,5	0	25,5	0	44	0	0
			ST-EM-019	18,5	0	25,5	0	44	0	0
			ST-CP-058	18,5	0	25,5	0	44	0	0
209	C	1	ST-RL-005	18,5	0	10,5	0	29	52	1508
			ST-TH-001	18,5	0	10,5	0	29	111	3219
			ST-TH-006	18,5	0	10,5	0	29	101	2929
			ST-CVT-002	18,5	0	10,5	0	29	78	2262
			ST-RL-011	18,5	0	10,5	0	29	46	1334
			ST-SL-002A	18,5	0	10,5	0	29	102	2958
			ST-SL-003A	18,5	0	10,5	0	29	83	2407

D	2	ST-SL-001A	18,5	0	10,5	0	29	80	2320
		ND499000-6160-NGE	18,5	0	10,5	0	29	115	3335
		ST-SP-001	18,5	0	10,5	0	29	273	7917
		ST-EX-011	18,5	0	13,5	0	32	27	864
		ST-CC-009	18,5	0	13,5	0	32	12	384
		ST-RL-002	18,5	0	13,5	0	32	30	960
		ST-SL-004A	18,5	0	13,5	0	32	34	1088
		ST-RL-001	18,5	0	13,5	0	32	23	736
		ST-EK-007	18,5	0	13,5	0	32	30	960
		ST-EK-013	18,5	0	13,5	0	32	30	960
	3	ST-EF-009	18,5	0	16,5	0	35	10	350
		VBB48	18,5	0	16,5	0	35	3	105
		VBB57	18,5	0	16,5	0	35	6	210
		VBB46	18,5	0	16,5	0	35	2	70
		VBB54	18,5	0	16,5	0	35	3	105
		04120-21747-NGE	18,5	0	16,5	0	35	9	315
	4	ST-MC-001	18,5	0	19,5	0	38	4	152
		ST-CP-027	18,5	0	19,5	0	38	2	76
		MF110091	18,5	0	19,5	0	38	2	76
		ST-RD-015	18,5	0	19,5	0	38	1	38
		ST-RD-041	18,5	0	19,5	0	38	2	76
		600-825-9330-NGE	18,5	0	19,5	0	38	3	114
	5	ST-CC-012	18,5	0	22,5	0	41	7	287
		ST-EM-064	18,5	0	22,5	0	41	0	0
		ST-SP-002	18,5	0	22,5	0	41	2	82
		ST-EM-006A	18,5	0	22,5	0	41	1	41
		ST-RD-032	18,5	0	22,5	0	41	7	287
	6	ST-CP-026	18,5	0	25,5	0	44	10	440
		ST-EM-046	18,5	0	25,5	0	44	9	396
		ST-CP-067	18,5	0	25,5	0	44	5	220
		ST-EM-055	18,5	0	25,5	0	44	8	352
	1	ST-SP-019K	18,5	0	10,5	0	29	50	1450
		ST-SP-020K	18,5	0	10,5	0	29	80	2320
		ST-SP-018K	18,5	0	10,5	0	29	65	1885
		ST-SP-019	18,5	0	10,5	0	29	75	2175
		ST-SP-020	18,5	0	10,5	0	29	122	3538
		ST-SP-058	18,5	0	10,5	0	29	204	5916
		ST-SP-059	18,5	0	10,5	0	29	214	6206
		F109S10	18,5	0	10,5	0	29	224	6496
		ST-PT-001	18,5	0	10,5	0	29	185	5365
		ST-KP-003	18,5	0	10,5	0	29	38	1102
	2	ST-PT-002	18,5	0	10,5	0	29	59	1711
		ST-CP-051	18,5	0	13,5	0	32	27	864
		FF025S14	18,5	0	13,5	0	32	18	576
		203194	18,5	0	13,5	0	32	13	416
		MF203196	18,5	0	13,5	0	32	13	416
		ST-FT-007	18,5	0	13,5	0	32	24	768
		ST-QP-003	18,5	0	13,5	0	32	19	608
		MF200-0365PM	18,5	0	16,5	0	35	9	315
		ST-PS-006	18,5	0	16,5	0	35	6	210
		ST-SP-003	18,5	0	16,5	0	35	1	35
	3	ST-FT-011	18,5	0	16,5	0	35	10	350
		ST-SP-048	18,5	0	16,5	0	35	5	175
		ST-DN-001C	18,5	0	16,5	0	35	2	70

210	4	MFH4973	18,5	0	16,5	0	35	12	420		
		53T126N353	18,5	0	19,5	0	38	6	228		
		MF101233	18,5	0	19,5	0	38	0	0		
		ST-FT-O-012	18,5	0	19,5	0	38	2	76		
		ST-FC-012	18,5	0	19,5	0	38	1	38		
		ST-FT-O-013	18,5	0	19,5	0	38	4	152		
		ST-FS-017	18,5	0	19,5	0	38	2	76		
		ST-SH-002	18,5	0	19,5	0	38	6	228		
		ST-SH-001	18,5	0	19,5	0	38	6	228		
		5	VBA74	18,5	0	22,5	0	41	4	164	
			VBA42	18,5	0	22,5	0	41	6	246	
			VBB41	18,5	0	22,5	0	41	1	41	
	VBA46		18,5	0	22,5	0	41	9	369		
	VBB51		18,5	0	22,5	0	41	0	0		
	VBA40		18,5	0	22,5	0	41	9	369		
	6	ST-RD-052A	18,5	0	22,5	0	41	6	246		
		ST-SP-004	18,5	0	25,5	0	44	11	484		
		ST-FL-008	18,5	0	25,5	0	44	5	220		
		ST-SP-005T	18,5	0	10,5	0	29	5	145		
	A	2	MK586070C23	20,325	0	13,5	0	33,825	16	541,2	
			MFPK-DWF193	20,325	0	13,5	0	33,825	24	811,8	
	B	1	ELBRB500	20,325	0	13,5	0	33,825	27	913,275	
			ST-CP-038	20,325	0	10,5	0	30,825	64	1972,8	
		2	ST-EM-052	20,325	0	10,5	0	30,825	54	1664,55	
			F6132S01	20,325	0	13,5	0	33,825	13	439,725	
		3	MF258494	20,325	0	13,5	0	33,825	21	710,325	
			ST-CD-024	20,325	0	13,5	0	33,825	12	405,9	
		3	ST-EF-006	20,325	0	16,5	0	36,825	3	110,475	
			ST-CC-019	20,325	0	16,5	0	36,825	1	36,825	
			ST-EF-013	20,325	0	16,5	0	36,825	3	110,475	
			ST-CP-110	20,325	0	16,5	0	36,825	0	0	
		C	1	ELBRB125	20,325	0	10,5	0	30,825	48	1479,6
				PAK02	20,325	0	10,5	0	30,825	42	1294,65
	M-2MA180/240RR			20,325	0	10,5	0	30,825	229	7058,925	
	M-2MA180PR			20,325	0	10,5	0	30,825	57	1757,025	
	M-2MA240PR			20,325	0	10,5	0	30,825	191	5887,575	
	2		ESP6/6	20,325	0	10,5	0	30,825	51	1572,075	
			ST-CP-013	20,325	0	13,5	0	33,825	25	845,625	
			ST-EF-003	20,325	0	13,5	0	33,825	29	980,925	
	3		ST-CP-040	20,325	0	13,5	0	33,825	23	777,975	
			ST-CP-062	20,325	0	16,5	0	36,825	7	257,775	
			ST-CP-005A	20,325	0	16,5	0	36,825	0	0	
			ST-CC-013	20,325	0	16,5	0	36,825	1	36,825	
	D	1	G-L-90-0702	20,325	0	10,5	0	30,825	593	18279,225	
01-005000			20,325	0	10,5	0	30,825	577	17786,025		
01-034572			20,325	0	10,5	0	30,825	57	1757,025		
03-000100			20,325	0	10,5	0	30,825	50	1541,25		
02-223-12567-1			20,325	0	10,5	0	30,825	74	2281,05		
G-G-0707			20,325	0	10,5	0	30,825	97	2990,025		
G-L-0704			20,325	0	10,5	0	30,825	90	2774,25		
02-504-36033-3			20,325	0	10,5	0	30,825	1931	59523,075		
2		ST-KP-002	20,325	0	13,5	0	33,825	15	507,375		
		ST-KN-001	20,325	0	13,5	0	33,825	13	439,725		
		ST-PT-006	20,325	0	13,5	0	33,825	20	676,5		
		ST-SW-003	20,325	0	13,5	0	33,825	12	405,9		

211	A		ST-PS-005	20,325	0	13,5	0	33,825	3	101,475
			ST-EX-001	20,325	0	13,5	0	33,825	3	101,475
			ST-PT-005	20,325	0	13,5	0	33,825	5	169,125
			ST-PS-007	20,325	0	13,5	0	33,825	0	0
		3	ST-WR-012	20,325	0	16,5	0	36,825	6	220,95
			ST-PS-003	20,325	0	16,5	0	36,825	4	147,3
			ST-RD-018	20,325	0	16,5	0	36,825	2	73,65
		4	ST-EF-011	20,325	0	16,5	0	36,825	0	0
			M12A2-30H	20,325	0	19,5	0	39,825	2	79,65
			MFR24VCOAS-01	20,325	0	19,5	0	39,825	10	398,25
	B	1	Z00100006221	20,325	0	10,5	0	30,825	44	1356,3
			Z00100006222	20,325	0	10,5	0	30,825	7	215,775
		2	225-3099-NGE	20,325	0	13,5	0	33,825	15	507,375
		3	MF203193E62	20,325	0	16,5	0	36,825	2	73,65
			MF202584	20,325	0	16,5	0	36,825	4	147,3
		1	Z00100006217	20,325	0	10,5	0	30,825	529	16306,425
212	A		HCA-04	20,325	0	13,5	0	33,825	30	1014,75
			9S-8004-NGE	20,325	0	13,5	0	33,825	26	879,45
			5D-0764-NGE	20,325	0	13,5	0	33,825	36	1217,7
			123-7271-NGE	20,325	0	13,5	0	33,825	15	507,375
		2	2A-3398-NGE	20,325	0	13,5	0	33,825	27	913,275
			9Y-6089-NGE	20,325	0	13,5	0	33,825	21	710,325
			04121-22264-NGE	20,325	0	13,5	0	33,825	17	575,025
		3	F129ME62	20,325	0	16,5	0	36,825	4	147,3
			SYGSM184E62	20,325	0	16,5	0	36,825	3	110,475
			FFY184DE62	20,325	0	16,5	0	36,825	3	110,475
	B		MFMK583681J37	20,325	0	16,5	0	36,825	11	405,075
		1	Z00100006219	20,325	0	10,5	0	30,825	124	3822,3
			01-275186	20,325	0	13,5	0	33,825	12	405,9
			04-PC-4	20,325	0	13,5	0	33,825	14	473,55
			04-PC-8	20,325	0	13,5	0	33,825	33	1116,225
			04-SB-6	20,325	0	13,5	0	33,825	24	811,8
		2	L-AC-0402	20,325	0	13,5	0	33,825	23	777,975
			01-270692	20,325	0	13,5	0	33,825	13	439,725
			01-270693	20,325	0	13,5	0	33,825	19	642,675
		C	13-532-30738-7/16	20,325	0	13,5	0	33,825	18	608,85
			03-000013-5-CS	20,325	0	13,5	0	33,825	19	642,675
			02-223-12270-7	20,325	0	16,5	0	36,825	4	147,3
	C		01-090471	20,325	0	16,5	0	36,825	0	0
			01-270635	20,325	0	16,5	0	36,825	0	0
			03-000921	20,325	0	16,5	0	36,825	4	147,3
			06030-06317-NGE	20,325	0	16,5	0	36,825	0	0
		3	Z00100006216	20,325	0	10,5	0	30,825	190	5856,75
			03-000920-9V	20,325	0	13,5	0	33,825	35	1183,875
			01-090942	20,325	0	13,5	0	33,825	20	676,5
		D	G-L-90-1206	20,325	0	13,5	0	33,825	33	1116,225
			01-083001	20,325	0	13,5	0	33,825	28	947,1
			04-PG5000-4B	20,325	0	13,5	0	33,825	27	913,275
			03-003000	20,325	0	13,5	0	33,825	33	1116,225
			03-CVF-04-JSG-L	20,325	0	13,5	0	33,825	16	541,2
			04-SCR-4	20,325	0	13,5	0	33,825	35	1183,875
			04-PG1000-4B	20,325	0	13,5	0	33,825	31	1048,575
			01-250158	20,325	0	13,5	0	33,825	32	1082,4
	E	1	Z00100006223	20,325	0	10,5	0	30,825	75	2311,875
212	A	3	S009	21,975	0	16,5	0	38,475	10	384,75

213	B	3	MFMK413241AJ32	21,975	0	16,5	0	38,475	6	230,85
			FG10132S01	21,975	0	16,5	0	38,475	3	115,425
			FX6124S00	21,975	0	16,5	0	38,475	0	0
			F8132S01	21,975	0	16,5	0	38,475	1	38,475
			MF203195E62	21,975	0	16,5	0	38,475	2	76,95
			FFY008E62	21,975	0	16,5	0	38,475	2	76,95
	C	2	S009D	21,975	0	13,5	0	35,475	8	283,8
			20569151-NGE	21,975	0	13,5	0	35,475	1	35,475
			20581089-NGE	21,975	0	13,5	0	35,475	2	70,95
			1652986-NGE	21,975	0	13,5	0	35,475	2	70,95
	D	3	390-34N	21,975	0	16,5	0	38,475	6	230,85
			F045MC23	21,975	0	16,5	0	38,475	10	384,75
			MF04B001585	21,975	0	16,5	0	38,475	2	76,95
			MF04B001450	21,975	0	16,5	0	38,475	0	0
			MF202598	21,975	0	16,5	0	38,475	3	115,425
213	A	2	ST-CD-016	20,325	0	13,5	0	33,825	6	202,95
			ST-CD-041	20,325	0	13,5	0	33,825	6	202,95
	B	1	ST-CD-009	20,325	0	10,5	0	30,825	5	154,125
			ST-CD-006	20,325	0	10,5	0	30,825	3	92,475
	C	1	ST-CD-039	20,325	0	10,5	0	30,825	3	92,475
214	A	1	ST-CD-040	20,325	0	10,5	0	30,825	0	0
			ST-CD-033	21,975	0	10,5	0	32,475	5	162,375
	B	2	ST-CD-018	21,975	0	10,5	0	32,475	7	227,325
			MA000 350 27 05	21,975	0	13,5	0	35,475	0	0
			MA625 330 01 19	21,975	0	13,5	0	35,475	0	0
			MA942 317 20 12	21,975	0	13,5	0	35,475	7	248,325
	C	2	MN000000 005729	21,975	0	13,5	0	35,475	0	0
			MA000 326 44 81	21,975	0	13,5	0	35,475	0	0
			MA942 317 02 74	21,975	0	13,5	0	35,475	3	106,425
			6212-85-6840-NGE	21,975	0	10,5	0	32,475	104	3377,4
215	A	1	6245-81-6360-NGE	21,975	0	10,5	0	32,475	39	1266,525
			17A-911-4680-NGE	21,975	0	13,5	0	35,475	18	638,55
		2	6261-81-6810-NGE	21,975	0	13,5	0	35,475	17	603,075
			6732-61-3871-NGE	21,975	0	13,5	0	35,475	18	638,55
			04120-21760-NGE	21,975	0	13,5	0	35,475	28	993,3
		3	561-20-71100-NGE	21,975	0	16,5	0	38,475	5	192,375
			561-27-61940-NGE	21,975	0	16,5	0	38,475	1	38,475
			141-7116-NGE	21,975	0	16,5	0	38,475	0	0
		4	6A-33	21,975	0	19,5	0	41,475	0	0
		5	21051052-NGE	21,975	0	22,5	0	44,475	0	0
	B	1	6V-8400-NGE	21,975	0	10,5	0	32,475	74	2403,15
			299-3401-NGE	21,975	0	10,5	0	32,475	51	1656,225
			3S-1349-NGE	21,975	0	10,5	0	32,475	47	1526,325
			4B-8407-NGE	21,975	0	10,5	0	32,475	347	11268,825
			5P-3108-NGE	21,975	0	10,5	0	32,475	66	2143,35
			4J-2506-NGE	21,975	0	10,5	0	32,475	91	2955,225
			7S-8767-NGE	21,975	0	10,5	0	32,475	49	1591,275
			2N-2766-NGE	21,975	0	10,5	0	32,475	238	7729,05
			106-1792-NGE	21,975	0	10,5	0	32,475	184	5975,4
			5F-3144-NGE	21,975	0	10,5	0	32,475	25	811,875
			5S-2106-NGE	21,975	0	10,5	0	32,475	22	714,45
			6B-9664-NGE	21,975	0	10,5	0	32,475	26	844,35
			5P-0597-NGE	21,975	0	10,5	0	32,475	18	584,55
		2	6J-2680-NGE	21,975	0	13,5	0	35,475	31	1099,725

C		6M-5218-NGE	21,975	0	13,5	0	35,475	18	638,55
		274-9256-NGE	21,975	0	13,5	0	35,475	15	532,125
		5D-0765-NGE	21,975	0	13,5	0	35,475	30	1064,25
		6G-7339-NGE	21,975	0	13,5	0	35,475	19	674,025
		8M-4438-NGE	21,975	0	13,5	0	35,475	34	1206,15
		9S-2760-NGE	21,975	0	13,5	0	35,475	12	425,7
	3	01-270735	21,975	0	16,5	0	38,475	1	38,475
		02-432-24162-1	21,975	0	16,5	0	38,475	4	153,9
		L-AC-1206	21,975	0	16,5	0	38,475	7	269,325
		QNV-M08	21,975	0	16,5	0	38,475	6	230,85
		01-270673	21,975	0	16,5	0	38,475	3	115,425
		13-002500-2	21,975	0	16,5	0	38,475	5	192,375
	4	M2STK02	21,975	0	16,5	0	38,475	6	230,85
		MFF117C21	21,975	0	19,5	0	41,475	8	331,8
		MFF075J32	21,975	0	19,5	0	41,475	7	290,325
		MF03B004319	21,975	0	19,5	0	41,475	1	41,475
		MF215500	21,975	0	19,5	0	41,475	8	331,8
		MFGTE200	21,975	0	19,5	0	41,475	2	82,95
	5	FH122S01	21,975	0	19,5	0	41,475	1	41,475
		MF540-140-700-24	21,975	0	19,5	0	41,475	2	82,95
		04120-21740-NGE	21,975	0	22,5	0	44,475	6	266,85
		4W-3027-NGE	21,975	0	22,5	0	44,475	6	266,85
	6	04121-22271-NGE	21,975	0	25,5	0	47,475	11	522,225
		04120-21757-NGE	21,975	0	25,5	0	47,475	9	427,275
	1	8H-9789-NGE	21,975	0	10,5	0	32,475	38	1234,05
		160-6387-NGE	21,975	0	10,5	0	32,475	69	2240,775
		3K-0360-NGE	21,975	0	10,5	0	32,475	281	9125,475
		160-6386-NGE	21,975	0	10,5	0	32,475	41	1331,475
		5F-0149-NGE	21,975	0	10,5	0	32,475	228	7404,3
		4J-0522-NGE	21,975	0	10,5	0	32,475	340	11041,5
	2	5P-8245-NGE	21,975	0	10,5	0	32,475	175	5683,125
		8T-4167-NGE	21,975	0	10,5	0	32,475	49	1591,275
		4J-0526-NGE	21,975	0	10,5	0	32,475	62	2013,45
		9H-6832-NGE	21,975	0	13,5	0	35,475	20	709,5
		6F-8146-NGE	21,975	0	13,5	0	35,475	34	1206,15
		114-9305-NGE	21,975	0	13,5	0	35,475	31	1099,725
	3	294-9583-NGE	21,975	0	13,5	0	35,475	12	425,7
		2K-8257-NGE	21,975	0	13,5	0	35,475	20	709,5
		123-2941-NGE	21,975	0	13,5	0	35,475	21	744,975
		3S-9643-NGE	21,975	0	13,5	0	35,475	31	1099,725
		109-0077-NGE	21,975	0	13,5	0	35,475	30	1064,25
		4J-8251-NGE	21,975	0	13,5	0	35,475	29	1028,775
	4	4F-5607-NGE	21,975	0	13,5	0	35,475	15	532,125
		9N-2038-NGE	21,975	0	13,5	0	35,475	13	461,175
		5P-8500-NGE	21,975	0	13,5	0	35,475	15	532,125
		9M-2092-NGE	21,975	0	13,5	0	35,475	31	1099,725
		04-BV-8	21,975	0	16,5	0	38,475	1	38,475
		G-L-1208	21,975	0	16,5	0	38,475	6	230,85
	3	L-L-0808	21,975	0	16,5	0	38,475	1	38,475
		01-270670	21,975	0	16,5	0	38,475	4	153,9
		01-270674	21,975	0	16,5	0	38,475	7	269,325
		01-272180	21,975	0	16,5	0	38,475	10	384,75
	4	MA000 090 20 51	21,975	0	19,5	0	41,475	0	0
		MA000 326 56 81	21,975	0	19,5	0	41,475	0	0
		MF11B014500	21,975	0	19,5	0	41,475	5	207,375

216	A	D	5	2W-8837-NGE	21,975	0	22,5	0	44,475	3	133,425
			5	2W-8848-NGE	21,975	0	22,5	0	44,475	3	133,425
				04120-21763-NGE	21,975	0	22,5	0	44,475	2	88,95
			6	8H-5306-NGE	21,975	0	25,5	0	47,475	6	284,85
				8J-8879-NGE	21,975	0	25,5	0	47,475	8	379,8
				1W-3601-NGE	21,975	0	25,5	0	47,475	0	0
			1	04120-21735-NGE	21,975	0	10,5	0	32,475	122	3961,95
				04120-21748-NGE	21,975	0	10,5	0	32,475	239	7761,525
				04120-21951-NGE	21,975	0	10,5	0	32,475	250	8118,75
				3P-2794-NGE	21,975	0	13,5	0	35,475	21	744,975
				3P-0751-NGE	21,975	0	13,5	0	35,475	14	496,65
				6V-3917-NGE	21,975	0	13,5	0	35,475	18	638,55
			2	224-7506-NGE	21,975	0	13,5	0	35,475	21	744,975
				6V-5048-NGE	21,975	0	13,5	0	35,475	14	496,65
				123-7272-NGE	21,975	0	13,5	0	35,475	14	496,65
				124-3520-NGE	21,975	0	13,5	0	35,475	14	496,65
				228-7090-NGE	21,975	0	13,5	0	35,475	20	709,5
				5P-8356-NGE	21,975	0	13,5	0	35,475	33	1170,675
				6V-6609-NGE	21,975	0	13,5	0	35,475	16	567,6
				129-3719-NGE	21,975	0	13,5	0	35,475	22	780,45
				9M-8546-NGE	21,975	0	13,5	0	35,475	27	957,825
				2N-2765-NGE	21,975	0	13,5	0	35,475	29	1028,775
			3	G-N-0707	21,975	0	16,5	0	38,475	5	192,375
				G-N-0909	21,975	0	16,5	0	38,475	5	192,375
				L-06	21,975	0	16,5	0	38,475	3	115,425
				L-AC-1204	21,975	0	16,5	0	38,475	4	153,9
				L-L-0204	21,975	0	16,5	0	38,475	2	76,95
				01-086234	21,975	0	16,5	0	38,475	2	76,95
				01-061041	21,975	0	16,5	0	38,475	11	423,225
				AC-AC-0404	21,975	0	16,5	0	38,475	0	0
				L-AC-AC-040404	21,975	0	16,5	0	38,475	9	346,275
			4	421-20-32621-NGE	21,975	0	19,5	0	41,475	2	82,95
				235-27-11190-NGE	21,975	0	19,5	0	41,475	1	41,475
			5	7E-2631-NGE	21,975	0	22,5	0	44,475	3	133,425
			6	04120-21741-NGE	21,975	0	25,5	0	47,475	0	0
				118-3534-NGE	21,975	0	25,5	0	47,475	7	332,325
				4W-9839-NGE	21,975	0	25,5	0	47,475	5	237,375
				2N-0876-NGE	21,975	0	25,5	0	47,475	3	142,425
				9X-7381-NGE	21,975	0	25,5	0	47,475	1	47,475
216	A		1	6V-0444-NGE	23,65	0	10,5	0	34,15	42	1434,3
				7J-3297-NGE	23,65	0	10,5	0	34,15	39	1331,85
				8J-8906-NGE	23,65	0	10,5	0	34,15	54	1844,1
				8X-8414-NGE	23,65	0	10,5	0	34,15	97	3312,55
				114-9299-NGE	23,65	0	10,5	0	34,15	152	5190,8
			2	248-5513-NGE	23,65	0	13,5	0	37,15	32	1188,8
				3S-2909-NGE	23,65	0	13,5	0	37,15	14	520,1
				2K-4472-NGE	23,65	0	13,5	0	37,15	23	854,45
				2N-8374-NGE	23,65	0	13,5	0	37,15	21	780,15
				2S-4078-NGE	23,65	0	13,5	0	37,15	16	594,4
				337-1943-NGE	23,65	0	13,5	0	37,15	30	1114,5
				4D-8695-NGE	23,65	0	13,5	0	37,15	18	668,7
				9X-2201-NGE	23,65	0	13,5	0	37,15	15	557,25
				8X-6729-NGE	23,65	0	13,5	0	37,15	13	482,95
			3	114-5477-NGE	23,65	0	16,5	0	40,15	0	0
				6V-8676-NGE	23,65	0	16,5	0	40,15	8	321,2

B	4	247-3796-NGE	23,65	0	16,5	0	40,15	4	160,6
		467-8535-NGE	23,65	0	16,5	0	40,15	0	0
		3F-5792-NGE	23,65	0	16,5	0	40,15	0	0
		442-1340-NGE	23,65	0	16,5	0	40,15	1	40,15
		107-3758-NGE	23,65	0	16,5	0	40,15	2	80,3
		125-9740-NGE	23,65	0	16,5	0	40,15	4	160,6
		8T-4986-NGE	23,65	0	19,5	0	43,15	4	172,6
		9D-2319-NGE	23,65	0	19,5	0	43,15	7	302,05
		7D-5435-NGE	23,65	0	19,5	0	43,15	11	474,65
		4N-9680-NGE	23,65	0	19,5	0	43,15	1	43,15
	5	114-5333-NGE	23,65	0	19,5	0	43,15	1	43,15
		2G-9491-NGE	23,65	0	19,5	0	43,15	2	86,3
		5P-0840-NGE	23,65	0	19,5	0	43,15	0	0
		297-6849-NGE	23,65	0	19,5	0	43,15	2	86,3
		04121-21740-NGE	23,65	0	22,5	0	46,15	5	230,75
	1	04120-21762-NGE	23,65	0	22,5	0	46,15	1	46,15
		6215-61-3690-NGE	23,65	0	22,5	0	46,15	10	461,5
		3H-3385-NGE	23,65	0	10,5	0	34,15	390	13318,5
		198-6068-NGE	23,65	0	10,5	0	34,15	43	1468,45
		238-5082-NGE	23,65	0	10,5	0	34,15	53	1809,95
		1P-3708-NGE	23,65	0	10,5	0	34,15	51	1741,65
		166-2904-NGE	23,65	0	10,5	0	34,15	188	6420,2
		1P-3705-NGE	23,65	0	10,5	0	34,15	59	2014,85
		238-5081-NGE	23,65	0	10,5	0	34,15	54	1844,1
		4T-2565-NGE	23,65	0	10,5	0	34,15	38	1297,7
		7M-8485-NGE	23,65	0	10,5	0	34,15	102	3483,3
		6J-1080-NGE	23,65	0	10,5	0	34,15	73	2492,95
		5P-5846-NGE	23,65	0	10,5	0	34,15	55	1878,25
		6V-3965-NGE	23,65	0	10,5	0	34,15	59	2014,85
		126-2702-NGE	23,65	0	10,5	0	34,15	46	1570,9
	2	8P-2022-NGE	23,65	0	13,5	0	37,15	13	482,95
		9N-1941-NGE	23,65	0	13,5	0	37,15	12	445,8
		3P-2793-NGE	23,65	0	13,5	0	37,15	36	1337,4
		5J-9451-NGE	23,65	0	13,5	0	37,15	17	631,55
		7G-4817-NGE	23,65	0	13,5	0	37,15	20	743
		134-1935-NGE	23,65	0	13,5	0	37,15	22	817,3
		8P-2019-NGE	23,65	0	13,5	0	37,15	17	631,55
		8F-8733-NGE	23,65	0	13,5	0	37,15	32	1188,8
		1T-0210-NGE	23,65	0	13,5	0	37,15	22	817,3
	3	235-2484-NGE	23,65	0	16,5	0	40,15	0	0
		245-4907-NGE	23,65	0	16,5	0	40,15	0	0
		235-3546-NGE	23,65	0	16,5	0	40,15	0	0
		2D-8009-NGE	23,65	0	16,5	0	40,15	3	120,45
		8N-3248-NGE	23,65	0	16,5	0	40,15	4	160,6
		175-7897-NGE	23,65	0	16,5	0	40,15	3	120,45
		259-4598-NGE	23,65	0	16,5	0	40,15	6	240,9
		5F-0304-NGE	23,65	0	16,5	0	40,15	11	441,65
	4	8M-4435-NGE	23,65	0	19,5	0	43,15	10	431,5
		7X-7655-NGE	23,65	0	19,5	0	43,15	1	43,15
		127-4422-NGE	23,65	0	19,5	0	43,15	3	129,45
		7N-6494-NGE	23,65	0	19,5	0	43,15	4	172,6
		4J-0525-NGE	23,65	0	19,5	0	43,15	11	474,65
		7N-4927-NGE	23,65	0	19,5	0	43,15	2	86,3
		7G-1594-NGE	23,65	0	19,5	0	43,15	7	302,05
		5P-3345-NGE	23,65	0	19,5	0	43,15	0	0

	5	258-4521-NGE	23,65	0	22,5	0	46,15	1	46,15
		6V-0973-NGE	23,65	0	22,5	0	46,15	8	369,2
		4F-3765-NGE	23,65	0	22,5	0	46,15	5	230,75
		7H-2444-NGE	23,65	0	22,5	0	46,15	8	369,2
C	1	8L-2786-NGE	23,65	0	10,5	0	34,15	745	25441,75
		6V-8398-NGE	23,65	0	10,5	0	34,15	195	6659,25
		2M-9780-NGE	23,65	0	10,5	0	34,15	150	5122,5
		3J-7354-NGE	23,65	0	10,5	0	34,15	165	5634,75
		9S-8307-NGE	23,65	0	10,5	0	34,15	39	1331,85
		7J-9108-NGE	23,65	0	10,5	0	34,15	177	6044,55
		1S-2174-NGE	23,65	0	10,5	0	34,15	50	1707,5
		214-7568-NGE	23,65	0	10,5	0	34,15	148	5054,2
		2H-3932-NGE	23,65	0	10,5	0	34,15	43	1468,45
		5F-3999-NGE	23,65	0	10,5	0	34,15	46	1570,9
		5H-6005-NGE	23,65	0	10,5	0	34,15	670	22880,5
		6H-3977-NGE	23,65	0	10,5	0	34,15	90	3073,5
	2	7J-3296-NGE	23,65	0	10,5	0	34,15	73	2492,95
		7D-7519-NGE	23,65	0	13,5	0	37,15	22	817,3
		6V-8260-NGE	23,65	0	13,5	0	37,15	14	520,1
		5K-5959-NGE	23,65	0	13,5	0	37,15	15	557,25
		5H-2824-NGE	23,65	0	13,5	0	37,15	15	557,25
		109-0076-NGE	23,65	0	13,5	0	37,15	15	557,25
		4J-3815-NGE	23,65	0	13,5	0	37,15	22	817,3
		5F-7054-NGE	23,65	0	13,5	0	37,15	30	1114,5
		9D-3432-NGE	23,65	0	13,5	0	37,15	26	965,9
		6V-6353-NGE	23,65	0	13,5	0	37,15	12	445,8
		9M-1503-NGE	23,65	0	13,5	0	37,15	35	1300,25
		8T-6703-NGE	23,65	0	13,5	0	37,15	20	743
D	3	8J-8905-NGE	23,65	0	13,5	0	37,15	26	965,9
		8T-4985-NGE	23,65	0	13,5	0	37,15	30	1114,5
		133-4297-NGE	23,65	0	16,5	0	40,15	5	200,75
		5H-6734-NGE	23,65	0	16,5	0	40,15	2	80,3
		6D-9157-NGE	23,65	0	16,5	0	40,15	0	0
		5P-8210-NGE	23,65	0	16,5	0	40,15	5	200,75
		111-3820-NGE	23,65	0	16,5	0	40,15	4	160,6
		272-0758-NGE	23,65	0	16,5	0	40,15	3	120,45
		4N-0848-NGE	23,65	0	16,5	0	40,15	5	200,75
		272-0760-NGE	23,65	0	16,5	0	40,15	0	0
		109-2332-NGE	23,65	0	16,5	0	40,15	5	200,75
		5D-4311-NGE	23,65	0	19,5	0	43,15	7	302,05
	4	2S-2182-NGE	23,65	0	19,5	0	43,15	0	0
		117-5268-NGE	23,65	0	19,5	0	43,15	5	215,75
		9S-3581-NGE	23,65	0	19,5	0	43,15	1	43,15
		9S-3582-NGE	23,65	0	19,5	0	43,15	1	43,15
		2H-3931-NGE	23,65	0	19,5	0	43,15	1	43,15
		4D-6578-NGE	23,65	0	19,5	0	43,15	8	345,2
		6K-6307-NGE	23,65	0	19,5	0	43,15	10	431,5
		9S-8005-NGE	23,65	0	22,5	0	46,15	10	461,5
	5	5H-1504-NGE	23,65	0	22,5	0	46,15	5	230,75
		5M-6708-NGE	23,65	0	22,5	0	46,15	8	369,2
		298-6387-NGE	23,65	0	22,5	0	46,15	1	46,15
D	1	391-2167-NGE	23,65	0	10,5	0	34,15	56	1912,4
		5K-9090-NGE	23,65	0	10,5	0	34,15	76	2595,4
		8C-3089-NGE	23,65	0	10,5	0	34,15	76	2595,4
		4J-5267-NGE	23,65	0	10,5	0	34,15	40	1366

	4J-0519-NGE	23,65	0	10,5	0	34,15	100	3415
	1J-2859-NGE	23,65	0	10,5	0	34,15	83	2834,45
	1P-3709-NGE	23,65	0	10,5	0	34,15	91	3107,65
	161-8068-NGE	23,65	0	10,5	0	34,15	119	4063,85
	2D-8364-NGE	23,65	0	10,5	0	34,15	70	2390,5
	8T-3013-NGE	23,65	0	10,5	0	34,15	57	1946,55
	1P-3704-NGE	23,65	0	10,5	0	34,15	61	2083,15
	1H-5728-NGE	23,65	0	10,5	0	34,15	68	2322,2
	4J-0520-NGE	23,65	0	10,5	0	34,15	118	4029,7
2	8M-8157-NGE	23,65	0	13,5	0	37,15	19	705,85
	5P-5299-NGE	23,65	0	13,5	0	37,15	18	668,7
	8M-4986-NGE	23,65	0	13,5	0	37,15	13	482,95
	2K-0337-NGE	23,65	0	13,5	0	37,15	23	854,45
	1H-9696-NGE	23,65	0	13,5	0	37,15	19	705,85
	5P-8068-NGE	23,65	0	13,5	0	37,15	17	631,55
	288-5476-NGE	23,65	0	13,5	0	37,15	14	520,1
	123-7268-NGE	23,65	0	13,5	0	37,15	15	557,25
	214-7566-NGE	23,65	0	13,5	0	37,15	13	482,95
	9M-2151-NGE	23,65	0	13,5	0	37,15	17	631,55
	112-3540-NGE	23,65	0	13,5	0	37,15	28	1040,2
	5E-8771-NGE	23,65	0	13,5	0	37,15	32	1188,8
	238-5080-NGE	23,65	0	13,5	0	37,15	32	1188,8
	3E-5239-NGE	23,65	0	16,5	0	40,15	0	0
	5S-4629-NGE	23,65	0	16,5	0	40,15	0	0
	7D-3462-NGE	23,65	0	16,5	0	40,15	4	160,6
	245-4908-NGE	23,65	0	16,5	0	40,15	0	0
	2D-6533-NGE	23,65	0	16,5	0	40,15	6	240,9
3	4W-0530-NGE	23,65	0	16,5	0	40,15	0	0
	6F-4855-NGE	23,65	0	16,5	0	40,15	2	80,3
	6V-3319-NGE	23,65	0	16,5	0	40,15	8	321,2
	8M-4446-NGE	23,65	0	19,5	0	43,15	4	172,6
	8T-1919-NGE	23,65	0	19,5	0	43,15	0	0
4	2H-6338-NGE	23,65	0	19,5	0	43,15	0	0
	6N-0634-NGE	23,65	0	19,5	0	43,15	1	43,15
	7X-4810-NGE	23,65	0	19,5	0	43,15	2	86,3
	234-8937-NGE	23,65	0	19,5	0	43,15	4	172,6
	118-7226-NGE	23,65	0	19,5	0	43,15	7	302,05
	6L-1883-NGE	23,65	0	19,5	0	43,15	10	431,5
5	269-7885-NGE	23,65	0	22,5	0	46,15	6	276,9
	6V-6809-NGE	23,65	0	22,5	0	46,15	0	0
	112-1574-NGE	23,65	0	22,5	0	46,15	4	184,6
	129-9452-NGE	23,65	0	22,5	0	46,15	6	276,9
	136-7227-NGE	23,65	0	22,5	0	46,15	5	230,75
	4F-2612-NGE	23,65	0	22,5	0	46,15	6	276,9
	6V-5066-NGE	23,65	0	22,5	0	46,15	7	323,05
	9F-2247-NGE	23,65	0	22,5	0	46,15	1	46,15
	6V-5101-NGE	23,65	0	22,5	0	46,15	2	92,3
Total Material		533	Total Jarak Tempuh				679314,9	

Lampiran 8 Hasil Perhitungan Jarak Tempuh Tata Letak Metode *Class Based Storage* Alternatif 2

Tabel 38 Rincian perhitungan jarak tempuh tata letak metode *class based storage* alternatif 2

Rak	Baris	Kolom	Kode Material	Xi	Xj	Yi	Yj	Dij	Frekuensi	Jarak Tempuh
209	A	1	Z00100006221	18,5	0	10,5	0	29	44	1276
			Z00100006222	18,5	0	10,5	0	29	7	203
		2	ST-CP-011	18,5	0	13,5	0	32	67	2144
			ST-RD-002	18,5	0	13,5	0	32	132	4224
		3	ST-CP-038	18,5	0	16,5	0	35	64	2240
			ST-EM-052	18,5	0	16,5	0	35	54	1890
		4	ST-RD-036	18,5	0	19,5	0	38	271	10298
			ST-RD-022	18,5	0	19,5	0	38	197	7486
	B	1	Z00100006217	18,5	0	10,5	0	29	529	15341
			ST-RL-005	18,5	0	13,5	0	32	52	1664
			ST-TH-001	18,5	0	13,5	0	32	111	3552
			ST-TH-006	18,5	0	13,5	0	32	101	3232
			ST-CVT-002	18,5	0	13,5	0	32	78	2496
		2	ST-RL-011	18,5	0	13,5	0	32	46	1472
			ST-SL-002A	18,5	0	13,5	0	32	102	3264
			ST-SL-003A	18,5	0	13,5	0	32	83	2656
			ST-SL-001A	18,5	0	13,5	0	32	80	2560
			ND499000-6160-NGE	18,5	0	13,5	0	32	115	3680
			ST-SP-001	18,5	0	13,5	0	32	273	8736
			ELBRB125	18,5	0	16,5	0	35	48	1680
		3	M-2MA180/240RR	18,5	0	16,5	0	35	229	8015
			M-2MA180PR	18,5	0	16,5	0	35	57	1995
			M-2MA240PR	18,5	0	16,5	0	35	191	6685
		4	3H-3385-NGE	18,5	0	19,5	0	38	390	14820
			198-6068-NGE	18,5	0	19,5	0	38	43	1634
			238-5082-NGE	18,5	0	19,5	0	38	53	2014
			1P-3708-NGE	18,5	0	19,5	0	38	51	1938
			166-2904-NGE	18,5	0	19,5	0	38	188	7144
			1P-3705-NGE	18,5	0	19,5	0	38	59	2242
			238-5081-NGE	18,5	0	19,5	0	38	54	2052
			4T-2565-NGE	18,5	0	19,5	0	38	38	1444
			7M-8485-NGE	18,5	0	19,5	0	38	102	3876
			6J-1080-NGE	18,5	0	19,5	0	38	73	2774
			5P-5846-NGE	18,5	0	19,5	0	38	55	2090
			6V-3965-NGE	18,5	0	19,5	0	38	59	2242
		5	126-2702-NGE	18,5	0	19,5	0	38	46	1748
			8H-9789-NGE	18,5	0	22,5	0	41	38	1558
			160-6387-NGE	18,5	0	22,5	0	41	69	2829
			3K-0360-NGE	18,5	0	22,5	0	41	281	11521
			160-6386-NGE	18,5	0	22,5	0	41	41	1681
			5F-0149-NGE	18,5	0	22,5	0	41	228	9348
			4J-0522-NGE	18,5	0	22,5	0	41	340	13940
			5P-8245-NGE	18,5	0	22,5	0	41	175	7175
			8T-4167-NGE	18,5	0	22,5	0	41	49	2009
			4J-0526-NGE	18,5	0	22,5	0	41	62	2542
		6	ESP6/6	18,5	0	25,5	0	44	51	2244
	C	1	Z00100006219	18,5	0	10,5	0	29	124	3596
		2	ST-SP-019K	18,5	0	13,5	0	32	50	1600

D		ST-SP-020K	18,5	0	13,5	0	32	80	2560
		ST-SP-018K	18,5	0	13,5	0	32	65	2080
		ST-SP-019	18,5	0	13,5	0	32	75	2400
		ST-SP-020	18,5	0	13,5	0	32	122	3904
		ST-SP-058	18,5	0	13,5	0	32	204	6528
		ST-SP-059	18,5	0	13,5	0	32	214	6848
		ST-PT-001	18,5	0	13,5	0	32	185	5920
		ST-KP-003	18,5	0	13,5	0	32	38	1216
		ST-PT-002	18,5	0	13,5	0	32	59	1888
	3	G-L-90-0702	18,5	0	16,5	0	35	593	20755
		01-005000	18,5	0	16,5	0	35	577	20195
		01-034572	18,5	0	16,5	0	35	57	1995
		03-000100	18,5	0	16,5	0	35	50	1750
		02-223-12567-1	18,5	0	16,5	0	35	74	2590
		G-G-0707	18,5	0	16,5	0	35	97	3395
		G-L-0704	18,5	0	16,5	0	35	90	3150
		PAK02	18,5	0	16,5	0	35	42	1470
	4	8L-2786-NGE	18,5	0	19,5	0	38	745	28310
		6V-8398-NGE	18,5	0	19,5	0	38	195	7410
		2M-9780-NGE	18,5	0	19,5	0	38	150	5700
		3J-7354-NGE	18,5	0	19,5	0	38	165	6270
		9S-8307-NGE	18,5	0	19,5	0	38	39	1482
		7J-9108-NGE	18,5	0	19,5	0	38	177	6726
		1S-2174-NGE	18,5	0	19,5	0	38	50	1900
		214-7568-NGE	18,5	0	19,5	0	38	148	5624
		2H-3932-NGE	18,5	0	19,5	0	38	43	1634
		5F-3999-NGE	18,5	0	19,5	0	38	46	1748
		5H-6005-NGE	18,5	0	19,5	0	38	670	25460
		6H-3977-NGE	18,5	0	19,5	0	38	90	3420
		7J-3296-NGE	18,5	0	19,5	0	38	73	2774
	5	6V-8400-NGE	18,5	0	22,5	0	41	74	3034
		299-3401-NGE	18,5	0	22,5	0	41	51	2091
		3S-1349-NGE	18,5	0	22,5	0	41	47	1927
		4B-8407-NGE	18,5	0	22,5	0	41	347	14227
		5P-3108-NGE	18,5	0	22,5	0	41	66	2706
		4J-2506-NGE	18,5	0	22,5	0	41	91	3731
		7S-8767-NGE	18,5	0	22,5	0	41	49	2009
		2N-2766-NGE	18,5	0	22,5	0	41	238	9758
	6	106-1792-NGE	18,5	0	22,5	0	41	184	7544
		6212-85-6840-NGE	18,5	0	25,5	0	44	104	4576
		6245-81-6360-NGE	18,5	0	25,5	0	44	39	1716
	1	Z00100006216	18,5	0	10,5	0	29	190	5510
	2	F109S10	18,5	0	13,5	0	32	224	7168
		PAK02	18,5	0	13,5	0	32	42	1344
	3	02-504-36033-3	18,5	0	16,5	0	35	1931	67585
	4	391-2167-NGE	18,5	0	19,5	0	38	56	2128
		5K-9090-NGE	18,5	0	19,5	0	38	76	2888
		8C-3089-NGE	18,5	0	19,5	0	38	76	2888
		4J-5267-NGE	18,5	0	19,5	0	38	40	1520
		4J-0519-NGE	18,5	0	19,5	0	38	100	3800
		1J-2859-NGE	18,5	0	19,5	0	38	83	3154
		1P-3709-NGE	18,5	0	19,5	0	38	91	3458
		161-8068-NGE	18,5	0	19,5	0	38	119	4522
		2D-8364-NGE	18,5	0	19,5	0	38	70	2660
		8T-3013-NGE	18,5	0	19,5	0	38	57	2166

210	E	5	1P-3704-NGE	18,5	0	19,5	0	38	61	2318
			1H-5728-NGE	18,5	0	19,5	0	38	68	2584
			4J-0520-NGE	18,5	0	19,5	0	38	118	4484
			6V-0444-NGE	18,5	0	22,5	0	41	42	1722
			7J-3297-NGE	18,5	0	22,5	0	41	39	1599
			8J-8906-NGE	18,5	0	22,5	0	41	54	2214
			8X-8414-NGE	18,5	0	22,5	0	41	97	3977
			114-9299-NGE	18,5	0	22,5	0	41	152	6232
		6	04120-21735-NGE	18,5	0	25,5	0	44	122	5368
			04120-21748-NGE	18,5	0	25,5	0	44	239	10516
			04120-21951-NGE	18,5	0	25,5	0	44	250	11000
	1		Z00100006223	18,5	0	10,5	0	29	75	2175
A	1	2	225-3099-NGE	20,325	0	10,5	0	30,825	15	462,375
			ST-EX-011	20,325	0	13,5	0	33,825	27	913,275
			ST-CC-009	20,325	0	13,5	0	33,825	12	405,9
			ST-RL-002	20,325	0	13,5	0	33,825	30	1014,75
			ST-SL-004A	20,325	0	13,5	0	33,825	34	1150,05
			ST-RL-001	20,325	0	13,5	0	33,825	23	777,975
			ST-EK-007	20,325	0	13,5	0	33,825	30	1014,75
			ST-EK-013	20,325	0	13,5	0	33,825	30	1014,75
		3	MF258494	20,325	0	16,5	0	36,825	21	773,325
			MFPK-DWF193	20,325	0	16,5	0	36,825	24	883,8
			ELBRB500	20,325	0	16,5	0	36,825	27	994,275
	4	5	FF025S14	20,325	0	16,5	0	36,825	18	662,85
			203194	20,325	0	19,5	0	39,825	13	517,725
			MF203196	20,325	0	19,5	0	39,825	13	517,725
			ST-CP-013	20,325	0	22,5	0	42,825	25	1070,625
			ST-EF-003	20,325	0	22,5	0	42,825	29	1241,925
		6	ST-CP-040	20,325	0	22,5	0	42,825	23	984,975
			ST-CP-014	20,325	0	25,5	0	45,825	18	824,85
			ST-RD-001	20,325	0	25,5	0	45,825	16	733,2
			ST-CD-024	20,325	0	25,5	0	45,825	12	549,9
			ST-CP-066	20,325	0	25,5	0	45,825	17	779,025
B	1	2	HCA-04	20,325	0	10,5	0	30,825	30	924,75
			ST-CP-069	20,325	0	13,5	0	33,825	24	811,8
			ST-EM-056	20,325	0	13,5	0	33,825	14	473,55
			ST-EV-016	20,325	0	13,5	0	33,825	20	676,5
			ST-CP-051	20,325	0	16,5	0	36,825	27	994,275
		3	ST-FT-007	20,325	0	16,5	0	36,825	24	883,8
			ST-QP-003	20,325	0	16,5	0	36,825	19	699,675
			248-5513-NGE	20,325	0	19,5	0	39,825	32	1274,4
			3S-2909-NGE	20,325	0	19,5	0	39,825	14	557,55
			2K-4472-NGE	20,325	0	19,5	0	39,825	23	915,975
	4	5	2N-8374-NGE	20,325	0	19,5	0	39,825	21	836,325
			2S-4078-NGE	20,325	0	19,5	0	39,825	16	637,2
			337-1943-NGE	20,325	0	19,5	0	39,825	30	1194,75
			4D-8695-NGE	20,325	0	19,5	0	39,825	18	716,85
			9X-2201-NGE	20,325	0	19,5	0	39,825	15	597,375
		5	8X-6729-NGE	20,325	0	19,5	0	39,825	13	517,725
			8P-2022-NGE	20,325	0	22,5	0	42,825	13	556,725
			9N-1941-NGE	20,325	0	22,5	0	42,825	12	513,9
			3P-2793-NGE	20,325	0	22,5	0	42,825	36	1541,7
			5J-9451-NGE	20,325	0	22,5	0	42,825	17	728,025
			7G-4817-NGE	20,325	0	22,5	0	42,825	20	856,5
			134-1935-NGE	20,325	0	22,5	0	42,825	22	942,15

C	6	8P-2019-NGE	20,325	0	22,5	0	42,825	17	728,025
		8F-8733-NGE	20,325	0	22,5	0	42,825	32	1370,4
		1T-0210-NGE	20,325	0	22,5	0	42,825	22	942,15
		5F-3144-NGE	20,325	0	25,5	0	45,825	25	1145,625
		5S-2106-NGE	20,325	0	25,5	0	45,825	22	1008,15
		6B-9664-NGE	20,325	0	25,5	0	45,825	26	1191,45
		5P-0597-NGE	20,325	0	25,5	0	45,825	18	824,85
		6J-2680-NGE	20,325	0	25,5	0	45,825	31	1420,575
		6M-5218-NGE	20,325	0	25,5	0	45,825	18	824,85
		274-9256-NGE	20,325	0	25,5	0	45,825	15	687,375
		5D-0765-NGE	20,325	0	25,5	0	45,825	30	1374,75
	1	04-PG1000-4B	20,325	0	10,5	0	30,825	31	955,575
		MK586070C23	20,325	0	10,5	0	30,825	16	493,2
		03-000013-5-CS	20,325	0	10,5	0	30,825	19	585,675
	2	01-275186	20,325	0	13,5	0	33,825	12	405,9
		04-PC-4	20,325	0	13,5	0	33,825	14	473,55
		04-PC-8	20,325	0	13,5	0	33,825	33	1116,225
		04-SB-6	20,325	0	13,5	0	33,825	24	811,8
		L-AC-0402	20,325	0	13,5	0	33,825	23	777,975
		01-270692	20,325	0	13,5	0	33,825	13	439,725
		01-270693	20,325	0	13,5	0	33,825	19	642,675
		13-532-30738-7/16	20,325	0	13,5	0	33,825	18	608,85
		03-000920-9V	20,325	0	16,5	0	36,825	35	1288,875
		01-090942	20,325	0	16,5	0	36,825	20	736,5
	3	G-L-90-1206	20,325	0	16,5	0	36,825	33	1215,225
		01-083001	20,325	0	16,5	0	36,825	28	1031,1
		04-PG5000-4B	20,325	0	16,5	0	36,825	27	994,275
		03-003000	20,325	0	16,5	0	36,825	33	1215,225
		03-CVF-04-JSG-L	20,325	0	16,5	0	36,825	16	589,2
		04-SCR-4	20,325	0	16,5	0	36,825	35	1288,875
		01-250158	20,325	0	16,5	0	36,825	32	1178,4
		7D-7519-NGE	20,325	0	19,5	0	39,825	22	876,15
	4	6V-8260-NGE	20,325	0	19,5	0	39,825	14	557,55
		5K-5959-NGE	20,325	0	19,5	0	39,825	15	597,375
		5H-2824-NGE	20,325	0	19,5	0	39,825	15	597,375
		109-0076-NGE	20,325	0	19,5	0	39,825	15	597,375
		4J-3815-NGE	20,325	0	19,5	0	39,825	22	876,15
		5F-7054-NGE	20,325	0	19,5	0	39,825	30	1194,75
		9D-3432-NGE	20,325	0	19,5	0	39,825	26	1035,45
		6V-6353-NGE	20,325	0	19,5	0	39,825	12	477,9
	5	9M-1503-NGE	20,325	0	22,5	0	42,825	35	1498,875
		8T-6703-NGE	20,325	0	22,5	0	42,825	20	856,5
		8J-8905-NGE	20,325	0	22,5	0	42,825	26	1113,45
		8T-4985-NGE	20,325	0	22,5	0	42,825	30	1284,75
		9H-6832-NGE	20,325	0	22,5	0	42,825	20	856,5
		6F-8146-NGE	20,325	0	22,5	0	42,825	34	1456,05
		114-9305-NGE	20,325	0	22,5	0	42,825	31	1327,575
		294-9583-NGE	20,325	0	22,5	0	42,825	12	513,9
	6	2K-8257-NGE	20,325	0	25,5	0	45,825	20	916,5
		123-2941-NGE	20,325	0	25,5	0	45,825	21	962,325
		3S-9643-NGE	20,325	0	25,5	0	45,825	31	1420,575
		109-0077-NGE	20,325	0	25,5	0	45,825	30	1374,75
		4J-8251-NGE	20,325	0	25,5	0	45,825	29	1328,925
		4F-5607-NGE	20,325	0	25,5	0	45,825	15	687,375
		9N-2038-NGE	20,325	0	25,5	0	45,825	13	595,725

211	A	D		5P-8500-NGE	20,325	0	25,5	0	45,825	15	687,375
				9M-2092-NGE	20,325	0	25,5	0	45,825	31	1420,575
			1	ST-KP-002	20,325	0	10,5	0	30,825	15	462,375
				ST-KN-001	20,325	0	10,5	0	30,825	13	400,725
				ST-PT-006	20,325	0	10,5	0	30,825	20	616,5
				ST-SW-003	20,325	0	10,5	0	30,825	12	369,9
					9S-8004-NGE	20,325	0	13,5	0	33,825	26
			2	5D-0764-NGE	20,325	0	13,5	0	33,825	36	1217,7
				123-7271-NGE	20,325	0	13,5	0	33,825	15	507,375
				2A-3398-NGE	20,325	0	13,5	0	33,825	27	913,275
				9Y-6089-NGE	20,325	0	13,5	0	33,825	21	710,325
				04121-22264-NGE	20,325	0	13,5	0	33,825	17	575,025
			3	8M-8157-NGE	20,325	0	16,5	0	36,825	19	699,675
				5P-5299-NGE	20,325	0	16,5	0	36,825	18	662,85
				8M-4986-NGE	20,325	0	16,5	0	36,825	13	478,725
				2K-0337-NGE	20,325	0	16,5	0	36,825	23	846,975
				1H-9696-NGE	20,325	0	16,5	0	36,825	19	699,675
				5P-8068-NGE	20,325	0	16,5	0	36,825	17	626,025
				288-5476-NGE	20,325	0	16,5	0	36,825	14	515,55
				123-7268-NGE	20,325	0	16,5	0	36,825	15	552,375
				214-7566-NGE	20,325	0	16,5	0	36,825	13	478,725
				9M-2151-NGE	20,325	0	16,5	0	36,825	17	626,025
				112-3540-NGE	20,325	0	16,5	0	36,825	28	1031,1
				5E-8771-NGE	20,325	0	16,5	0	36,825	32	1178,4
				238-5080-NGE	20,325	0	16,5	0	36,825	32	1178,4
			4	3P-2794-NGE	20,325	0	19,5	0	39,825	21	836,325
				3P-0751-NGE	20,325	0	19,5	0	39,825	14	557,55
				6V-3917-NGE	20,325	0	19,5	0	39,825	18	716,85
				224-7506-NGE	20,325	0	19,5	0	39,825	21	836,325
				6V-5048-NGE	20,325	0	19,5	0	39,825	14	557,55
				123-7272-NGE	20,325	0	19,5	0	39,825	14	557,55
				124-3520-NGE	20,325	0	19,5	0	39,825	14	557,55
				228-7090-NGE	20,325	0	22,5	0	42,825	20	856,5
			5	5P-8356-NGE	20,325	0	22,5	0	42,825	33	1413,225
				6V-6609-NGE	20,325	0	22,5	0	42,825	16	685,2
				129-3719-NGE	20,325	0	22,5	0	42,825	22	942,15
				9M-8546-NGE	20,325	0	22,5	0	42,825	27	1156,275
				2N-2765-NGE	20,325	0	22,5	0	42,825	29	1241,925
				6G-7339-NGE	20,325	0	22,5	0	42,825	19	813,675
				8M-4438-NGE	20,325	0	22,5	0	42,825	34	1456,05
				9S-2760-NGE	20,325	0	22,5	0	42,825	12	513,9
			6	17A-911-4680-NGE	20,325	0	25,5	0	45,825	18	824,85
				6261-81-6810-NGE	20,325	0	25,5	0	45,825	17	779,025
				6732-61-3871-NGE	20,325	0	25,5	0	45,825	18	824,85
				04120-21760-NGE	20,325	0	25,5	0	45,825	28	1283,1
			1	ST-CD-039	20,325	0	10,5	0	30,825	3	92,475
				ST-CD-040	20,325	0	10,5	0	30,825	0	0
			2	MA625 330 01 19	20,325	0	13,5	0	33,825	0	0
				MA942 317 20 12	20,325	0	13,5	0	33,825	7	236,775
				MN000000 005729	20,325	0	13,5	0	33,825	0	0
				MA000 326 44 81	20,325	0	13,5	0	33,825	0	0
				MA942 317 02 74	20,325	0	13,5	0	33,825	3	101,475
			3	MF203193E62	20,325	0	16,5	0	36,825	2	73,65
				MF202584	20,325	0	16,5	0	36,825	4	147,3
				MFMK583681J37	20,325	0	16,5	0	36,825	11	405,075

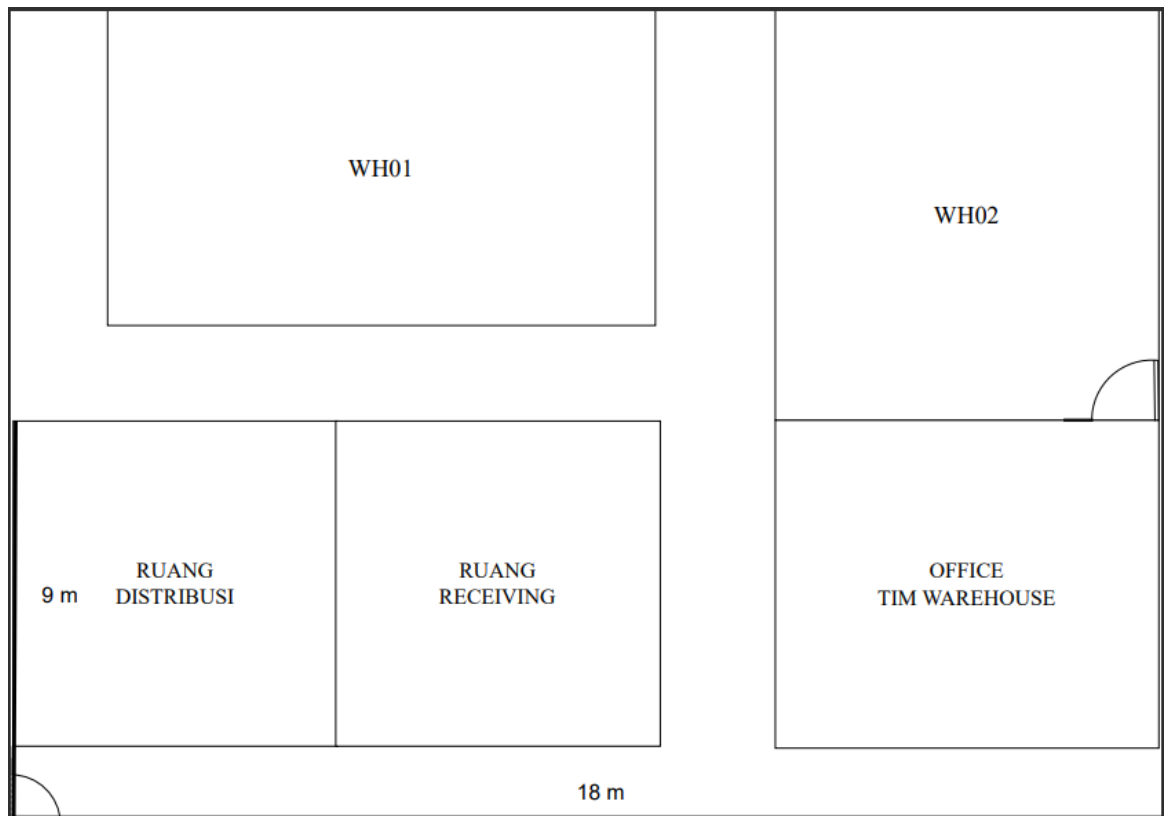
213	B	1	ST-FL-008	20,325	0	10,5	0	30,825	5	154,125
		2	06030-06317-NGE	20,325	0	13,5	0	33,825	0	0
		3	F129ME62	20,325	0	16,5	0	36,825	4	147,3
			SYGSM184E62	20,325	0	16,5	0	36,825	3	110,475
			FFY184DE62	20,325	0	16,5	0	36,825	3	110,475
	C	1	ST-FT-O-012	20,325	0	10,5	0	30,825	2	61,65
			ST-FC-012	20,325	0	10,5	0	30,825	1	30,825
			ST-FT-O-013	20,325	0	10,5	0	30,825	4	123,3
			ST-FS-017	20,325	0	10,5	0	30,825	2	61,65
			ST-SH-002	20,325	0	10,5	0	30,825	6	184,95
		2	ST-SH-001	20,325	0	10,5	0	30,825	6	184,95
			421-20-32621-NGE	20,325	0	13,5	0	33,825	2	67,65
			600-825-9330-NGE	20,325	0	13,5	0	33,825	3	101,475
			235-27-11190-NGE	20,325	0	13,5	0	33,825	1	33,825
			MF202596	20,325	0	16,5	0	36,825	11	405,075
	D	3	MF200BFV-KGO	20,325	0	16,5	0	36,825	11	405,075
			141-7116-NGE	20,325	0	13,5	0	33,825	0	0
			561-20-71100-NGE	20,325	0	13,5	0	33,825	5	169,125
		2	561-27-61940-NGE	20,325	0	13,5	0	33,825	1	33,825
			MF110091	20,325	0	16,5	0	36,825	2	73,65
			S009	20,325	0	22,5	0	42,825	10	428,25
215	A	1	MFMK413241AJ32	20,325	0	22,5	0	42,825	6	256,95
			MF200-0365PM	20,325	0	25,5	0	45,825	9	412,425
			MFH4973	20,325	0	25,5	0	45,825	12	549,9
		2	53T126N353	20,325	0	25,5	0	45,825	6	274,95
			MF101233	20,325	0	25,5	0	45,825	0	0
			FG10132S01	20,325	0	22,5	0	42,825	3	128,475
	B	1	FX6124S00	20,325	0	22,5	0	42,825	0	0
			F8132S01	20,325	0	22,5	0	42,825	1	42,825
			MF203195E62	20,325	0	22,5	0	42,825	2	85,65
			FFY008E62	20,325	0	22,5	0	42,825	2	85,65
			6A-33	20,325	0	25,5	0	45,825	0	0
	C	1	F6132S01	20,325	0	22,5	0	42,825	13	556,725
			S009D	20,325	0	22,5	0	42,825	8	342,6
		2	390-34N	20,325	0	25,5	0	45,825	6	274,95
			F045MC23	20,325	0	25,5	0	45,825	10	458,25
			MF04B001585	20,325	0	25,5	0	45,825	2	91,65
			MF202598	20,325	0	25,5	0	45,825	3	137,475
			MF04B001450	20,325	0	22,5	0	42,825	0	0
	D	2	M12A2-30H	20,325	0	25,5	0	45,825	2	91,65
			MFR24VCOAS-01	20,325	0	13,5	0	33,825	10	338,25
215	A	1	ST-EF-006	21,975	0	10,5	0	32,475	3	97,425
			ST-CC-019	21,975	0	10,5	0	32,475	1	32,475
			ST-EF-013	21,975	0	10,5	0	32,475	3	97,425
			ST-CP-110	21,975	0	10,5	0	32,475	0	0
			ST-CP-062	21,975	0	13,5	0	35,475	7	248,325
		2	ST-CP-005A	21,975	0	13,5	0	35,475	0	0
			ST-CC-013	21,975	0	13,5	0	35,475	1	35,475
			ST-MC-001	21,975	0	16,5	0	38,475	4	153,9
		3	ST-CP-027	21,975	0	16,5	0	38,475	2	76,95
			ST-RD-015	21,975	0	16,5	0	38,475	1	38,475
			ST-RD-041	21,975	0	16,5	0	38,475	2	76,95
			ST-CD-016	21,975	0	19,5	0	41,475	6	248,85
		4	ST-CD-041	21,975	0	19,5	0	41,475	6	248,85
			ST-CD-009	21,975	0	22,5	0	44,475	5	222,375

B	6	ST-CD-006	21,975	0	22,5	0	44,475	3	133,425
		04121-22271-NGE	21,975	0	25,5	0	47,475	11	522,225
		04120-21757-NGE	21,975	0	25,5	0	47,475	9	427,275
		21051052-NGE	21,975	0	25,5	0	47,475	0	0
	1	ST-PS-005	21,975	0	10,5	0	32,475	3	97,425
		ST-EX-001	21,975	0	10,5	0	32,475	3	97,425
		ST-PT-005	21,975	0	10,5	0	32,475	5	162,375
		ST-PS-007	21,975	0	10,5	0	32,475	0	0
	2	ST-WR-012	21,975	0	13,5	0	35,475	6	212,85
		ST-PS-003	21,975	0	13,5	0	35,475	4	141,9
		ST-RD-018	21,975	0	13,5	0	35,475	2	70,95
		ST-EF-011	21,975	0	13,5	0	35,475	0	0
	3	MF03B004319	21,975	0	16,5	0	38,475	1	38,475
		MFF117C21	21,975	0	16,5	0	38,475	8	307,8
		MFF075J32	21,975	0	16,5	0	38,475	7	269,325
		MF215500	21,975	0	16,5	0	38,475	8	307,8
		MFGTE200	21,975	0	16,5	0	38,475	2	76,95
		FH122S01	21,975	0	16,5	0	38,475	1	38,475
		MF11B014500	21,975	0	16,5	0	38,475	5	192,375
		MF540-140-700-24	21,975	0	16,5	0	38,475	2	76,95
	4	01-270735	21,975	0	19,5	0	41,475	1	41,475
		02-432-24162-1	21,975	0	19,5	0	41,475	4	165,9
		L-AC-1206	21,975	0	19,5	0	41,475	7	290,325
		QNV-M08	21,975	0	19,5	0	41,475	6	248,85
		M2STK02	21,975	0	19,5	0	41,475	6	248,85
		01-270673	21,975	0	19,5	0	41,475	3	124,425
		13-002500-2	21,975	0	19,5	0	41,475	5	207,375
		04120-21740-NGE	21,975	0	22,5	0	44,475	6	266,85
C	5	4W-3027-NGE	21,975	0	22,5	0	44,475	6	266,85
		2W-8837-NGE	21,975	0	25,5	0	47,475	3	142,425
	6	2W-8848-NGE	21,975	0	25,5	0	47,475	3	142,425
		04120-21763-NGE	21,975	0	25,5	0	47,475	2	94,95
	1	ST-PS-006	21,975	0	10,5	0	32,475	6	194,85
		ST-SP-003	21,975	0	10,5	0	32,475	1	32,475
		ST-FT-011	21,975	0	10,5	0	32,475	10	324,75
		ST-SP-048	21,975	0	10,5	0	32,475	5	162,375
		ST-DN-001C	21,975	0	10,5	0	32,475	2	64,95
	3	G-N-0707	21,975	0	16,5	0	38,475	5	192,375
		G-N-0909	21,975	0	16,5	0	38,475	5	192,375
		L-06	21,975	0	16,5	0	38,475	3	115,425
		L-AC-1204	21,975	0	16,5	0	38,475	4	153,9
		L-L-0204	21,975	0	16,5	0	38,475	2	76,95
		01-086234	21,975	0	16,5	0	38,475	2	76,95
		01-061041	21,975	0	16,5	0	38,475	11	423,225
		AC-AC-0404	21,975	0	16,5	0	38,475	0	0
		L-AC-AC-040404	21,975	0	16,5	0	38,475	9	346,275
		04-BV-8	21,975	0	19,5	0	41,475	1	41,475
	4	G-L-1208	21,975	0	19,5	0	41,475	6	248,85
		L-L-0808	21,975	0	19,5	0	41,475	1	41,475
		01-270670	21,975	0	19,5	0	41,475	4	165,9
		01-270674	21,975	0	19,5	0	41,475	7	290,325
		01-272180	21,975	0	19,5	0	41,475	10	414,75
	5	114-5477-NGE	21,975	0	22,5	0	44,475	0	0
		6V-8676-NGE	21,975	0	22,5	0	44,475	8	355,8
		247-3796-NGE	21,975	0	22,5	0	44,475	4	177,9

216	D		467-8535-NGE	21,975	0	22,5	0	44,475	0	0
			3F-5792-NGE	21,975	0	22,5	0	44,475	0	0
			442-1340-NGE	21,975	0	22,5	0	44,475	1	44,475
			107-3758-NGE	21,975	0	22,5	0	44,475	2	88,95
			125-9740-NGE	21,975	0	22,5	0	44,475	4	177,9
		6	04121-21740-NGE	21,975	0	25,5	0	47,475	5	237,375
			04120-21762-NGE	21,975	0	25,5	0	47,475	1	47,475
			6215-61-3690-NGE	21,975	0	25,5	0	47,475	10	474,75
		3	03-000921	21,975	0	16,5	0	38,475	4	153,9
			01-270635	21,975	0	16,5	0	38,475	0	0
		4	02-223-12270-7	21,975	0	19,5	0	41,475	4	165,9
			01-090471	21,975	0	19,5	0	41,475	0	0
		5	8T-4986-NGE	21,975	0	22,5	0	44,475	4	177,9
			9D-2319-NGE	21,975	0	22,5	0	44,475	7	311,325
			7D-5435-NGE	21,975	0	22,5	0	44,475	11	489,225
			4N-9680-NGE	21,975	0	22,5	0	44,475	1	44,475
			114-5333-NGE	21,975	0	22,5	0	44,475	1	44,475
	D		2G-9491-NGE	21,975	0	22,5	0	44,475	2	88,95
			5P-0840-NGE	21,975	0	22,5	0	44,475	0	0
			297-6849-NGE	21,975	0	22,5	0	44,475	2	88,95
			7X-7655-NGE	21,975	0	25,5	0	47,475	1	47,475
			127-4422-NGE	21,975	0	25,5	0	47,475	3	142,425
		6	7N-6494-NGE	21,975	0	25,5	0	47,475	4	189,9
			4J-0525-NGE	21,975	0	25,5	0	47,475	11	522,225
			7N-4927-NGE	21,975	0	25,5	0	47,475	2	94,95
			7G-1594-NGE	21,975	0	25,5	0	47,475	7	332,325
			5P-3345-NGE	21,975	0	25,5	0	47,475	0	0
			258-4521-NGE	21,975	0	25,5	0	47,475	1	47,475
			6V-0973-NGE	21,975	0	25,5	0	47,475	8	379,8
			ST-EM-006	23,65	0	10,5	0	34,15	0	0
			ST-QP-001	23,65	0	10,5	0	34,15	5	170,75
			ST-CP-025ND	23,65	0	10,5	0	34,15	0	0
			ST-CP-026A	23,65	0	10,5	0	34,15	0	0
			ST-EV-004	23,65	0	10,5	0	34,15	1	34,15
	A	1	ST-EM-036	23,65	0	13,5	0	37,15	5	185,75
			ST-CC-010	23,65	0	13,5	0	37,15	8	297,2
			ST-EM-065	23,65	0	13,5	0	37,15	6	222,9
			ST-CD-033	23,65	0	16,5	0	40,15	5	200,75
			ST-CD-018	23,65	0	16,5	0	40,15	7	281,05
		4	ST-EM-042	23,65	0	19,5	0	43,15	0	0
			ST-CP-023	23,65	0	19,5	0	43,15	0	0
		5	ST-CC-012	23,65	0	22,5	0	46,15	7	323,05
			ST-EM-064	23,65	0	22,5	0	46,15	0	0
			ST-SP-002	23,65	0	22,5	0	46,15	2	92,3
			ST-EM-006A	23,65	0	22,5	0	46,15	1	46,15
			ST-RD-032	23,65	0	22,5	0	46,15	7	323,05
		6	ST-CP-026	23,65	0	25,5	0	49,15	10	491,5
			ST-EM-046	23,65	0	25,5	0	49,15	9	442,35
			ST-CP-067	23,65	0	25,5	0	49,15	5	245,75
			ST-EM-055	23,65	0	25,5	0	49,15	8	393,2
	B	1	ST-WR-010	23,65	0	10,5	0	34,15	0	0
			ST-KP-001	23,65	0	10,5	0	34,15	9	307,35
			ST-WR-007	23,65	0	10,5	0	34,15	0	0
			ST-IP-006	23,65	0	10,5	0	34,15	0	0
			ST-IP-002	23,65	0	10,5	0	34,15	4	136,6

C	2	ST-EK-018	23,65	0	10,5	0	34,15	0	0
		ST-EK-015	23,65	0	10,5	0	34,15	5	170,75
		ST-IP-004	23,65	0	10,5	0	34,15	0	0
		ST-CP-065	23,65	0	13,5	0	37,15	3	111,45
		ST-EM-046A	23,65	0	13,5	0	37,15	5	185,75
		ST-CP-049	23,65	0	13,5	0	37,15	2	74,3
		ST-EM-027	23,65	0	13,5	0	37,15	1	37,15
		ST-CP-046	23,65	0	16,5	0	40,15	4	160,6
		ST-EM-002	23,65	0	16,5	0	40,15	5	200,75
		ST-CP-070	23,65	0	16,5	0	40,15	4	160,6
	3	ST-EM-025	23,65	0	16,5	0	40,15	3	120,45
		ST-CP-028	23,65	0	19,5	0	43,15	0	0
		ST-EM-019	23,65	0	19,5	0	43,15	0	0
	4	ST-CP-058	23,65	0	19,5	0	43,15	0	0
		VBA74	23,65	0	22,5	0	46,15	4	184,6
	5	VBA42	23,65	0	22,5	0	46,15	6	276,9
		VBB41	23,65	0	22,5	0	46,15	1	46,15
		VBA46	23,65	0	22,5	0	46,15	9	415,35
		VBB51	23,65	0	22,5	0	46,15	0	0
		VBA40	23,65	0	22,5	0	46,15	9	415,35
		ST-RD-052A	23,65	0	22,5	0	46,15	6	276,9
		ST-SP-004	23,65	0	25,5	0	49,15	11	540,65
	6	ST-SP-005T	23,65	0	25,5	0	49,15	5	245,75
		ST-EF-009	23,65	0	10,5	0	34,15	10	341,5
	1	VBB48	23,65	0	10,5	0	34,15	3	102,45
		VBB57	23,65	0	10,5	0	34,15	6	204,9
		VBB46	23,65	0	10,5	0	34,15	2	68,3
		VBB54	23,65	0	10,5	0	34,15	3	102,45
		04120-21747-NGE	23,65	0	10,5	0	34,15	9	307,35
	3	8H-5306-NGE	23,65	0	16,5	0	40,15	6	240,9
		8J-8879-NGE	23,65	0	16,5	0	40,15	8	321,2
		1W-3601-NGE	23,65	0	16,5	0	40,15	0	0
		9S-8005-NGE	23,65	0	16,5	0	40,15	10	401,5
		5H-1504-NGE	23,65	0	16,5	0	40,15	5	200,75
		5M-6708-NGE	23,65	0	16,5	0	40,15	8	321,2
		298-6387-NGE	23,65	0	16,5	0	40,15	1	40,15
	4	20569151-NGE	23,65	0	19,5	0	43,15	1	43,15
		20581089-NGE	23,65	0	19,5	0	43,15	2	86,3
		1652986-NGE	23,65	0	19,5	0	43,15	2	86,3
		7E-2631-NGE	23,65	0	19,5	0	43,15	3	129,45
		235-2484-NGE	23,65	0	22,5	0	46,15	0	0
	5	245-4907-NGE	23,65	0	22,5	0	46,15	0	0
		235-3546-NGE	23,65	0	22,5	0	46,15	0	0
		2D-8009-NGE	23,65	0	22,5	0	46,15	3	138,45
		8N-3248-NGE	23,65	0	22,5	0	46,15	4	184,6
		175-7897-NGE	23,65	0	22,5	0	46,15	3	138,45
		259-4598-NGE	23,65	0	22,5	0	46,15	6	276,9
		5F-0304-NGE	23,65	0	22,5	0	46,15	11	507,65
		8M-4435-NGE	23,65	0	22,5	0	46,15	10	461,5
		133-4297-NGE	23,65	0	25,5	0	49,15	5	245,75
		5H-6734-NGE	23,65	0	25,5	0	49,15	2	98,3
	6	6D-9157-NGE	23,65	0	25,5	0	49,15	0	0
		5P-8210-NGE	23,65	0	25,5	0	49,15	5	245,75
		111-3820-NGE	23,65	0	25,5	0	49,15	4	196,6
		272-0758-NGE	23,65	0	25,5	0	49,15	3	147,45

D		4N-0848-NGE	23,65	0	25,5	0	49,15	5	245,75
		272-0760-NGE	23,65	0	25,5	0	49,15	0	0
		109-2332-NGE	23,65	0	25,5	0	49,15	5	245,75
	2	MA000 350 27 05	23,65	0	13,5	0	37,15	0	0
		MA000 090 20 51	23,65	0	13,5	0	37,15	0	0
		MA000 326 56 81	23,65	0	13,5	0	37,15	0	0
	3	04120-21741-NGE	23,65	0	16,5	0	40,15	0	0
		118-3534-NGE	23,65	0	16,5	0	40,15	7	281,05
		4W-9839-NGE	23,65	0	16,5	0	40,15	5	200,75
		2N-0876-NGE	23,65	0	16,5	0	40,15	3	120,45
		9X-7381-NGE	23,65	0	16,5	0	40,15	1	40,15
	4	269-7885-NGE	23,65	0	19,5	0	43,15	6	258,9
		6V-6809-NGE	23,65	0	19,5	0	43,15	0	0
		112-1574-NGE	23,65	0	19,5	0	43,15	4	172,6
		129-9452-NGE	23,65	0	19,5	0	43,15	6	258,9
		136-7227-NGE	23,65	0	19,5	0	43,15	5	215,75
		4F-2612-NGE	23,65	0	19,5	0	43,15	6	258,9
		6V-5066-NGE	23,65	0	19,5	0	43,15	7	302,05
		9F-2247-NGE	23,65	0	19,5	0	43,15	1	43,15
		6V-5101-NGE	23,65	0	19,5	0	43,15	2	86,3
		5D-4311-NGE	23,65	0	22,5	0	46,15	7	323,05
	5	2S-2182-NGE	23,65	0	22,5	0	46,15	0	0
		117-5268-NGE	23,65	0	22,5	0	46,15	5	230,75
		9S-3581-NGE	23,65	0	22,5	0	46,15	1	46,15
		9S-3582-NGE	23,65	0	22,5	0	46,15	1	46,15
		2H-3931-NGE	23,65	0	22,5	0	46,15	1	46,15
		4D-6578-NGE	23,65	0	22,5	0	46,15	8	369,2
		6K-6307-NGE	23,65	0	22,5	0	46,15	10	461,5
		3E-5239-NGE	23,65	0	22,5	0	46,15	0	0
		5S-4629-NGE	23,65	0	22,5	0	46,15	0	0
		7D-3462-NGE	23,65	0	22,5	0	46,15	4	184,6
	6	245-4908-NGE	23,65	0	22,5	0	46,15	0	0
		2D-6533-NGE	23,65	0	22,5	0	46,15	6	276,9
		4W-0530-NGE	23,65	0	25,5	0	49,15	0	0
		6F-4855-NGE	23,65	0	25,5	0	49,15	2	98,3
		6V-3319-NGE	23,65	0	25,5	0	49,15	8	393,2
		8M-4446-NGE	23,65	0	25,5	0	49,15	4	196,6
		8T-1919-NGE	23,65	0	25,5	0	49,15	0	0
		2H-6338-NGE	23,65	0	25,5	0	49,15	0	0
		6N-0634-NGE	23,65	0	25,5	0	49,15	1	49,15
		7X-4810-NGE	23,65	0	25,5	0	49,15	2	98,3
		234-8937-NGE	23,65	0	25,5	0	49,15	4	196,6
		118-7226-NGE	23,65	0	25,5	0	49,15	7	344,05
		6L-1883-NGE	23,65	0	25,5	0	49,15	10	491,5
		4F-3765-NGE	23,65	0	25,5	0	49,15	5	245,75
Total Material		533	Total Jarak Tempuh					774342,725	

Lampiran 9. Tampilan Warehouse PT. XYZ Secara Keseluruhan

Gambar 25 Tampilan warehouse PT. XYZ secara keseluruhan

