

DAFTAR ISI

| | |
|---|-----|
| Halaman Judul..... | i |
| Halaman Pernyataan Keaslian..... | ii |
| Halaman Pengesahan..... | iii |
| Kata Pengantar..... | iv |
| Halaman Persetujuan Publikasi Ilmiah..... | vi |
| Abstrak..... | vii |
| Daftar Isi..... | ix |
| Daftar Gambar..... | xi |
| Daftar Tabel..... | xii |

BAB I : PENDAHULUAN

| | |
|--------------------------------|---|
| 1.1 Latar belakang..... | 1 |
| 1.2 Rumusan Masalah..... | 2 |
| 1.3 Tujuan Penelitian..... | 3 |
| 1.4 Ruang Lingkup..... | 3 |
| 1.5 Manfaat Penelitian..... | 3 |
| 1.6 Sistematika Penulisan..... | 4 |

BAB II : TINJAUAN PUSTAKA

| | |
|--|----|
| 2.1 Pengertian Lean manufacturing..... | 5 |
| 2.2 Konsep Dasar Lean..... | 5 |
| 2.3 Pengertian Waste..... | 6 |
| 2.4 Konsep Seven Waste..... | 6 |
| 2.5 Value Stream Mapping..... | 8 |
| 2.6 Fungsi Value Stream Mapping..... | 9 |
| 2.7 Simbol Aktivitas..... | 9 |
| 2.8 Peta Aliran Material dan informasi keseluruhan pabrik..... | 11 |
| 2.9 Process Activity Mapping..... | 14 |
| 2.10 Kaizen..... | 14 |
| 2.11 Diagram Pareto..... | 17 |
| 2.12 Penelitian Terdahulu..... | 17 |

BAB III : METODOLOGI PENELITIAN

| | |
|--|----|
| 3.1 Objek Penelitian..... | 20 |
| 3.2 Jenis Data..... | 20 |
| 3.3 Metode Pengumpulan Data..... | 21 |
| 3.4 Pengolahan Data..... | 21 |
| 3.4.1 Penyusunan Current State Value Stream Mapping..... | 21 |
| 3.4.2 Pemetaan dengan menggunakan PAM..... | 22 |
| 3.4.3 Pengelompokan..... | 22 |
| 3.4.4 Identifikasi Waste..... | 22 |
| 3.5 Kerangka Penelitian..... | 22 |

| | |
|--|----|
| BAB IV : PENGUMPULAN DAN PENGOLAHAN DATA | |
| 4.1 Pengumpulan Data..... | 25 |
| 4.1.1 Profil Perusahaan..... | 25 |
| 4.1.2 Layout PT Multindo Velvet Industries..... | 27 |
| 4.1.3 Lokasi Pabrik..... | 27 |
| 4.1.4 Tenaga Kerja..... | 28 |
| 4.2 Pengumpulan Data..... | 29 |
| 4.2.1 Proses Produksi..... | 29 |
| 4.3 Stasiun Kerja..... | 30 |
| 4.4 Aktivitas pada Proses Produksi..... | 31 |
| 4.5 Operator Stasiun Kerja..... | 31 |
| 4.6 Waktu Proses..... | 32 |
| 4.7 Perhitungan Waktu..... | 33 |
| 4.8 Pengolahan Data..... | 33 |
| 4.9 Perhitungan <i>Up time</i> | 33 |
| 4.10 <i>Current State Value Stream Mapping</i> | 34 |
| 4.11 <i>Process Activity Mapping</i> | 35 |
| 4.12 Identifikasi Aktivitas menggunakan <i>Diagram Pareto</i> | 38 |
| 4.13 Identifikasi Pemborosan <i>7 Waste</i> | 38 |
| 4.14 Identifikasi <i>Waste</i> menggunakan <i>Diagram Pareto</i> | 40 |
| 4.15 Identifikasi <i>Waste</i> | 41 |
| 4.16 Usulan Perbaikan..... | 41 |
| 4.17 <i>Future Value stream State Mapping</i> | 47 |
| BAB V : PEMBAHASAN | |
| 5.1 Analisis <i>Current State Value Stream Mapping</i> | 48 |
| 5.2 Analisis <i>Proses Activity Mapping</i> | 48 |
| 5.3 Analisis <i>7 Waste</i> berdasarkan VA/NVA/NNVA..... | 49 |
| 5.4 Analisis Perbaikan PAM..... | 49 |
| 5.5 Analisis <i>Future Stream Mapping</i> | 49 |
| BAB VI : KESIMPULAN DAN SARAN | |
| 6.1 Kesimpulan..... | 50 |
| 6.2 Saran..... | 50 |

DAFTAR GAMBAR

| | |
|--|----|
| Gambar 1.1 Diagram Pareto 7 Waste..... | 2 |
| Gambar 2.1 Customer/Supplier..... | 9 |
| Gambar 2.2 Dedicated Process..... | 10 |
| Gambar 2.3 Lambang Shared Process..... | 10 |
| Gambar 2.4 Lambang Data Box..... | 10 |
| Gambar 2.5 Lambang Work Cell..... | 10 |
| Gambar 2.6 Lambang Inventory..... | 11 |
| Gambar 2.7 Lambang Shipments..... | 11 |
| Gambar 2.8 Lambang Push Arrows..... | 12 |
| Gambar 2.9 Lambang External Shipments..... | 12 |
| Gambar 2.10 Lambang Production Control..... | 12 |
| Gambar 2.11 Lambang Manual Info..... | 12 |
| Gambar 2.12 Lambang Electronic Info..... | 13 |
| Gambar 2.13 Lambang Other..... | 13 |
| Gambar 2.14 Lambang Timeline..... | 13 |
| Gambar 3.1 Kerangka Penelitian..... | 23 |
| Gambar 4.1 Sajadah..... | 26 |
| Gambar 4.2 Kain Sofa..... | 26 |
| Gambar 4.3 Layout Produksi..... | 27 |
| Gambar 4.4 <i>Flowchart</i> | 30 |
| Gambar 4.5 <i>Current State Stream Mapping</i> | 34 |
| Gambar 4.6 Diagram Pareto..... | 38 |
| Gambar 4.7 Diagram Pareto 7 Waste..... | 40 |
| Gambar 4.8 Water Jet Loom..... | 42 |
| Gambar 4.9 <i>Air Jet Loom</i> | 42 |
| Gambar 4.10 <i>Future Stream Mapping</i> | 4 |

DAFTAR TABEL

| | |
|---|----|
| Tabel 2.1 Penelitian Terdahulu..... | 18 |
| Tabel 4.1 Stasiun Kerja dan Fungsinya..... | 30 |
| Tabel 4.2 Aktivitas Produksi..... | 31 |
| Tabel 4.3 Operator Stasiun Kerja..... | 31 |
| Tabel 4.4 Waktu Proses..... | 32 |
| Tabel 4.5 Perhitungan waktu..... | 33 |
| Tabel 4.6 Perhitungan waktu Up time..... | 33 |
| Tabel 4.7 Process Activity Mapping..... | 35 |
| Tabel 4.8 Rekapitulasi Process Activity Mapping..... | 36 |
| Tabel 4.9 Rekapitulasi Pengelompokan Waste..... | 39 |
| Tabel 4.10 Perbandingan Process Activity Mapping..... | 43 |
| Tabel 4.11 Rekapitulas Perbandingan PAM..... | 44 |
| Tabel 4.12 Perbandingan Perbaikan Waktu..... | 44 |
| Tabel 4.13 Perbaikan <i>Up Time</i> | 45 |
| Tabel 4.14 Perbandingan Perbaikan Cacat..... | 45 |