

DAFTAR GAMBAR

Gambar I.2 Grafik <i>Trend Export</i> Sepatu (Kementrian Perindustrian, 2013)	2
Gambar I.3 kapasitas produksi	3
Gambar I.4 <i>Fishbone</i> Diagram Pemecahan Masalah	4
Gambar II.1 <i>Close-loop Control System</i> (Groover, 2008).....	11
Gambar II.2 <i>Open-loop System</i> (Groover, 2001).....	11
Gambar II.3 Ilustrasi <i>Clustering</i>	12
Gambar II.4 Ilustrasi Algoritma K-means	13
Gambar II.6 Hierarki Sensor (Groover, 2005).....	14
Gambar II.8 <i>Light Dependent Resistor (LDR)</i>	15
Gambar II.9 Jenis Kontak <i>Push Button</i> (Petruzella, 1996).....	16
Gambar II.10 <i>Limit Switch</i>	16
Gambar II.11 Proximity Sensor (festo, 2015)	17
Gambar II. 12 Taksonomi <i>Actuator</i> (Groover, 2001).....	17
Gambar II.14 Siemens Compact S7-1200 (Siemens, 2015).....	18
Gambar II.15 PLC Modular Siemens (Siemens, 2015).....	19
Gambar II.16 <i>Leader diagram</i>	20
Gambar II.17 hubungan HMI dengan sistem SCADA (Wicaksino, 2012)	21
Gambar II.18 Tampilan <i>Wonderware Intouch</i> (ZI-ARGUS, 2014)	23
Gambar II.19 <i>Portal View TIA PORTAL V.12</i>	24
Gambar II.20 Lingkup Kerja Matlab	24
Gambar IV.1 <i>Flowchat</i> Proses <i>Eksisting</i> Pensortiran Kulit.....	34
Gambar IV.3 Sekenario Proses.....	38
Gambar IV.4 Rancangan <i>Miniplant</i>	41
Gambar IV.5 <i>Miniplant</i>	42
Gambar IV.6 Sekenario Proses HMI.....	44

Gambar IV.7 Proses Pengidentifikasi Jenis Kulit.....	46
Gambar V.1 Analisis Histogram <i>Structure 1</i>	57
Gambar V.2 Analisis Histogram <i>Structure 2</i>	58
Gambar V.3 Analisis Histogram <i>Structure 3</i>	58
Gambar V.4 Analisis Histogram <i>Structure 4</i>	59
Gambar V.45 Analisis Histogram <i>Structure 5</i>	59
Gambar V.6 Menjalankan Sistem.....	61
Gambar V.8 Proses Labeling.....	62
Gambar V.9 <i>Conveyor Backward</i>	63
Gambar V.10 <i>Interface login</i>	65
Gambar V.11 status <i>supervisor</i>	67
Gambar V.12 Status user operator.....	67
Gambar V.13 Monitoring	68
Gambar V.14 Control	70