

## DAFTAR GAMBAR

	Halaman
Gambar 2.1 Proses <i>Asphalt Mixing Plant</i> .....	7
Gambar 2.2 Persiapan Bahan Baku.....	8
Gambar 2.3 Bahan Baku Aspal.....	9
Gambar 2.4 Filler .....	9
Gambar 2.5 Bin Dingin .....	10
Gambar 2.6 Unit Dryer .....	12
Gambar 2.7 Pengumpul Debu .....	13
Gambar 2.8 Bin Panas.....	15
Gambar 2.9 Timbangan.....	16
Gambar 2.10 Mixer .....	17
Gambar 2.11 Komponen Perangkat Keras PLC .....	17
Gambar 2.12 <i>Programmable Logic Control CPU Unit CJ2M</i> .....	20
Gambar 2.13 <i>Human Machine Interface GXU3512</i> .....	23
Gambar 2.14 Tampilan CX-Programmer.....	24
Gambar 2.15 Tampilan Vijeo Designer .....	25
Gambar 2.16 <i>Power Supply Unit 24 VDC</i> .....	26
Gambar 2.17 Koneksi Kabel Komunikasi PLC dengan HMI.....	27
Gambar 2.18 Host Link 1 : 1 Kabel RS232 .....	28
Gambar 2.19 Host Link 1 : N Kabel RS485 .....	28
Gambar 2.20 Fitur Protokol FINS.....	29
Gambar 2.21 PLC Network Level .....	30

Gambar 2.22 Kondisi <i>Push Button</i> .....	31
Gambar 2.23 <i>Push Button</i> .....	31
Gambar 2.24 <i>Emergency Switch</i> .....	32
Gambar 2.25 <i>Pilot Lamp 24VDC</i> .....	32
Gambar 2.26 <i>Selector Switch</i> .....	33
Gambar 2.27 Konektor <i>Banana</i> .....	34
Gambar 3.1 Konsep ADDIE menurut Robert Maribe Branch.....	36
Gambar 3.2 <i>Flowchart</i> Penelitian .....	40
Gambar 3.3 Blok Diagram Sistem .....	43
Gambar 3.3 Flow Chart Sistem.....	44
Gambar 3.4 Catu Daya.....	45
Gambar 3.5 Pengawatan PLC CJ2M .....	46
Gambar 3.6 Pengawatan HMI.....	47
Gambar 4.1 Hasil Desain Tampak Depan.....	57
Gambar 4.2 Hasil Desain Tampak Isometrik.....	58
Gambar 4.3 Hasil Pembuatan <i>Trainer</i> .....	59
Gambar 4.4 Panel Home .....	60
Gambar 4.5 Panel Job Mix Formula .....	61
Gambar 4.6 Panel Start Auto .....	62
Gambar 4.7 Panel Manual.....	63
Gambar 4.8 Catu Daya.....	65
Gambar 4.9 Pengujian Input Catu Daya .....	66
Gambar 4.10 Pengujian Output Catu Daya.....	66

Gambar 4.11 Pengujian Input/Output PLC .....	68
Gambar 4.12 Pengujian Panel HMI .....	74
Gambar 4.13 Pengujian Kelayakan dan Reliabilitas .....	75
Gambar 4.14 Pengujian Kelayakan dan Reliabilitas.....	75