

## LIST OF TABLES

|             |   |    |
|-------------|---|----|
| Table II.1  | Industrial Structure of TPT in Indonesia.....   | 7  |
| Table II.2  | Group of Defect and Type of Defect.....   | 9  |
| Table II.3  | Research Positioning.....   | 30 |
| Table IV.1  | Process Time of Fabric Detection .....  | 37 |
| Table IV.2  | Result of Extraction Feature First Image .....  | 48 |
| Table IV.3  | Result of Extraction Feature First Image .....  | 55 |
| Table IV.4  | Results of the extraction and classification of fuzzy sets of the first<br>image data ..... | 58 |
| Table IV.5  | Result of Extraxtion First Image.....   | 59 |
| Table IV.6  | Result of Extraction Feature 31st Image.....  | 64 |
| Table IV.7  | Result of Extraction Feature 31st Image.....  | 70 |
| Table IV.8  | Results of the extraction and classification of fuzzy sets of the first<br>image data ..... | 73 |
| Table IV.9  | Result of Extraxtion First Image.....   | 74 |
| Table IV.10 | Tagname input and output PLC .....  | 77 |
| Table IV.11 | Scenario Testing System.....  | 79 |
| Table IV.12 | Scenario Testing PLC input .....  | 80 |
| Table IV.13 | Scenario Testing PLC Output .....   | 80 |
| Table V.1   | Testing Result PLC Program Input.....   | 84 |
| Table V.2   | Testing Result PLC Program Output .....   | 85 |
| Table V.3   | Testing Result Login Window .....   | 86 |
| Table V.4   | Testing Result Home Window .....  | 87 |
| Table V.5   | Testing Result Monitoring Window.....   | 88 |
| Table V.6   | Testing Result Image Processing using Fuzzy Model .....                                     | 90 |
| Table V.7   | Processing Time of Image Processing using Fuzzy Model .....                                 | 92 |
| Table V.9   | Result of System in Real Time Process .....   | 93 |
| Table V.10  | The comparison existing and automated fabric defect detection<br>process time.....          | 94 |