

ISO/TR 15155-1:2018-08 (E)

Agricultural irrigation equipment - Test facilities for agricultural irrigation equipment - Part 1: General

| Contents | | Page |
|--|---|-------------|
| Foreword | | iv |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | System components | 2 |
| 4.1 | Pumps and pump environment | 2 |
| 4.1.1 | General | 2 |
| 4.1.2 | Selection | 2 |
| 4.1.3 | Installation | 2 |
| 4.1.4 | Use | 6 |
| 4.2 | Pressure measurement | 6 |
| 4.2.1 | General | 6 |
| 4.2.2 | Selection | 6 |
| 4.2.3 | Installation and location of sensors | 7 |
| 4.2.4 | Calibration and certification | 8 |
| 4.3 | Flow and volume measurement | 8 |
| 4.3.1 | General | 8 |
| 4.3.2 | Flow meter alternatives and selection | 8 |
| 4.3.3 | Volumetric (time and mass/volume) | 9 |
| 4.3.4 | Installation and maintenance | 9 |
| 4.3.5 | Calibration and certification | 9 |
| 4.4 | Test bench design | 9 |
| 4.4.1 | Pressure control | 9 |
| 4.4.2 | Flow control | 10 |
| 4.5 | Water processing | 10 |
| 4.5.1 | Screens and filters | 10 |
| 4.5.2 | Disinfection | 10 |
| 4.5.3 | Temperature control | 10 |
| 4.6 | Turbulence considerations | 11 |
| 5 | Test facility procedures and policies | 11 |
| 5.1 | General | 11 |
| 5.2 | Test results confidentiality | 11 |
| 5.3 | Control of records | 11 |
| 5.4 | Handling of test or calibration items | 11 |
| 5.5 | Public access to facilities and test results | 11 |
| 5.6 | Vendor testing of competitors' products | 11 |
| 5.7 | Commercial use of test data | 11 |
| 5.8 | Expert witness policy | 11 |
| Annex A (informative) Sprinkler hydraulic properties in clear water | | 12 |
| Annex B (informative) Drip emitters and emitting pipe hydraulic properties in clear water | | 14 |
| Annex C (informative) Valves hydraulic properties in clear water | | 16 |
| Annex D (informative) Sprayers hydraulic properties in clear water | | 18 |

| | |
|---|-----------|
| Annex E (informative) Meters hydraulic properties in clear water | 20 |
| Bibliography | 22 |