

## Introduction

WDS digital universal testing machines are suitable for tensile, compression and all other special load tests for non-metal material, such as plastic, rubber, thread, wood, alloy, PVC, spring, electrical wire and cable, composite, profiled bar, waterproof roll, etc. With optional accessories, it is also easy to test bending, shearing, peeling, friction, tearing, puncture and hardness. These units are essential testing instruments for quality control testing sections, university and colleges, research institutions and laboratories. The machines are calibrated to ASTM E4 and ISO 75001 international standard, however, by adding different grips they will conform to ISO 527, ISO 8295, ISO 37, ISO 178, ISO 6892, ASTM D412, ASTM C1161, ASTM D882, ASTM D885, ASTM D918, ASTM D1876, ASTM D4632 as well as force and extension JIS, DIN, BSEN testing standards.



WDS-1,2,5

## Features

- ✘ High accuracy Load cell, Encoder and optional extensometer to test the force, displacement and extension. Reading resolution can be 1/300000 of full range.
- ✘ Speed Servo control from 0.01mm/min to 500mm/min by servo motor.
- ✘ A wide range of test grips and other accessories are available
- ✘ Accessories are easy to install
- ✘ Test results and peak force are displayed in real time, force vs displacement and force vs extension (requires curve display option).
- ✘ Data save and test result printing by Mini-printer optionally.
- ✘ Two kinds of user administrative system - for operator and system administrator.
- ✘ Option Ethernet socket and computer interface to connect to PC or Laptop by adding software.
- ✘ Computer servo control of testing machine allows load, displacement and extension control.



WDS-1,2,5,10,20

## Specifications

Model	WDS-0.5	WDS-1	WDS-2	WDS-5	WDS-10	WDS-20
Range of testing Force (kN)	0.01~0.5	0.02~1	0.04~2	0.10~5	0.20~10	0.40~20
Accuracy of Force	±1% of indicated value (±0.5% as special order)					
Resolution of Force	0.001 as test value					
Resolution of crosshead displacement Measurement	0.01 mm					
Displacement Accuracy	±1%					
Speed range of Crosshead	0.01 mm/min~500 mm/min, Servo Control					
Speed Accuracy	±1%					
Crosshead Move Range	0-1050mm					
Effective testing space	900mm					
Deformation Measurement	±1% as optional part					
Connect to PC	By interface and Ethernet cable as optional parts.					
Drive type	Servo Motor with Ball Screw Driver					
Power supply	220V, Single Phase 50/60Hz					
Working environment	10 C ~ 40 C, relative humidity ≤ 80%					
machine type	Single and Double columns				Double Columns	
Overall dimension of host machine (mm)	Single 600×420×1500; Double:740×500×1680				740×500×1680	
Weight (kg)	Single 300, Double 580					

### Standard Accessories

Encoder installed, Load cell installed; Servo motor built in; Control card and display unit; Flat Tension Grip; Compression Plates; Installation tool and Cables.

### Optional Accessories

Strain gauge type Extensometer, Large deformation Extensometer; Computer interface and software; Computer, Windows system, Printer; other test fixtures upon request.