AdLab
Total Testing Solutions

Dishwasher Resistance Testing Machine
Model: ADL-DRT02

Meeting the Standard

EN12875-1:2005 (E), BS 5416 Standard recommendation for mechanical resistance to dishwashing for appliances of automatic cycle dishwashers.

Technical Parameters

Independent design dishwasher model: Purchase domestic Midea dishwasher (brand customer selection)
Design the following specifications for independent design

1. Size :700 x 700 x 850 mm
2. Purchase Midea dishwasher P60 capacity :13 sets of tableware
3. Hot water: up to 70°C test machine water needs to have a soft water module, and there must be real-time monitoring data;
3. Water spray pressure :29000pa.
4. Cycle temperature controller :PLC + touch screen
5. Cleaning agent dosing mechanism: automatic dosing, according to weight measurement (dosing mechanism using vibration plate + weighing system structure, installed on the top of the dishwasher precision weighing sensor). Add water quality filter and water quality real-time monitoring device
7. The feed amount 0-30G can be set on the screen
8. Dosing using vibration plate + weighing system structure

AdLab Instruments Co., Ltd
RM 602, 6/F, Kaiyue Comm Building, No.2C, Argyle Street, Mongkok Kowloon, Hong Kong
20A Cuil Na Carriage, Ballymakeera, Co-Cork, Ireland (EU)
info@adlabinstruments.com www.adlabinstruments.com

Dishwasher Resistance Testing Machine
Model: ADL-DRT02

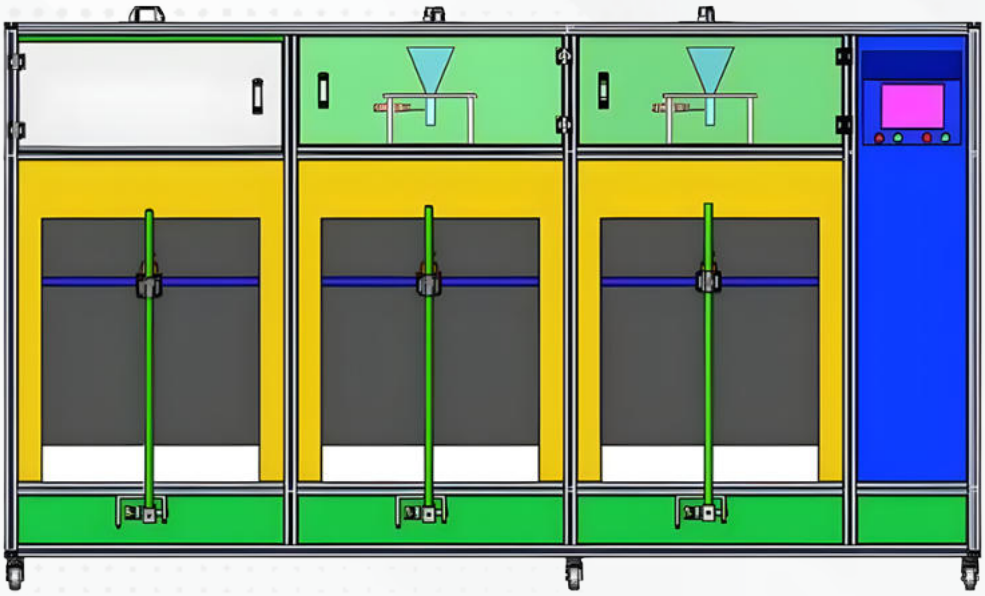
9. Test cycle:
   There are two modes: standard test and custom test. Mainly according to the number, time, temperature, test dose, etc., to detect the dishwasher washing test of tableware and kitchen supplies, check whether the product has discoloration, opening, cracking, deterioration and other quality problems.
   Voltage: 220V,50HZ Power: 3KW
   Inlet pressure: 0.4-0.8Mpa Inlet pressure: 0.05-1Mpa
   Control interface: touch screen + man-machine interface setting times: 1-99999 times
   Opening time: 0-99999S adjustable.
10. According to EN12875-1, BS 5416) Article 8.3 Test cycle, the test cycle shall include the following stages:
    a) Drain the dishwasher with a water pump.
    b) 1) Fill the dishwasher with water (see 5.1):
       2) Circulating water (5±0,5)min; Drain the dishwasher with a water pump.
    c) Wash test specimens in the dishwasher:
       1) Fill the dishwasher with (6,0 + 0,5) water and (24±3)g cleaning agent per liter;
       2) Heating to (60±2)°C, while circulating water and cleaning agent (20±1) minutes;
       3) Cycle the water and cleaning agent for (3±1) minutes without heating
    d) Wash the sample in the dishwasher :
       1) Add water to the dishwasher;
       2) Circulating water (3±0,5)min;
       3) Drain the dishwasher with a water pump.
    e) Finally wash the sample in the dishwasher :
       1) Fill the dishwasher with water,
       2) The circulating water is heated to (65±2)°C;
       3) Measure the temperature between 40 °C and 45 °C and add 2.5g to 3.0g of bleach per (6.0±0.5) litre of water
       4) The measured temperature reaches (65±2)°C and is cleaned by the pump
    f) Store the test sample in the dishwasher for drying.
       1)(3±1)min close the door
       2)(301)min open the door

Specific Technical Parameters are as Follows:

a) The water softener (cation exchanger) can control the hardness of water c (CaMg) between 0.3 mmol/ L and 0.6mmol/ L (1mmo/ -5.6 H or 1" DH-0.1786 mmol/ L) when tested by the 1SO 6059 method. Regarding the control of water quality, the final negotiation was the need to add water filters and real-time water quality monitoring devices.
b) Heating shall meet the heating rate

AdLab Instruments Co., Ltd
RM 602, 6/F, Kaiyue Comm Building, No.2C, Argyle Street, Mongkok Kowloon, Hong Kong
20A Cuil Na Carriage, Ballymakeera, Co-Cork, Ireland (EU)
info@adlabinstruments.com www.adlabinstruments.com

Dishwasher Resistance Testing Machine
Model: ADL-DRT02



c) Fixed Water quantity 6.0±0.5L water for each test period, with water pressure ranging from 5N/cm to 100 N/cm (select pump lift of 0.3-0.4MPA).
d) The white distribution device can give the required amount of detergent and bleaching agent in each test cycle.
e) Method of automatic door opening or uniform cooling and humidity reduction after the end of the cleaning cycle
f) Thermostat accuracy ±2C.
g) The door actuating device can automatically perform and repeat the complete cleaning procedure
h) The number of times the counter records cleaning is the total number of single zero able times and the total cumulative number.
i) The safety of dishwashers shall comply with EN 60335-1 and EN 60335-2-5, BS 5416)

2. The use of finished dishwasher main body, but in order to achieve a better life of the test machine, the finished machine due to the high strength of continuous testing, wearing parts need to be replaced with better
3. Can realize the automatic quantitative input of dishwasher powder and block according to EN standard, to consider avoiding the phenomenon of quantitative instability, such as water vapor on the powder outlet wet, it is recommended to refer to the design of the shock feed machine;
4. After each cycle is completed and the door is opened, the automatic alarm can be set to manually or automatically reset into the next cycle, after the completion of the set number of tests, the alarm can be reminded, the alarm volume needs to be applied by human ears
5. Due to the heavy product, basket and pull track, need to be designed for high reliability, basket partition should also take into account the test pair
   Like, mainly for pot products, milk pot, wok and other sizes; The upper basket can support objects of 10KG weight, and the lower basket can support objects of 20KG weight

AdLab Instruments Co., Ltd
RM 602, 6/F, Kaiyue Comm Building, No.2C, Argyle Street, Mongkok Kowloon, Hong Kong
20A Cuil Na Carriage, Ballymakeera, Co-Cork, Ireland (EU)
info@adlabinstruments.com www.adlabinstruments.com

Dishwasher Resistance Testing Machine
Model: ADL-DRT02

6. a group of 3 stations, but the design of the frame connection between the machine needs to consider easy movement, easy disassembly, such as the independent frame can be considered to splice into a group of 3 stations frame
7. The bottom of the equipment should be designed with a leakproof tray, and drainage function (drainage hole and drainage pipe), in order to prevent equipment failure to cause water bubble phenomenon in the test area
8. Each station must be circuit independent protection, can not be due to a station abnormal lead to the whole station strike
9. All test data, including test conditions can be exported by USB, including raw data or test reports can be exported, report templates need to be developed, the report should reflect the relevant monitoring data, such as temperature, cycle times, soft water
   The value is etc.
10. Close the door design, do not consider the pneumatic type, the design should consider aesthetics, and stability
11. The test machine program defaults to EN 12875 standard program, but can also customize the test program in order to meet the special test requirements of customers, such as heating temperature can be set up to 70°C;
12. According to the state of the door or the degree of closure, the body needs to have spray protection, program protection and other protection functions, such as when opening the door or not closed the door frame, the spray function can not work
13. The test machine water needs to have a soft water module, and there must be real-time monitoring data
14. The body heating component, to consider the matching of heating power, to avoid heating time is too long, and occupy the time node controlled by the program itself, and finally make the program node does not correspond, the test results are inconsistent, but also consider the life of the heating component Situation.
15. The main frame part is recommended to use stainless steel as the main body.
16 Retain the dishwasher's original function of increasing washing liquid

**Technical Data Subject to change without notice.*

AdLab Instruments Co., Ltd
RM 602, 6/F, Kaiyue Comm Building, No.2C, Argyle Street, Mongkok Kowloon, Hong Kong
20A Cuil Na Carriage, Ballymakeera, Co-Cork, Ireland (EU)
info@adlabinstruments.com www.adlabinstruments.com

AdLab
Total Testing Solutions

AdLab is a globally recognized brand specializing in the manufacturing and supply of high-quality laboratory equipment and textile testing instruments. With over 15 years of experience, we are committed to delivering precision-engineered solutions that meet the needs of industries such as textiles, pharmaceuticals, research laboratories, and educational institutions. Our products are designed to enhance efficiency, accuracy, and reliability in scientific and industrial applications.

Our Skill

At AdLab, we combine expertise in precision engineering with advanced laboratory technology to create innovative and reliable testing instruments. Our team of skilled professionals continuously works on improving product designs, integrating the latest advancements in technology, and ensuring compliance with international quality standards. With a strong focus on research and development, we provide customized solutions that cater to the unique needs of our customers worldwide.

Our Products

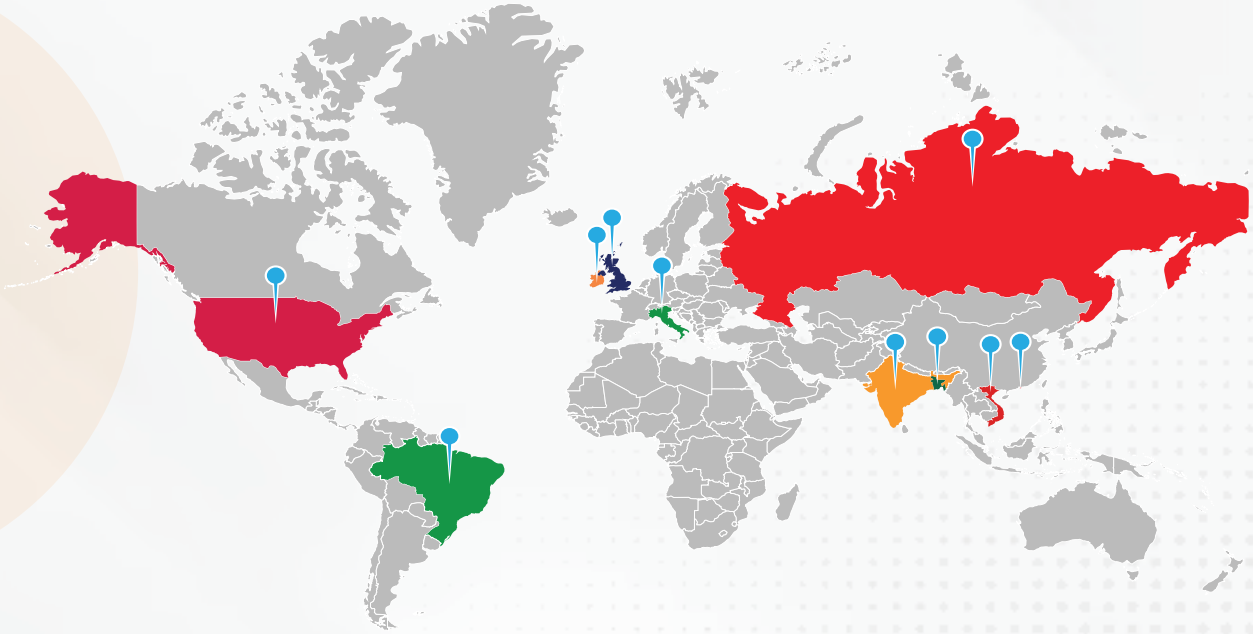
AdLab offers a wide range of high-quality laboratory and textile testing instruments, including Yarn & Fiber Testing Instruments, Laboratory Fume Hood Chambers, Ovens & Incubators, Water Baths, Textile Testing Instruments, Dyeing & Finishing Machines, Ceramic Testing, Tensile Testing, Washers & Dryers, Needle Detectors, and In-House Testing Equipment. Designed for precision and efficiency, our products ensure accurate testing and reliable performance across various industries.

Our Services

At AdLab, customer satisfaction is our top priority. We provide comprehensive support services to ensure the smooth operation of our equipment, including:

- ✓ 24/7 Technical Support Team – Our highly trained technical support team is available around the clock to assist with troubleshooting, maintenance, and operational guidance. Whether you need immediate assistance or expert advice, we are always ready to help.
- ✓ Installation & Training – We offer professional installation services and hands-on training to help users operate our equipment efficiently.
- ✓ Calibration & Maintenance – Regular calibration and maintenance services ensure that your laboratory instruments remain accurate and in optimal working condition.
- ✓ Customized Solutions – We provide tailored solutions to meet specific industry requirements, helping our clients achieve maximum efficiency in their operations.

Global Networks



Bangladesh • Brazil • China • Hong Kong • India • Ireland • Italy • UK • USA • Vietnam

AdLab Instruments Co., Ltd

RM 602, 6/F, Kaiyue Comm Building, No.2C, Argyle Street, Mongkok Kowloon, Hong Kong

20A Cuil Na Carriage, Ballymakeera, Co-Cork, Ireland (EU)

info@adlabinstruments.com www.adlabinstruments.com