

Automatic Viscometer DT-553

Delivery Specification

Introduction

This device is designed for automatic measurement of viscosity based on the Japanese Industrial Standard (JIS).

1. Device Configuration

No.	Part name	Dimension (mm)	Quantity (unit)
1	Controller (Touch panel and Build-in printer)	W320 x D500 x H430	1
2	Liquid transfer unit	W360 x D480 x H230	1
3	Autosampler (6 samples installation)	W260 x D350 x H600	1
4	Liquid level detector (Meniscus detection and Optical fiber light guide attached)	W230 x D210 x H100	1
5	Water bath (visual mercury thermometer included)	W460 x D400 x H600	1
6	Temperature control unit		1
7	Waste liquid collection bottle (with full detection sensor)		1

2. Device Specification

No.	Item	Description
1	Viscometer	Uberode improved type
2	Number of viscometer	1
3	Viscosity measurement range	0.5 ~ 20.000mm ² /sec
4	Measurement range	0 ~ 999.99 sec
5	Measurement accuracy	Within 0.02 sec (error between 2 solvent measurements)
6	Detection principle	Originally designed photoelectric type Glass fiber light transmission method
7	Sampling	Suction type
8	Display and Input	Touch panel input method (display size: 7 inches)
9	Printer	Built-in (thermal roll paper)
10	Data	Kinematic viscosity and Relative viscosity
11	Temperature range	20°C ~ 80°C
12	Temperature accuracy	±0.2°C
13	Temperature sensor	Pt 100Ω
14	Water bath heater	1500W
15	Water bath capacity	30L
16	Power	AC230V 50Hz 20A

Device External View



Figure 1: Automatic viscometer DT-553



Figure 2: Liquid level detector (Top)
Liquid transfer unit (Bottom)



Figure 3: Controller

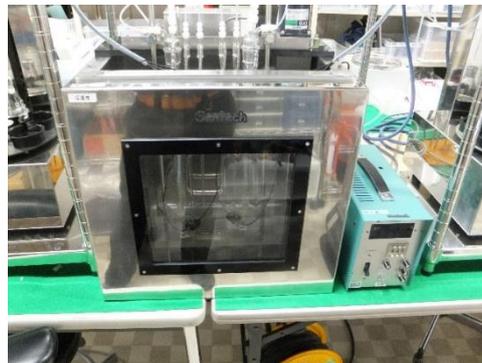


Figure 4: Water bath

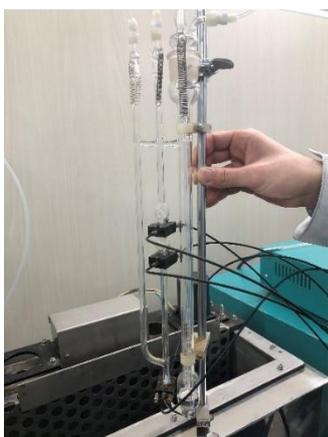


Figure 5: Viscosity tube
(fiber attached)

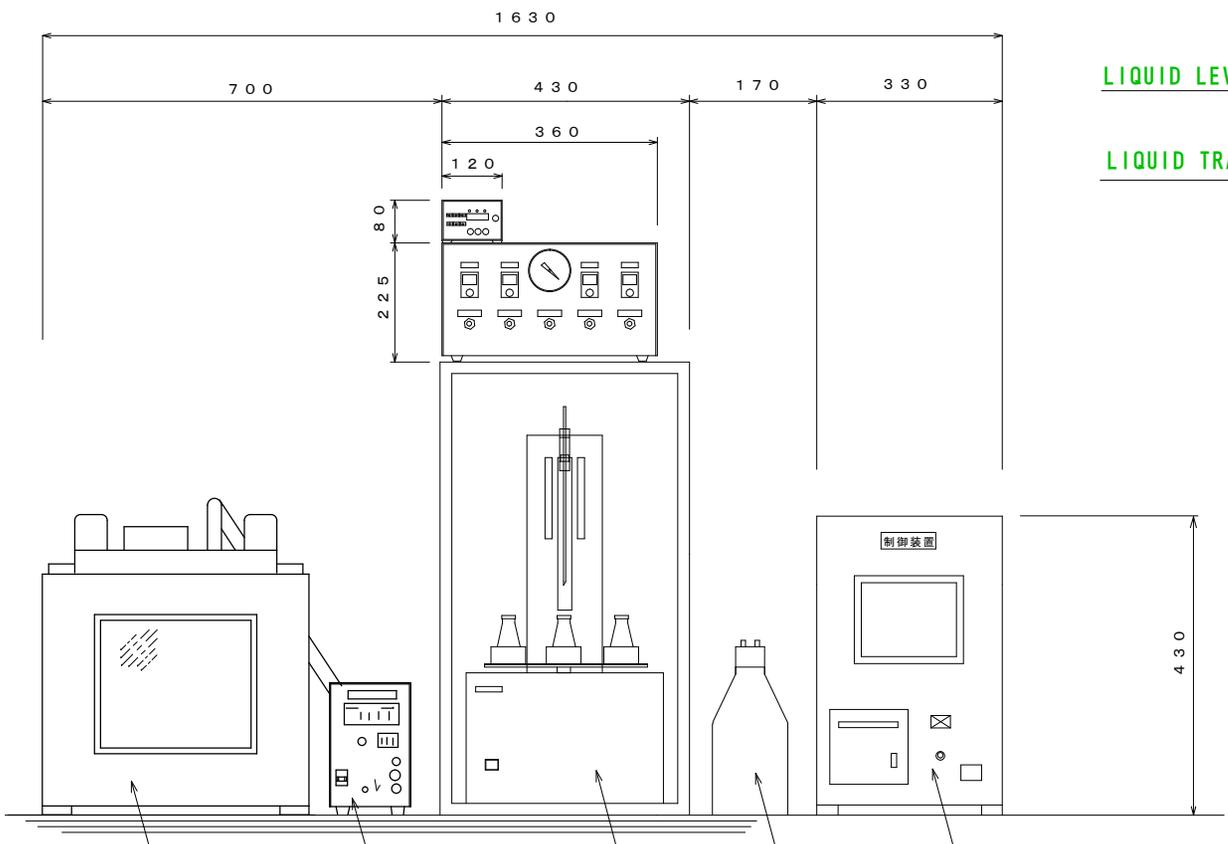


Figure 6: Upper part of viscosity tube
(liquid transfer unit set)



Figure 7: Contamination prevention filter

ENGINEERING STANDARDS	DIFFERENTIATION	DIMENSION TOLERANCE		
	(UNIT mm)	PRECISION ±	INTERMEDIATE ±	COARSE ±
ACCURACY	OVER 1 AND UNDER 4	0.05	0.1	0.3
	OVER 4 AND UNDER 16	0.07	0.2	0.5
	OVER 16 TAND UNDER 63	0.1	0.3	0.7
	OVER 63 AND UNDER 250	0.2	0.5	1.2
	OVER 250 AND UNDER 1000	0.3	0.8	2.0



WATER BATH

TEMPERATURE CONTROL UNIT

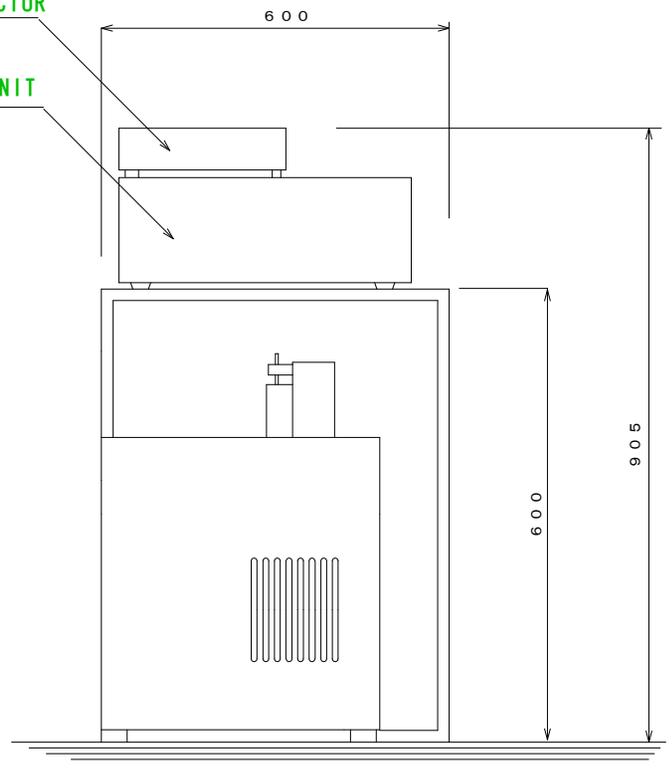
AUTOSAMPLER

WASTE LIQUID COLLECTION BOTTLE

DEVICE CONTROLLER

LIQUID LEVEL DETECTOR

LIQUID TRANSFER UNIT



PART NO.	PARTS NAME	MATERIAL	PROCESSING	QUANTITY
	DT553 EXTERNAL VIEW		REVISION	○
PROJECTION	THIRD ANGLE METHOD	CONS-TRUCTED	TAKE BAYASHI	CHECKED
DRAWING NO.	DT553-00	SCALE	CREATED DATE	2012. 10. 5
ACROEDGE CO., LTD.				