

# Melt Flow

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02-9744354-6

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## Fully Automatic Melt Flow Index ITK-MFR

### Product introduction

This tester for high precision automatic melt flow rate instrument, used for testing all kinds of plastic, resin in the state of viscous flow through a certain temperature and load, every 10 min module and melt flow rate through the standard port MFR/MVR value, it is suitable for high temperature of polycarbonate, aromatic sulfone, fluorine plastics, nylon engineering plastics, can also be applied to polyethylene (PE), polystyrene (PS), polypropylene (PP), ABS resin, polyformaldehyde (POM), polycarbonate (PC) resin with lower melting temperature, such as plastic test, widely used in plastic production, Plastic products, petrochemical and other industries and related institutions, scientific research units and commodity inspection departments.



### 2. Test standard:

GB/T3682-2000	Measurement of melt flow rate and melt volume flow rate of thermoplastic plastics
ISO 1133: 1997	Determination of mass flow rate MFR and melt volume flow rate MVR of thermoplastic melt
ASTM D1238	Standard test method for flow rate determination of thermoplastic melt by extruded plastic meter

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### Product advantage

- more paragraphs (2) temperature control method, two groups of platinum resistance sensor, two heating jacket separate temperature control, high accuracy intelligent PID control, ramp rate the heating speed is adjustable
- resolution temperature was 0.1 °C, the temperature uniformity of 0.2 °C, the temperature fluctuation of not more than 0.5 °C within 24 hours, the displacement sensor resolution is 0.001 mm.
- Thermal protection device
- hand automatic cutting material, can be arbitrary set blanking time (0 ~ 999), blanking times (0 ~ 999)
- test can choose quality standard, or volume method, two test methods or simultaneously, and can melt density is calculated. Both methods are tested when the piston rod moves to a certain position.
- stable internal temperature alarm prompts, and an increase of 240 seconds (GB3682 regulations) material preheat second countdown, after the end of the countdown, issued a prompt, can also set the American standard (ASTM) preheating time, etc.
- built-in many plastic material melt index test conditions, convenient customer used to be obtained at any time, reduce the tedious work, and storing the last test conditions and results
- Built - in mini printer for easy printing test data
- high precision touch screen controller, 7 inch touch screen, can be stored and print test conditions and data recently, test print menu Settings include test time (the default) system, operating personnel, material name, test method, test conditions (temperature, weight weight, blanking interval) data, test results, test results, the artificial judgement OK or NG, etc.,
- reserved RS232 interface or USB interface to connect computers, can through the computer control instrument operation and to save test data transmission to the computer,
- need weight load, are installed in screen equipment to choose corresponding weight and loading that no user manual loading or bolt type selection, reduce the workload. Test completion self - rising.

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### Technical Specification

- temperature range: 0 - 450 °C
- temperature volatility:  $\pm 0.2$  °C
- temperature uniformity:  $\pm 1$  °C
- temperature display resolution: 0.1 °C
- time display resolution: 0.1 S
- cylinder diameter:  $\Phi 2.095 \pm 0.005$  mm
- discharging mouth length:  $8.000 \pm 0.025$  mm
- charging tube diameter:  $\Phi 9.550 \pm 0.025$  mm
- weights precision:  $\pm 0.5\%$
- output way: the micro automatic printing
- Cut material method: hand automatic cutting material
- test load: total 8 level, 8 sets weights
- Power: AC220V $\pm 10\%$  50HZ



### Software

Temperature	19.6	MFR Position	100.0	Cut Times	1.1	Timer	238.5
		MFR Time	0.00	Cut Counter	0	Timer Switch	
	MFR Weight	MFR (g/10min)	MVR Time	MVR (ml/10min)	Clear	Set Cut Interval :	
01	0.000	0.0000	0.00	0.0000		10	
02	0.000	0.0000	0.00	0.0000		Set Cut Times :	
03	0.000	0.0000	0.00	0.0000		15	
04	0.000	0.0000	0.00	0.0000		Set Temperature :	
05	0.000	0.0000	0.00	0.0000		210.0	
06	0.000	0.0000	0.00	0.0000		Test No. :	
07	0.000	0.0000	0.00	0.0000		2160	
08	0.000	0.0000	0.00	0.0000	PRINT	Material No. :	
09	0.000	0.0000	0.00	0.0000	NEXT	0	
AVG	0.000	0.0000	0.00	0.0000		Counter Weight :	
						10000	
	START	Manual Cut	HEAT ON	JOG UP	JOG Down	Configuration	

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### Software

Temperature  CH1  Countdown  Refresh  No Device   
CH2  Cut Times  Connect  Disconnect   
Position  MVR Time  Cut Delay  Communication is OFF

No	Temper	Weight	MFR weight	MFR result	MVR time	MVR result	Melt density
1	000.0	0000	00.000	000.000	000.000	000.000	00.000
2	000.0	0000	00.000	000.000	000.000	000.000	00.000
3	000.0	0000	00.000	000.000	000.000	000.000	00.000
4	000.0	0000	00.000	000.000	000.000	000.000	00.000
5	000.0	0000	00.000	000.000	000.000	000.000	00.000
6	000.0	0000	00.000	000.000	000.000	000.000	00.000
7	000.0	0000	00.000	000.000	000.000	000.000	00.000
8	000.0	0000	00.000	000.000	000.000	000.000	00.000
9	000.0	0000	00.000	000.000	000.000	000.000	00.000
10	000.0	0000	00.000	000.000	000.000	000.000	00.000
11	000.0	0000	00.000	000.000	000.000	000.000	00.000

Temperature  °C  
Cut Times  times  
Cut Delay  s  
Start point   
Stop point   
CounterWeight  g  
Sample Weight  g

System Information  
Configuration PID setting  
Sensor Preset  
Start Heating  
Stop Heating  
START  
STOP  
Manual Cut  
Start Countdown  
Manual up  
Manual down  
help

MFR : 0.0000 MF Density : 0.0000  
MVR : 0.0000 Sample Weight : 0.000  
PRINT  
NEXT

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