

# Thermo Scientific Marple 290 Series Personal Cascade Impactor

Multi-orifice, multi-stage personal cascade impactor used to measure the concentration and particle size distribution of all liquid and solid particulate matter

The Thermo Scientific™ Marple 290 Series Personal Cascade Impactor is the first precision cascade impactor designed for personal wear by the worker, providing

complete and accurate aerodynamic particle size distribution. The compact design allows the unit to be attached, via the personal mounting bracket, to a lapel or pocket.

- The first precision cascade impactor designed for personal wear
- Aerodynamic range
- Lightweight design
- Available in two to eight stages
- Variety of collection substrates available



The Thermo Scientific Marple 290 Series impactor combines light-weight, compactness with the widely acclaimed radial slot design for increased accuracy, minimal internal losses and absence of particle bounce.

The sampled air enters the Marple 290 Series impactor through the inlet cowl and accelerates through the six radial slots in the first impactor stage. The cowl eliminates ash and debris from the first stage on a pre-cut collection substrate. Then, the airstream flows through the slots on each impactor stage allowing particles to impact on the collection substrate. The resolution of impaction will be dependent upon the number of impactor stages selected.

The width of the radial slots are constant for each stage, becoming progressively smaller for each succeeding stage. Thus, the jet velocity increases for each succeeding stage and smaller particles eventually acquire sufficient momentum to impact on one of the collection substrates. After the last impactor stage, any remaining fine particles are collected by the final filter.

#### Applications Include:

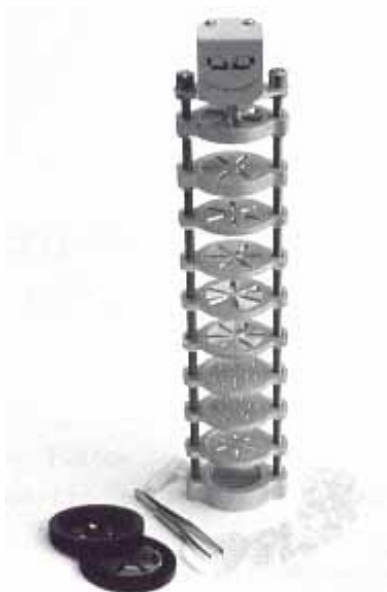
- Wood, coal and silica dust
- Respirable dust sampling
- Inhalation toxicology & aerobacteriology
- Indoor air pollution
- Multi-point sampling
- Aerosol research
- Worker protection

## Thermo Scientific Marple 290 Series Personal Cascade Impactor

Impactor Stages	
Marple 292	Two Stage
Marple 294	Four Stage
Marple 296	Six Stage
Marple 298	Eight Stage
Flow Rate	2 lpm nominal
Flow Range	1 to 5 lpm (1 to 3 lpm recommended)
Collection Substrates	34mm diameter available in glass fiber, Mylar, stainless steel and other filter media
Back-up filter	34mm diameter available in glass fiber, MCE, PVC or quartz
Outlet fitting	1/8" NPT with 0.25" ID tube
Materials of Construction	Precision-machined aluminum impactor stages
<b>Physical Dimensions</b>	
Marple 292	2.21" (5.6cm) H x 2.2" (5.6cm) W x 1.6" (4.1cm) D, 0.34lbs (0.15kg)
Marple 294	2.8" (7.1cm) H x 2.2" (5.6cm) W x 1.6" (4.1cm) D, 0.37 lbs (0.17kg)
Marple 296	3.1" (7.9cm) H x 2.2" (5.6cm) W x 1.6 (4.1cm) D, 0.4 lbs (0.18kg)
Marple 298	3.4" (8.6cm) H x 2.2 (5.6cm) W x 1.6 (4.1cm) D, 0.44lbs (0.2kg)

### Additional Information

#### Marple 290 Series Personal Cascade Impactor Assembly



To maintain optimal product performance, you need immediate access to experts worldwide, as well as priority status when your air quality equipment needs repair or replacement. We offer comprehensive, flexible support solutions for all phases of the product life cycle. Through predictable, fixed-cost pricing, our services help protect the return on investment and total cost of ownership of your Thermo Scientific products.

For more information, visit our website at [thermoscientific.com/oeH](http://thermoscientific.com/oeH)

© 2013 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

This product is manufactured in a plant whose quality management system is ISO 9001 certified.

<b>USA</b> 27 Forge Parkway Franklin, MA 02038 Ph: (866) 282-0430 Fax: (508) 520-1460 <a href="mailto:customerservice.aqi@thermofisher.com">customerservice.aqi@thermofisher.com</a>	<b>India</b> C/327, TTC Industrial Area MIDC Pawane New Mumbai 400 705, India Ph: +91 22 4157 8800 <a href="mailto:india@thermofisher.com">india@thermofisher.com</a>	<b>China</b> +Units 702-715, 7th Floor Tower West, Yonghe Beijing, China 100007 +86 10 84193588 <a href="mailto:info.eid.china@thermofisher.com">info.eid.china@thermofisher.com</a>	<b>Europe</b> Takkebijsters 1 Breda Netherlands 4801EB +31 765795641 <a href="mailto:info.aq.breda@thermofisher.com">info.aq.breda@thermofisher.com</a>
---	--	---	---