

# NGI & NGI+

Series 4520



#### The Gold Standard for Inhalation Pharmaceutical APSD Characterization

The Next Generation Impactor (NGI) is and has been the industry standard pharmaceutical cascade impactor for the last 20 years, with 1800+ units in use and adopted into the USP guidelines. It was designed and developed by and for the OINDP Industry, and is the most efficient and precise cascade impactor to conduct standard in vitro APSD testing with the widest capabilities.

The NGI+ uses the same design, but substitutes more durable materials which enable a wider range of applications, chemicals, and drugs.

### **NGI Features & Benefits**

- Designed by the OINDP market for the OINDP market
- Written into the USP guidance
- 8-stage collection (7 stage + MOC)
- Precise cut points
- Planar arrangement with cover, cup tray and quick clamp cam
- Suite of accessories to make testing even more efficient
- Suite of accessories for additional testing (gravimetric, deep cup, exhaust cup, glass disc cup, rNGI)

### NGI+ Additional Features & Benefits

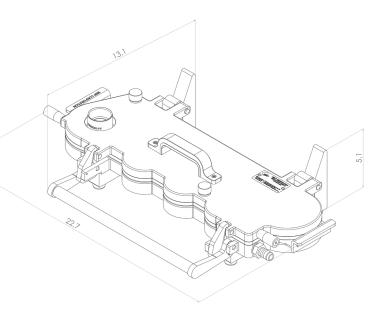
- Enhanced corrosion and chemical resistance
- Extended equipment life
- Allows for a more robust and/or automated cleaning process for cups, nozzles, and seal body
- Comprised of inert materials to maintain aerosol performance

# Specifications



	NGI	NGI+		
Product Specs				
Weight (lb) [kg]	20.2 [9.2] 23.5 [10.7]			
Dimensions,	13.1 x 22.7 x 5.1			
(W x D x H) (in) [mm]	[332.7 x 576.6 x 129.5]			
Seal body dims,	6.5 x 20.5 x 2.5			
(W x D x H) (in) [mm]	[165 x 520 x 65]			
Shipping				
Weight (lb) [kg]	27 [12.2]	30.3 [13.7]		
Dimensions,	16 x 27 x 11			
(W x D x H) (in) [mm]	[405 x 685 x 280]			
Design				
# of Stages		MOC		
	(not included: external filter, induction port, preseparator)			
Internal volume (mL)	1160			
Calibrated flow rate	15L/min – 100 L/min			
Material				
Lid	Nickel Plated Aluminum			
Seal body	Nickel Plated Aluminum	Stainless Steel		
Nozzles	Stainless Steel			
Cups	Stainless Steel (2 large, 6 small)			
Bottom Frame	Aluminum			

APSD Stage Cutoff Diameter by Flow Rate					
Flow rate (L/min)	15	30	60	100	
S1	14.10	11.72	8.06	6.12	
S2	8.61	6.40	4.46	3.42	
S3	5.39	3.99	2.82	2.18	
S4	3.30	2.30	1.66	1.31	
S5	2.08	1.36	0.94	0.72	
S6	1.36	0.83	0.55	0.40	
S7	0.98	0.54	0.34	0.24	



The MSP logo is a registered trademark of MSP Corporation. TSI and the TSI logo are registered trademarks of TSI Incorporated.



MSP - Visit our website www.tsi.com/msp for more information.

5910 Rice Creek Parkway, Suite 300 Shoreview, Minnesota 55126, U.S.A. **Tel:** 651.287.8100

P/N 5002637 (A4) Rev C ©2023 TSI Incorporated