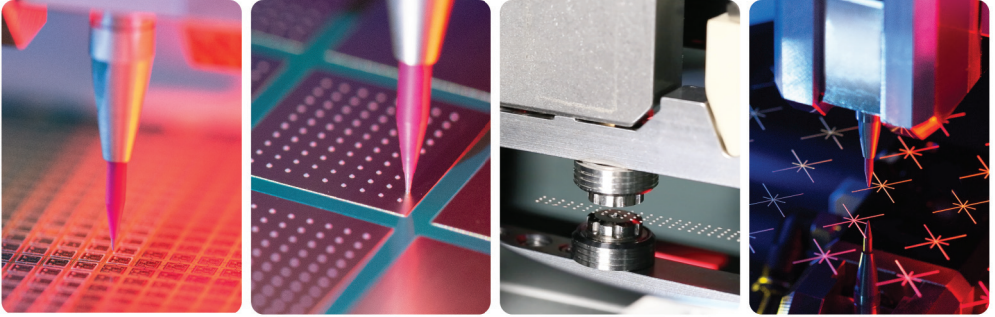




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Our Innovated Micro Dispensing Technologies

Ultraprecise Micro Dispensing
Solutions created for market
need of tomorrow.



WORLD'S SMALLEST Micro Dot Size
SOLDER PASTE DISPENSING as small as $\varnothing 80\mu\text{m}$

Solder Paste (Line) 100µm

Solder Paste (Dot) 80µm

Your Advanced
**DISPENSING
SOLUTIONS**
Partner



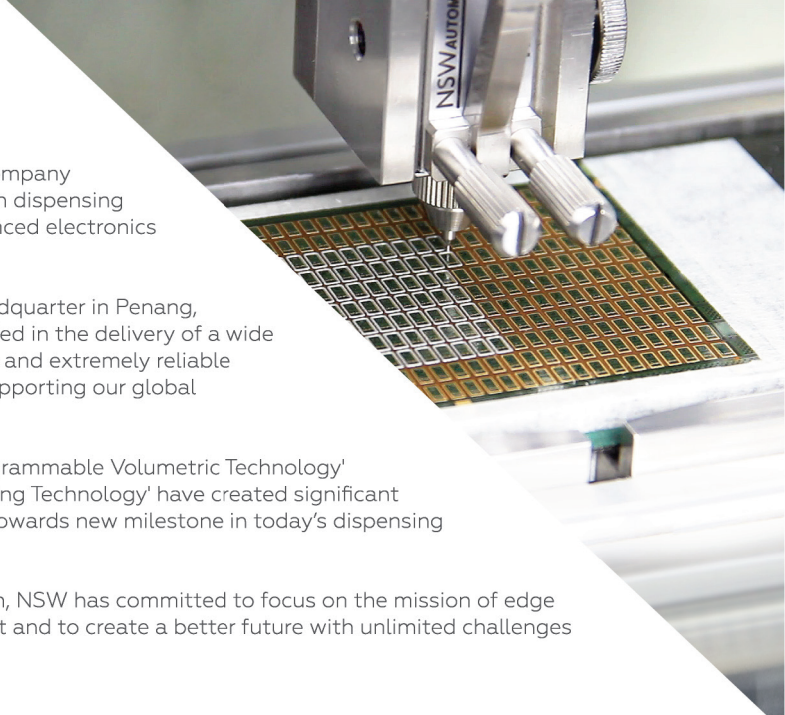
About Us

NSW is a leading global company who specializes in precision dispensing solutions for today's advanced electronics manufacturing market.

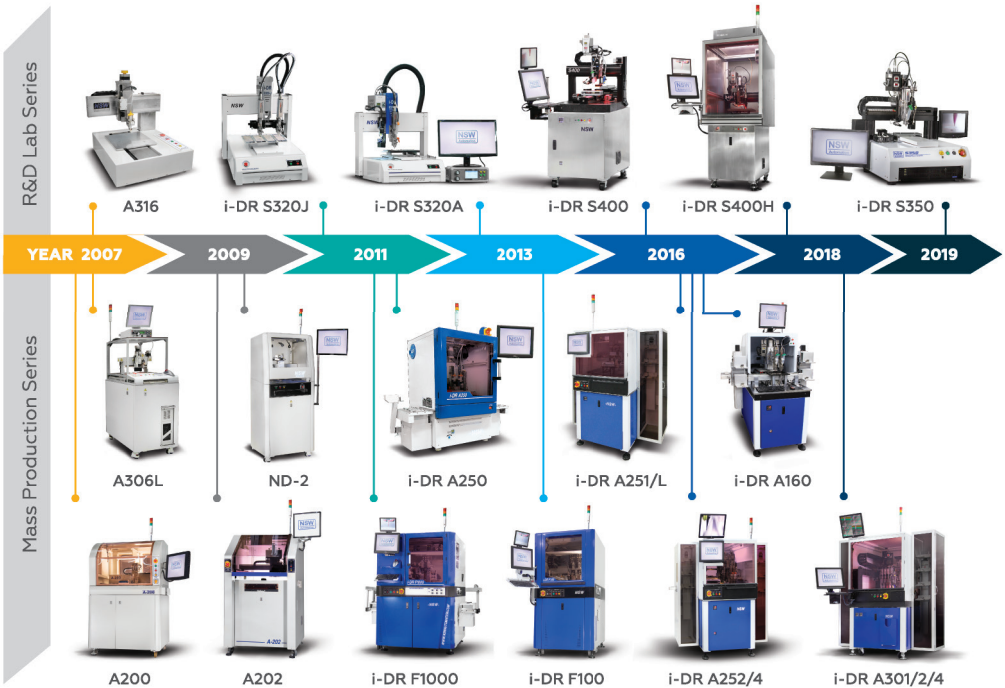
Founded in 2004 with headquarter in Penang, Malaysia, we have succeeded in the delivery of a wide range of high performance and extremely reliable dispensing products for supporting our global customer's needs.

Our seamless 'Digital-Programmable Volumetric Technology' and 'Micro Volume Squeezing Technology' have created significant breakthrough for moving towards new milestone in today's dispensing equipment market.

In pursuit of market growth, NSW has committed to focus on the mission of edge technological development and to create a better future with unlimited challenges and possibilities.



Evolution of NSW Dispensing System



R&D Laboratory Series

Dispensing
Handler



Model	i-DR S350	i-DR S400	i-DR S400H
Operating System	■ Microsoft Windows Based (Industry PC)		
Handler Software	N Disp 3 WIN		
No. of Axis	3	3	3
Max. Head	1	1	1
XY Actuator	Precision Rolled Ball Screw		Precision Ground Ball Screw
XY Accuracy	±20µm (0.020mm)		±10µm (0.010mm)
Z Actuator	Rolled Ball Screw		Precision Rolled Ball Screw
Z Accuracy	±20µm (0.020mm)		±10µm (0.010mm)
XY Repeatability	±10µm (0.010mm)		±5µm (0.005mm)
Z Repeatability	±10µm (0.010mm)		±5µm (0.005mm)
XY Resolution	8µm (0.008mm)	8µm (0.008mm)	±0.5µm (0.0005mm)
Z Resolution	4µm (0.004mm)	4µm (0.004mm)	±0.5µm (0.0005mm)
XYZ Linear Encoder Resolution	N/A	N/A	0.5µm/Step (0.0005mm) *Optional
Max Dispensing Area	350mm x 350mm	320mm x 350mm	320mm x 350mm
Weighing Scale Resolution	N/A	N/A	0.01mg (Optional)
Needle Tip XYZ Calibrator		✓ Yes, Integrated	
Needle Tip Vacuum Cleaner		✓ Yes, Integrated	

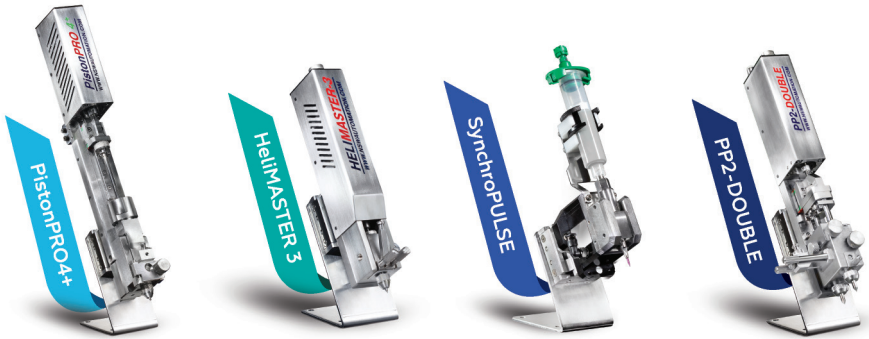
Mass Production Series

Dispensing
Handler



Model	i-DR A301	i-DR A302	i-DR A304
Operating System	■ Microsoft Windows Based (Industry PC)		
Handler Software	N Disp 3 WIN		
No. of Axis	3	6	12
Max. Head	1	2	4
XY Actuator	Precision Ground Ball Screw		
XY Accuracy	±10µm (0.010mm)		
Z Actuator	Precision Rolled Ball Screw		
Z Accuracy	±10µm (0.010mm)		
XY Repeatability	±5µm (0.005mm)		
Z Repeatability	±5µm (0.005mm)		
XY Resolution	2µm (0.002mm)		
Z Resolution	0.6µm (0.0006mm)		
XYZ Linear Encoder Resolution	0.5µm/Step (0.0005mm) (Optional)		
Board Length	Min: X-50mm Max: X-300mm		
Board Width	Min: Y-40mm (Optional up to 24mm) Max: Y-210mm		
Max Over Board Thickness	5mm		
Max Under Board Thickness	3mm		
Weighing Scale Resolution	0.01mg (Optional) / 0.001mg (Optional)		

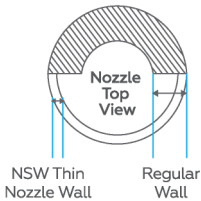
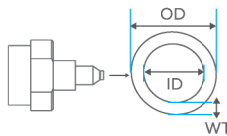
NSW Nspira Series — Precision Fluid Delivery System



Model	PistonPRO4+	HeliMASTER 3	SynchroPULSE	PP2-DOUBLE
Valve Control	Volumetric	Auger Screw	Squeezing Diaphragm	Volumetric
Volume Resolution	PP4200: 0.000314µl PP4400: 0.001256µl PP4600: 0.002827µl		N/A	PP2300D: 0.000707µl PP2600D: 0.002827µl
Fluid Viscosity	1-50,000 Cps	20,000-100,000 Cps	5,000-1,000,000 Cps	1-25,000 Cps
Reservoir Volume	PP4200: 0.1413ml PP4400: 0.5654ml PP4600: 1.2723ml		N/A	PP2300D: 0.3110ml PP2600D: 1.2440ml
Material Outlet Port	NSW Precision Needle/ Standard Luer Lock Needle	NSW Precision Needle/ Standard Luer Lock Needle	NSW Precision Needle	NSW Precision Needle
Weight	1250g	950g	400g	1200g

NSW Precision Dispensing Nozzle

NSW in-house engineered dispensing nozzles are geometrically designed to achieve a higher precision level & greater efficiency for liquid flow.



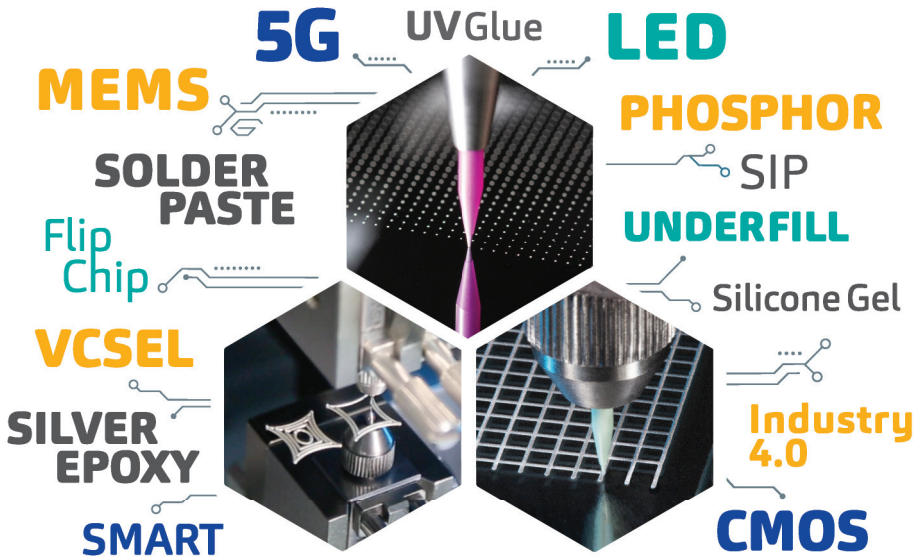
ID	OD	WT	P20-S	H20-S	H20-D	P40-S	S50-C
20µm	50µm	15µm					C
40µm	70µm	15µm					C
60µm	90µm	15µm			T.C		C
80µm	110µm	15µm			T.C		C
100µm	150µm	25µm	SUS	SUS	T.C	SUS	C
150µm	200µm	25µm	SUS	SUS	T.C	SUS	C
200µm	300µm	50µm					C
225µm	365µm	70µm	SUS	SUS		SUS	C
275µm	415µm	70µm	SUS	SUS		SUS	C
350µm	490µm	70µm	SUS	SUS		SUS	C
450µm	590µm	70µm	SUS	SUS		SUS	C
550µm	690µm	70µm	SUS	SUS		SUS	C

Nozzle Material Type

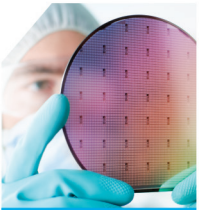
- SUS Stainless Steel
- T.C Tungsten Carbide
- C Ceramic (Ø < 200µm)

ID=Inner Diameter | OD=Overall Diameter | WT=Wall Thickness
Any nozzle technical inquiry, please consult our sales personnel.

All specification results shown in this brochure may vary depending on test method. All product, specifications and data are subject to change without notice to improve reliability, function or design or otherwise. Brochure Version: V1.0.9.2019. Printed in Malaysia.



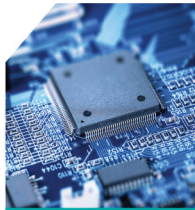
Our Expertise Industries



SEMICONDUCTOR



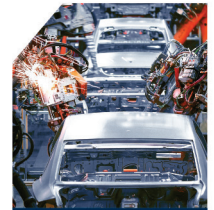
LED



SMT



BIOTECH



AUTOMOTIVE

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