



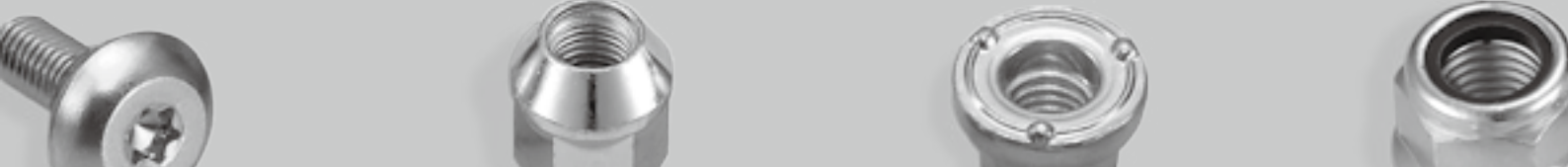
SANSHING

THE ART OF FASTENER EQUIPMENTS

TOTAL SOLUTION



Machine Brochure



SAN SHING NUT FORMER Precision Series SNF

The Most Precise Machine With Cutting-Edge Technology

Highest Precision, Efficiency and Flexibility. Your Optimum Solution For High-Value Products.



Model		11P	14P	17P	19P	24P	32P
Hex Nut (DIN934)	mm	M4~M6	M6~M8	M6~M10	M8~M12	M10~M16	M12~M22
	inch	#8~1/4	1/4~5/16	1/4~7/16	5/16~1/2	3/8~5/8	1/2~7/8
Flange Nut (DIN6923)	mm	M4~M6	M5~M8	M6~M8	M6~M10	M8~M14	M10~M20
	inch	#8~1/4	#12~5/16	1/4~5/16	1/4~7/16	5/16~9/16	3/8~3/4
Station		6	6	6	6	6	6
Forging Power	Tons	55	90	130	160	250	450
Main Motor	HP	15	25	40	40	50	125
Max. Cut-Off Dia	mm	11	14	17	19	24	32
Max. Cut-Off Length	mm	15	19	23	26	35	42
Max. Kick-Out Stroke	mm	15	19	23	26	35	42
Max. Output	pcs/min	400	260	230	200	150	110
Max. PKO Stroke	mm	8	10	12	13	16	24
Ram Stroke	mm	50	80	85	110	130	160
Die Pitch	mm	50	60	75	80	100	140
Forging Die	mm	50x40	60x45	75x55	80x60	100x75	140x100
Punch Die	mm	30x100	40x120	55x148	60x160	65x248	92x312

ACCESSORIES						
Human Machine Interface with OPC UA	●	●	●	●	●	●
Inverter	●	●	●	●	●	●
Linear Feeding System	●	●	●	●	●	×
Oil Tank With Centrifugal Filter	●	●	●	●	●	●
Overarm	●	●	●	●	●	●
Crankshaft with Bush and Clutch	●	●	●	●	●	●
Concentric Punch Adjusting Device	●	●	●	●	●	●
PKO System for All Stations	▲	▲	▲	▲	▲	▲
Sound Enclosure	▲	▲	▲	▲	▲	▲
Forge Load Monitor	▲	▲	▲	▲	▲	▲
Close Type Cutter	▲	▲	▲	▲	▲	▲
	11P	14P	17P	19P	24P	32P

● = Standard ▲ = Optional × = Not Available

- San Shing precision series - Systematic evolution of the highly successful Basic series.
- For achieving a higher precision, this series equips many features such as Linear Feeding System, Main Ram with Overarm design, the Crankshaft with Bush and cooperated with Clutch System to ensure product precision while forging.



Overarm & Crankshaft with Bush

Crankshaft with Bush collocated with high pressure lube system extends crankshaft endurance. Overarm maximizes machine stability and produce precision.



PKO Punch-Block (Option)

With adjustable kick-out stroke on punchside, this synchronous mechanism provides high flexibility for diverse products.



Air brake with Clutch

Flywheel driven by motor and stopped by air brake with clutch. Whenever the machine stops, the main ram stays at the BDC position.



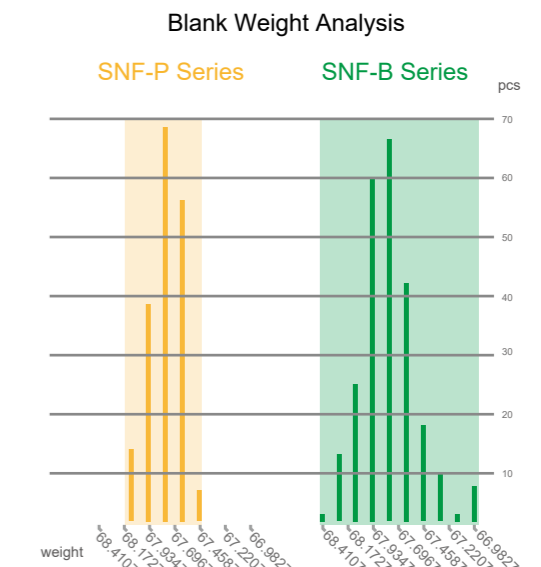
Human Machine Interface

Displaying the production info in all aspect. Easier to handle machine condition.



Linear Feeding System

Minimize blank deviation. The Linear Feeding System supports material utilization, also lowers tooling cost.



SNF SAN SHING NUT FORMER

Basic Series

Most Economical Solution For Your Standard Nuts

Outstanding Performance. Competitive Price. Your Best Choice for Standard Nuts.



- Built on 60 years of expertise in nut production.
- The Basic Series combine high standardization with affordable pricing and excellent price-to-performance ratio.

Higher Speed & Superior Productivity

Thanks to the lightened transfer finger design, San Shing nut former operates in high speed production for most type of the standardized nuts.

Cut-Off Position Detector

When there is a deviation of cut-off position, alarm signal will appear so that the operator will be aware of the possible problem in the cut-off system.

Lining Plate Design

When the gap between the main ram and clamping plate is over the standard value, maintenance only needs to be done on the main ram and lining plate instead of machine frame.

HMI With Alarm Status

Clear alarm message pinpoints the exact error location. Provide faster troubleshooting information for operator.



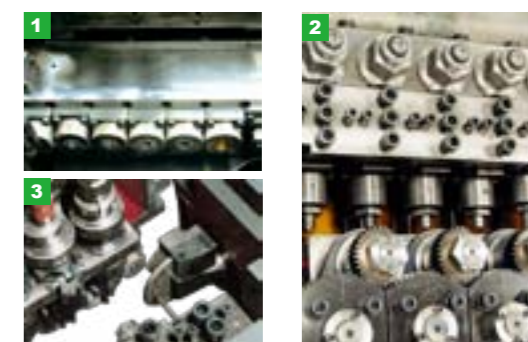
Model		11B	14B	17B	19B	24B	32B
Hex Nut (DIN934)	mm	M4~M6	M6~M8	M6~M10	M8~M12	M10~M16	M12~M22
	inch	#8~1/4	1/4~3/8	1/4~7/16	5/16~1/2	3/8~5/8	1/2~7/8
Station		5 6	5 6	5 6	5 6	5 6	5 6
Forging Power	Tons	50 55	85 90	120 130	145 160	230 250	375 400
Main Motor	HP	15	20	30	30	50	100 125
Max. Cut-Off Dia	mm	11	14	17	19	24	32
Max. Cut-Off Length	mm	9	12	15.5	17	22.5	30
Max. Kick-Out Stroke	mm	12.5	16.5	20	22	26	36
Max. Output	pcs/min	400	320	275	220	180	110
Ram Stroke	mm	50	70	85	90	110	146
Die Pitch	mm	50	60	75	80	100	140
Forging Die	mm	50x40	60x45	75x55	80x60	100x75	140x100
Punch Die	mm	28x113	38x135	43x170	50x184	60x211	85x278

ACCESSORIES

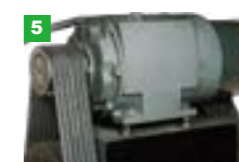
Human Machine Interface	●	●	●	●	●	●
Inverter	●	●	●	●	●	●
Linear Feeding System	▲	▲	▲	▲	▲	×
Oil Tank with Centrifuge Filter	▲	▲	▲	▲	▲	▲
Concentric Punch Adjusting Device	▲	▲	▲	▲	▲	▲
PKO System for 3 Stations	▲	▲	▲	▲	▲	▲
Sound Enclosure	▲	▲	▲	▲	▲	▲
Forge Load Monitor	▲	▲	▲	▲	▲	▲
Close Type Cutter	▲	▲	▲	▲	▲	▲
		11B	14B	17B	19B	24B 32B

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Concentric Punch Adjusting Device (Option)



- 1 Square Die Block & Shortest Die Pitch
- 2 Double Eccentric Punch Adjusting Device
- 3 Circular Stripper
- 4 Crankshaft Roller Bearing
- 5 Motor with Overload Protection
- 6 Ratchet Wheel Feeding System



SAN SHING BOLT FORMER SBF

The Exquisite Design To Provide Possible Conditions For Cost Saving

Optimal Output. Superior Mold Life. The Best Choice to Chase Productivity-Based Growth.



Peak Productivity

Lightened transfer finger system serves faster production speed and maintains the precise movement.

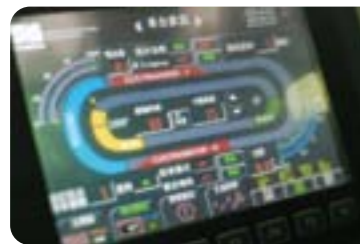


Ease of Adjustment

With worm gear design, the opening/closing timing of transfer fingers can be handily adjusted in the shortest time.



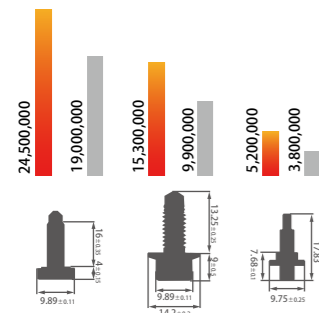
The transfer system adopts the off-machine modular design, which can be quickly and precisely fine-tuned for immediate production after set-up.



HMI displays all necessary production info. Operator gets a real-time machine status feedback and manages the tooling life effortlessly.



SAN SHING GENERAL



Annual Production

30% UP



The hand wheel and digital counter enable fast and precise adjustment on kick-out setting.

Utmost Precision



Strict process control and fine scraping applied to the primary machine parts give the San Shing bolt former superior overall performance. Excellent accuracy and reliability ensure efficient production across a wide range bolt types.

Tooling Life

20% UP



Quadruple-feed rollers system provides smooth and steady material feeding.

SPECIFICATION

		SBF-10B	SBF-13B	SBF-17B	SBF-19B			
PRODUCT SIZE	mm	M6	M8	M10	M12			
	inch	1/4"	5/16"	3/8"	1/2"			
Max LENGTH	mm	50	75	100	100			
MIN LENGTH (H/S)	mm	12/16	16/20	16/20	20/25			
FORGING STATION	-	4	4	5	4	5	4	5
FORGING POWER	Tons	40	60	80	90	105	120	145
MAIN MOTOR	HP	20	25	30	40	40	50	50
MAX. CUT-OFF DIA	mm	8	10	10	13	13	15	15
MAX. CUT-OFF LENGTH	mm	70	105	105	135	135	140	140
MAX. OUTPUT	pcs/min	260	240	200	200	180	170	140
MAX. KICK-OUT STROKE	mm	55	80	80	110	110	110	115
MAX. P.K.O STROKE	mm	13	25	25	25	25	26	26
MAX. RAM STROKE	mm	120	150	150	180	180	200	200
DIE PITCH	mm	60	76	76	90	90	110	110
MAIN DIE HOLE	D*L	Φ50*65	Φ60*105	Φ70*123	Φ80*123			
PUNCH HOLE	D*L	Φ40*80	Φ45*110	Φ50*111	Φ60*120			
CUT-OFF QUILL	D*L	Φ28*46	Φ35*56	Φ40*66	Φ46*80			
HMI (HUMAN MACHINE INTERFACE)		●	●	●	●			
INVERTER		●	●	●	●			
SOUND ENCLOSURE		▲	▲	▲	▲			
MOTORIZED K.O. ADJUSTMENT		▲	▲	▲	▲			
FORGE LOAD MONITOR		▲	▲	▲	▲			
HYDRAULIC CLAMP FOR K.O.		▲	▲	▲	▲			

● = Standard ▲ = Option

SAN SHING
NUT TAPPING MACHINE
 Two Spindles / Four Spindles Type

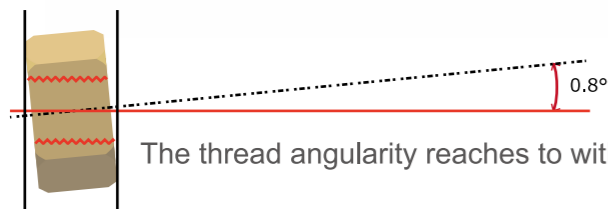
SNT

Comprehensive Tapping Machines To Satisfy All Demands of Nut Product.

The thread quality can reach the standard of DIN13 to within 6 and the thread angularity within 0.8 degree.



Four Spindles Type



The thread angularity reaches to within 0.8 degree.

- Air cylinder pusher, simple pushing mechanism and easy stroke adjustment.
- Tapping movement controlled by PLC.
- Sensors for operation errors such as bad threads, no feeding, part jammed, overloaded and abnormal air pressure...etc.
- Rejection system to discharge the defective parts automatically.
- Human Machine Interface can set up the tapping parameters and manage tap life.
- Easy tool change-over for pusher heads, chutes and sleeves.
- One-click on HMI to shift the operation for left / right threads.

Model	11T	11A	16T	16A	19T	19A	24T	24A	30T	30A				
Spindles	2	4	2	4	2	4	2	4	2	4				
* Hex Nut (DIN934)	Product Size		mm		M5~M8		M8~M10		M10~M12		M12~M16		M16~M24	
			inch		#10~5/16"		5/16"~3/8"		3/8"~1/2"		1/2"~5/8"		5/8"~7/8"	
	Max. Output		pcs/min		165~150 330~300		135~120 270~240		105~90 210~180		75~60 150~120		55~40 110~80	
* Flange Nut (DIN6923)	Product Size		mm		M5~M6		M6~M10		M10~M12		M12~M14		M14~M20	
			inch		#10~1/4"		1/4"~3/8"		3/8"~1/2"		1/2"~9/16"		9/16"~3/4"	
	Max. Output		pcs/min		105~90 210~180		85~72 170~145		65~55 130~110		45~35 90~70		32~27 65~55	
Main Motor Qty	2	4	2	4	2	4	2	4	2	4				
Max Diameter for Nut	mm		16		23		26		35		45			
Motor Power	HP,Pole		1,2		2,4		2,4		3,4		5,4			
Spindle Speed	RPM		2090		1629		1425		1166		855			
Net Weight	kg		930		1050		1480		1610		1480		1730	
Oil Tank Volume	L		190		250		360		510		360		510	
Machine Size (LxWxH)	mm		1360		1200		1575		1595		1670		1635	
			X		X		X		X		X		X	
			1310		1470		1410		1685		1410		1685	
			X		X		X		X		X		X	
		1570		1575		1785		1785		1870		1875		
		X		X		X		X		X		X		
		2065		1880		2280		2190						

* Valid For Tapping Before Heat Treatment Process

Series	Two Spindles (T) Type	Four Spindles (A) Type
HMI (Human Machine Interface)	●	●
Magnetic Chip Separator	●	●
Wear-resistance Tapping Spindles	●	●
Wear-Resistance Hopper	●	●
Inverter For Main Motor	●	●
Inverter For Hopper Motor	●	●
Air Tank	●	●
Automatic Defect Rejection	●	●
Oil-proof Cover	●	●
Magnetic Scrap Conveyor	▲	▲

● = Standard ▲ = Optional



- 1 Tapping Push Rod
- 2 PLC&Human Machine Interface
- 3 Magnetic Chip Separator
- 4 Main Motor Inverter
- 5 Torque Limiter

SAN SHING
NUT TAPPING MACHINE
Round Nut Type

SNT

Purpose-Built Tapping Machine To Serve Expert Technology For Round Nut

Diverse integrations for ideal thread angularity controlling and systematic production monitoring.



7 Full Machine Covers
Provide a clean and safer working environment.

1 Tapping Push Rod
Simple design and easy adjustment.

2 Air Turning Clamps
Pneumatic clamps for fixing nuts.

6 Improving The Nut Angularity
Precise pusher-to-clamping alignment ensures nut angularity within 0.5°.

3 Human Machine Interface
Set up the tapping parameters and manage tap life.

PLC Module
Control tapping movement and detect bad thread, part jammed, overloaded and abnormal air pressure.

5 Inverter
Tapping speed is adjustable.

4 Automatic Rejection System
Discharge the defective parts automatically.



- ▲ **Optional Items**
- Hopper
 - Magnetic Scrap Conveyor

Specification		SNT-30D	SNT-55D
Production range	mm	M5~M8	M10~M22
	inch	#10~3/8"	7/16"~3/4"
Output rate	pcs/min	140~120	80~45
Ref.output rate	Size*Thick*Taps	140 (M6*T7*Thread NO.28T)	76 (M10*T10*Thread NO.28T)
		120 (M8*T9*Thread NO.28T)	48 (M22*T11*Thread NO.23T)
Spindle Speed	Range	1200~2500	700~1500
Max Diameter for Nut	mm	26	38
Oil Tank Volume	L	230	370
Size	With Hopper ▲	2170*1620*2840	2570*2035*2940
	Without Hopper	2170*1620*2340	2570*2035*2520
Net Weight	kg	4200	4800
▲ = Optional			

SNS

SAN SHING NUT SORTING MACHINE
Glass Plate Type



SBS

SAN SHING BOLT SORTING MACHINE
Index Plate Type

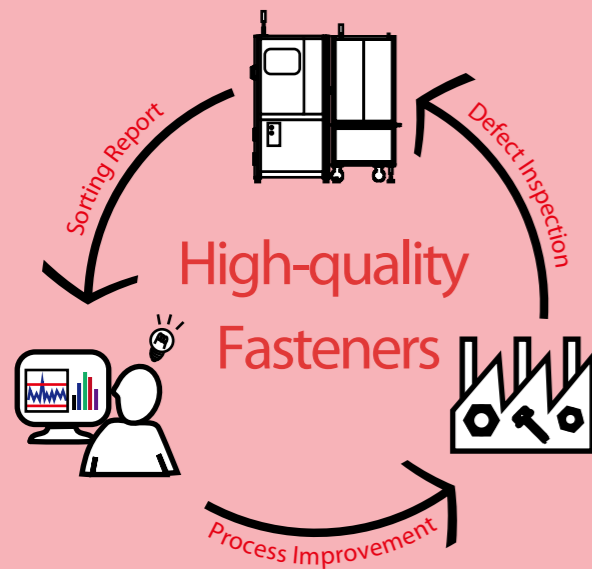


Compulsory Equipment for High Quality Fasteners

With the most powerful sorting software, you may lay back in your office while learning all sorting info from computer.

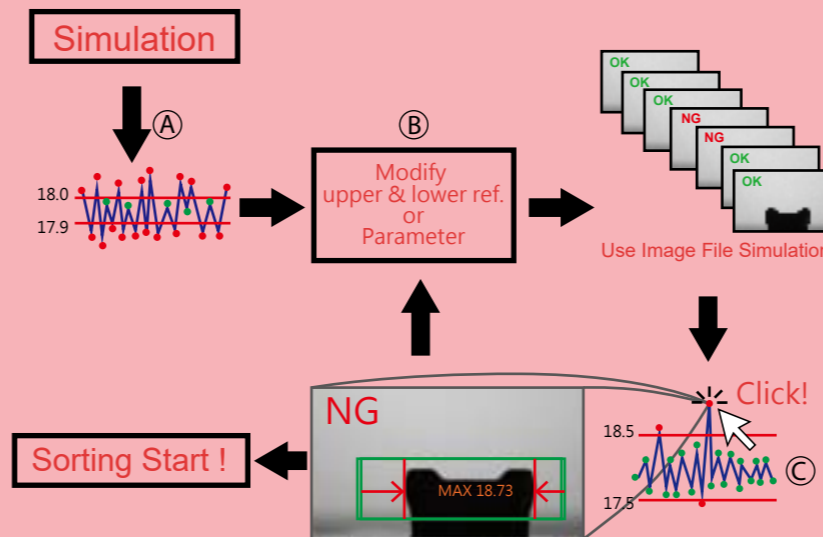
Accurate information for process improvement

Sorting data is stored in Database format, enabling integration with any ERP/MES system. The gathered information from sorting process, such as CPK value, SPC graph, and reference images, can be fed back into process improvement.



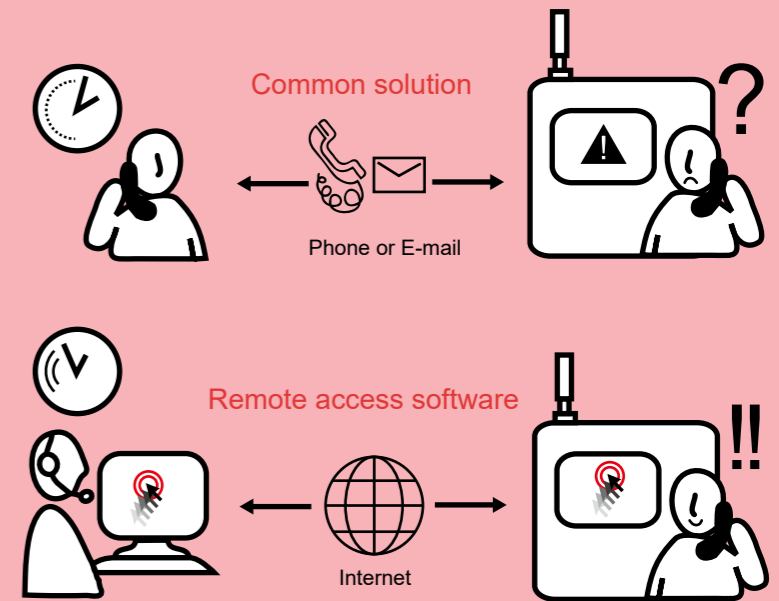
Simulation Function

3 simple steps to find optimized tolerance prior to actual sorting process : (A) .Check the distribution of upper & lower limits.(B) .Modify upper & lower limits or parameters by reviewing the defect images.(C) .Test run by the existed image file. The optimized tolerance can be located to rule out defective parts efficiently, and simplify the process.



Online service

Through remote support platform, San Shing service engineers provide instant suggestion for operator to diagnose and eliminate technical issues.



SNS Glass Plate Type Nut Sorting Machine

High-transparency, tempered glass is polished to achieve ±10um flatness, ensuring better nut height inspection.



SBS Index Plate Type Bolt Sorting Machine

Smooth turning index plate is driven by actuator to ensure stable image capturing.



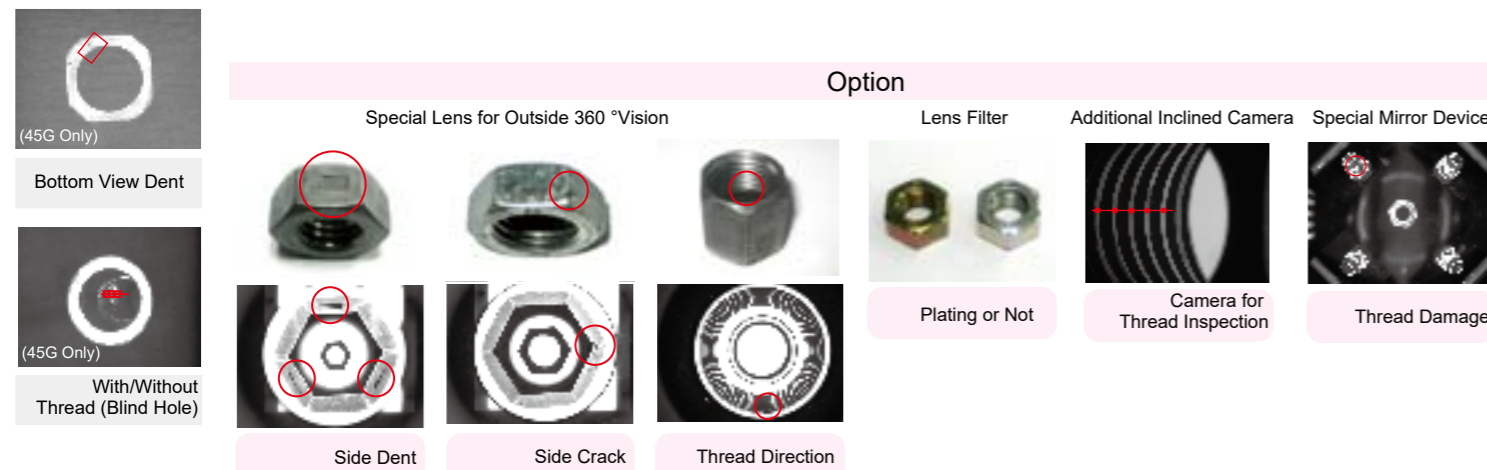
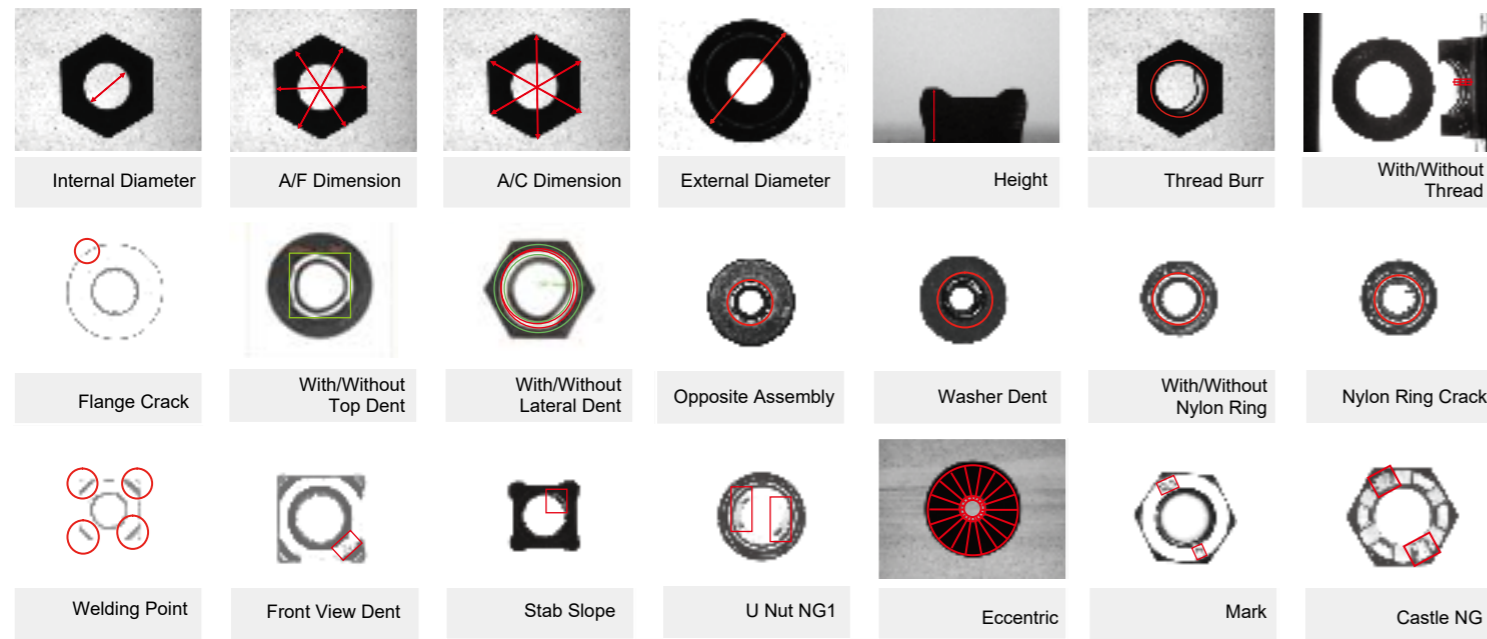
User-Friendly Design

- Easy-to-learn homemade sorting program.
- Adjustable monitor mount with retractable keyboard drawer.
- Clear alarm code with corresponding photo and guideline for troubleshooting.

SNS SAN SHING NUT SORTING MACHINE

Glass Plate Type

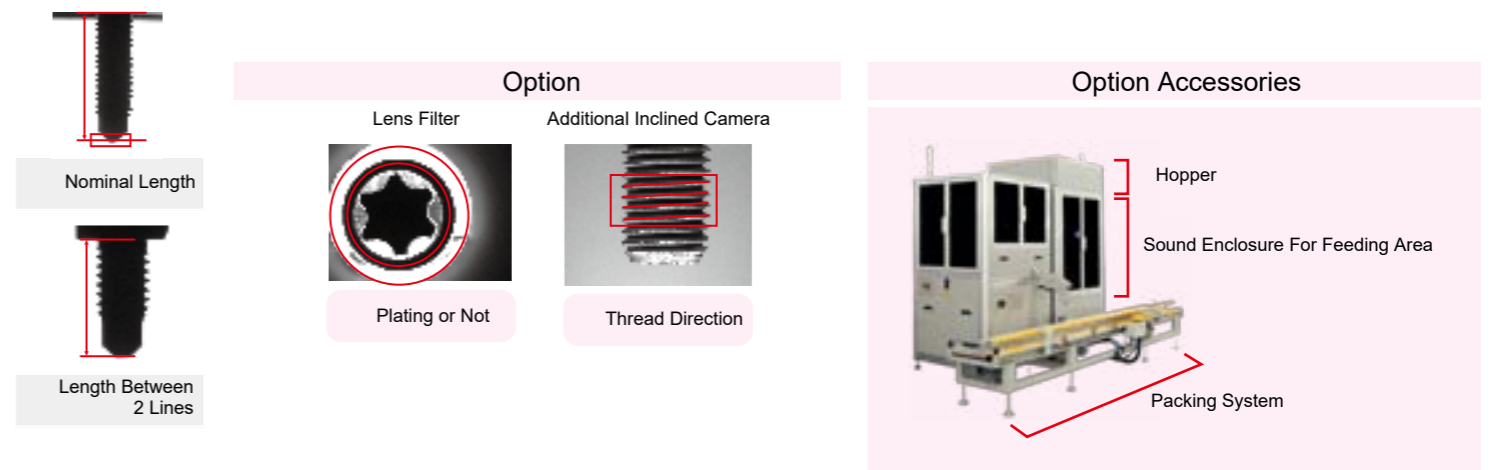
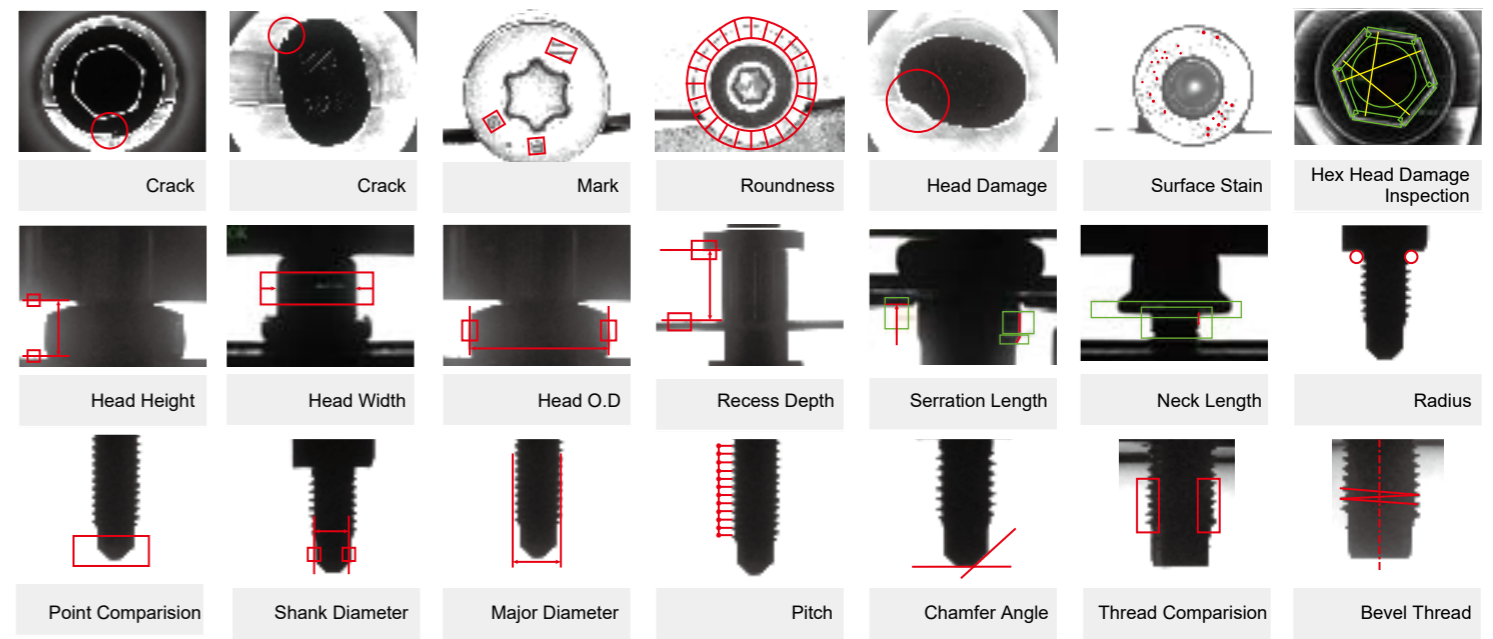
Model	SNS-45G	SNS-45B
Feeding Type	Glass Plate (Flatness Reaches to ±10 um)	Glass Plate + Conveyor Belt
Camera	4 Cameras : 1 Horizontal, 3 Vertical Cameras	4 Cameras : 1 Horizontal, 3 Vertical Cameras
Resolution	640x480 pixels	640x480 pixels
Illumination	1 LED Ring Light · 4 LED Flat Light · 1 Coaxial Light	1 LED Ring Light · 4 LED Flat Light · 1 Coaxial Light
Max Diameter/Height/ Weight	45mm(M20)/38mm/150g	45mm(M20)/30mm/80g
Sorting Accuracy(Back Light)	±1 pixel	±1 pixel
Max Sorting Speed	400pcs/min	400pcs/min
Option		
Packing System		
Sound Enclosure For Feeding Area		
Special Lens for Outside 360°Vision		
Additional Inclined Camera for Thread Inspection		



SBS SAN SHING BOLT SORTING MACHINE

Index Plate Type

Model	SBS-35D	SBS-35L
Feeding Type	Index Plate	Index Plate
Camera	4 Cameras : 3 Horizontal, 1 Vertical Cameras	4 Cameras : 3 Horizontal, 1 Vertical Cameras
Resolution	640x480 pixels	640x480 pixels
Illumination	1 LED Ring Light · 4 LED Flat Light	1 LED Ring Light · 3 LED Flat Light
Sorting Diameter	M3 ~ M16	M3 ~ M16
Sorting Accuracy(Back Light)	±1 pixel	±1 pixel
Max Head Diameter/Length	35mm/6 ~ 125mm	35mm/50 ~ 150mm
Max Sorting Speed	400pcs/min	400pcs/min
Option		
Packing System		
Sound Enclosure For Feeding Area		
Straightness Inspection (For SBS-35L only)		



WORKING HARD TO BE THE BEST
STRATEGIC PARTNER FOR OUR
CUSTOMERS

At SAN SHING, we believe our vertically integrated production, focus on innovation and quality, and professional work force create the highest quality products and top service in the business. That's why we're the best partner for our customers.

WE WOULD LIKE TO TAKE THIS OPPORTUNITY TO THANK YOU FOR YOUR SUPPORT.



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