



The screenshot at right shows a setup on our Model 324 Automated Vision Inspection System for internally threaded fasteners. This system offers the most comprehensive solution for inspecting for multiple diameters, heights, widths, presence of lock, ID and OD chips, bearing surface defects, and presence of threads.

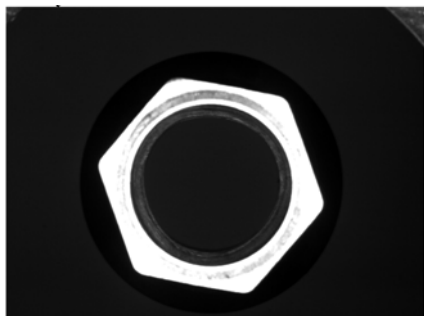


Image above represents the "raw" image without inspection software processing.

**Retina Inspected and Certified Parts: 727**

CAM 3			CAM 4		
Thrd	Thrd		Hex	Hex	
Count	Pitch		FtoF	PtoP	
CURRENT	7.000		A	C	
UPPER	9.000				
LOWER	3.000				
OVERS	0				
UNDERS	0				

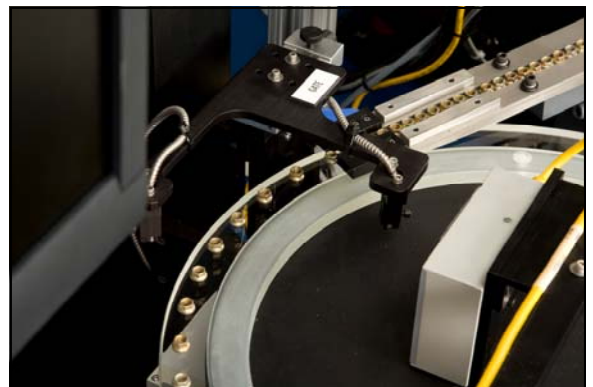
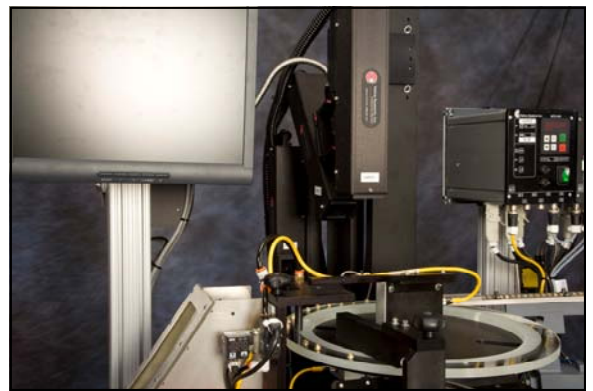
  

CAM 2						
Avg	Avg	Avg	Avg	Min	Max	Avg
OAL	Diam1	Diam2	Diam3	Height1	Height2	Diam4
CURRENT	0.740	0.490	0.615	0.458	0.155	0.485
UPPER	0.744	0.491	0.618	0.462	0.160	0.489
LOWER	0.724	0.489	0.614	0.458	0.150	0.479
OVERS	0	0	0	0	0	0
UNDERS	D	E	G	F	H	I

CAM 1									
Avg	Diams	ID	ID	Avg	Diams	OD	Hex	Hex	
ID	Delta	Chips	Block	OD	Delta	Burst	FtoF	PtoP	Conc.
CURRENT	0.337	0.002	0.000	3			0.622	0.703	
UPPER	0.339	0.006	0.010	100			0.625	0.710	
LOWER	0.336	0.000	0.000	0			0.613	0.697	
OVERS	B	0	0	0			A	0	C
UNDERS	0	0	0	0			0	0	0

Lock Detect



Retina Systems  
Part No: 10-32  
Lookup #: P10-32  
Operator:  
WorkOrder:

TARGET SETUP  
Strobel Int: 4.0  
ThdLt Fstop: 5.6  
Camera3 Pos: 3.94  
Hopper : 45.0  
Bow1 : 56.0  
Inline : 70.0  
Eject Air : 10psi  
Target Rate: 300p/m  
Dial Speed : -9.0

Retina Inspected and Certified Parts: 58861

CAM 3	Thrd	Thrd	Count	Pitch
CURRENT	- 2.000	0.023		
UPPER	- 7.000	0.035		
LOWER	- 2.000	0.015		
OVERS	- 0	3		
UNDERS	- 32	18		

CAM 2	Avg OAL	Avg Diam1	Min Diam2	Avg Len1	Avg Len2
CURRENT	- 0.176			0.052	0.124
UPPER	- 0.185			0.065	0.130
LOWER	- 0.165			0.040	0.110
OVERS	- 0			1	0
UNDERS	- 0			0	1

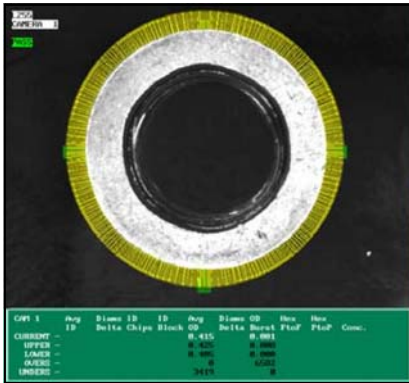
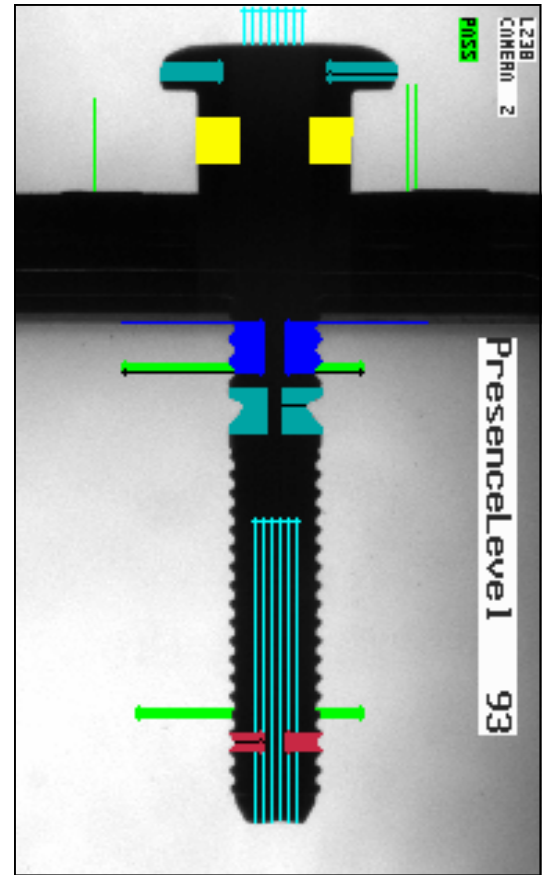
CAM 1	Avg ID	Diams ID	ID Delta	Chips	Block	Avg OD	Diams OD	Hex OD	Hex FtoF	PtoP	Conc.
CURRENT	- 0.159	0.001	0.000	9	0.316	0.001	0.000				0.002
UPPER	- 0.170	0.010	0.010	50	0.325	0.010	0.010				0.010
LOWER	- 0.150	0.000	0.000	0	0.305	0.000	0.000				0.000
OVERS	- 0	0	60	34	0	1	1				
UNDERS	- 1	0	0	0	0	0	0				

RATE	
Good:	364 p/m
Total:	400 p/m
Reject:	10.0%
RejTrend:	9.0%

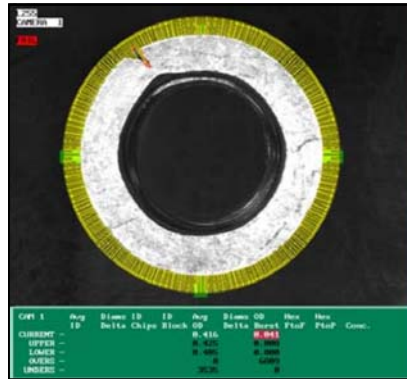
TOTAL COUNTS	
Good:	2015
Reject:	225
Total:	2240

BIN COUNTS	
Good:	2015
GoodMax:	0
Reject:	225
RejectMax:	0

ALIGN/TOOL ERRORS	
Cam 1:	129
Cam 2:	0
Cam 3:	0



Screenshot below shows bearing surface defect at 11:00.



Screenshot above shows bearing surface of a flange nut and is a GOOD part.

