

AQL Standards

The “AQL tables” are statistical tools at the disposal of buyers (for product inspections). They help determine two key elements:

- How many samples should be inspected?
- Where is the limit between acceptability and refusal, when it comes to defective products?

Below are descriptions of the general inspection levels

Level I

If you have received items previously and the quality has not been a problem you can choose Level I.

Level II

Is often used for items of some importance. Usually items that are placed within components which are not frequently serviced or replaced.

Level III

Some buyers opt for level-III inspections for high-value products. It can also be interesting for small quantities, where the inspection would take only one day whatever the level chosen.

Polymax standard Level of inspection is I with AQL of 2.5. Should you need a different inspection criteria please contact our sales team for a bespoke production run

Lot Size (Number of ordered products)				General Inspection Levels		
				I	II	III
2	to	8	A	A	B	
9	to	15	A	B	C	
16	to	25	B	C	D	
26	to	50	C	D	E	
51	to	90	C	E	F	
91	to	150	D	F	G	
151	to	280	E	G	H	
281	to	500	F	H	J	
501	to	1,200	G	J	K	
1,201	to	3,200	H	K	L	
3,201	to	10,000	J	L	M	
10,001	to	35,000	K	M	N	
34,001	to	150,000	L	N	P	
150,001	to	500,000	M	P	Q	
500,001	and over		N	Q	R	

When you have found the batch quantity you can look down the Inspection Level to find the consequential letter. This can then be applied below to find the sampling quantity.

Code letter	Sample size	AQL				
		1.0	1.5	2.5	4.0	6.5
A	2	≤0	≤0	≤0	≤0	≤0
B	3	≤0	≤0	≤0	≤0	≤0
C	5	≤0	≤0	≤0	≤0	≤1
D	8	≤0	≤0	≤0	≤1	≤1
E	13	≤0	≤0	≤1	≤1	≤2
F	20	≤1	≤1	≤1	≤2	≤3
G	32	≤1	≤1	≤2	≤3	≤5
H	50	≤1	≤2	≤3	≤5	≤7
J	80	≤2	≤3	≤5	≤7	≤10
K	125	≤3	≤5	≤7	≤10	≤14
L	200	≤5	≤7	≤10	≤14	≤21
M	315	≤7	≤10	≤14	≤21	≤21
N	500	≤10	≤14	≤21	≤21	≤21
P	800	≤14	≤21	≤21	≤21	≤21
Q	1,250	≤21	≤21	≤21	≤21	≤21
R	2,000	≤21	≤21	≤21	≤21	≤21

You can then look across the Code to the subsequent AQL that has been applied to the batch to find the acceptable defect rate of o-rings sampled.

Thus for a batch of 3000 pcs: Code 'H' will apply, 50 pcs will be inspected and the batch will be deemed to be acceptable if fewer than (or equal to) 3 pcs are found in the same