



Sampling Size Code Letters							
Lot Size	General Inspection Levels			Special Inspection Levels			
	I	II	III	S1	S2	S3	S4
2 to 8	A	A	B	A	A	A	A
9 to 15	A	B	C	A	A	A	A
16 to 25	B	C	D	A	A	B	B
26 to 50	C	D	E	A	B	B	C
51 to 90	C	E	F	B	B	C	C
91 to 150	D	F	G	B	B	C	D
151 to 280	E	G	H	B	C	D	E
281 to 500	F	H	J	B	C	D	E
501 to 1 200	G	J	K	C	C	E	F
1 201 to 3 200	H	K	L	C	D	E	G
3 201 to 10 000	J	L	M	C	D	F	G
10 001 to 35 000	K	M	N	C	D	F	H
35 001 to 150 000	L	N	P	D	E	G	J
150 001 to 500 000	M	P	Q	D	E	G	J
500 000 and over	N	Q	R	D	E	H	K

### Inspection Levels

Three general and four special inspection levels are provided. The general inspection levels (I to III) are commonly used for non-destructive inspection. Level II is considered the norm (except for small sample sizes). Level I is required only 40 percent of inspection level II and can be used where less discrimination is needed. Level III equals 160 percent of the amount of inspection Level II. Level III will give a lower risk of accepting a lot with excessive number of defects. However, inspection of larger samples is required. Unless otherwise specified, inspection Level II will be used.

Special Levels S-1, S-2, S-3 and S-4 may be used where relatively small sample sizes are necessary or large sampling risks can be taken. Examples of this are inspections involving destructive or costly (time consuming) type inspection, or where large lots are involved, small sample sizes are desired and large risks can be tolerated such as repetitive processes (screw machine, stamping, bolting operations, etc.) performed by a quality supplier. Larger sample sizes are for inspection levels increasing from S-1 to S-4.

When it is necessary to determine an inspection level, a number of factors must be considered in order to optimize the cost/risk relationship. These are:

- The operating characteristic (OC) curves to evaluate the technical properties of various plans.
- The supplier's risk and discrimination afforded by various inspection levels.
- Knowledge of the production process.
- Process capability knowledge and past quality performance history.
- Item complexity.
- Cost and importance of examination or test, particularly when testing is expensive, time consuming or destructive.
- Importance of the quality characteristics to be examined, that is, critical, major and so forth.
- Analysis of consumer's risk.