KEMENTERIAN PENDIDIKAN TINGGI
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI

BAHAGIAN PEPERIKSAAN DAN PENILAIAN
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI
KEMENTERIAN PENDIDIKAN TINGGI

JABATAN KEJURUTERAAN MEKANIKAL

PEPERIKSAAN AKHIR

SESI II : 2025/2026

DJF52092 : QUALITY CONTROL

TARIKH : 08 MEI 2026
MASA : 8.30 PAGI - 10.30 PAGI (2 JAM)

Kertas ini mengandungi **SEPULUH (10)** halaman bercetak.

Struktur (4 soalan)

Dokumen sokongan yang disertakan : Kertas Graf & Formula Table

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JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIARAHKAN

(CLO yang tertera hanya sebagai rujukan)

INSTRUCTION:

This section consists of **FOUR (4)** structured questions. Answers **ALL** questions.

ARAHAN:

*Bahagian ini mengandungi **EMPAT (4)** soalan struktur. Jawap **SEMUA** soalan.*

QUESTION 1

SOALAN 1

(a) State **FOUR (4)** reasons for creating a standard of quality.

CLO1 *Senaraikan **EMPAT (4)** sebab untuk mewujudkan standard kualiti*

[4 marks]

[4 *markah*]

(b) Quality Management Principles are basic guidelines that help organizations manage quality effectively to meet customer needs and improve performance. Explain any **FOUR (4)** Quality Management Principles.

CLO1 *Prinsip Pengurusan Kualiti adalah garis panduan asas yang membantu organisasi mengurus kualiti dengan berkesan untuk memenuhi keperluan pelanggan dan meningkatkan prestasi. Terangkan mana-mana **EMPAT (4)** Prinsip Pengurusan Kualiti.*

[8 marks]

[*8 markah*]

(c) The population data for the tensile strength (MPa) of eight plastic components are recorded as follows:

CLO1 *Data populasi bagi kekuatan tegangan (MPa) untuk lapan komponen plastik direkodkan seperti berikut:*

48, 52, 50, 49, 51, 53, 47, 50

i) Using the data above, calculate the population mean and the standard deviation.

Dengan menggunakan data di atas, hitung nilai min populasi dan sisihan piawai.

[6 marks]

[*6 markah*]

ii) A component with tensile strength of 54 MPa is produced. Calculate the Z-score for this value using the mean and standard deviation obtained in part (i).

Satu komponen dihasilkan dengan kekuatan tegangan 54 MPa. Hitung skor Z bagi nilai tersebut menggunakan min dan sisihan piawai yang diperoleh dalam bahagian (i).

[3 marks]

[*3 markah*]

iii) Calculate the probability of obtaining a value greater than 54 MPa using the Z-table.

Kira kebarangkalian memperoleh nilai melebihi 54 MPa dengan menggunakan jadual Z.

[4 marks]

[*4 markah*]

QUESTION 2

SOALAN 2

(a) State the **TWO (2)** types of data used in quality control.

CLO1 *Nyatakan **DUA (2)** jenis data yang digunakan dalam kawalan kualiti.*

[2 marks]

[*2 markah*]

(b) A manufacturing company produces metal shafts and monitors the diameter of

CLO1 the shafts using a control chart. The quality engineer reviews the chart daily to observe process variation and ensure the production process remains stable. Based on this situation:

Sebuah syarikat pembuatan menghasilkan aci logam dan memantau diameter aci tersebut menggunakan carta kawalan. Jurutera kualiti menyemak carta tersebut setiap hari untuk memerhati variasi proses dan memastikan proses pengeluaran kekal stabil. Berdasarkan situasi ini:

i) Discuss **TWO (2)** purposes of using a control chart

*Bincangkan **DUA (2)** tujuan penggunaan carta kawalan.*

[4 marks]

[*4 markah*]

ii) Explain how a control chart indicates whether a process is in control or out of control.

Terangkan bagaimana carta kawalan menunjukkan sama ada sesuatu proses berada dalam kawalan atau di luar kawalan.

[4 marks]

[*4 markah*]

c) The data shown in Table 2(c) represent the acid content (millimeters) of samples taken from a process. Each sample consists of n = 4 observations.

CLO1

Data yang ditunjukkan dalam Jadual 2(c) mewakili kandungan asid (milimeter) bagi sampel yang diambil daripada suatu proses. Setiap sampel terdiri daripada n = 4 pemerhatian.

Table 2(c) / *Jadual 2(c)*

No. SG	1	2	3	4	Xbar	s
1	6.32	6.35	6.38	6.32	6.34	0.03
2	6.34	6.25	6.37	6.25	6.30	0.06
3	6.41	6.39	6.29	6.46	6.39	0.08
4	6.29	6.25	6.25	6.34	6.28	0.04
5	6.25	6.33	6.30	6.32	6.30	0.04
6	6.46	6.34	6.41	6.35	6.39	0.06
7	6.35	6.38	6.33	6.38	6.36	0.02
8	6.34	6.33	6.35	6.25	6.32	0.05
9	6.43	6.37	6.38	6.34	6.38	0.04
10	6.37	6.42	6.35	6.25	6.35	0.07

Based on the data:

Berdasarkan data:

(i) Calculate the Center Line (CL), Upper Control Limit (UCL), and Lower Control Limit (LCL).

Kira Garis Tengah (CL), Had Kawalan Atas (UCL) dan Had Kawalan Bawah (LCL).

[8 marks]

[8 *markah*]

(ii) Plot the X bar-s Chart.

Lukis Carta X bar-s

[7 marks]

[7 *markah*]

QUESTION 3

SOALAN 3

(a) List **TWO (2)** advantages and **TWO (2)** disadvantages of the attribute control chart.

CLO1

*Senaraikan **DUA (2)** kelebihan dan **DUA (2)** kekurangan carta kawalan atribut.*

[4 marks]

[*4 markah*]

(b) Explain **THREE (3)** differences between attribute control charts and variable control charts.

CLO1

*Jelaskan **TIGA (3)** perbezaan antara carta kawalan atribut dan carta kawalan pembolehubah.*

[6 marks]

[6 *markah*]

(c) A production manager for a computer component has inspected the number of defective keyboards in 5 random samples, with 20 keyboards in each sample. Table 3(c) below shows the result of the inspection.

CLO1

Seorang pengurus pengeluaran bagi komponen komputer telah memeriksa bilangan papan kekunci yang rosak dalam 5 sampel rawak, dengan 20 papan kekunci dalam setiap sampel. Jadual 3(c) di bawah menunjukkan keputusan pemeriksaan tersebut.

Table 3(c) / *Jadual 3(c)*

Sample Number *Nombor Sampel*	Number of defective *Bilangan kecacatan*
1	1
2	2
3	4
4	1
5	3

i) Determine the control limit for the P-chart

Tentukan limit kawalan bagi P-chart

[8 marks]

[*8 markah*]

ii) Plot a P-chart

Lukis satu P-chart

[7 marks]

[*7 markah*]

QUESTION 4

SOALAN 4

(a) Explain acceptance sampling in quality control with **THREE (3)** types of acceptance sampling plans commonly used.

CLO1

*Terangkan pensampelan penerimaan dalam kawalan kualiti dengan **TIGA (3)** jenis pelan pensampelan penerimaan yang biasa digunakan.*

[4 marks]

[4 *markah*]

(b) According to MIL-STD-105D, there are three inspection severities: normal, tightened, and reduced. Consider the following data:

CLO1

Berdasarkan MIL-STD-105D, terdapat tiga tahap ketegasan pemeriksaan iaitu pemeriksaan normal, diperketatkan (tightened), dan dikurangkan (reduced). Pertimbangkan data berikut:

Lot size, N = 20,000 units

Saiz lot, N = 20,000 unit

AQL = 0.65%

AQL = 0.65%

General Inspection Level = II

Tahap Pemeriksaan Umum = II

i) Acquire the sample size (n), acceptance number (Ac), and rejection number (Re) for single sampling.

Tentukan saiz sampel (n), nombor penerimaan (Ac), dan nombor tolak (Re) untuk pelan pensampelan tunggal bagi pemeriksaan normal.

[9 marks]

[*9 markah*]

ii) Inspection severity may vary between normal, tightened, and reduced inspection levels. Write **ONE (1)** reason for the change in inspection severity for any three types of inspection.
*Tahap ketegasan pemeriksaan boleh berubah antara pemeriksaan normal, diperketatkan dan dikurangkan. Nyatakan **SATU (1)** sebab perubahan tahap ketegasan pemeriksaan bagi mana-mana tiga jenis pemeriksaan.*

[2 marks]
[*2 markah*]

(c) CLO2 Table 4(c) shows the cost of quality report for ABC Manufacturing Company for January–March 2024.
Jadual 4(c) menunjukkan laporan kos kualiti bagi Syarikat ABC Manufacturing untuk tempoh Januari hingga Mac 2024.

Table 4(c) / *Jadual 4(c)*

Activities *Aktiviti*	January *Januari* (RM)	February *Februari* (RM)	March *Mac* (RM)
Operator training *Latihan operator*	3000	2000	1000
Inspection labour *Tenaga kerja pemeriksaan*	2500	2500	2500
Scrap *Sisa buangan*	1200	1500	1300
Rework *Pembaikan*	800	600	700
Warranty claims *Tuntutan jaminan*	0	900	600
Product return handling *Pengendalian pemulangan produk*	300	0	400

i) Classify each cost item into the appropriate quality cost category.
Kelaskan setiap item kos ke dalam kategori kos kualiti yang sesuai.

[3 marks]
[3 *markah*]

ii) Determine the total cost for each quality cost category over three months.
Tentukan jumlah kos bagi setiap kategori kos kualiti untuk tempoh tiga bulan.

[7 marks]
[7 *markah*]

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GPS :1.630823,110.195364

DJF52092

QUALITY CONTROL

Version: SESSION 1 2021/2022

FORMULAS & TABLES

FOR

DIPLOMA IN MECHANICAL ENGINEERING

DEPARTMENT OF MECHANICAL ENGINEERING

POLITEKNIK KUCHING SARAWAK

PREPARED BY

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TABLE OF CONTENTS

Formulas

A. Statistics

i. Average

- Ungrouped data

$$\overline{X} = \frac{\Sigma X}{n}$$

- Grouped data

$$\overline{X} = \frac{\Sigma fx}{\Sigma f}$$

ii. Standard Deviation

- ungrouped population

$$\sigma = \sqrt{\frac{\sum(X_i - \bar{X})^2}{N}}$$

- Grouped population

$$\sigma = \sqrt{\frac{\sum f(X_i - \bar{X})^2}{N}}$$

- (theory) sample data

$$s = \sqrt{\frac{\sum(X_i - \bar{X})^2}{(n-1)}}$$

- Ungrouped sample

$$s = \sqrt{\frac{n\sum X_i^2 - (\sum X_i)^2}{n(n-1)}}$$

- Grouped sample

$$s = \sqrt{\frac{n(\sum f_i X_i^2) - (\sum f_i X_i)^2}{n(n-1)}}$$

B. Variable Control Charts

i. Average and Range Charts

- $\overline{X}$ chart:
  1. Center line, $\overline{\overline{X}} = \frac{\sum_{i=1}^{m} \overline{X}}{m}$
  2. Upper Control Limit, $UCL_{\overline{X}} = \overline{\overline{X}} + A_2\overline{R}$
  3. Lower Control Limit, $LCL_{\overline{X}} = \overline{\overline{X}} - A_2\overline{R}$
- R chart
  1. Center line, $\overline{R} = \frac{\sum_{i=1}^{m} R_i}{m}$
  2. Upper Control Limit, $UCL_R = D_4\overline{R}$
  3. Lower Control Limit, $LCL_R = D_3\overline{R}$
- Revising the Charts:
  1. New Center line, $\overline{X} = \overline{\overline{X}}_{new} = \frac{\sum_{i=1}^{m} \overline{X} - \overline{X}_d}{m - m_d}$
  2. New Upper Control Limit, $UCL_{\overline{X}} = \overline{X}_0 + A\sigma_0$
  3. New Lower Control Limit, $LCL_{\overline{X}} = \overline{X}_0 - A\sigma_0$
  4. Sigma, $\sigma_0 = R_0 / d_2$
  5. New Center line, $R_0 = \overline{R}_{new} = \frac{\sum_{i=1}^{m} R_i - R_d}{m - m_d}$
  6. New Upper Control Limit, $UCL_R = D_2\sigma_0$
  7. New Lower Control Limit, $LCL_R = D_1\sigma_0$

ii. Average and Standard Deviation Charts

- $\overline{X}$ chart:
  1. Center line, $\overline{\overline{X}} = \frac{\sum_{i=1}^{m} \overline{X}}{m}$
  2. Upper Control Limit, $UCL_{\overline{X}} = \overline{\overline{X}} + A_3\overline{s}$
  3. Lower Control Limit, $LCL_{\overline{X}} = \overline{\overline{X}} - A_3\overline{s}$
- s chart
  1. Center line, $\overline{s} = \frac{\sum_{i=1}^{m} s_i}{m}$
  2. Upper Control Limit, $UCL_s = B_4\overline{s}$
  3. Lower Control Limit, $LCL_s = B_3\overline{s}$
- Revising the Charts:
  1. New Center line, $\overline{X} = \overline{\overline{X}}_{new} = \frac{\sum_{i=1}^{m} \overline{X} - \overline{X}_d}{m - m_d}$
  2. New Upper Control Limit, $UCL_{\overline{X}} = \overline{X}_0 + A\sigma_0$
  3. New Lower Control Limit, $LCL_{\overline{X}} = \overline{X}_0 - A\sigma_0$
  4. Sigma, $\sigma_0 = s_0 / c_4$
  5. New Center line, $s_0 = \overline{s}_{new} = \frac{\sum_{i=1}^{m} s_i - s_d}{m - m_d}$
  6. New Upper Control Limit, $UCL_s = B_6\sigma_0$
  7. New Lower Control Limit, $LCL_s = B_5\sigma_0$

C. Capability Index

i. $C_p = \frac{USL - LSL}{6\sigma}$

ii. $C_{PK} = \frac{USL - \overline{X}}{3\sigma}$, $\frac{\overline{X} - LSL}{3\sigma}$

D. Attribute Control Charts

i. Fraction Nonconforming (p) Chart

1. Fraction, $p = \frac{np}{n}$
2. Center line, $\bar{p} = \frac{\sum_{i=1}^{n} np}{\sum_{i=1}^{n} n}$
3. Upper Control Limit, $UCL_{\bar{p}} = \bar{p} + 3\frac{\sqrt{\bar{p}(1-\bar{p})}}{\sqrt{n}}$
4. Lower Control Limit, $LCL_{\bar{p}} = \bar{p} - 3\frac{\sqrt{\bar{p}(1-\bar{p})}}{\sqrt{n}}$

- Revising the Charts:
  1. New Center line, $\bar{p}_{new} = \frac{\sum_{i=1}^{n} np - np_d}{\sum_{i=1}^{n} n - n_d}$
  2. New Upper Control Limit, $UCL_{\bar{p}_{new}} = \bar{p}_{new} + 3\frac{\sqrt{\bar{p}_{new}(1-\bar{p}_{new})}}{\sqrt{n}}$
  3. New Lower Control Limit, $LCL_{\bar{p}_{new}} = \bar{p}_{new} - 3\frac{\sqrt{\bar{p}_{new}(1-\bar{p}_{new})}}{\sqrt{n}}$

ii. Percent Nonconforming (100p) Chart

1. Center line, $100\bar{p} = 100\left[\frac{\sum_{i=1}^{n} np}{\sum_{i=1}^{n} n}\right]$
2. Upper Control Limit, $UCL_{100\bar{p}} = 100\left[\bar{p} + 3\frac{\sqrt{\bar{p}(1-\bar{p})}}{\sqrt{n}}\right]$
3. Lower Control Limit, $LCL_{100\bar{p}} = 100\left[\bar{p} - 3\frac{\sqrt{\bar{p}(1-\bar{p})}}{\sqrt{n}}\right]$

iii. Number of Nonconforming (np) Chart

1. Center line, $\overline{np} = \frac{\sum_{i=1}^{n} np}{m}$
2. Upper Control Limit, $UCL_{\overline{np}} = \overline{np} + 3\sqrt{\overline{np}(1-\bar{p})}$
3. Lower Control Limit, $LCL_{\overline{np}} = \overline{np} - 3\sqrt{\overline{np}(1-\bar{p})}$

iv. Count of Nonconformities (c) Chart

1. Center line, $\bar{c} = \frac{\sum_{i=1}^{n} c}{m}$
2. Upper Control Limit, $UCL_{\bar{c}} = \bar{c} + 3\sqrt{\bar{c}}$
3. Lower Control Limit, $LCL_{\bar{c}} = \bar{c} - 3\sqrt{\bar{c}}$

- Revising the Charts:
  1. New Center line, $\bar{c}_{new} = \frac{\sum_{i=1}^{n} c - c_d}{m - m_d}$
  2. New Upper Control Limit, $UCL_{\bar{c}_{new}} = \bar{c}_{new} + 3\sqrt{\bar{c}_{new}}$
  3. New Lower Control Limit, $LCL_{\bar{c}_{new}} = \bar{c}_{new} - 3\sqrt{\bar{c}_{new}}$

v. Nonconformities per Unit (u) Chart

1. Nonconformities per unit, $u = \frac{c}{n}$
2. Center line, $\bar{u} = \frac{\sum_{i=1}^{n} c}{\sum_{i=1}^{n} n}$
3. Upper Control Limit, $UCL_{u} = \bar{u} + 3\frac{\sqrt{\bar{u}}}{\sqrt{n}}$
4. Lower Control Limit, $LCL_{u} = \bar{u} - 3\frac{\sqrt{\bar{u}}}{\sqrt{n}}$

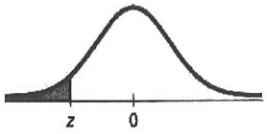
Note:

- **NONE of the formula in page 1 and 2 content "Cube Root" ($3\sqrt{\ }$), only "3 x $\sqrt{\ }$ ".**
- **Symbol 'm' in this booklet refers to the number of group (g).**

TABLES

A. Normal Distribution Table

Table Z
Areas under the standard Normal curve

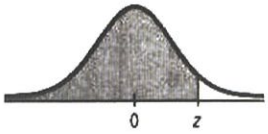


$$Z = \frac{X_i - \mu}{\sigma}$$

Second decimal place in z										
0.09	*0.08*	*0.07*	*0.06*	*0.05*	*0.04*	*0.03*	*0.02*	*0.01*	*0.00*	*z*
									0.0000†	*−3.9*
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	*−3.8*
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	*−3.7*
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	*−3.6*
0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	*−3.5*
0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	*−3.4*
0.0003	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	*−3.3*
0.0005	0.0005	0.0005	0.0006	0.0006	0.0006	0.0006	0.0006	0.0007	0.0007	*−3.2*
0.0007	0.0007	0.0008	0.0008	0.0008	0.0008	0.0009	0.0009	0.0009	0.0010	*−3.1*
0.0010	0.0010	0.0011	0.0011	0.0011	0.0012	0.0012	0.0013	0.0013	0.0013	*−3.0*
0.0014	0.0014	0.0015	0.0015	0.0016	0.0016	0.0017	0.0018	0.0018	0.0019	*−2.9*
0.0019	0.0020	0.0021	0.0021	0.0022	0.0023	0.0023	0.0024	0.0025	0.0026	*−2.8*
0.0026	0.0027	0.0028	0.0029	0.0030	0.0031	0.0032	0.0033	0.0034	0.0035	*−2.7*
0.0036	0.0037	0.0038	0.0039	0.0040	0.0041	0.0043	0.0044	0.0045	0.0047	*−2.6*
0.0048	0.0049	0.0051	0.0052	0.0054	0.0055	0.0057	0.0059	0.0060	0.0062	*−2.5*
0.0064	0.0066	0.0068	0.0069	0.0071	0.0073	0.0075	0.0078	0.0080	0.0082	*−2.4*
0.0084	0.0087	0.0089	0.0091	0.0094	0.0096	0.0099	0.0102	0.0104	0.0107	*−2.3*
0.0110	0.0113	0.0116	0.0119	0.0122	0.0125	0.0129	0.0132	0.0136	0.0139	*−2.2*
0.0143	0.0146	0.0150	0.0154	0.0158	0.0162	0.0166	0.0170	0.0174	0.0179	*−2.1*
0.0183	0.0188	0.0192	0.0197	0.0202	0.0207	0.0212	0.0217	0.0222	0.0228	*−2.0*
0.0233	0.0239	0.0244	0.0250	0.0256	0.0262	0.0268	0.0274	0.0281	0.0287	*−1.9*
0.0294	0.0301	0.0307	0.0314	0.0322	0.0329	0.0336	0.0344	0.0351	0.0359	*−1.8*
0.0367	0.0375	0.0384	0.0392	0.0401	0.0409	0.0418	0.0427	0.0436	0.0446	*−1.7*
0.0455	0.0465	0.0475	0.0485	0.0495	0.0505	0.0516	0.0526	0.0537	0.0548	*−1.6*
0.0559	0.0571	0.0582	0.0594	0.0606	0.0618	0.0630	0.0643	0.0655	0.0668	*−1.5*
0.0681	0.0694	0.0708	0.0721	0.0735	0.0749	0.0764	0.0778	0.0793	0.0808	*−1.4*
0.0823	0.0838	0.0853	0.0869	0.0885	0.0901	0.0918	0.0934	0.0951	0.0968	*−1.3*
0.0985	0.1003	0.1020	0.1038	0.1056	0.1075	0.1093	0.1112	0.1131	0.1151	*−1.2*
0.1170	0.1190	0.1210	0.1230	0.1251	0.1271	0.1292	0.1314	0.1335	0.1357	*−1.1*
0.1379	0.1401	0.1423	0.1446	0.1469	0.1492	0.1515	0.1539	0.1562	0.1587	*−1.0*
0.1611	0.1635	0.1660	0.1685	0.1711	0.1736	0.1762	0.1788	0.1814	0.1841	*−0.9*
0.1867	0.1894	0.1922	0.1949	0.1977	0.2005	0.2033	0.2061	0.2090	0.2119	*−0.8*
0.2148	0.2177	0.2206	0.2236	0.2266	0.2296	0.2327	0.2358	0.2389	0.2420	*−0.7*
0.2451	0.2483	0.2514	0.2546	0.2578	0.2611	0.2643	0.2676	0.2709	0.2743	*−0.6*
0.2776	0.2810	0.2843	0.2877	0.2912	0.2946	0.2981	0.3015	0.3050	0.3085	*−0.5*
0.3121	0.3156	0.3192	0.3228	0.3264	0.3300	0.3336	0.3372	0.3409	0.3446	*−0.4*
0.3483	0.3520	0.3557	0.3594	0.3632	0.3669	0.3707	0.3745	0.3783	0.3821	*−0.3*
0.3859	0.3897	0.3936	0.3974	0.4013	0.4052	0.4090	0.4129	0.4168	0.4207	*−0.2*
0.4247	0.4286	0.4325	0.4364	0.4404	0.4443	0.4483	0.4522	0.4562	0.4602	*−0.1*
0.4641	0.4681	0.4721	0.4761	0.4801	0.4840	0.4880	0.4920	0.4960	0.5000	*−0.0*

†For $z \leq -3.90$, the areas are 0.0000 to four decimal places.

Table Z (cont.)
Areas under the standard Normal curve



	Second decimal place in z									
z	*0.00*	*0.01*	*0.02*	*0.03*	*0.04*	*0.05*	*0.06*	*0.07*	*0.08*	*0.09*
0.0	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5319	0.5359
0.1	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753
0.2	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141
0.3	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517
0.4	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879
0.5	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224
0.6	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7517	0.7549
0.7	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.7823	0.7852
0.8	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8106	0.8133
0.9	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8365	0.8389
1.0	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8599	0.8621
1.1	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8810	0.8830
1.2	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015
1.3	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9162	0.9177
1.4	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319
1.5	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9429	0.9441
1.6	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9535	0.9545
1.7	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9625	0.9633
1.8	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9699	0.9706
1.9	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9761	0.9767
2.0	0.9772	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817
2.1	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9854	0.9857
2.2	0.9861	0.9864	0.9868	0.9871	0.9875	0.9878	0.9881	0.9884	0.9887	0.9890
2.3	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9913	0.9916
2.4	0.9918	0.9920	0.9922	0.9925	0.9927	0.9929	0.9931	0.9932	0.9934	0.9936
2.5	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952
2.6	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9963	0.9964
2.7	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974
2.8	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981
2.9	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986
3.0	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9990	0.9990
3.1	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9992	0.9993	0.9993
3.2	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995
3.3	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997
3.4	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998
3.5	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998	0.9998
3.6	0.9998	0.9998	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3.7	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3.8	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999	0.9999
3.9	1.0000†									

†For $z \geq 3.90$, the areas are 1.0000 to four decimal places.

B. Factors For Computing Center Line And Three-Sigma Control Limits

Observations in Sample, n	$\bar{X}$-Charts			s-Charts						R-Charts						
	Factors for Control Limits			Factors for Center line		Factors for Control Limits				Factors for Center line		Factors for Control Limits				
	A	A_2	A_3	c_4	$1/c_4$	B_3	B_4	B_5	B_6	d_2	$1/d_2$	d_3	D_1	D_2	D_3	D_4
2	2.121	1.880	2.659	0.7979	1.2533	0	3.267	0	2.606	1.128	0.8865	0.853	0	3.686	0	3.267
3	1.732	1.023	1.954	0.8862	1.1284	0	2.568	0	2.276	1.693	0.5907	0.888	0	4.358	0	2.574
4	1.500	0.729	1.628	0.9213	1.0854	0	2.266	0	2.088	2.059	0.4857	0.880	0	4.698	0	2.282
5	1.342	0.577	1.427	0.9400	1.0638	0	2.089	0	1.964	2.326	0.4299	0.864	0	4.918	0	2.114
6	1.225	0.483	1.287	0.9515	1.0510	0.030	1.970	0.029	1.874	2.534	0.3946	0.848	0	5.078	0	2.004
7	1.134	0.419	1.182	0.9594	1.0423	0.118	1.882	0.113	1.806	2.704	0.3698	0.833	0.204	5.204	0.076	1.924
8	1.061	0.373	1.099	0.9650	1.0363	0.185	1.815	0.179	1.751	2.847	0.3512	0.820	0.388	5.306	0.136	1.864
9	1.000	0.337	1.032	0.9693	1.0317	0.239	1.761	0.232	1.707	2.970	0.3367	0.808	0.547	5.393	0.184	1.816
10	0.949	0.308	0.975	0.9727	1.0281	0.284	1.716	0.276	1.669	3.078	0.3249	0.797	0.687	5.469	0.223	1.777
11	0.905	0.285	0.927	0.9754	1.0252	0.321	1.679	0.313	1.637	3.173	0.3152	0.787	0.811	5.535	0.256	1.744
12	0.866	0.266	0.886	0.9776	1.0229	0.354	1.646	0.346	1.610	3.258	0.3069	0.778	0.922	5.594	0.283	1.717
13	0.832	0.249	0.850	0.9794	1.0210	0.382	1.618	0.374	1.585	3.336	0.2998	0.770	1.025	5.647	0.307	1.693
14	0.802	0.235	0.817	0.9810	1.0194	0.406	1.594	0.399	1.563	3.407	0.2935	0.763	1.118	5.696	0.328	1.672
15	0.775	0.223	0.789	0.9823	1.0180	0.428	1.572	0.421	1.544	3.472	0.2880	0.756	1.203	5.741	0.347	1.653
16	0.750	0.212	0.763	0.9835	1.0168	0.448	1.552	0.440	1.526	3.532	0.2831	0.750	1.282	5.782	0.363	1.637
17	0.728	0.203	0.739	0.9845	1.0157	0.466	1.534	0.458	1.511	3.588	0.2787	0.744	1.356	5.820	0.378	1.622
18	0.707	0.194	0.718	0.9854	1.0148	0.482	1.518	0.475	1.496	3.640	0.2747	0.739	1.424	5.856	0.391	1.608
19	0.688	0.187	0.698	0.9862	1.0140	0.497	1.503	0.490	1.483	3.689	0.2711	0.734	1.487	5.891	0.403	1.597
20	0.671	0.180	0.680	0.9869	1.0133	0.510	1.490	0.504	1.470	3.735	0.2677	0.729	1.549	5.921	0.415	1.585
21	0.655	0.173	0.663	0.9876	1.0126	0.523	1.477	0.516	1.459	3.778	0.2647	0.724	1.605	5.951	0.425	1.575
22	0.640	0.167	0.647	0.9882	1.0119	0.534	1.466	0.528	1.448	3.819	0.2618	0.720	1.659	5.979	0.434	1.566
23	0.626	0.162	0.633	0.9887	1.0114	0.545	1.455	0.539	1.438	3.858	0.2592	0.716	1.710	6.006	0.443	1.557
24	0.612	0.157	0.619	0.9892	1.0109	0.555	1.445	0.549	1.429	3.895	0.2567	0.712	1.759	6.031	0.451	1.548
25	0.600	0.153	0.606	0.9896	1.0105	0.565	1.435	0.559	1.420	3.931	0.2544	0.708	1.806	6.056	0.459	1.541

C. Cumulative Poission Distribution Table

						np_0					
c	**0.01**	**0.05**	**0.1**	**0.2**	**0.3**	**0.4**	**0.5**	**0.6**	**0.7**	**0.8**	**0.9**
0	0.990	0.951	0.905	0.819	0.741	0.670	0.607	0.549	0.497	0.449	0.407
1	1.000	0.999	0.995	0.982	0.963	0.938	0.910	0.878	0.844	0.809	0.772
2		1.000	1.000	0.999	0.996	0.992	0.986	0.977	0.966	0.953	0.937
3				1.000	1.000	0.999	0.998	0.997	0.994	0.991	0.987
4						1.000	1.000	1.000	0.999	0.999	0.998
5									1.000	1.000	1.000
c	**1.0**	**1.1**	**1.2**	**1.3**	**1.4**	**1.5**	**1.6**	**1.7**	**1.8**	**1.9**	**2.0**
0	0.368	0.333	0.301	0.273	0.247	0.223	0.202	0.183	0.165	0.150	0.135
1	0.736	0.699	0.663	0.627	0.592	0.558	0.525	0.493	0.463	0.434	0.406
2	0.920	0.900	0.879	0.857	0.833	0.809	0.783	0.757	0.731	0.704	0.677
3	0.981	0.974	0.966	0.957	0.946	0.934	0.921	0.907	0.891	0.875	0.857
4	0.996	0.995	0.992	0.989	0.986	0.981	0.976	0.970	0.964	0.956	0.947
5	0.999	0.999	0.998	0.998	0.997	0.996	0.994	0.992	0.990	0.987	0.983
6	1.000	1.000	1.000	1.000	0.999	0.999	0.999	0.998	0.997	0.997	0.995
7					1.000	1.000	1.000	1.000	0.999	0.999	0.999
8									1.000	1.000	1.000
c	**2.2**	**2.4**	**2.6**	**2.8**	**3.0**	**3.5**	**4.0**	**4.5**	**5.0**	**5.5**	**6.0**
0	0.111	0.091	0.074	0.061	0.050	0.030	0.018	0.011	0.007	0.004	0.002
1	0.355	0.308	0.267	0.231	0.199	0.136	0.092	0.061	0.040	0.027	0.017
2	0.623	0.570	0.518	0.469	0.423	0.321	0.238	0.174	0.125	0.088	0.062
3	0.819	0.779	0.736	0.692	0.647	0.537	0.433	0.342	0.265	0.202	0.151
4	0.928	0.904	0.877	0.848	0.815	0.725	0.629	0.532	0.440	0.358	0.285
5	0.975	0.964	0.951	0.935	0.916	0.858	0.785	0.703	0.616	0.529	0.446
6	0.993	0.988	0.983	0.976	0.966	0.935	0.889	0.831	0.762	0.686	0.606
7	0.998	0.997	0.995	0.992	0.988	0.973	0.949	0.913	0.867	0.809	0.744
8	1.000	0.999	0.999	0.998	0.996	0.990	0.979	0.960	0.932	0.894	0.847
9		1.000	1.000	0.999	0.999	0.997	0.992	0.983	0.968	0.946	0.916
10				1.000	1.000	0.999	0.997	0.993	0.986	0.975	0.957
11						1.000	0.999	0.998	0.995	0.989	0.980
12							1.000	0.999	0.998	0.996	0.991
13								1.000	0.999	0.998	0.996
14									1.000	0.999	0.999
15										1.000	0.999
16											1.000

Cumulative Poission Distribution Table (cont.)

	np_0										
c	**6.5**	**7.0**	**7.5**	**8.0**	**9.0**	**10.0**	**12.0**	**14.0**	**16.0**	**18.0**	**20.0**
0	0.002	0.001	0.001	0.000							
1	0.011	0.007	0.005	0.003	0.001						
2	0.043	0.030	0.020	0.014	0.006	0.003	0.001				
3	0.112	0.082	0.059	0.042	0.021	0.010	0.002				
4	0.224	0.173	0.132	0.100	0.055	0.029	0.008	0.002			
5	0.369	0.301	0.241	0.191	0.116	0.067	0.020	0.006	0.001		
6	0.527	0.450	0.378	0.313	0.207	0.130	0.046	0.014	0.004	0.001	
7	0.673	0.599	0.525	0.453	0.324	0.220	0.090	0.032	0.010	0.003	0.001
8	0.792	0.729	0.662	0.593	0.456	0.333	0.155	0.062	0.022	0.007	0.002
9	0.877	0.830	0.776	0.717	0.587	0.458	0.242	0.109	0.043	0.015	0.005
10	0.933	0.901	0.862	0.816	0.706	0.583	0.347	0.176	0.077	0.030	0.011
11	0.966	0.947	0.921	0.888	0.803	0.697	0.462	0.260	0.127	0.055	0.021
12	0.984	0.973	0.957	0.936	0.876	0.792	0.576	0.358	0.193	0.092	0.039
13	0.993	0.987	0.978	0.966	0.926	0.864	0.682	0.464	0.275	0.143	0.066
14	0.997	0.994	0.990	0.983	0.959	0.917	0.772	0.570	0.368	0.208	0.105
15	0.999	0.998	0.995	0.992	0.978	0.951	0.844	0.669	0.467	0.287	0.157
16	1.000	0.999	0.998	0.996	0.989	0.973	0.899	0.756	0.566	0.375	0.221
17		1.000	0.999	0.998	0.995	0.986	0.937	0.827	0.659	0.469	0.297
18			1.000	0.999	0.998	0.993	0.963	0.883	0.742	0.562	0.381
19				1.000	0.999	0.997	0.979	0.923	0.812	0.651	0.470
20					1.000	0.998	0.988	0.952	0.868	0.731	0.559
21						0.999	0.994	0.971	0.911	0.799	0.644
22						1.000	0.997	0.983	0.942	0.855	0.721
23							0.999	0.991	0.963	0.899	0.787
24							0.999	0.995	0.978	0.932	0.843
25							1.000	0.997	0.987	0.955	0.888
26								0.999	0.993	0.972	0.922
27								0.999	0.996	0.983	0.948
28								1.000	0.998	0.990	0.966
29									0.999	0.994	0.978
30									0.999	0.997	0.987
31									1.000	0.998	0.992
32										0.999	0.995
33										1.000	0.997
34											0.999
35											0.999
36											1.000

D (i) Sample-Size Code Letters

Lot or batch size			Special Inspection Levels				General Inspection Levels		
			S-1	S-2	S-3	S-4	I	II	III
2	to	8	A	A	A	A	A	A	B
9	to	15	A	A	A	A	A	B	C
16	to	25	A	A	B	B	B	C	D
26	to	50	A	B	B	C	C	D	E
51	to	90	B	B	C	C	C	E	F
91	to	150	B	B	C	D	D	F	G
151	to	280	B	C	D	E	E	G	H
281	to	500	B	C	D	E	F	H	J
501	to	1,200	C	C	E	F	G	J	K
1,201	to	3,200	C	D	E	G	H	K	L
3,201	to	10,000	C	D	F	G	J	L	M
10,001	to	35,000	C	D	F	H	K	M	N
35,001	to	150,000	D	E	G	J	L	N	P
150,001	to	500,000	D	E	G	J	M	P	Q
500,001	and	over	D	E	H	K	N	Q	R

D (ii) Single Sampling Plans for Normal Inspection (Master Table)

Sample size code letter	Sample size	Acceptable Quality Levels (normal inspection)																									
		0.010	0.015	0.025	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
A	2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↓	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31
B	3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45
C	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	↑
D	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	↑	↑
E	13	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	↑	↑	↑
F	20	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑
G	32	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑
H	50	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑
J	80	↓	↓	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑
K	125	↓	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
L	200	↓	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
M	315	↓	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
N	500	↓	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
P	800	↓	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Q	1250	0 1	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
R	2000	↑	↑	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

↓ = Use first sampling plan below arrow. If sample size equals or exceeds lot or batch size, do 100 percent inspection.

↑ = Use first sampling plan above arrow.

Ac = Acceptance number.

Re = Rejection number.

D (iii) Single Sampling Plans for Tightened Inspection (Master Table)

Sample size code letter	Sample size	Acceptable Quality Levels (tightened inspection)																																	
		0.010		0.015		0.025		0.040		0.065		0.10		0.15		0.25		0.40		0.65		1.0		1.5		2.5		4.0		6.5		10		15		25		40		65		100		150		250		400		650		1000	
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
A	2	⇓		⇓		⇓		⇓		⇓		⇓		⇓		⇓		⇓		⇓		⇓		⇓		⇓		⇓		0	1	⇓		⇓		1	2	2	3	3	4	5	6	8	9	12	13	18	19	27	28
B	3																																	1	2	2	3	3	4	5	6	8	9	12	13	18	19	27	28	41	42
C	5																									0	1					1	2	2	3	3	4	5	6	8	9	12	13	18	19	27	28	41	42		
D	8																													1	2	2	3	3	4	5	6	8	9	12	13	18	19	27	28	41	42				
E	13																													2	3	3	4	5	6	8	9	12	13	18	19	27	28	41	42						
F	20																													3	4	5	6	8	9	12	13	18	19										
G	32																													5	6	8	9	12	13	18	19										
H	50																													8	9	12	13	18	19										
J	80																													12	13	18	19												
K	125																													18	19														
L	200																																												
M	315																																											
N	500																																											
P	800																																											
Q	1250																																											
R	2000																																											
S	3150																																											

⇓ = Use first sampling plan below arrow. If sample size equals or exceeds lot or batch size, do 100 percent inspection.

⇑ = Use first sampling plan above arrow.

Ac = Acceptance number.

Re = Rejection number.

D (iv) Single Sampling Plans for Reduced Inspection (Master

Sample size code letter	Sample size	Acceptable Quality Levels (reduced inspection)✝																									
		0.010	0.015	0.025	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
A	2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↓	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31
B	2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	2 4	3 5	5 6	7 8	10 11	14 15	21 22	30 31
C	2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	14 17	21 24	↑
D	3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	14 17	21 24	↑	↑
E	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	14 17	21 24	↑	↑	↑
F	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑
G	13	↓	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑
H	20	↓	↓	↓	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑	↑
J	32	↓	↓	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑	↑	↑
K	50	↓	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
L	80	↓	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
M	125	↓	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
N	200	↓	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
P	315	↓	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Q	500	0 1	↑	↓	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
R	800	↑	↑	0 2	1 3	1 4	2 5	3 6	5 8	7 10	10 13	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

↓ = Use first sampling plan below arrow. If sample size equals or exceeds lot or batch size, do 100 percent inspection.

↑ = Use first sampling plan above arrow.

✝ = If the acceptance number has been exceeded, but the rejection number has not been reached; accept the lot, but reinstate normal inspection.

Ac = Acceptance number.

Re = Rejection number.