

## Control Charts

### Description

This template illustrates a Statistical Process Control (SPC) chart. A detailed discussion of SPC charts can be found at [www.ASQ.org](http://www.ASQ.org)

[Learn About Statistical Process Control](#)

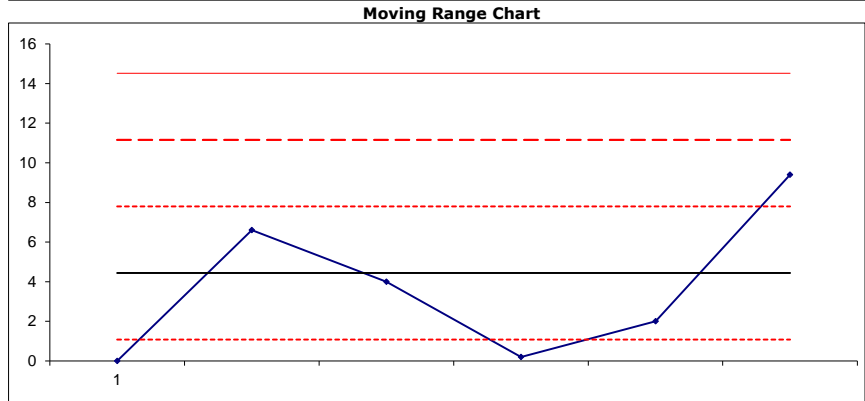
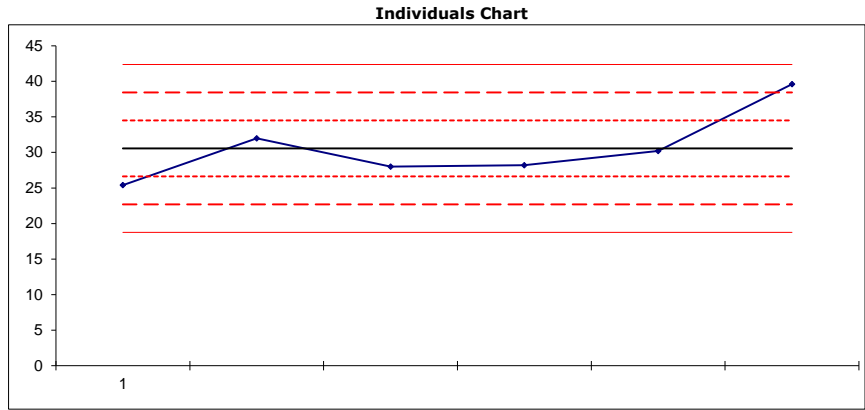
### Instructions

- Select the correct subgroup size. When in doubt, select a subgroup size of one. Partial subgroups are not displayed.
  - One    Two    Three
  - Four    Five    Six
- Enter up to 200 data points in the cells provided. Do not enter values in the subgroup column. These cells update automatically to show the subgroup in which the data point is included
- Identify any out of control conditions. Four tests are performed. Use the legend to identify the points corresponding to a particular test.
- If a test looks for a proportion of points, only the offending point will be identified. For example, if eight points in a row are on one side of the centerline only the eighth point will be identified.

### Learn More

To learn more about other quality tools, visit the ASQ Learn About Quality web site.

[Learn About Quality](#)



- Three Sigma Limit
- - - Two Sigma Limit
- . . . One Sigma Limit
- Average
- A single point outside the control limits
- Two of three pts outside the two sigma limit
- Four of Five pts outside the one sigma limit
- Eight in a row on the same side of centerline

### Control Chart Data

30,567	Xbar/IMR Chart Avg
4,44	Range Chart Avg
3,9361702	Rbar/d <sub>2</sub>
6	Number of samples
1	Subgroup size
6	Number of subgroups

34,5	Xbar one sigma Upper Limit
38,44	Xbar two sigma Upper Limit
42,38	Xbar three sigma Upper Limit
26,63	Xbar one sigma Lower Limit
22,69	Xbar two sigma Lower Limit
18,76	Xbar three sigma Lower Limit

7,8	Rbar one sigma Upper Limit
11,16	Rbar two sigma Upper Limit
14,52	Rbar three sigma Upper Limit
1,08	Rbar one sigma Lower Limit
n/a	Rbar two sigma Lower Limit
n/a	Rbar three sigma Lower Limit

Sub Group	Data	Sub Group	Data	Sub Group	Data	Sub Group	Data	Sub Group	Data	Sub Group	Data	Sub Group	Data	Sub Group	Data
1	25,4	26		51		76		101		126		151		176	
2	32	27		52		77		102		127		152		177	
3	28	28		53		78		103		128		153		178	
4	28,2	29		54		79		104		129		154		179	
5	30,2	30		55		80		105		130		155		180	
6	39,6	31		56		81		106		131		156		181	
7		32		57		82		107		132		157		182	
8		33		58		83		108		133		158		183	
9		34		59		84		109		134		159		184	
10		35		60		85		110		135		160		185	
11		36		61		86		111		136		161		186	
12		37		62		87		112		137		162		187	
13		38		63		88		113		138		163		188	
14		39		64		89		114		139		164		189	
15		40		65		90		115		140		165		190	
16		41		66		91		116		141		166		191	
17		42		67		92		117		142		167		192	
18		43		68		93		118		143		168		193	
19		44		69		94		119		144		169		194	
20		45		70		95		120		145		170		195	
21		46		71		96		121		146		171		196	
22		47		72		97		122		147		172		197	
23		48		73		98		123		148		173		198	
24		49		74		99		124		149		174		199	
25		50		75		100		125		150		175		200	