DataNet Quality Systems Knowledgebase

What Subgroup Level Control Tests come preconfigured with WinSPC?

Family	Test	Definition	Color	Description
Standard	1 pt beyond control limits	RUN(PRI,1,1,Z)	RED	A single point outside of the c
Nelson	1 pt beyond Zone A	RUN(PRI,1,1,Z)	RED	A single point beyond Zone A
	2/3 pts Zone A or beyond	RUN(PRI,2,3,A+)	RED	Two out of three points in a ro
	4/5 pts Zone B or beyond	RUN(PRI,4,5,B+)	RED	Four out of five points in a rov
	9 pts Zone C or beyond	RUN(PRI,9,9,C+, ONE SIDE)	RED	Nine points in a row in Zone C
	Mixture	RUN(PRI,8,8,B+,BOTH SIDES)	PURPLE	Eight points in a row on both
	Stratification	RUN(PRI,15,15,C,BOTH SIDES)	PURPLE	Fifteen points in a row all in Z line.
	{PRI} decreasing	TREND(PRI,6,DOWN)		Six points in a row, each one
	{PRI} increasing	TREND(PRI,6,UP)		Six points in a row, each one
	{PRI} not changing	TREND(PRI,6,STEADY)		Six points in a row, each one
	{SEC} decreasing	TREND(SEC,6,DOWN)		Six points in a row, each one
	{SEC} increasing	TREND(SEC,6,UP)		Six points in a row, each one
	{SEC} not changing	TREND(SEC,6,STEADY)		Six points in a row, each one
Shewhart	1 pt beyond Zone A	RUN(PRI,1,1,Z)	RED	A single point beyond Zone A
Western Electric*	1 pt beyond Zone A	RUN(PRI,1,1,Z)	RED	A single point beyond Zone A
	2/3 pts Zone A or beyond	RUN(PRI,2,3,A+)	RED YELLOW	Two out of three points in a ro
	4/5 pts Zone B or beyond	RUN(PRI,4,5,B+)	RED YELLOW	Four out of five points in a rov
	8 pts Zone C or beyond	RUN(PRI,8,8,C+,ONE SIDE)	RED YELLOW	Eight points in a row in Zone
	Mixture	RUN(PRI,8,8,B+,BOTH SIDES)	PURPLE YELLOW	Eight points in a row on both
	Stratification	RUN(PRI,15,15,C,BOTH SIDES)	YELLOW PURPLE	Fifteen points in a row all in Z line.
	{PRI} decreasing	TREND(PRI,6,DOWN)		Six points in a row, each one
	{PRI} increasing	TREND(PRI,6,UP)		Six points in a row, each one
	{PRI} not changing	TREND(PRI,6,STEADY)		Six points in a row, each one
	{SEC} decreasing	TREND(SEC,6,DOWN)		Six points in a row, each one
	{SEC} increasing	TREND(SEC,6,DOWN)		Six points in a row, each one
	{SEC} not changing	TREND(SEC,6,STEADY)		Six points in a row, each one

Introduction

WinSPC allows you to set up rules known as Control Tests against your control charts in Data Collection mode. These Control Tests are referred to as Subgroup Level Control Tests. When violated, WinSPC can be configured to react by using triggers.

WinSPC comes preconfigured with the most common Subgroup Level Control Tests. For information on how to create your own custom Subgroup Level Control Tests, please reference the WinSPC Version 8 Administrator Training Manual, Chapter 24, Page 395, as well as additional information in the following knowledgebase article for WinSPC versions 8.3.4 and newer:

https://knowledgebase.winspc.com/questions/311

YELLOW
YELLOW
YELLOW
YELLOW
YELLOW
YELLOW

These tests are broken up into families of tests, based on various commonly used SPC methodologies. These include the Shewhart, Western Electric, and Nelson tests.

Table of Preconfigured WinSPC Subgroup Level Control Tests

Family - The family indicates which set or family of rules the Subgroup Level Control Test is based on.

Test - The test is the name of the Subgroup Level Control Test as it appears in the WinSPC Tree.

Definition - Reference to the actual syntax used by WinSPC that defines a named given test.

Color - The control test will cause the subgroup listed on the Control Chart to change color to highlight the violation on the chart. The severity of the color appears in Data Collection as well as Plant Monitor.

Description - The description of the Subgroup Level Control Test, as it appears inside WinSPC.

*Western Electric rules are sometimes also referred to as AT&T rules.

https://knowledgebase.winspc.com/questions/315/