

Translation of Varian Injector and Detector Model Numbers into Scion Acronyms

by Randall Bramston-Cook
Lotus Consulting

The Varian 3700 Gas Chromatograph was released in 1975 and had been specifically designed to accommodate capillary capabilities after the restrictive patent for capillary columns expired in 1977 (US Patent 2920478 A, 1960). Thirteen different injector types had been developed over the years since, to provide an optimum choice in performance capabilities. To distinguish the different styles and to leave room for enhancements to the injectors as the technology emerged, model numbers were assigned to injectors. These have matured over the years and are now remain well established, with minor adjustments being implemented. The following table converts the current versions of these injectors into the new labeling by Scion Instruments as acronyms.

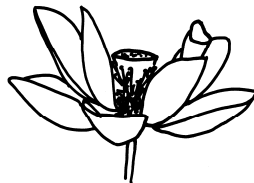
Varian Injector Model	Scion Acronym	Expanded Label	Year Originally Introduced	Notes
1041	PWOC	<u>P</u> acked <u>W</u> ide-bore <u>O</u> pen-tubular <u>C</u> apillary	1984	Packed and Megabore Columns
1061	Flash	<u>F</u> lash Injector with Injector Insert	1984	Packed and Megabore Columns for Dirty Samples
1079	PTV	<u>P</u> rogrammed <u>T</u> emperature <u>V</u> aporizer	1979	Subambient; Injector, required for Chromatoprobe
1098-SPI	COC	<u>C</u> ool- <u>O</u> n- <u>C</u> olumn	1985	Subambient
1177	S/SL	<u>S</u> plit/ <u>S</u> plitless	2000	
SPT	SPT	<u>S</u> ample <u>P</u> reconcentration <u>T</u> rap	1999	Designed to Concentrate Air Samples
--	MGS	<u>M</u> ini- <u>G</u> as <u>S</u> plitter	2013	Column Inlet Splitter without Injector

Varian detectors had been always labeled detector labels as acronyms that referenced the physical measurement involved. For example, a detector based on detection of the difference in analyte's thermal conductivity, compared with the carrier gas, was called a Thermal Conductivity Detector (TCD). Or a flame detector set up to monitor hydrocarbons was labeled a Flame Ionization Detector (FID), and not a "hydrocarbon" detector. In 1976, Varian introduced a detector specific to the monitoring of nitrogen and phosphorus containing organics eluting from a column, and labeled by its principal - Thermal-ionic Specific Detector (TSD). Other manufacturers started calling theirs as a Nitrogen-Phosphorus Detector (NPD). Scion Instruments has conceded the labeling to the popular demand, and now calls their TSD as NPD.

Varian Label	Scion Acronym	Expanded Label	Year Originally Introduced	Notes
TSD	NPD	<u>N</u> itrogen- <u>P</u> hosphorus <u>D</u> etector	1976	TSD - <u>T</u> hermal- <u>I</u> onic <u>S</u> pecific <u>D</u> etector

Copyright 2016 Lotus Flower, Inc.

Lotus Consulting
 310/569-0128
 email randy@lotusinstruments.com



5781 Campo Walk
 Long Beach, California 90803
www.lotusinstruments.com