

SPAN PAC™ I Industrial Standards Generator

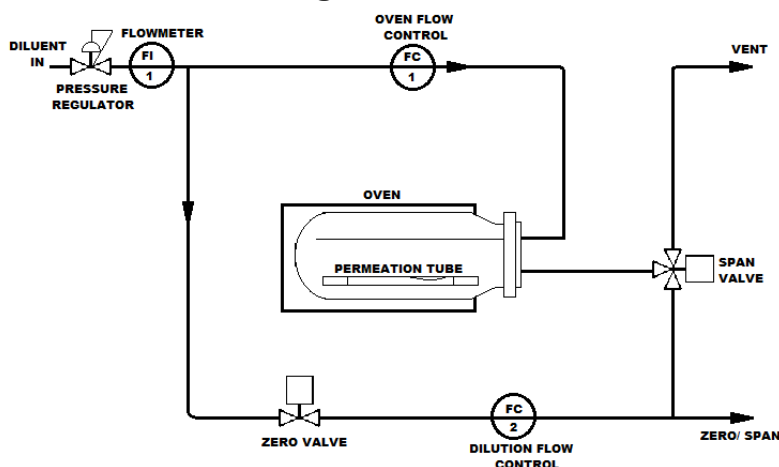
DESCRIPTION

The **Span Pac™ I Gas Standards Generator** blends gas standards for on-line calibration of process analyzers and continuous emissions monitors. **Span Pac™ I** units are capable of generating concentrations from sub-ppb to over 1,000 ppm. These units have an output signal for switching the analyzer input from sample to calibration gas. They can be operated manually or by remote station. **Span Pac™ I Gas Standards Generators** are available in single or multi-oven configurations, which give these units the capability of multicomponent mixture and multi-point span calibration.

All **Span Pac™ I** units are housed in NEMA 4 specification cabinets and are designed to satisfy the safety requirements for operation in N.E.C. Class 1, Group C or D, Div. II hazardous atmospheres. These units can also be adapted to Div. I service by adding the X-purge option. The Z-purge option meets revision of NFPA 494. The Span Pac I cabinets can hold up to three permeation ovens.



Flow Diagram SPAN PAC™ I



APPLICATIONS

- Process Control
- Custody Transfer Analysis
- On-Line Quality Assurance
- Stationary Source Monitors
- Industrial Hygiene Monitoring

OPERATION

The **Span Pac™ I** has three operating modes: Zero, Span and Standby. In all three modes, the dilution gas flows through the pressure regulator and the flow meter (FI 1); then splits into two flows, the Oven Flow and the Main Dilution Flow.

In Zero Mode, the zero valve sends the Main Dilution Flow through the Dilution Flow Controller (F.C. 2) and out the Zero/ Span to the analyzer. The Oven Flow flows through the Oven Flow controller (F.C. 1); over the permeation tube and is sent to Vent by the Span Valve.

OPERATION (CONT.)

In the Span Mode, the Zero Valve is open, sending the Main Dilution Flow through the Dilution Flow controller (F.C. 1). The Oven Flow flows through the Oven Flow controller (F.C. 1); over the permeation tube and is added back into the Main Dilution Flows by the Span Valve to form the span mixture.

In the Standby Mode, the Zero Valve is closed to conserve dilution gas, and the Oven Flow flows over the permeation tube and is sent to Vent by the Span Valve.

BENEFITS

- Economical – Replaces expensive, unreliable gas cylinder mixtures
- Safe – Limits possibility of exposure to hazardous materials
- Reliable – Continuous service – accuracy can be verified by user
- Automated – Can be operated by the analyzer or computerized process control system
- Traceable Accuracy – Permeation tube output measure by weight loss
- Rugged Construction – NEMA 4 housing withstands industrial environment

SPECIFICATION

Oven Capacity:	Up to 1/4" dia. X 6" long disposable permeation tubes, one LFH, one 57S or one 57H.
Temperature Control:	High mass oven, solid state, zero switching, on-off control. Set point values from 30°C to 150°C. (Value chosen to suit the application) Control sensitivity: $\pm 0.03^{\circ}\text{C}$
Flow Range:	0.5 to 5 liters per minute. (2 to 20 l/min optional)
Output Pressure:	0-40 psig
Typical Concentration Range:	1,000 ppm to ppb
Dimensions:	20" x 20" x 9 1/4"
Electrical Classification:	General purpose (Class I, Gr. D, Div. II option)
Weight:	Approximately 60 lbs.

Models Available in One, Two or Three Oven Configurations

Span Pac 61 I:	Single oven unit
Span Pac 261 I:	Two oven unit
Span Pac 361 I:	Three oven unit
Span Pac 71 I:	Single oven unit for 57 Series Permeation Tubes
Span Pac 61/ 71 I:	Two oven unit, one 61 oven and one 57 Series oven
Span Pac 271 I:	Two oven unit for 57 Series Permeation Tubes
Span Pac 261/ 71 I:	Two 61 ovens and one 57 Series oven

Represented by:

KIN-TEK 
The Calibration Specialists

1-800-326-3627
Ph: (409) 938-3627
Fax: (409) 938-3710
www.kin-tek.com
email: sales@kin-tek.com

REVSP1160524-LM
© 2016 KIN-TEK Analytical, Inc. All rights reserved.
Printed in USA