TERMINOLOGY

Air Consumption - Static. The maximum rate at which air is consumed by a device within its operating range during steady-state (static) signal conditions.

Air Consumption - Dynamic. The maximum rate at which air is consumed by a device within its operating range while the device is in motion.

Air Delivery Rate (Max.). See Flow Capacity.

Ambient Temperature Range. The minimum and maximum temperature of the medium surrounding a device.

Control Action. The nature of the change of the output effected by the input.

Controller Signal. The output of a device which operates automatically to regulate a controlled variable.

Exhaust Capacity. The rate which a volume will exhaust from a given device. Typically expressed in SCFM for gases or GPM for liquids.

Exhaust Rate. See Exhaust Capacity.

Fail Safe System. In the event of power source loss, either electrical or pneumatic, an additional apparatus designed to direct a device to take a specific action.

Failure mode. The reaction of a device in the event of a power source loss, either electrical or pneumatic.

Flow Capacity - Dynamic. The rate which a mass will pass forward through a given device within a unit of time while variables are in a steady-state. Typically expressed in SCFM for gases or GPM for liquids.

Flow Capacity - Static. The rate which a volume will pass forward through a given device within a unit of time while variables are undergoing a change. Typically expressed in SCFM for gases or GPM for liquids.

Maximum Supply Pressure. The maximum pressure that can be supplied to a device above which will result in malfunction of device.

Power Amplification. The change in input required to produce a full range change in output, due to proportional control action.

Proportional Control Action. Control action in which there is a continuous linear relation between the input and the output.

Proportional Gain. The ratio of the change in output due to proportional control action to the change in input.

Repeatability. The maximum difference between a number of consecutive reaction indications for the same applied inputs, approaching from the same direction. It is usually measured in terms of non-repeatability and expressed in repeatability error as a percentage of span.

Reproducibility. See Repeatability.

Span. The algebraic difference between maximum and minimum limits of a scale.

Static. See Steady-State.

Steady State. A characteristic of a condition, such as value, rate, periodicity, or amplitude, exhibiting only negligible change over an arbitrary long period.

Supply Pressure Effect. The effect of supply pressure variations relative to output pressure at a constant set point.

Zero Suppression. The condition in which the zero of the measured variable is less than the lower range-value.