

BRING PNEUMATIC CONCEPTS TO LIFE FOR YOUR STUDENTS with IntelliSchematic™ Pneumatic PowerPoint™ presentations!

Schoolcraft Publishing now offers dynamic and animated PowerPoint presentations on Pneumatic concepts from IntelliSchematic. These PowerPoints are designed to enhance your presentation of compressors, lubricators, actuators, control valves, and hundreds of other topics. Seeing the parts of a pneumatic system function separately and together will help your students visualize and better understand pneumatic principles.

This package consists of: 8 PowerPoint presentations. These presentations contain over 400 slides!

The animated PowerPoints are versatile and adaptable—they work well with any textbook, in a classroom or training environment, or as an excellent stand-alone visual resource.

## Pneumatic Fundamentals

### Applied Physics

Work  
Power  
Horsepower  
Formulas  
Flow  
Pressure  
Pressure Scales  
Pressure Drop  
Boyle's Law  
Charles' Law  
Lussac's Law  
Combined Gas Law  
Bernoulli's Principle

## Pneumatic Compressors

### Terminology

SCFM  
Compressed CFM  
Staging  
Unloading

## Displacement Compressors

Piston  
Diaphragm  
Vane  
Screw

## Support Components

Inlet Filter  
Intercooler  
Aftercooler  
Air Receiver  
Safety Relief Valve  
Pressure Switch

## Pneumatics Air Pressure

### Dryers

Dew Point Dryers  
Refrigerant Dryers  
Deliquescent Dryers  
Desiccant Dryers

## Air Preparation

Filters

Standard Filters  
Coalescing Filters  
Absorbing Filters

## Air Regulators

Non-Relieving  
Relieving

## Lubricators

Functional Description

## Air Conductors and Distribution

### Conductors

Pipe  
Hoses  
Tubing  
Connectors

## Air Distribution

Primary Lines  
Secondary Lines  
Dead End System

## Key Benefits for Teachers/Trainers:

- Flexible classroom options. Walk students through the explanation of concepts using the hundreds of provided slides, and then bring the concepts to life with the detailed and high quality animation that follows.
- Comprehensive coverage of pneumatic concepts.
- You can easily customize a presentation to your lectures and discussions by dropping them into your own PowerPoints for even more flexibility.
- Add your own text and information to our slides and animations to enhance and drive home your curriculum.
- With the Slide View option, students cannot just visualize the concepts but hear the explanations as well—great for quick review to help them prepare for exams and further enhance their understanding, freeing up your time.

Please Note: Animations are PC compatible only



## Key Benefits for Students

- Helps you create “aha” moments as students can “see” pneumatic principles in action!
- Builds strong retention when student “see” how things work as opposed to just an explanation.

Loop System  
Decentralized System

### Pneumatic Actuators

#### Cylinders

Disposable  
Tie Rod  
Non Rotating  
Rodless

#### Air Motors

Vane  
Piston

#### Rotary Actuators

Vane  
Rack & Pinion

### Pneumatic Control Valves

#### Directional Control Valves

Direct Acting  
Pilot Operated  
Spool Type  
Poppet  
Sliding Plate Valves

#### Valves Actuators

Defined

#### Valves Application

Defined  
Power Valves  
Control Valves

### Miscellaneous Valves

Check Valves  
Shuttle Valves  
Pulse Valves  
Quick Exhaust Valve  
Flow Control  
Slow Start Valve  
Lockout Valve  
Excess Flow Valve

### Vacuum Control Fundamentals

#### Basic Physics

Vacuum Defined  
Vacuum Pressure Scale

#### Vacuum Generation

Vacuum Pumps  
Vacuum Generators

#### Vacuum Applications

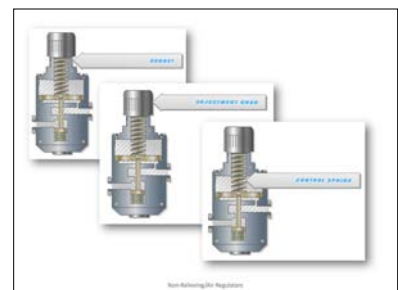
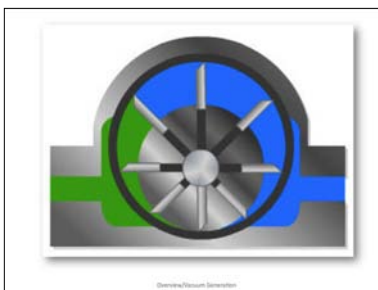
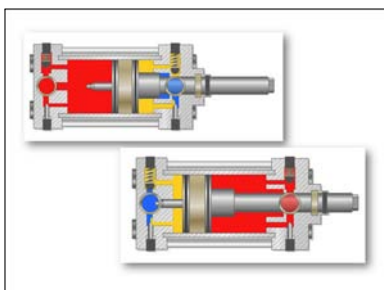
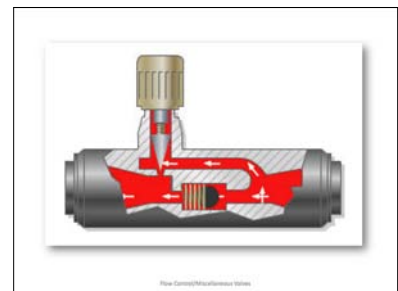
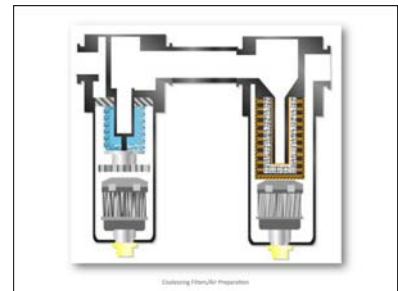
Lifting  
Forming  
Holding

### Pneumatic Symbols and Circuits

#### Symbolism

Lines  
Air Receiver/Air Dryer  
Energy Source/Exhaust  
Flow Control  
Directional Control  
Compressor, Vacuum Pump

Check, Shuttle, Quick  
Exhaust Valves  
FRL  
Coolers  
Misc. Components  
Actuators



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