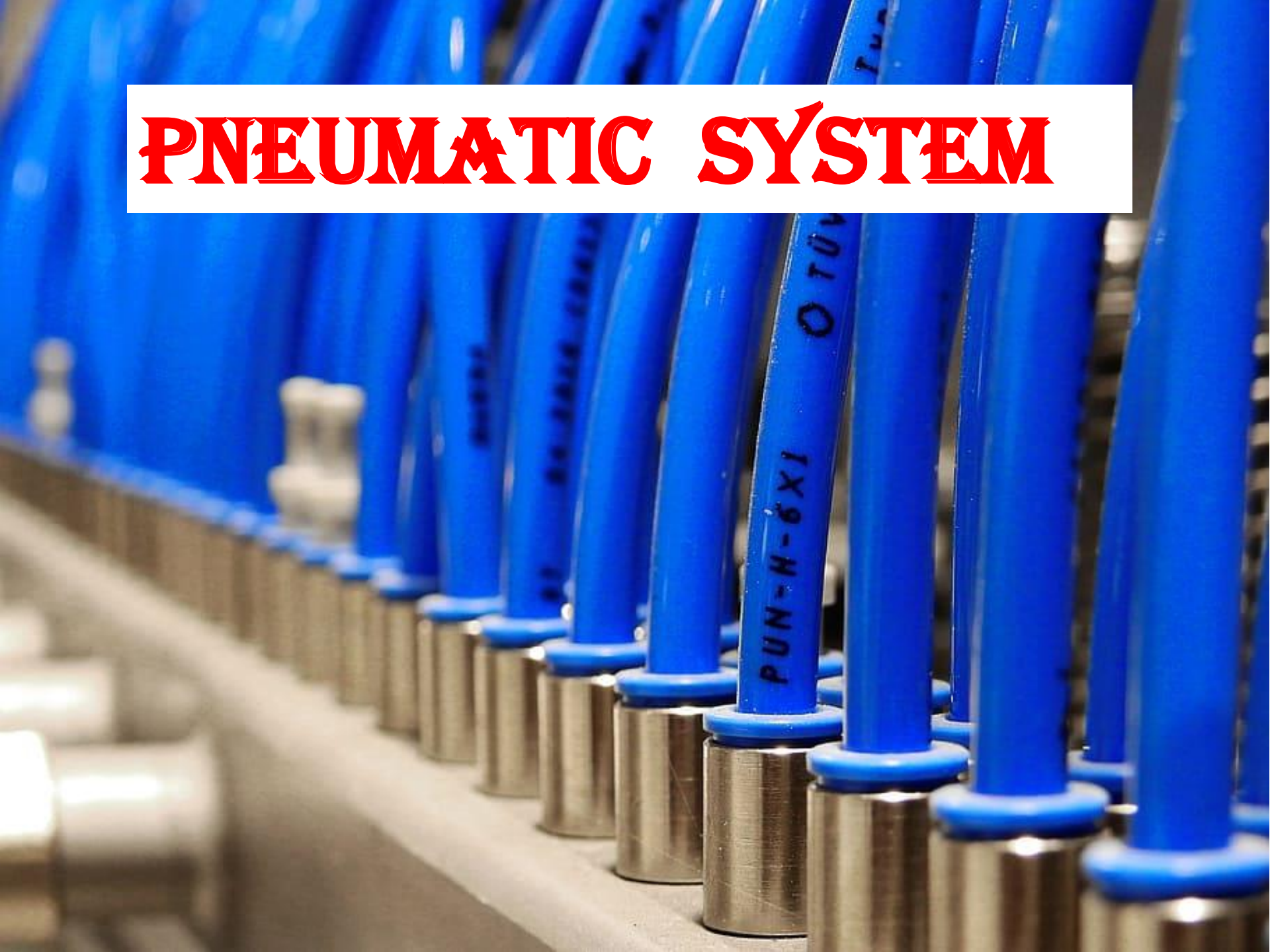


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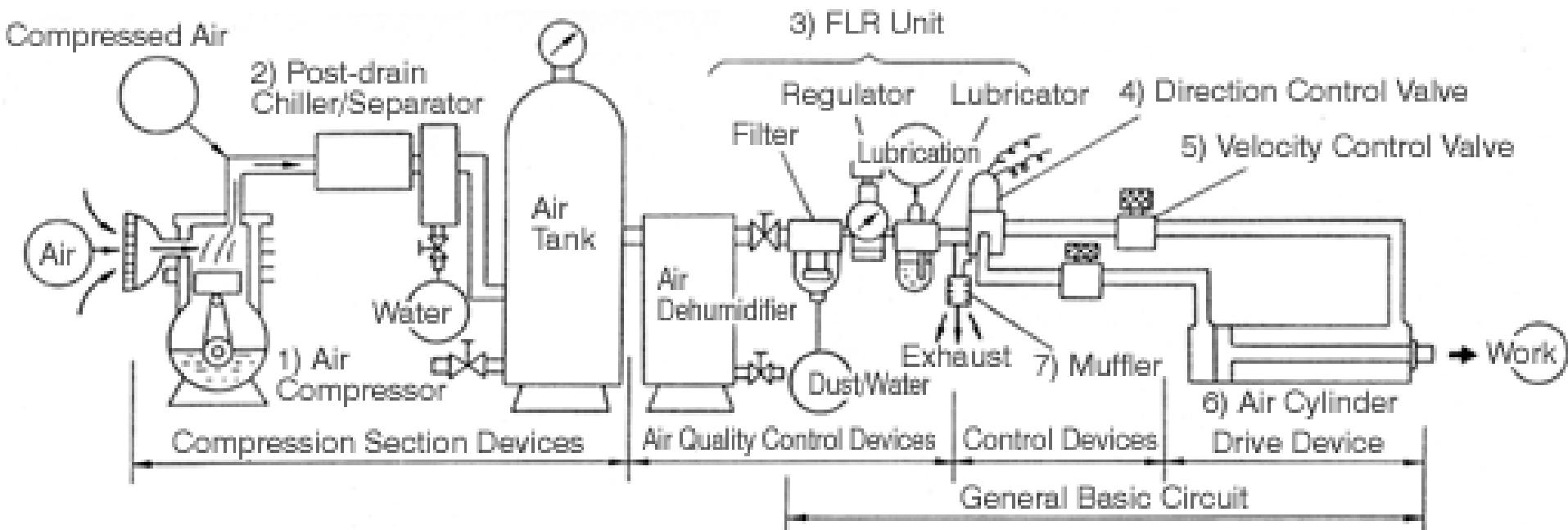
PNEUMATIC SYSTEM



Pneumatic System

- **Pneumatic and hydraulic systems are similar in that they use confined fluids.**
- **Since liquids and gases flow, they are both considered fluids; however, there is a great difference in the characteristics of the two.**
- **Liquids are practically incompressible; a quart of water still occupies about a quart of space regardless of how hard it is compressed.**
- **But gases are highly compressible; a quart of air can be compressed into a thimbleful of space.**
- **In spite of this difference, gases and liquids are both fluids which are confined and made to transmit power.**
- **The type of unit used to provide pressurized air for pneumatic systems is determined by the system's air pressure requirements.**

Basic Pneumatic System



Components

Intake Filter

- **The intake filter channels either atmospheric air or a stable gas into the pneumatic framework, separating it of residue and other undesirable particles.**
- **At this stage the air has a low strain to volume proportions. This will change as it advances through the treatment framework.**



MAX. PRESS. 1.0 MPa

BTC LUBRICATOR
MODEL AL3000
MAX. PRESS. 1.0MPa

Compressor

- The compressor takes air and packs it to diminish its volume and increase its temperature.
- There are various kinds of compressors which work under the rule of either positive displacement or dynamic displacement.



Cooler, Separator and Dryer

- Pressure expands the temperature of the air, which must be cooled through a heat exchanger to arrive at operating temperature. Cooling units utilize a counter progression of air or water to concentrate and expel surplus heat from the compacted air.
- The Separator, or drying unit, cleanses the packed quality of abundance water fume and vaporous contaminants. Dryers may utilize heat to drive off unstable segments from the packed gas, or compound ingestion (for example phosphoric pentoxide, calcium chloride or silicon dioxide). A few frameworks utilize refrigerant compressors to expel dampness from the compacted air.
- The unadulterated, dry packed air is directed into the collector tank, once in a while after further filtration, while the clammy, defiled air is condensed into fluid form and ousted through a drain

Receiver Tank

- **As pneumatic frameworks rely upon a consistent inventory of packed air/gas, this liquid must be put away in a beneficiary tank.**
- **The enormous inner surface territory of the collector tank further disseminates abundance heat while keeping up the necessary weight.**
- **This is estimated by at least one weight checks. Packed air is bolstered into the control valve by an exit pipe connected to a shut-off valve.**
- **As the weight drops in the receiver tank, the change is identified by pressure sensors at the inlet valve, which opens to refill the tank.**

Control Valve

- **The compacted gas as it enters the control valve to the actuator has a high pressure to volume proportions.**
- **The control valve, or controller, encourages the gas into the actuator to control its speed and developments.**





Cheetah Can not roar Instead Meow Like House Cat



धन्यवाद

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