

ETHANOL BLENDING SOLUTIONS

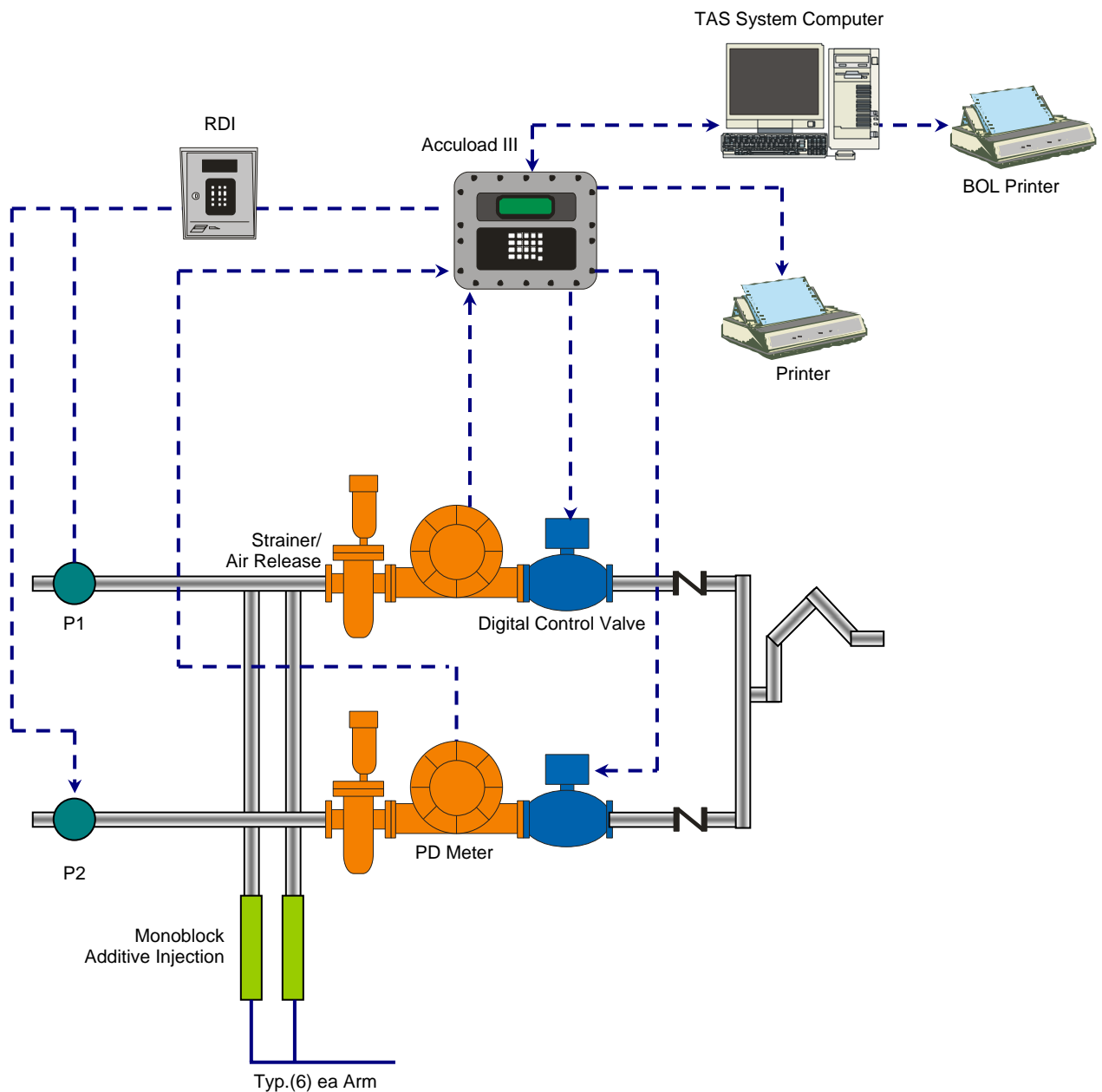
Advantages of Ratio Blending

- Quality of delivered blend
- Complete preset not required for accurate blend
- No penalty on loading time

Disadvantages of Ratio Blending

- Greater capital investment (requires extra meters and flow control valves)
- Reduced flexibility on system blend ratios due to hydraulic, metering, and flow control

One-Arm, Two-Product Ratio



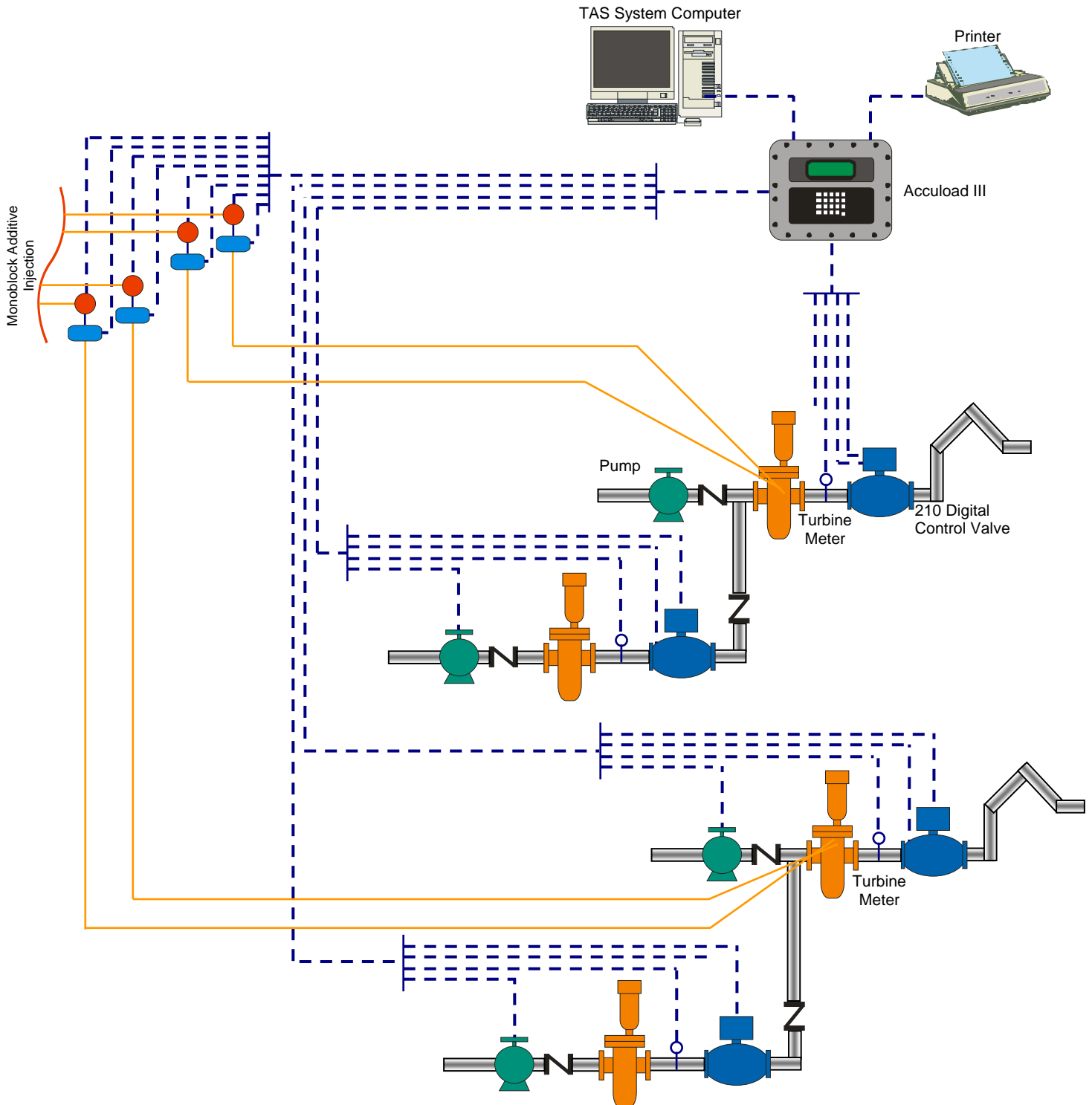
Advantages of Slip-Stream Blending

- Quality of delivered blend
- Complete preset not required for an accurate blend
- No penalty on loading time

Disadvantages of Slip-Stream Blending

- Dependent on the hydraulics of the Slip-Stream – pressure being greater than the main stream
- Cannot load straight product B (Ethanol)
- Greater capital investment (requires extra meters and flow control valves)

Two-Arm/Side-Stream Blender



Advantages of Sequential Blending

- Virtually unlimited variations in blend ratios
- Insensitive to hydraulic variations
- Lower capital investment than ratio blending

Disadvantages of Sequential Blending

- Blend accuracy is dependent on proper preset/delivery amounts
- Delivery time is slightly increased
- Relies on product mixing in the truck tank
- The ethanol flow rate must fall within the meter linear flow range

One-Arm, Two-Product Sequential Blender

