Why Variable Speed Pumping?

Better Performance

- More efficient method of pump balancing
- Better system balancing
- Lower noise in piping
- Better control prevents cavitation
- Eliminates valve blow by allowance for expansion
- Interim Performance at part load can be optimized

Longer Equipment Life

- Soft start/stop
- Rotating Equipment: Life = 1/speed
- Lower pressure on components
- Valve actuators absorb less pressure

Lower "System" Life Cycle & Installed Cost

- Reduced maintenance
- Lower "In Rush" current reduces wire and circuit breaker size
- Smaller pipe (design 10-12ft/sec)
- Less tonnage required in chiller plant

Chiller Plant Optimization

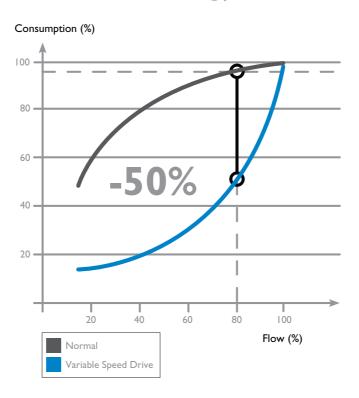
- Less capacity goes farther
- Better Delta Ts

Protection Device For Motor

• Protect against phase loss, voltage imbalance, over current, etc.



Reduced Energy Cost



World energy consumption has risen **45%** since 1980 and it's projected to be **70%** higher by 2030!

Pumps consume over **20%** of the world's energy.

The HVAC system accounts for up to **50%** of a commercial business's electric bill.

At **80%** of nominal flow, the power consumption is reduced by **50%** when using a Variable Speed Drive.

