

## Air Conditioning

### **Limitation: Large Air Conditioner Required for Outside Air Project**

Cooling summer air for climate control uses considerable refrigeration tonnage. Industrial air conditioners lose up to two-thirds of their cooling tonnage when projects require 100% make-up air. Half of the loss occurs when cooling from 95 to 75°F (no effect on keeping a space at 75°F), the rest is lost in uninsulated duct when supply air gains 3 to 5 degrees per 25 feet of duct. Cooling hot summer air to 75°F delivers minimal cooling value to a space. Useable cooling occurs when supply air temperature is below the customer's desired space temperature.

### **Solution:**

Subcooled Air can deliver 50% more cooling tonnage to a project, by cooling air to 40°F. Air delivers more cooling tonnage at 40°F than 55°F. High efficiency allows smaller units to perform large jobs. In many cases, power requirements can be cut in half, since dry air is more comfortable.

During the day, when temperatures can exceed 100°F, cold 40°F dew point air is directed toward workers, creating a comfortable environment. Reheated supply air at 85°F and 40°F dew point can be delivered all night when space temperatures fall.



### **Benefits:**

- **Lower cooling operating costs by up to 50%**
- **Sturdy, reliable equipment**
- **40°F supply air dew point**

For an engineered review of your application, or to learn more about Subcooled Air, visit [www.subcooled.com](http://www.subcooled.com), contact our staff in Houston, TX at 713-201-1478 or send us an email to [tomd@subcooled.com](mailto:tomd@subcooled.com).