• Temperature Control Units
  Water & Oil
  30° - 500°F

- Package Chillers
  Air & Water-Cooled
  20° - 70°F

- Central Chillers
  Air & Water-Cooled
  Packages & Modules
  20° - 70°F

- Pump Tank Stations
  Chilled or Tower Water
  200 - 3600 gallons

- Cooling Tower Cells
  45 - 540 tons

- Fluid Coolers
  Hybrid
  Dry

- Filters

- Heat Exchangers

- Heat Recovery Units

WARRANTY
- 1 Year:
  Covering parts and labor
- 2nd Year:
  FREE preventative maintenance visit

CUSTOM UNITS
If one of our standard models does not meet your application needs, then we can custom build a unit that will! Call us at 317-887-0729 for more details.

M1 CHILLER CONTROL

Web: www.AdvantageEngineering.com
Phone: 317-887-0729

MAXIMUM SERIES

• Air-Cooled Unit with Remote Condenser
• 5 - 40 Tons
• 20°F to 70°F
• Using Non-Ozone Depleting Refrigerants

INDUSTRIAL DUTY PACKAGE CHILLERS

When your process cooling requirements call for recirculated fluids at temperatures between 20°F and 70°F, the ADVANTAGE Maximum Series water chiller is your choice.

The Maximum Series chiller with remote condenser provides process cooling while rejecting the absorbed heat outside, eliminating heat gain to your building.

The included high flow pump circulates cooling water form the internal reservoir to process where heat is removed. The warmed process cooling water returns to the chiller where it is cooled by its refrigeration system.

Maximum Series chillers are controlled by a tailor made microprocessor control instrument that provides precise temperature control and system diagnostics.

The remote condenser is installed outside and requires field piping and system charging by a qualified installer.

APPLICATIONS

Maximum Series chillers can be used on a variety of process applications that require 20°F to 70°F chilled water.

Molds & Dies  Nozzles, Barrels & Tools  Heat Exchangers  Troughs & Tanks  Rolls  Radiators and Air Coils  Jacketed Vessels and Mixers  Lasers

Since 1977 Advantage has been applying, designing and servicing the best chillers available.
CONSTRUCTION (Interior Unit):
• Powder coated steel upright frame members
• Galvanized steel cross frame members
• Powder coated lift-off enclosure panels
• Lift-off molded front panel

REFRIGERANT CIRCUIT:
• Compressors:
  - Hermetic scroll
  - Air-Cooled Condensers
    - Remote, located outdoors
    - Finned tube
    - Fan generated air flow
    - Ambient control to -20°F
  - Filter-drier
  - Liquid line solenoid valve
  - Refrigerant sight glass with moisture indicator
  - Thermostatic expansion valve
  - Microprocessor controlled hot gas bypass capacity control system
  - Stainless Steel Brazed Plate evaporator
  - Liquid receiver
  - Oil separator

PRESSURE GAUGES:
• Refrigerant high pressure
• Refrigerant low pressure
• Coolant pressure gauge

ELECTRICAL:
• Process pump motor starter
• Compressor motor
• Fused transformer
• Power entry terminal block
• 5 kA RMS SSCR

COOLANT CIRCUIT:
• Coolant pump
  - High flow stainless steel centrifugal pump in 5 to 30 tons models
  - High flow cast iron centrifugal pump on the 40 ton model
  - Large capacity insulated non-ferrous reservoir
  - Reservoir level sight tube
  - Automatic water make-up system
  - Standard NPT process fittings

LIMIT DEVICES:
• High refrigerant pressure
• Low refrigerant pressure
• Refrigerant pressure relief valve
• Process pump motor overload
• Instrument control circuit fuse

WARRANTY:
• 1 Year covering parts and labor
• Free preventative maintenance check in the 2nd year
• 4 Years on the control instrument

OTHER PRODUCTS

Pump Tank Stations
Chilled & Tower Water, 450-3600 Gallons

Central Chilling Modules
Air & Water-Cooled, 5-300 Tons

Central Chilling Packages
Air & Water-Cooled, 20-200 Tons

Cooling Tower Cells
Fiberglass or Metal, 45-540 tons

Temperature Controllers
Water & Oil Units, 30°-500°F

STANDARD FEATURES

OPTIONS

REFRIGERANT CIRCUIT:
• Flooded head pressure control for extreme environments

COOLANT CIRCUIT:
• Overhead piping kit - prevents tank overflow when overhead piping is used
• No tank for gravity return applications
• Low flow bypass circuit - manual or automatic
• Process line shut-off valves
• Larger process pump

ALARMS:
• Audible alarm
• Visual / audible alarm beacon

WARRANTIES:
• Extended compressor warranty

ELECTRICAL:
• Branch circuit fusing
• UL rated electrical enclosures

DIGITAL SCROLL COMPRESSORS

The Copeland Scroll Digital™ compressor controlled by Advantage’s M1D advanced microprocessor instrument is an option on 5, 10 & 15 ton models.

Using a simple and effective method to modulate chiller capacity from 20 - 100 %, the digital scroll compressor gives unparalleled energy efficient performance in the modulation field.

CUSTOM MACHINE DESIGNS

If one of our standard chiller models does not meet your application needs, then we can custom build a unit that will! Our Engineering Department is staffed with experienced machine designers to provide you with a machine built to your exact specifications.