# **HVAC Products and Services**

Industry-Leading Solutions for All HVAC Challenges



Nuclear Power Products and Services







#### **About**

Curtiss-Wright is an industry leader and comprehensive source for all HVAC products and custom tailored solutions.

All of Curtiss-Wright's HVAC solutions can be provided as commercial or safety-related. Project scope can include evaluation, design, manufacturing, qualification and supply.



**HVAC Electrical Control Panel** 



Chiller

## A History of Heating, Ventilation, and Air Conditioning (HVAC) Excellence

Curtiss-Wright and its teaming partners have over 100 combined years of experience designing and manufacturing for the nuclear industry. Providing the full range of HVAC equipment and services ranging from safety-related chillers, to dampers, to motors, to much more, Curtiss-Wright provides all encompassing support for any HVAC need. All nuclear HVAC equipment supplied by Curtiss-Wright is manufactured to ASME Section III, Section VIII, and 10CFR50 Appendix B.

#### Comprehensive Portfolio

Curtiss-Wright aides customers with our commercial grade dedication programs, equipment qualification expertise, OEM replacement, reverse engineering, and safety related and non-safety related digital solutions. Curtiss-Wright's complete HVAC product portfolio give nuclear plants the ability to maintain and install new turnkey safety-related HVAC systems.

## **Collaborative Solutions**

Embracing the collaborative spirit of the nuclear industry, Curtiss-Wright has paired with a series of teaming partners to ensure that our HVAC portfolio can fulfill any customer need. To respond to customer demand we enter into strategic agreements for equipment and intellectual property with key organizations creating a one source option for all HVAC requirements.

- York Parts Center & Install Base Support
- Ruskin Dampers
- Reuland Motors
- Drake Refrigeration

- Aerofin Heat Exchangers
- Camfil Filtration
- CVI/CTI Charcoal Canisters, Heater Elements, Compressor Rebuilds and Control Components



# **HVAC Products and Services**

Industry-Leading Solutions for All HVAC Challenges

#### **Chillers**

## • Highly Efficient and Reliable Design

- Custom designed to match current footprint and inlet/outlet locations, as well as power, weight, and space restrictions, including options for safety related or commercial, water or air-cooled, and single or multi-stage applications
- Built for over 40 years of reliable service
- Small, modular design allows for better control of partial loads

## • Analog and Digital Controls Upgrades

- Standard analog controls eliminate the maintenance of safety-related software
- Digital system monitoring for loss of cooling, refridgerant, water flow, power, and control, as well as high head and low suction pressures.
- Compressors
- Chiller Tubes
- Maintenance, Replacements and Parts
  - OEM Replacement / Reverse Engineering

# **Air Handling Units**

- Containment Coolers
- Unit Coolers
- Air Conditioning Units

## **Dampers and Operators**

# • Designs for Every Application

- Control, Manual, Backdraft, Smoke, Fire, Pressure Relief, Front Access, Diffuser, and Balancing functions
- Bubble Tight
- Static, Dynamic, Curtain, and Multi-Blade options available for most options
- Material options include Extruded Aluminum, Non-Metallic, Stainless Steel, Heavy Duty Aluminum and Steel

#### · Fire and Smoke

- Stainless Steel or Galvanized
- Round and Square Ceiling Fire Dampers
- Complete Corridor Fire/Smoke Dampers
- Integral, Welded, or No Sleeves
- True Rounds or Square-to-Round Transitions
- Factory Mounted and Wired Duct Smoke Detectors

## Actuators

- Factory Mounted and Tested Actuators

## Access Doors

- Duct-Mounted Round and Rectangular Access Doors
- Walk-through Access Doors



#### Fans

- Axial and Centrifugal Options
- Safety Related and Augmented Quality Options Available

#### **Motors**

#### Custom Designed Motors for All Needs

- Direct replacements for obsolete Safety related and Non-safety related motors
- Flexible design, including allowances for mounting, moisture, space constraints, and other environmental parameters
- Multiple motor types, including: Standard, AC, Wound rotor, U-frame, High speed, Multi-speed, Fluid cooled, Partial, Synchronous, Gear and Brake motors
- EEE Class 1E Motors

### **Heat Exchangers**

- . Cooling & Heating Coils
  - Water
  - Steam
  - Direct Expansion Coils

### ASME Section VIII

#### Louvers, Penthouses, and Brick Vents

- Multiple Louver Configurations, Including: Stationary and Adjustable Blade, Drainable and Non-drainable, and Shaped Louvers
- Boxed or Mitered Corner Penthouses
- In-house Anodize and Kynar Finishes Extruded Aluminum and Steel Construction

### **Air Doors**

- 15 Standard Colors
- All ACC sizes

#### **Other Offerings**

- Valves
- Electric Heaters
- . Hydronic Unit Heaters
- Control System Components
- Filters
- · Purge Units
- Moisture Separators
- Flex Connections
- Ductwork
- Commercial Grade Dedication Services

# **Quality Standards**

- CSA N285
- CSA B51
- CSA CAN3-Z299.2
- 10 CFR 50 Appendix B
- 10 CFR Part 21
- ASME NQA-1
- Audited by Nuclear Procurement Issues Committee (NUPIC)
- Audited by Nuclear Industry Assessment Committee (NIAC)

