

# PETROCHINA CHANGQING OILFIELD OFFICE BUILDING

# Reliable<sup>®</sup> controls

XI'AN CITY, SHAANXI PROVINCE, CHINA

CORPORATE

## INTELLIGENT BUILDING

*This gasoline industry head office for PetroChina Changqing Oilfield, is located in Xi'an City, Shaanxi Province. In 2012, Shaanxi Jinruan Zhisheng Electronic Technology Co. Ltd. installed MACH-System™ controllers, which are responsible for centralized management and energy conservation control for all equipment in the heat pump machine room.*

## PROJECT DETAILS

The Reliable Controls MACH-System is composed of 4 MACH-ProSys controllers and 25 expansion modules. Connected by Ethernet, the MACH-ProSys controllers command four heat pump packages with auxiliary water pumps and electric valves. At the same time, the controllers act as Modbus-RTU masters monitoring temperature, water flow, electric current and other parameters. The system optimally starts and stops relevant equipment and avoids unnecessary equipment operation, reducing the energy consumption of the entire operation.

To ensure that computer breakdowns do not affect the operation of the heat pump system, a touch screen was added to make it easy for operators to modify the operation parameters on site.

The Reliable Controls MACH-System has been flawless since its installation. The owners of this office are all very satisfied with the installation and reliability of the system.

To learn more about projects using Reliable Controls® visit  
[www.reliablecontrols.com/projects/overview](http://www.reliablecontrols.com/projects/overview)



### PROJECT TYPE:

**New Construction**

### INSTALLATION TYPE:

**HVAC, Electric Power Monitoring**

### TOTAL AREA:

**100,000 m<sup>2</sup> (1,076,000 ft<sup>2</sup>) office**

### EQUIPMENT INSTALLED:

**1 MACH-ProWeb Sys™  
4 MACH-Pro Sys™  
4 MACH-ProPoint-I™  
21 MACH-ProPoint-IO™**

### NETWORK:

**EIA-485, Ethernet**

### INTEGRATION:

**BACnet®, Modbus**

### TOTAL SYSTEM POINTS:

**500 points**

### RELIABLE CONTROLS® DEALER:

**ShaanXi Jinruan Zhisheng Electronic  
Technology Co. Ltd.**

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