968

200241

021-64847787

021-34292618-226

021-34292618-369

021-34292618-211

021-34292278

xhg@xinhuagroup.com

http://www.xinhuagroup.com

2018 10

新华

A CHINT COMPANY

新华 XDC800 控制系统

1. 概述

上海市科学技术奖

证　书

为表彰上海市科技进步奖获得者，特颁发此证书。

项目名称：新华XDC800工业过程控制技术

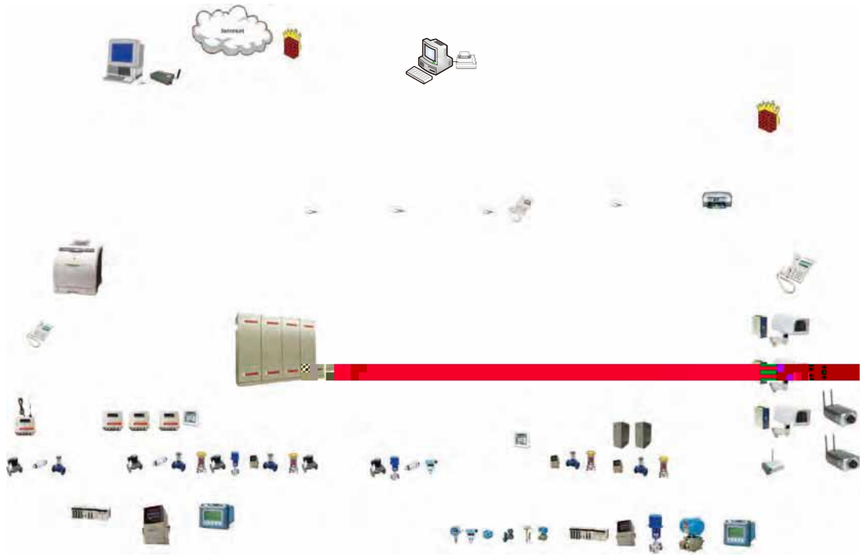
获 奖 者：上海新华控制技术（集团）有限公司

奖励等级：二等奖

上海市人民政府

编号：2010KJ-2-107　　2010年12月31日

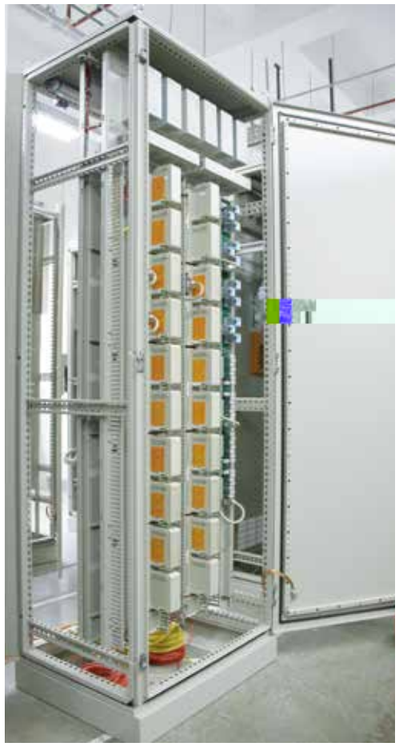
XDC800系统特点：



2、XDC800硬件系统

2.1 XDC800硬件系统的配置

XDC800 DCS



ENG

PC

配置

OPS

OPS PC

2.1.4 实时数据网XDCNET和IO网络

XDC800 IO XDCNET

HMI

A B C

XCU HMI A B

HMI C

C A B C

100/1000Mpbs

XDC800 IO I/O IONET

IO FCSNET FIONET IONET XCU IO

XDC800

RS485

10Mpbs

FCSNET

FCS XDCNET

100/1000Mpbs

FIONET XCU IO

10Mbps

2.1.1

XCU I/O

I/O I/

O

I/O

I/O XCU I/O

2.2 XDC800

直观、简洁的可视化图形组态工具

IEC61131-3

多任务的操作系统

在线组态、仿真

XCU

络

强大的功能模块

的硬件

XCU

2.3.1 新

上电自恢复

XCU

带电插拔

XCU

(2)控制器XCU的功能

XCU

XCU

CPU 256MB RAM 128MB CF

I/0

I/0

1		XCU-net	4
2		XCU-485	2 2 485
3		XCU-DP	2 1 Profibus

XCU-net

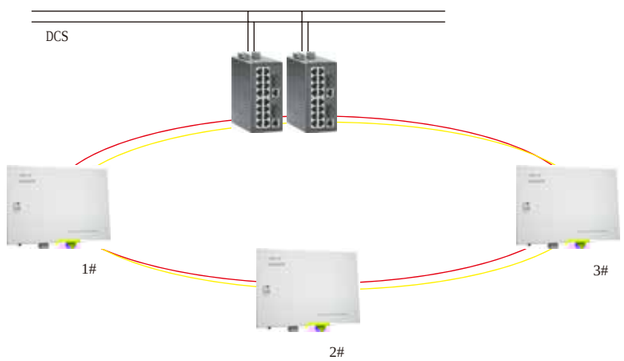
CE/EMC，FCC，TÜV

1		xL	
2			
3			
4			
		T	
8			

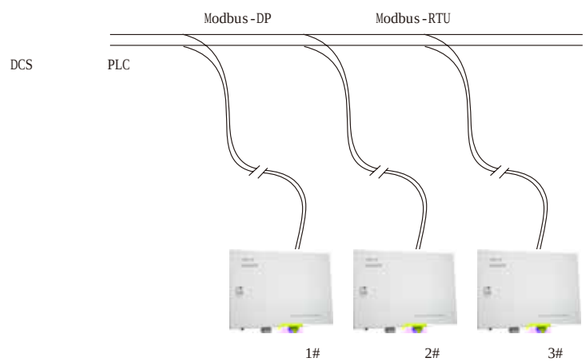
1			

800
XDC

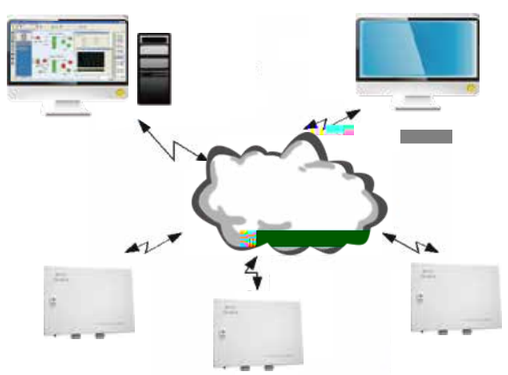
(3) 冗余虚拟环形以太网



(4) 现场总线



(5) 无线通讯



3.2.3 化远程I/O机箱

XDC800 I/O I/O

I/O

I/O I/O

(× × mm): 500 × 600 × 210

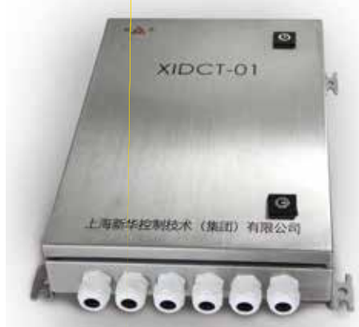
650 × 500 × 210

XDC800数字化远程I/O的远程控制站采用XDC800的同一系列I/O卡件，达到IP65防护等级，就近布置于现场，组成DCS系统中一个完整的FCS远程控制站。

3.2.4 智能前端数据采集器XIDCT-01

XIDCT-01 20

XIDCT-01主要特性



4 XDC800 OnXDC

OnXDC XDC800 HMI

XCU

OnXDC

xHMI xCU SAMA IEC61131-3

xHMI

xCU

“ ”

IEC61131-3 / /

4.1

OnXDC

DCS

OnXDC

OnXDC SAMA

UNDO REDO COPY / /

OnXDC

Web IE

4.2

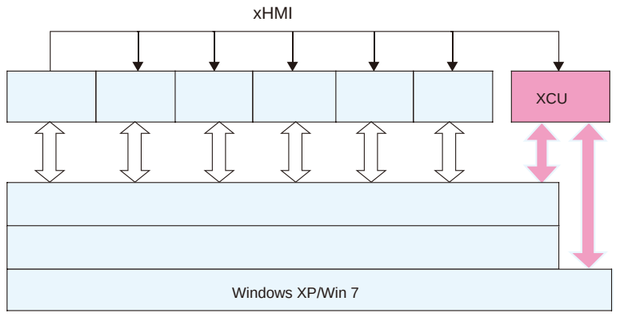
OnXDC xHMI

xCU

4.2.1 xHMI人机界面可视化图形组态软件

HMI OnXDC OnXDC

HMI



HMI

, HMI XCU

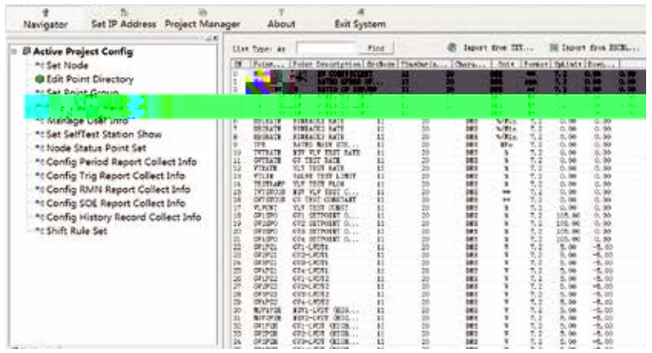
实时数据库接口 对实时数据库进行管理。

XDC

(1) 方便灵活的系统配置

OnXDC HMI IP

< >



(2) 丰富的图像生成

Windows Windows 2000

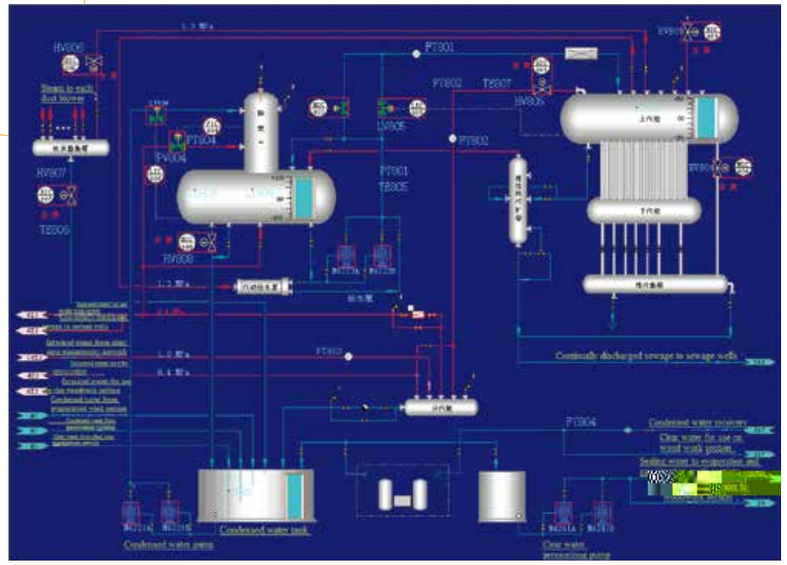
Windows XP Win7

(3) 生动美观的图像显示

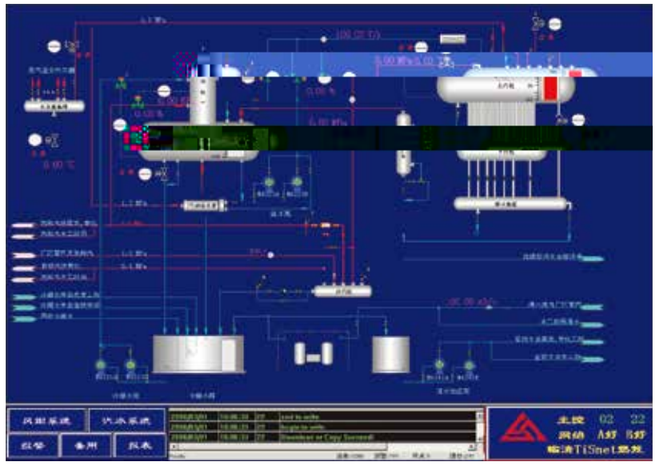
HMI

HMI

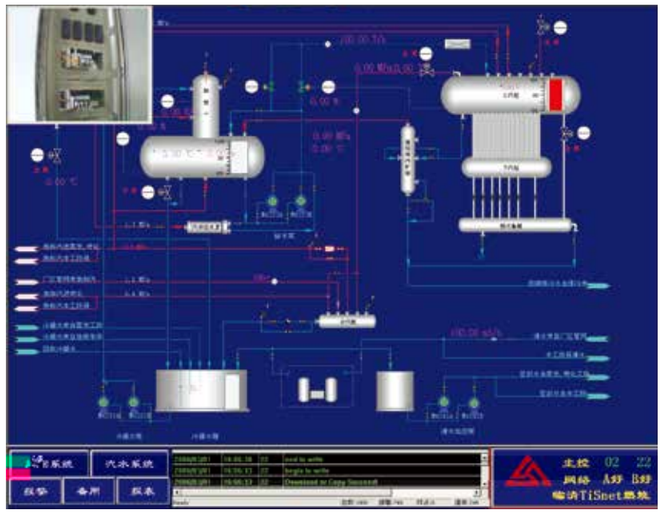
(SHOW)



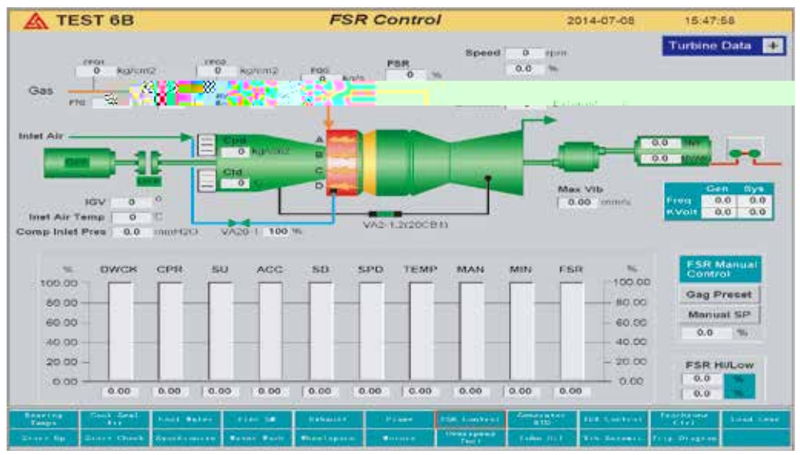
IE浏览器方式显示画面

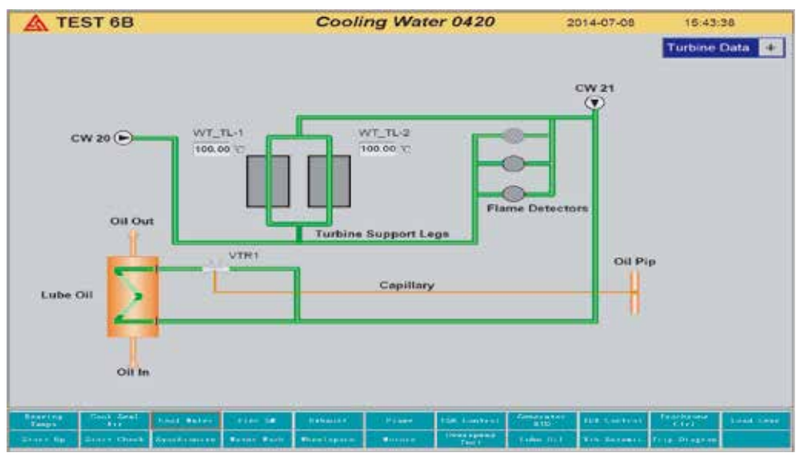


视频信号监控显示画面

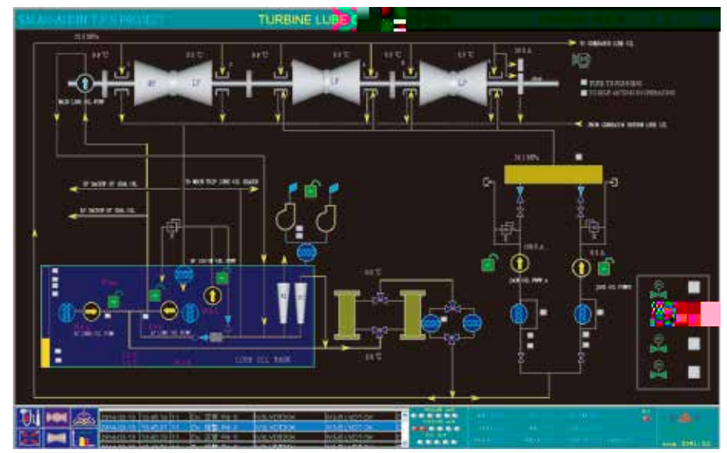


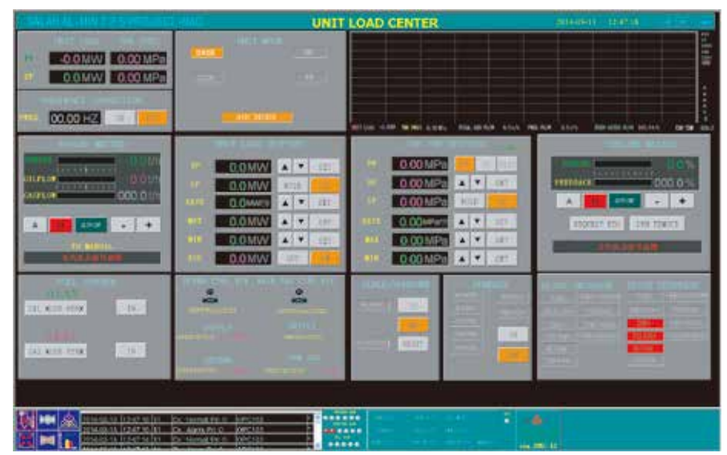
生产过程显示画面（例1）





生产过程显示画面（例2）





（4）强大的在线自检诊断工具

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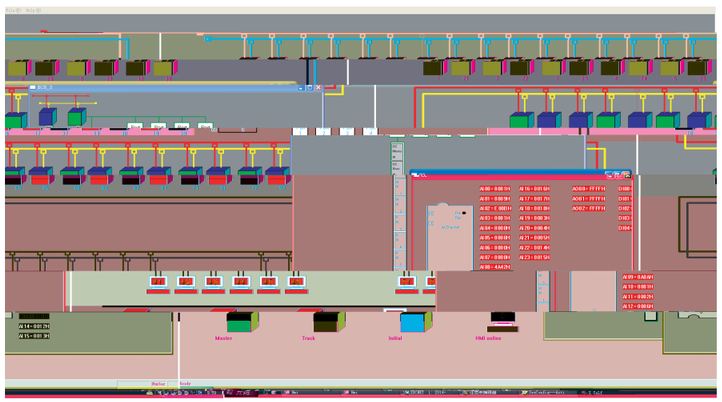
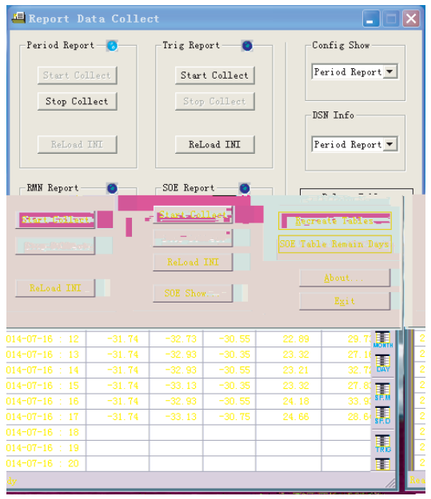


（5）灵活多样的报表数据收集与显示

（ （



4.2.2 xCU控制策略图形组态软件

XDC800 xCU

XDC800

xCU VXCU VCTRL I/O

VXCU VCTRL VCTRL

VCTRL

I/O I/O I/O

XCU XCU

XCU HMI XCU

XCU

HMI XCU XCU I/O

HMI XCU XCU XCU

XCU XCU I/O

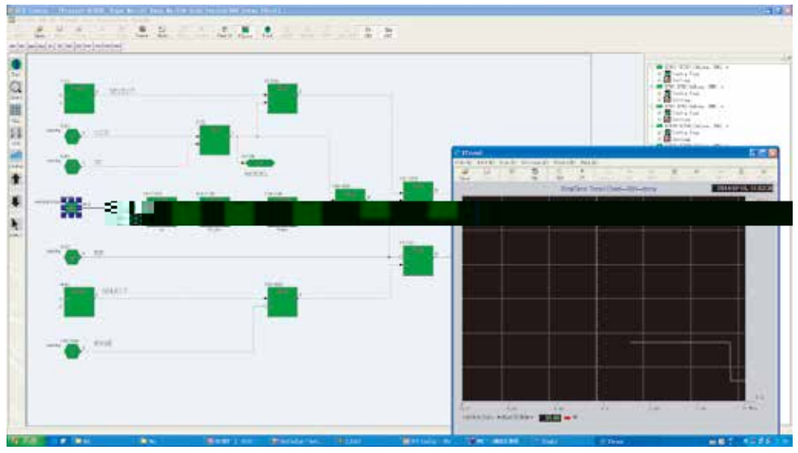
XDC800 XCU XCU

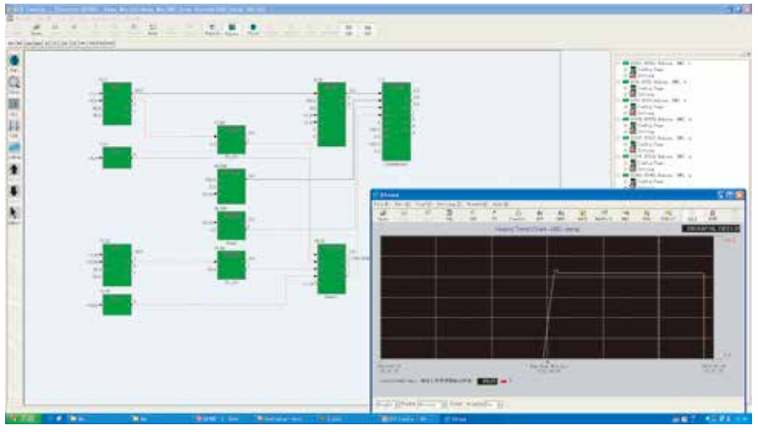
I/O

XCU

IEC61131-3

CU控制器控制策略组态过程如下图所示：





5、XDC800软件系统

5.1 软件系统特点

-
- HMI
-
- HMI HMI
- NTP 10ms
- iCAN OFFICE 2007

-
- SAMA IEC61131-3
-
“ ”
-
-
- PC
-
-
-

5.2 软件系统组成

iCAN

1 xHMI

2 xCU

5.2.1 xHMI可视化人机界面组态软件包

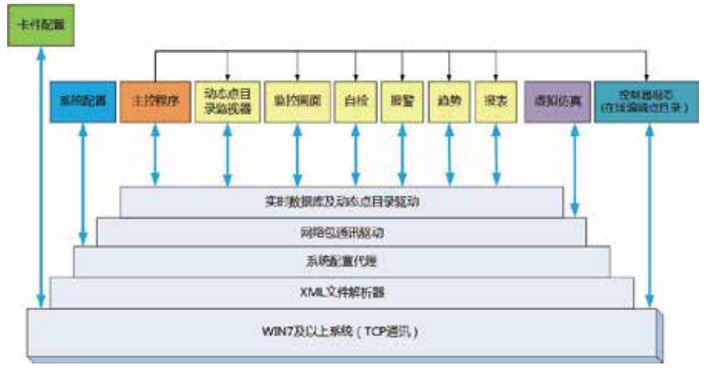
xHMI

xHMI

xHMI

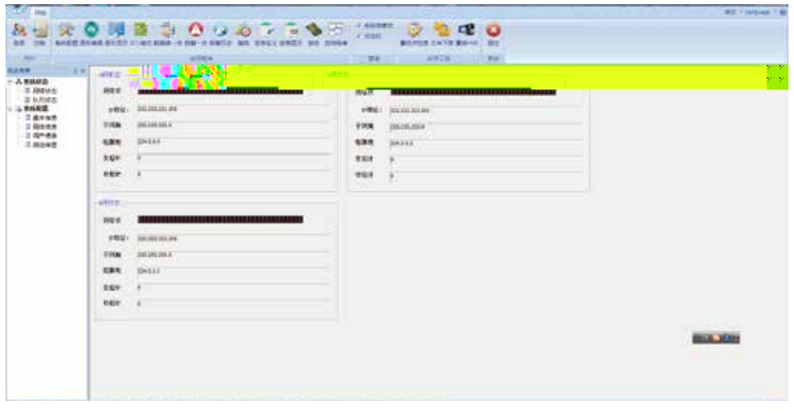
xHMI

xHMI



主控界面

- OFFICE
-
-

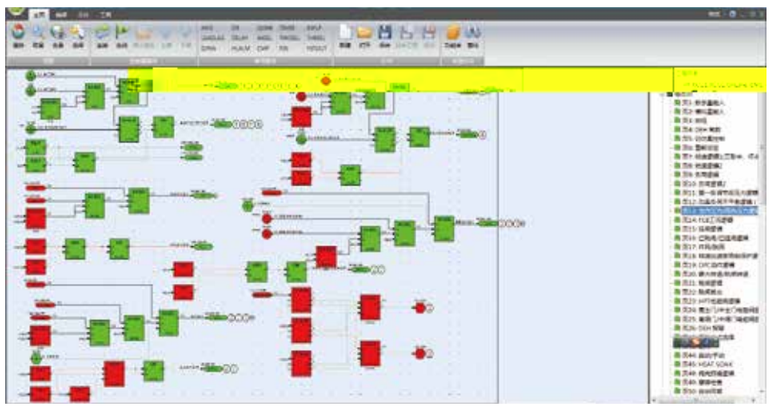


系统配置信息

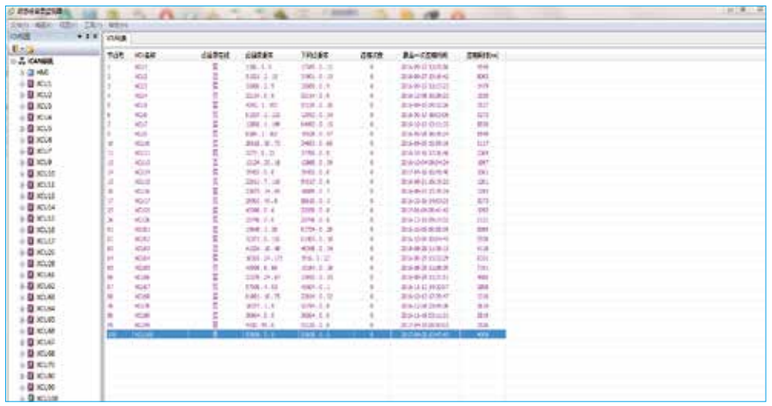
- XML
- IP Web

逻辑组态

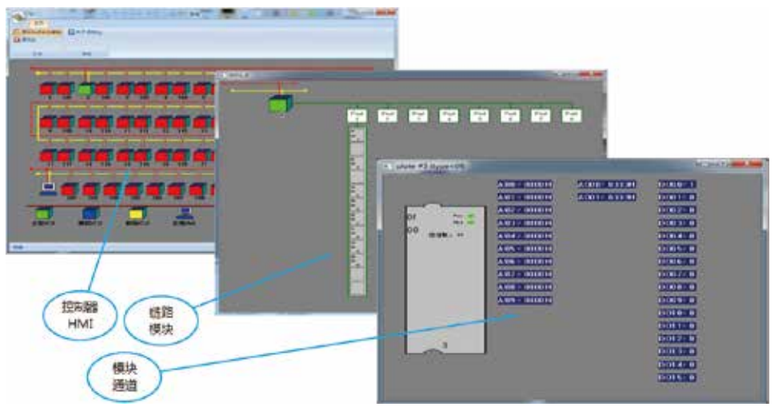
IEC61131-3



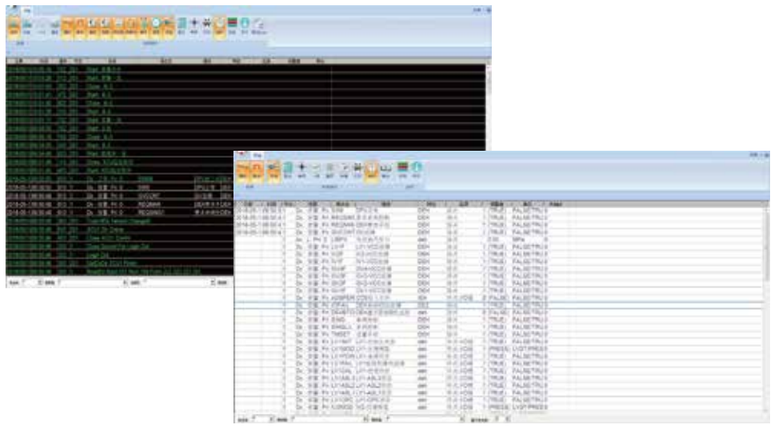
态点目录监视器



自检程序



报警一览



■ 趋势

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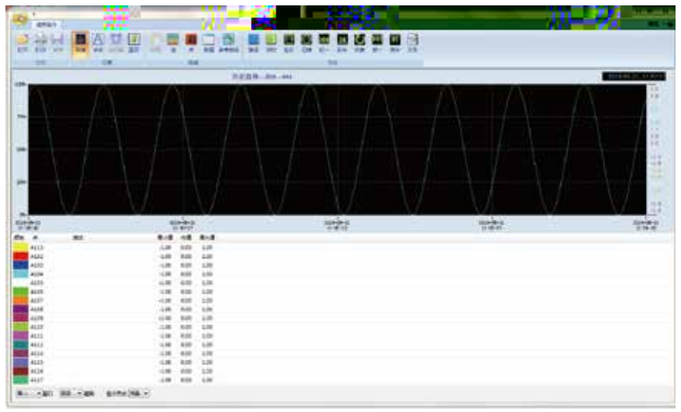
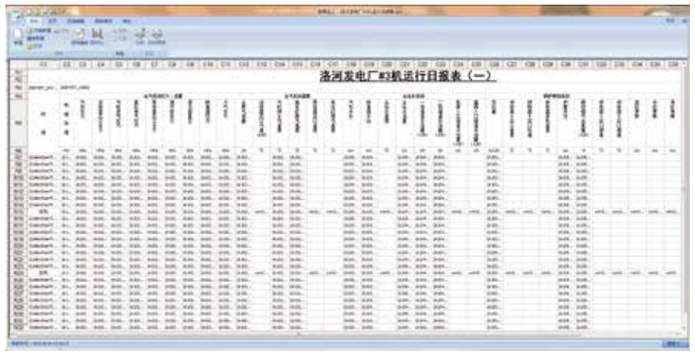
-
- 16
-



■ 报表

-



5.2.2 xCU图形化控制策略组态软件

xCU

xCU-CFG

HMI xCU

I/O

-
-
-
-
-
- SAMA
-

xCU

xCU MAIN-CTRL I/O XNET.SO MAINCTRL

I/O I/O

I/O

xCU XNET.SO

HMI NCU

华能山东如意巴基斯坦萨希瓦尔2×660MW新建项目

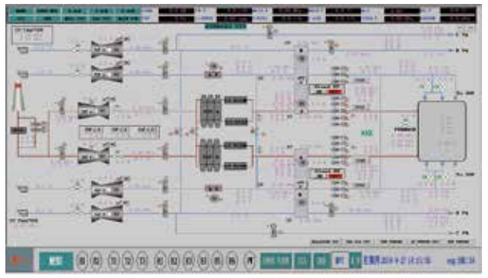
- “ ”
- 660MW
- 2017

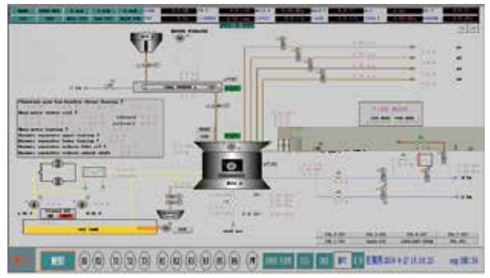
发货仪式

- XCU 30 ，HMI12 ， 62 ， 11000
- XCU 5 ， 4 ， 11 ， 1600
- XCU 35 ，HMI22 ， 56 ， 12000
- 156 ，XCU 1 ， 2500

- DAS/SCS/MCS/FSSS/ECS/SCR/BOP-DCS/ SMART-IO/

现场验收仪式


锅炉风烟系统


锅炉制粉系统

7、应用业绩

应用业绩5757套（截止到2018年6月）	
:	4074
:	451
	77
:	379
:	109
:	65
:	104
:	498
合计：	5757套