Product Overview

Alternative Controls		Remote Services and Alarm Services

Controller | ### HiProSystems | |

Basic

R6
-1 temperature setpoint

Eurotherm 3208
-2 temperature setpoints

Nabertherm B150, B180
-1 program / 2 steps

Nabertherm B130
-2 programs / 4 steps
-With preset programs for ceramic applications

Comfort

Eurotherm 3216
- 1 program / 8 steps
- optional with serial interface

Nabertherm C280
-9 programs / 4 steps
-2 settable functions
-With preset programs for ceramic applications

Nabertherm P300-P330
-9 programs / 40 steps
-2 settable functions
-P330 with real-time clock

Professional

Eurotherm 3504
-Multi-zone-/charge control
-Up to 6 setable functions
-25 programs / up to 500 steps

Basic

Operator interface H700 for simple, standardized processes without any customer specific adjustments / configurations
-   Touch panel: 5,7"-display with alpha numeric process visualization
-   Siemens PLC hardware

Comfort

Operator interface H1700 for complex standardized processes with customer specific adjustments/configurations
-   Touch panel: 5,7"-display with alpha numeric process visualization
-   Siemens PLC hardware

Professional

Operator interface H3700 for complex standardized processes with customer specific adjustments/configurations
-Touch panel: 12"-display with graphical process visualization
-Siemens PLC hardware

Operator interface Nabertherm Control Center NCC, also for multi-step and parallel processes with customer specific adjustments/configurations
-PC Process-Control-System (SCADA) with 19"-monitor and graphical process visualization
-Siemens PLC hardware

Safety packages
- Realization with conventional safety technology
- Realization with failsafe PLC technology
         - Siemens F-PLC
         - Operator interface H1700 or up

Remote Services

Remote service for PLC
-Via conventional telephone (analog modem)
-Via cell phone (GSM, GPRS, Edge, UMTS, eWon 2000/4000)
-Via internet (eWon 2000/4000, VPN)

Remote service for PC
-Via Internet (Teamviewer)

Alarm Services

Alarm messages HiProSystems
-As E-Mail/SMS message
-eWon 2000/4000
-Forwarding of 1 (up to 5) group messages

Alarm messages Nabertherm Control Center NCC
-As E-Mail/SMS message
-Siemens AlarmControlCenter with GSM module
-Forwarding of any alarm message
-Configurable by the operator

Documentation

Basic	Comfort	Professional

Record and display of process data with paper chart recorder
-Eurotherm 4102/3
-6 measuring points

Record and display of process data with graphical recorder
-Eurotherm 6100A/E
-With 3-18 measuring points
-Interface for USB-flash drive and CF-card
-Data security level 2

Record of process data with USB-flash drive for Nabertherm-controller
-Presentation with Nabertherm presentation software NTGraph or customer's spreadsheet
-Recording of differential time
-Data security level 1

Recording process data with storage device with NTLog (HiProSystems)
-On storage card, USB-flash drive or network
-From H1700/H3700
-Presentation with Nabertherm presentation software NTGraph or customer's spreadsheet
-Data security level 1

Reading and processing with MV-Software
-Setpoints, actual values from one or more Nabertherm- and/or Eurotherm-controller according to ISO9000ff.,
incl. operating and programming
-Only actual values for other controllers and systems
-Data security level 2

Data transmission between graphical recorder and HiProSystems or Eurotherm controller
-Option for Eurotherm 6100A/6180A
-Communication to recorder via network
-Data security level 2

Reading and processing with Nabertherm Documentation Center NDC
-16 records defined by one or more Nabertherm furnaces according to ISO9000
-From H1700
-Data security level 2

Process control system with Nabertherm Control Center NCC
-PC process control system (SCADA)
-Documentation of complete process chains according to ISO9000ff.
-At least 16 Process-specific records per furnace
-Data security level 2

Relevant documentation for standards, i.e. according to AMS 2750D/NADCAP, CQI-9, FDA..
-Realization with NCC
-Realization with recorder Eurotherm 6100A, 6180A
-TUS-recorder with Eurotherm 6100A/6180A
-Data security level 2

**Legend of Nabertherm security levels**

Nabertherm security levels describe the protection against manipulation of the process documentation.

1. level: Protection against intentional manipulation of a file with little criminal effort
Documentation with a simple proof obligation (e.g. the quality of a product),
where damages due to criminal actions remains manageable.
-> Realization i.e. by checksum calculation, etc…

2. level: Protection against intentional modification of a file with a high criminal effort
Use in normative burden of proof, which cause high damages by criminal
manipulation (e.g. AMS, FDA, CQI-9..).
-> Realization e.g. by generating PDF-Files, additional saving of hidden files, etc.