TotalControl



Safe & Simple Way to Run a Tyre Pyrolysis Plant

ABOUT TotalControl

Tyre pyrolysis, an otherwise wonderful industry, is being run on outdated and inefficient systems thereby making it highly polluting and unsafe. The plants are ill equipped with analogue temperature and pressure meters which neither have dependability and nor can be installed to take the readings from the reactor itself. The monitoring of these meters is completely dependent on untrained plant operators and highly susceptible to errors. *TotalControl* was created to eliminate these deficiencies in tyre pyrolysis industry. The main objective of *TotalControl* is to monitor the operating conditions of pyrolysis plant and help keep the process in check.

The system digitizes the signals from highly accurate temperature and pressure sensors that are installed within the system including reactor to give an actual working condition of the plant. The air monitoring facility, that indicates the levels of Carbon Monoxide (CO) and Methane (CH₄) in the atmosphere, increases the safety parameters giving a complete picture of the plant. It incorporates alarm and SMS facility to notify any abnormalities in the pressure during the process. In case the pressure rises to beyond the set limit, *TotalControl* automatically rings the alarm and sends an SMS to the predefined mobile numbers. Reporting of plant conditions can be taken via SMS, stored on an external drive or viewed on a computer. Additionally, an automatic shut down feature of *Total Control* makes the plant a lot safer. Automatic flaring systems helps maintain the system pressure without any manual intervention and burns the residual gases most scientifically as per the norms of Pollution Control Boards.

TotalControl

Basic System

- Monitoring and recording facility of temperatures and pressures from the separator and condenser
- ~ Alarm for rise in separator pressure
- ~ Data procurement option through SMS
- USB port for collecting data on pendrive
- ~ RS232 port for viewing log details on a computer
 - Option for addition of advanced features

Automatic Flaring

- ~ A robust, fully automatic ignition system mounted over the chimney
- ~ Built-in Anti-Flashback system
- Automatic maintenance of system pressure
- ~ Alarm to notify dangerous pressure levels

Add-On Options

Reactor Control System

- Monitoring and recording facility of temperature and pressure from inside the reactor
- ~ Alarm and SMS to notify dangerous pressure levels
- Automatic Shutdown of heating and switching on the sprinkler in case of emergency (Sprinkler required)

Air Monitoring System

- Monitoring and recording of Carbon Monoxide (CO) and Methane (CH₄) concentrations in the air
- ~ Alarm to notify dangerous levels of CO and CH₄



Directly view the data logs on your computer or collect it on a pen drive!



SMS to *TotalControl* to know your plant status anytime anywhere!



Integrated alarm system to keep your plant safer and reliable!

COMPARISIONS BETWEEN PLANTS WORKING WITH OR WITHOUT <u>TotalControl</u>:

Point of Difference	Plants Without TotalControl	Plants With TotalControl	Remarks
Monitoring Systems	Manual	Automatic	With TotalControl, completely automated monitoring can be carried out.
Safety Standard	Poor	Excellent	Increased sense of security and wellbeing comes with knowing that the plant is well monitored and properly equipped with technology.
Alarms	Not available	Automatic	Any problem in the working of plant, be it rise in pressures of increase in CO & CH ₄ (Optional) levels, operator is automatically alerted and so are you.
Reporting	Manual	Electronic	Accurate reporting/logging of every minute of data with TotalControl. Also saves paper and time. On-the-go reporting through SMS. Eliminates possibility of operator misreporting.
Sensors	Analogue	Digital	Analogue meters are seldom accurate and remote sensing is never possible. TotalControl senses everything remotely and manages crucial functions of plant automatically.
Automatic Shutdown	Absent	Present (Optional)	TotalControl senses the pressure from right inside of the reactor, and, in case of emergency, initiates a predefined shutdown process. Manual system cannot even sense any emergency.
Flaring	Manual	Automatic (Optional)	TotalControl provides an automatic flaring system that ensures gases are burnt in adherence to the pollution control norms. It also ensures maintenance of right pressure in the system without any manual intervention.

PRODUCT HIGHLIGHTS

- Automatic maintenance of system pressure
- → SMS for anytime updates of the plant
- *¬***USB port for storing data on pen drive**
- **尽**RS232 port for viewing on the computer
- Automatic Flaring System
- LED Display for perfect viewing

- → Automatic SMS in case of emergency
- Automatic Shutdown of the plant
- → Alarm system for within the factory
- Microprocessor based reliable technology
- Air Monitoring System

TECHNICAL SPECIFICATIONS

Size: 485mm X 260mm X 330mm (L X B X H)

Hooter: 100 Db

Input Voltage: 220V, 50Hz

Input Types (Sensor Types): Thermocouple, Pressure Transmitter, CO & CH4 Transmitter

Display: Segment LED

Recording: Pen Drive required

SMS: On Demand or On Emergency (Activated & networked SIM card required)

By Pass Switch: For manual flaring

Connectors: Plug & Socket or Screw type depending upon model

OPERATING CONDITIONS FOR TotalControl

- 1. All operations of TotalControl are dependent on proper maintenance of complete system and calibration of all sensors and equipment every six months.
- 2. TotalControl indicates the condition of plant based upon various sensors installed. It does not control the operation of plant.
- 3. Shutdown process is dependent on proper functioning of auxiliary equipments and their effectiveness. We do not take any responsibility of these equipments.
- 4. In case of any electrical failure and malfunctioning or non-functioning of TotalControl thereof, it is incumbent upon the plant owner/customer to get it duly checked/repaired by our authorized person.
- 5. Our warranty is limited to repair/replacement of whole or part of equipment supplied. We will not be, in any way responsible for any other damage/loss arising out of malfunctioning or non-functioning of TotalControl or any other equipment of the plant.
- 6. Warranty will be rendered void if any of the seals are tempered with or the unit is opened or repaired by any unauthorized person.
- 7. TotalControl operates on 220V 50Hz power supply. Please ensure right power supply for proper functioning of the system. It is advisable to have a power back up or uninterrupted power supply.

Marketed By:

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