Cold Chain Management

Cold Chain Management is a segment consisting of various products and services to ensure that temperature sensitive products such as medicines, vaccines, food etc. are stored and transported at the specified temperature throughout various stages of packaging, transportation, storage and distribution. This is extremely important for medicines which have to be maintained at certain temperature range such as between 2 Deg C and 8 Deg C. The temperature should not exceed these limits which will affect the medicine adversely.

Products and Solutions for Various stages

a. Packaging Solutions
Cryopak, USA is the industry leader in designing and producing temperature controlled packaging solutions for a variety of industry specific standards and tolerances. Various products being supplied under this category are:

- Gel Packs
- Phase Change Materials
- Insulated Shipping Containers (parcel)
- Insulated Pallet Shippers
- Pre-Qualified Shipping Containers
- Protective Packaging

b. Real time temperature monitoring with alert during transport
This involves continuous monitoring and data transmission of critical parameters such as temperature, humidity etc. through GPRS especially during land transport. The system will continuously monitor the temperature of the goods and will send SMS alerts in case the temperature goes beyond permitted levels.

The sensors can be mounted inside the refrigerated chamber of the vehicle or independent containers, boxes etc. for continuous recording. A normal SIM card with data package will transmit the data to a centralized monitoring PC and can be viewed on a monitor.

c. Real time monitoring for cold rooms, freezers & refrigerators
This involves continuous monitoring and recording of critical parameters during storage. The temperature will be continuously recorded and monitored using a standalone system with battery backup. If the temperature exceeds the permitted levels, a phone call, SMS and email alert will be generated. This system does not need any computer network and operates with any SIM card.

Features:
- Computer connectivity is not essential
- 8000 recordings on the device
- Web based free software. Any number of devices across different locations can be connected
- Full battery back up
- Phone call/SMS/Email alert to 8 operators if temperature exceeds limits
- Power failure, Water leakage, Compressor failure etc. can be connected to Phone call alert
- Operates with SIM card

d. **Data Loggers for independent recording**
Various type of data loggers which can record the temperature for upto 18 months are available. These data loggers generate alerts on its screen by means of LED indicators. These can be used during all stages of the Cold Chain Management including storage and transportation.
These small devices are placed in the boxes or packets and the data will be continuously recorded and can be downloaded without need of any software.
Please see video at [http://bit.ly/1eKI5m4](http://bit.ly/1eKI5m4)

Features:
- 4 Programmable threshold limits
- 4 LEDs will indicate whether the temperature/humidity crossed the limits
- High, Low and average readings will be shown on screen
- IP Rating : IP65
- Single use and Multiuse models are available

e. **Temperature Mapping Study, Validation & Qualification**
This is the study carried out for vehicles, warehouses, cold rooms, freezer, boxes etc. which are used to store and transport medicines. The temperature distribution across the entire enclosed area eg. a cold room has to be within 2 to 8 Deg C under all practical conditions. We carry out temperature mapping study and ascertain the same and issue certification for its suitability for such applications. The study is carried out under various climatic conditions as well. Eg. a vehicle which is certified for 2-8 Deg C indicates that the refrigerated compartment of the vehicle is suitable for transporting medicines between the said temperature ranges.

If you are involved in Manufacture, storage or transportation of temperature sensitive products, please contact us for a free consultation:
sales.uae@vackerglobal.com