



BLOWKINGS



Company Profile

Blowkings was founded in 1981, under the guidance of Mr. R. P. Kothari & Mr. Munjal R. Kothari in Kandla, Gujarat (India). A sister concern of the Panna Group of Companies, with headquarters in Mumbai, India, we have been at the forefront of the plastic moulding sector for over 30 years.

Blowkings manufactures cold chain equipment used to store and transport vaccines for immunization sessions. Our current line is dedicated to passive cold chain equipment, namely: cold boxes, vaccine carriers and ice packs.

We also manufacture specialised passive blood cold chain devices, which are particularly used to transport specimens from one place to another.

Along with a range of passive cold chain devices, and specialised passive blood cold chain equipment that is all WHO pre-qualified, we also added Oxfam buckets with taps and lids of various sizes, (10L, 14L, 20L) to our portfolio and continue to add many more other products to our range.

Cold Chain Equipment

Cold Chain or Vaccine Supply Chain or Immunization Supply Chain consists of a series of storage & transport links designed to keep temperatures of vaccines within the W.H.O. specified temperature range from point-of-manufacture to administration, in order to maintain potency of vaccines.¹

Vaccines are sensitive to extreme temperatures that affect their potency and ultimately their ability to successfully safeguard children against harmful diseases. While some vaccines are sensitive to freezing, others are sensitive to light and heat. In order to maintain the efficacy of a vaccine, it must be stored under appropriate conditions that require a specific temperature range, as described by W.H.O. in the Product, Quality and Safety (PQS) catalogue, known as cold chain equipment.²

Cold chain equipment can be classified into three categories: Electrical, Solar and Non-Electrical. Electrical (or Active) equipment includes freezers, cold rooms, regular and ice-lined refrigerators. Solar equipment consists of solar refrigerator battery drive and solar refrigerator direct drive. Non-Electrical (or Passive) equipment comprises cold boxes, vaccine carriers and ice packs.

¹ WHO IIP2015 Module 2

² Same as above

Why use Passive Cold Chain Equipment?

Health workers are faced with the following challenges at the Peripheral Level of the National cold chain system:

- Inadequate power supply in developing countries leads to the breakdown of active cold chain equipment
- Lack of access to medical facilities in rural areas results in parents having to walk long distances to get their children immunized

To address these challenges, W.H.O. has established protocols for storing and transporting vaccines (within specific temperature ranges) to inaccessible regions, thereby creating a need for passive cold chain equipment. Section E004 of PQS, explains: insulated boxes (cold boxes and vaccine carriers) are cooled by ice packs that maintain temperatures within a predefined range for a period spanning between 20 hours and 6 days (Blowkings carriers), even when outside ambient temperatures are over 43 degrees Celsius. As we strive towards a fully vaccinated community, passive cold chain enables us to reach out to the “last mile” of civilization.

For cold boxes and vaccine carriers used in immunization sessions, a number of key factors need to be considered while picking the right storage device. These factors include: transportation duration, distance of a session, day/night temperatures, supply period, and cold life to name a few.³

Below are the types and their corresponding specifications of boxes manufactured by Blowkings:

Vaccine Carrier:

Model	VDC-24-CF	BK-VC 1.7-CF	BK-VC-2.6-CF	BK-VC-3.4-CF
Type	Short Range	Long Range	Long Range	Long Range
PQS Code	E004/022	E004/021	E004/020	E004/043
Cold Life at +43° C	20 hrs	38 hrs	43 hrs	43.43 hrs
Cool Life at +43°C	3 hrs	6 hrs	7 hrs	8 hrs
Warm Life at -20°C	6 hrs	13 hrs	18 hrs	16 hrs

Cold Box:

Model	CB-55-CF	CB-20-CF	CB-12-CF
Type	Short Range	Long Range	Long Range
PQS Code	E004/019	E004/025	E004/018
Cold Life at +43° C	89 hrs	138 hrs	156 hrs
Cool Life at +43°C	20 hrs	31 hrs	33 hrs
Warm Life at -20°C	31 hrs	46 hrs	53 hrs

³ How to use Passive Containers & Coolant Packs for Vaccine Transport & Outreach Operations, July 2015, WHO Vaccine Management Handbook

VACCINE CARRIERS

VCD 24



Vaccine Storage Capacity: 0.9L

Ice Pack Vol × Qty: 0.4 L × 2

VC 1.7



Vaccine Storage Capacity: 1.7 L

Ice Pack Vol × Qty: 0.4 L × 4

VC 2.6



Vaccine Storage Capacity: 2.6 L

Ice Pack Vol × Qty: 0.6 L x 4

VC 3.4



Vaccine Storage Capacity: 3.4 L

Ice Pack Vol × Qty: 0.6 L x 4

COLD BOXES

CB 55



Vaccine Storage Capacity: 7L

Ice Pack Vol × Qty: 0.4 L × 24

CB 20



Vaccine Storage Capacity: 20 L

Ice Pack Vol × Qty: 0.4 L × 39

CB 12



Vaccine Storage Capacity: 12 L

Ice Pack Vol × Qty: 0.4 L × 42

BLOOD COLD BOXES

Model	CB-55-CF	CB-20-CF
PQS Code	BB/03/2 (PIS B4/57M)	BB/06/3 (PIS B4/76M)
Capacity	10 units	20 units
No. of ice packs supplied	24 (E5/12 of 0.3 litre. Cold life is 63 hrs when E5/19 (0.4 litre) is used)	52 (E3/12 of 0.3 litre. Cold life is 145 hrs when E5/19 0.4 litre is used)

CB 55, CODE: BB/03/2 (PIS B4/57M)



Vaccine Storage Capacity: 7L

Ice Pack Vol × Qty: 0.4 L × 24

CB 20, CODE: BB/06/3 (PIS B4/76M)



Blood Storage units: 20

Ice Pack Vol × Qty: 0.3 L × 52

WE ALSO MANUFACTURE OTHER PLASTIC PRODUCTS:

BLOWKINGS also manufacturers **Oxfam buckets** of various sizes. Mainly **14Ltr** buckets and **20 Ltr** buckets **with lid and tap. Latrine slabs and accessories, relief items, medical kits, and many such other items.** We manufacturer many other plastic injection moulded, blow moulded and roto-moulded products as per customers requirements.

CONTINUOUS LEARNING

Blowkings strives to add more innovation in the manufacturing process as well in the lines of products which could be useful to the people around the world. We continie to strive for ways and means to make our products more user friendly as well as eco-friendly.