Q GEN-NEXT SUSTAINABLE TECHNOLOGY PVT. LTD.

GANZKUHL®COATING

A PRODUCT FOR A SUSTAINABLE TOMORROW

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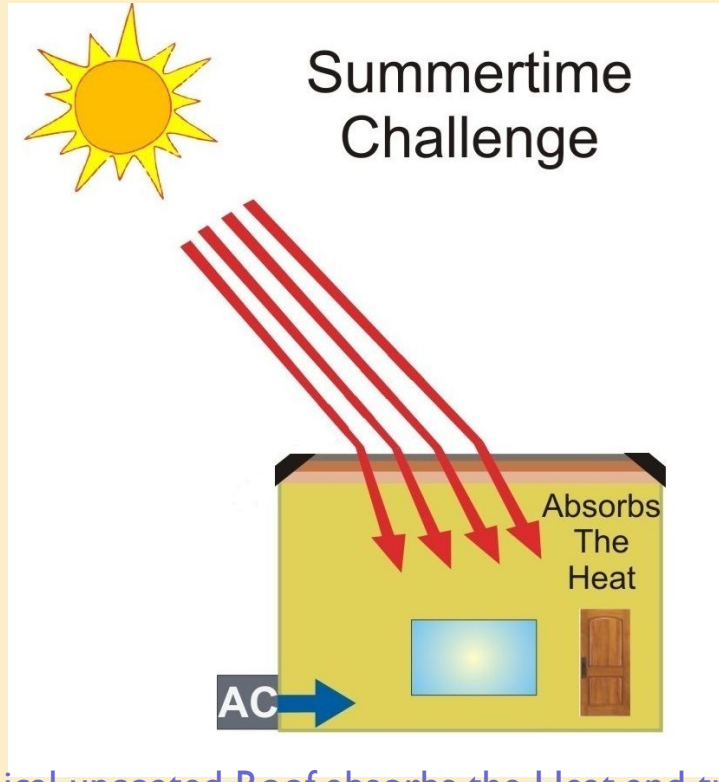
PROBLEM STATEMENT: INCREASING HEAT

- Rise in temperature on a Year-On-Year basis
- For instance, Indore:
  - Last Year: 39°C
  - **This year: 41°C. Sharp rise of 2°C in a year.**
- This is across the country. Some of the values for this season:
  - Nagpur 49°C
  - Kota 48°C
  - Lucknow 47°C
  - Delhi 47°C
  - Ahmedabad 46°C
  - Agra 45°C
  - Hyderabad 45°C
  - Chennai 45°C
  - Rajkot 45°C



- Typical uncoated Roof absorbs the Heat and transmits to the inside surface.
- Increasing Summer Temperatures imply heavier rains during monsoons.

PROBLEM STATEMENT: IMPACT OF THE HEAT

- Industries operating in metal sheds face even more hostile heating. This results in the dropping of the efficiency of the workers, due to the extreme heat.
- The products stored also undergo some damages due to the extreme heating.
- Use of forced ventilation solves this problem to some extent but doesn't cut the incoming heat due to the sun.
- Chemical Industry: During chemical storage, the rising temperatures would transfer greater heat to the inside of the storage tanks. This would result in:
  - Greater evaporation: Loss in material
  - Risks from release of evaporation products
  - Fire hazards, in case of volatile materials
- Impact on transportation:
  - Airports are the worst hit: they are large flat structures – so more heating and more water seepage.
  - Drawing the parallel, this issue exists with any transportation: road and rail.
  - The railways too would need a solution to reduce the heating, as it would have a direct impact on their AC costs.
- **To mitigate the above mentioned problems, there is a need for coated cooler roofs.**

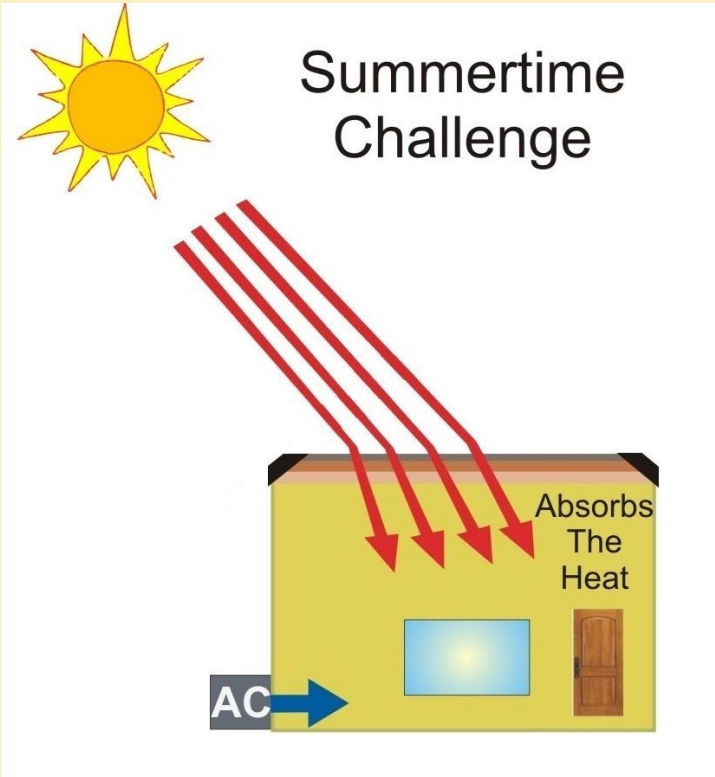
PROBLEM SOLUTION:

GANZKUHL®

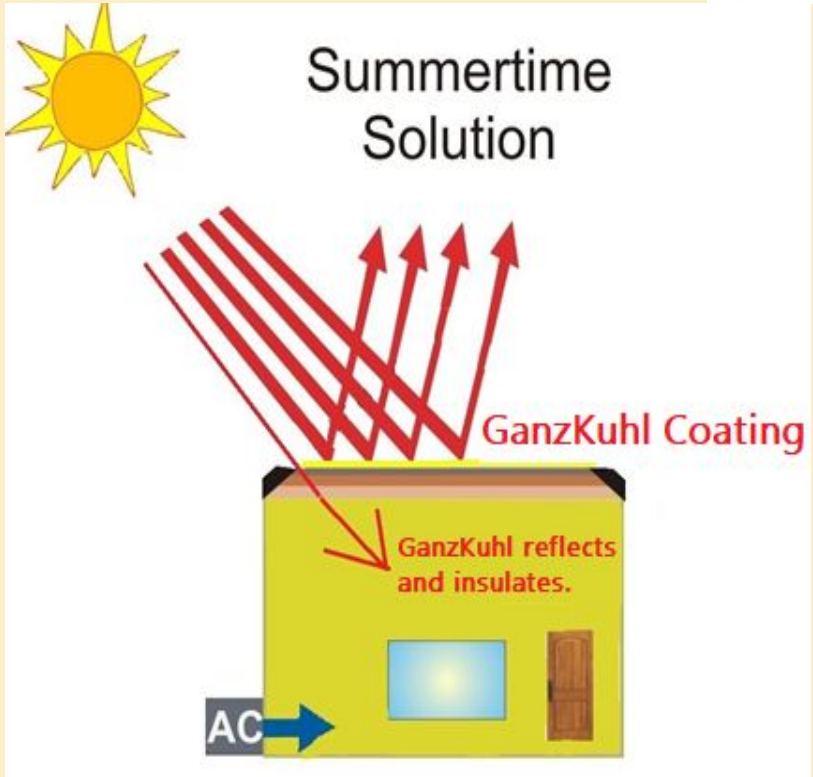
Ceramic-based Heat-Reflective Coating

We will look into the total advantages in the subsequent slides

PRINCIPLE OF WORKING



- Typical uncoated / non-functional coated Roof absorbs the Heat on the top slab.
  - Heat Absorbed by the Top Slab and transmitted to the inside surface



- **GanzKuhl® Coating Reflects the 98.6% of the Incident Heat**
  - Lesser Heat Absorbed by the Top Slab and transmitted to the inside surface

ADVANTAGES OF GANZKUHL® COATI

GanzKuhl® Coating Benefits:

- **High Heat Reflectivity:** 98.6% of the Sun's heat is reflected. This creates a cooler interior for the building.
- **Waterproof Layer:** Save money as no need to apply another waterproofing chemical.
- **Durable Walkable Surface:** Roof remains usable
- **No impact of fungus, bacteria or algae:** The roof remains clean!
- **High Dirt Resistance:** Keeps the surface easily washable and cleaner.
- **Good Aging characteristics:** Retains the reflectivity for a longer period, as compared to generic white paints.
- **Non-Toxic:** Not based on toxic compounds, so it is greener product.

MULTI-UTILITY OF GANZKUHL® COAT

- **Multiple Base Substrates:** GanzKuhl® Coating can be used for
  - Concrete Slabs
  - Galvanized / coated Metal sheets
  - Cloth
  - Wood
  - Rubber Sheet (limited adherence)
- **Ease of Application:**
  - Easily applied by brushing or with rollers.
  - Can be applied by any painter following the correct instructions.

GANZKUHL®:


DIFFERENT APPLICATIONS OF THIS VERSATILE PRODUCT
MALLS AND CINEMA HALLS
COMMERCIAL BUILDINGS
HOUSING COMPLEXES AND CLUBS
PORTABLE CONTAINER OFFICES
TRANSPORT
Trains, metros and buses
HOSPITAL
HOSPITALS
INDUSTRIES WITH SHEDS
INDIVIDUAL HOUSING
AC TENTS
YOUR IMAGINATION GIVES THE NEXT USE CASE HERE!
SCHOOL
SCHOOLS & COLLEGES
CHEMICAL STORAGE TANKS
lowering of evaporation losses
AIRPORTS
ALL TYPE OF SHEDS

COATING GUIDELINES

Surface preparation of the Roof:

- It is necessary to adequately prepare the surface of the roof by scratching or brushing, to remove any loose PCC or concrete.
- The surface then needs to be cleaned and washed thoroughly with water.
- Allow the surface to dry thoroughly prior to starting the coating.

Coating:

- The primer application is the first stage. Prepare the primer as per the formulation in the Instruction Sheet.
- Once the primer coating has dried the ready mix of GANZKUHL® can be applied on the Roof Top by brushing. Allow one coat to dry, before applying the second coat.
- The drying time is usually 2~3 hours. Check the surface by touching with any blunt object – if it doesn't go through, the surface is dry. After application of the second coat, let the coated surface be exposed to open sunlight for two days, before using the surface

Coverage:

- One kilo of GANZKUHL® covers approximately ~25 sq. ft. of area.

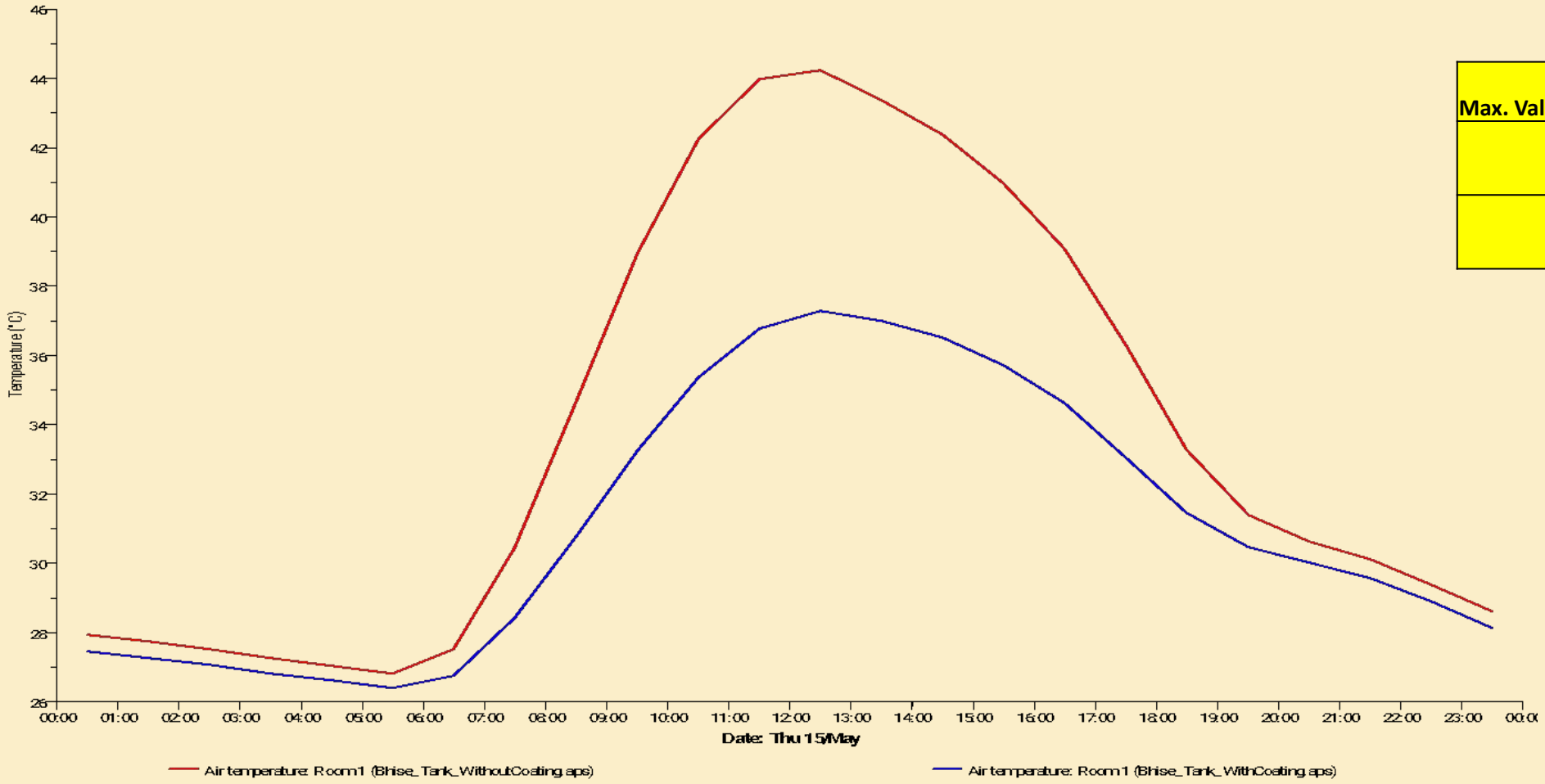
ACTUAL RESULTS: COATING ON METAL SHEET – HEAT WAVE

ACTUAL RESULTS: COATING ON METAL SHEET – VERY HOT DAY

ACTUAL RESULTS: COATING ON METAL SHEET – HOT CLOUDY DAY

ACTUAL RESULTS: COATING ON CONCRETE, WITH DUST EXPOSURE.

GANZKUHL®: SIMULATION COMPARISON WITH UNCOATED ALUMINIUM SUBSTRATE



Max. Value (C)	Time of max. temperature
57.03	12:30,20/Oct
42.81	12:30,27/Mar

SOME OF OUR OTHER PRODUCTS

We manufacture total range of ceramic parts for a wide variety of applications.
A glimpse into some of the recent innovations:

- **Zirprotekt®**: High Performance High Temperature Resistant Ceramic Coating for protecting refractories and Furnace Metal Shells and other Metallic Surfaces that shall withstand high temperature.

- **Cerolymer™:** Wear and Corrosion Resistant Ceramic Composite Coatings. Suitable for application on various equipment for protection against erosion and corrosion.

- **Innovative Ceramic Insulation:** Ceramic insulating coating/casting that has a very low thermal conductivity and can be used as an insulation for domestic use or for high temperature applications.

Thanks for your attention.

Any questions?