



Your Reliable Partner For  
Post Harvest Projects...

**Natural Storage Solutions Pvt. Ltd.**  
Your Reliable Partner For Post Harvest Projects

AN : ISO 9001 : 2008 Certified Company

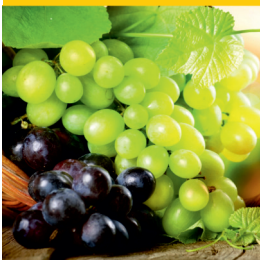
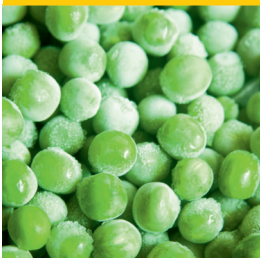
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## Controlled Atmosphere Storage

## Our Vision and Policy



Natural Storage Solutions Pvt Ltd has been engaged in providing turnkey solutions for various type of post-harvest project within India and across The Globe. The company has more than two decades of experience and established itself globally as quality player in this field and relentlessly drives for better. We believe in total customer satisfaction and they are our strongest marketing team which provide us cutting edge over other supplier.

### Our Vision

We want to be known by our customers for providing latest technology base cost effective state of the art post-harvest solutions which helps them to succeed in competitive market. NSSPL has always aligned with changing technology and continuously upgrade its manufacturing facility to produce highest quality systems which are eco-friendly, low operating cost and user friendly for its valued clients.

### Our Policy

NSSPL's core strength is its young dedicated passionate workforce which is ready to meet any challenges. We are continuously engaged ourselves to provide excellent after sales service to our valuable customers. NSSPL always strive to improve output of each employee by giving them full support, with pleasant working environment. NSSPL is engaged with various leading brand and key technology providers across The Globe to bring best solutions for each projects which benefits to Farmers & End-Users. By using cutting edge technology, NSSPL contributes its support to reduce the postharvest losses thereby serving the society and the nation.

*Yogesh Dahiya*

Yogesh Dahiya  
Managing Director  
Natural Storage Solutions Pvt. Ltd.



## Controlled Atmosphere Storage

Control Atmosphere Cold Storage is mainly used for long-term storage of perishable Fruits & Vegetables. In this type of cold storage, apart from constant temperature, concentration of oxygen, carbon dioxide, ethylene and humidity is maintained as per the requirement of the produce stored.

Due to control of respiration of Fruits & Vegetables, storage life is extended with this technology.

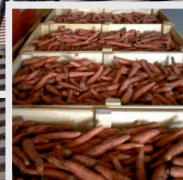
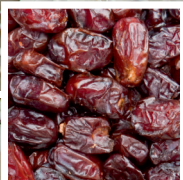
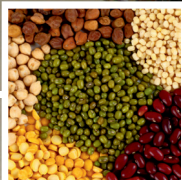
This type of Cold Storage is mainly used for long term storage of Apples, Pears, Lime, Litchi, Mango, Pomegranates, Groundnut, Tomatoes, Cabbage, Fresh Dates and other Perishable Fruits & Vegetables.





## Temperature controlled storage

## Modified Atmosphere Storage



## Temperature Controlled Storage

This type of Storage Technology is mainly used for non respired produce like Pulses, Grain, Spices, Dates, Jaggery, De-hydrated Products and other Products. The main object of the storage is to maintain constant product temperature thereby increasing the self-life and color of the produce.

We are offering wide storage capacity solutions along with material handling system as produce comes in large quantity and handling of the produce is important. We offer turnkey solutions for storage capacity starting from 1000 metric ton to 30,000 metric ton.

## Modified Atmosphere Storage ( Roots Vegetables Storage )

NSSPL provides total turnkey solution for long time storage of root vegetable like Onion, Garlic, Ginger, Carrots, and Processed Potatoes etc. In this type of storage, apart from uniform product temperature, humidity ( High / Low ), pre-defined level of carbon dioxide and air flow across the storage room maintained automatically.

This type of storage system is very useful in controlling the sugar level in products like Process Potatoes which is in high demand by processing industries. For Products like Onion, Garlic, Ginger etc. insulated building must be leak proof to ensure effective control of humidity. Material Stacking System is very much important for this products. Field knowledge and in-house R & D has given NSSPL success to establish long-term storage technology for critical products like onions.





## IQF with Processing Plant



## IQF with Processing Plant

Frozen Fruits, Vegetables & Ready to Eat Food market is growing rapidly both in Domestic and International market. Major market segments for IQF Products are :

- Retail Outlets
- Hotels, Restaurants, Caterers
- Food Industries

NSSPL has expertise in delivering turnkey projects for IQF and allied food processing application right from designing, integration, manufacturing of

various components as per the requirements and installation at site under experienced workforce team. One point solutions for such complicated projects gives NSSPL a leading edge to other competitors.

The Individual Quick Freezing Technology is one of the most effective technologies of preserving the natural characteristics of products with Color, Flavor and Texture of products remaining. The product retains long shelf life when

stored under -18 Degree C to -25 Degree C. No preservatives or artificial substances are added to enhance the self life of the products offered, thereby maintaining their natural freshness.

NSSPL has expertise in offering complete processing line for Ready to Eat Potato based Frozen Products like French Fry, Burger, Pattis, Vegies, Aloo Tikki, Nuggets Smiley Faces & Other Products.

This system is also used for Frozen Fruits & Vegetables like Green Peas, Mango, Lichi, Pineapple, Sea Products, Dairy Products, etc...

Green Peas, Diced Potato, Onion Rings, Strawberry, Mango, Pineapple, Melons, Sea Food, Meat etc are some of the popular application of IQF System







## Frozen Storage & Blast Freezer

## Fruits Ripening System



### Frozen Storage & Blast Freezer

Frozen storage are mainly used for Storage of Frozen Fruits & Vegetables, Sea Foods, Meat products, Dairy products and Ice-Creams. -18 deg C° to -40 deg C° temperature to be maintain during storage period depend on products.

Material handling in frozen storage is very much important as low temperature is maintain during the storage period. NSSPL has capability to design and delivered various type of stacking system in frozen storage.

Various kind of material stacking system used in Frozen Storage :

- Mezzanine structure with multi floor
- Drive-in Rack System
- Mobile Rack System
- Fix Rack System

Insulation, Defrosting System, Control of Moisture entered in Frozen Cold Room, Floor Design etc... are some of the important parameter to be consider during design of the Frozen storage. NSSPL offer efficient refrigerant overfeed system for frozen storage and blast freezer. The system offered by NSSPL is very efficient and low maintenance for such complicated application.

### Fruits Ripening System

NSSPL provides Ripening chambers for Mango, Banana and Papaya without altering the taste and freshness. We provide forced draft cooling system for uniform Ripening of Fruits even in large capacity rooms. We use blended Gas system for the purpose of Ripening which is acceptable by all world food standards. This system gives the client a unique advantage of controlled Ripening process with longer post storage life of the produce. The system offered by NSSPL ensures low weight loss after Ripening which benefits the customer commercially. This chamber can also be used for de-greening of Fruits.

#### Advantages Of The System Offered By NSSPL :

- Fully automatic temperature control system.
- Ethylene dozing is fully automatic. Dozing can be set as per the requirement.
- Carbon dioxide level is automatically controlled by the system, which prevent softening of fruits.
- Ethylene concretions can be measured in PPM enabling precise dozing of the gas.
- Concentration of ethylene and carbon dioxide is continuously measured by precise instrument resulting in optimum good quality of the produce.

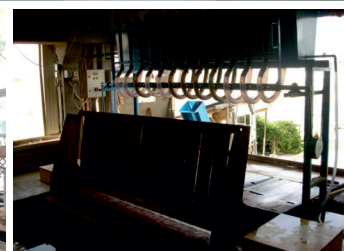
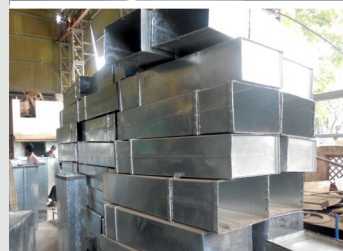
- Ripening cycle can be controlled by this system.
- This system is acceptable by all the food standards.
- Very safe and hygienic process.
- With forced draft air circulation system, uniform ripening of Fruits is possible resulting in uniform colour of each Fruit.
- Our refrigeration system is design to maintain high humidity within the room which results in minimum weight loss after ripening process.





## Chiller Package

## Block Ice Plant



## Chiller Package

A Chiller Packages that utilizes ammonia & various type of HFC gases as the refrigerant and consists of a compressor package, control panel, plate heat exchanger evaporator & condenser, surge drum, all assembled and wired in a factory controlled environment.

We at NSSPL offers ammonia based complete chiller package unit In-House designed and manufactured for both water

chilling and Glycol chilling. We designed and supply chiller package with reciprocating compressor as well as with screw compressor as per customer need. In recent days these packages are used to minimize the refrigeration charge and make the installation easy and save a lot of installation spaces. These chiller are used in Dairy, Chemical, Brewery and Food processing plants.

### Advantages of Chiller Package.

- Compact design
- Minimum charging of refrigerant.
- Less Welding
- Complete with control & monitoring system
- Ready to start unit after process side pipe connections
- Easy installation
- Low temperature application possible with use of secondary refrigerant like PPG.

## Block Ice Plant

NSSPL provides turnkey solutions for Block Ice Plant with a capacity starts from 5 tons per day to 300 tons per day. Ice plant comes with various block size of 10 kg to 200 kg.

As per the clients requirements we offer technology with or without automation. We offer Ice Cans in various materials like Galvanized Steel & Stainless Steel.

We also provide grid based dumping system to reduce labour cost for large capacity ice plant. NSSPL provide ice plants for chemical industries, Sea food industries, construction industries and for human consumption.





## Fruits & Vegetables Processing Solutions



## Sorting & Grading Solutions

NSSPL offers wide range of sorting and grading line solutions with required capacity. The sorting and grading line includes :

- Raw material receiving and unloading system
- Inspection
- Sorting
- Washing / Disinfection
- Pre dryer
- Waxing
- Dryer
- Grading (Mechanical / Electronic)
- Bag filler
- Automatic Bin filler

Having in depth experience of post harvest handling of fruits & vegetables. NSSPL offer turnkey solution for sorting and grading of various produce like :

- Potato
- Carrot
- Onion
- Garlic



NSSPL offers state of the art automatic advanced electronic sorter, system for gentle handling of the product like :

- Apple
- Pear
- Lime
- Pomegranate
- Mango
- Apricot
- Avocado
- Tomato
- Citrus
- Orang

Electronic(optical) Sorting & Grading system offer by NSSPL having gentle soft food grade cups and rollers system that ensure gentle damage free handling of the produce. Our system also include other equipment like pre-dryer, waxer, dryer etc. for surface treatment of fruits.

The salient features of the electronic line :

- Product transfer through soft rubber base rollers / cups
- Synchronised feeling with V-shaped singulatar / pre-aligner
- No of Lanes 1,2,4,6
- Required outlets
- Grading by weight, colour, diameter, external and internal quality
- Grading statistics and data be management
- Integration with remote tracibility system







## Packaging Solutions



## Packaging Solutions

NSSPL offer wide range of complete packaging solution for Fruits and Vegetables. Our turnkey solutions includes packaging in different shapes, conveying, labeling and stacking solution.

We used wide range of material to construct Machine and System that includes Stainless Steel, Hot Deep Galvanized Steel, Powder Coated Structure, Mild Steel, Aluminium etc...

We used food grade PP, PVC, SS belts with or without cleat in different shape and size for packaging solutions includes :

- Multi head Weighing System
- Row Material Conveying System
- Conveyors
- Conveying System for Raw and Finished Product
- Semi Automatic Clipping Machine
- Palletization Solution
- Accumulation Packing Belt
- Packing Bins



## NSSPL Manufacturing Facility



## NSSPL Manufacturing Facility

NSSPL have state of The Art Manufacturing facility spread in to 43500 square feet of area having all CNC Machines like Fiber Laser from AMADA Japan, Plate Bending Machine, CNC Press Break and Shear Machine from Europe, CNC Vertical Machining centers and All other related machinery under one roof. NSSPL also have most Advance surface treatment facility that includes Shot Blasting facility, Powder Coating plant, Paint both to produce World Class finish Components that serve last long.

NSSPL have In-House design facility included latest design software PTC Pro-E to design efficient components that results trouble-free operation for years and highly valued for our clients.

Highly motivated skilled workforce is the key strength of NSSPL which delivers high quality and ensure in time delivery of the products every time. Rigorous Quality Control and Inspection at all critical stage makes our product reliable and efficient.

We have executed turnkey projects across the globe

