

Cook Chill

Advantages of traditional 'Cook chill' and 'Automated Extended Shelf Life' technology

Cook chill is a catering system that is based on cooking food till it is just done followed by rapid blast chilling that reduces the food temperature to below 3°C within 90 minutes. Storage at this temperature extends the shelf life of the product to 5 days

Cook Chill

Advantages of traditional cook chill

- Labour cost savings
- Efficient time utilisation
- Increased productivity
- Economies of scale
- Power saving
- Economies of raw materials
- Menu variety
- Improve nutritional/bacteriology
- Improved food quality
- Quality control
- Centralised preparation
- Centralised control

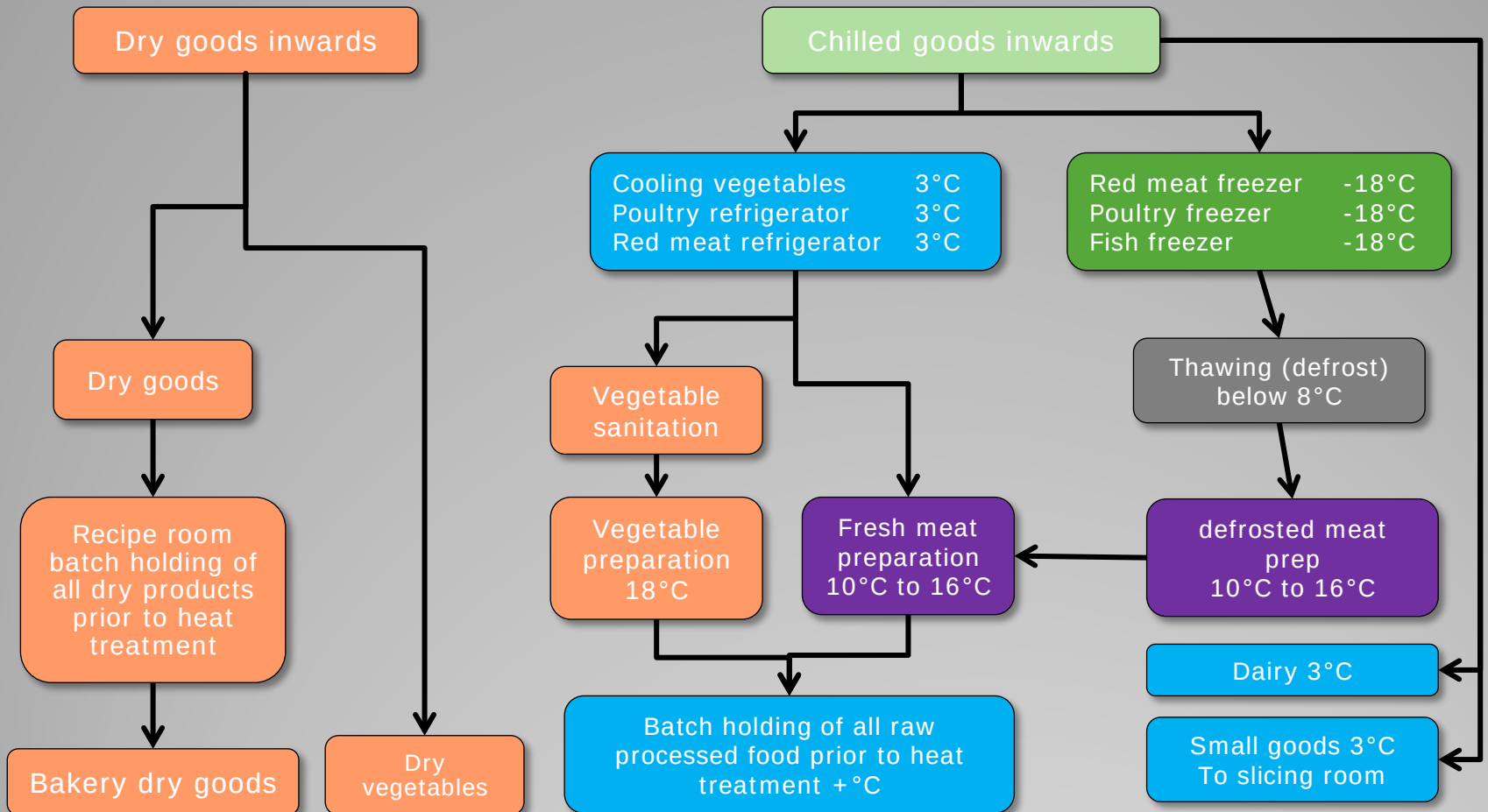
The utilisation of automated extended shelf life technology will reduce a number of process steps and in turn allow for greater efficiencies in labour and distribution. Product shelf life can be increased to between 14 and 30 days

Extended shelf life technology

Advantages of automated extended shelf life technology

- Further reduction in labour input through automation
- Improved workplace health and safety in the kitchen
- Food is cooked in own juices
- Seals in aroma, flavour and nutrients
- Reduced moisture losses
- Increased shelf life
- Marketing and economical benefits
- Menu versatility at serving location
- Microbiological safety
- Generally no preservatives
- Reduced weight in transportation
- Reduced frequency of delivery
- Increased product shelf life
- Minimal thermal processes

Receiving of raw products



Cooking

Recipe room 18°C

All dry goods are weighed and labelled on trolleys ready for production

Batch holding room 3°C

All raw products are weighed and labelled on trolleys ready for production

Production kitchens

Bakery 18°C

Preparation and portioning of all bakery items. Cooking of product is shared with core production until a secondary shift is initiated. The bakery will require its own equipment space for ovens, chillers and freezers

Core production Production of all hot meals 18°C

All preparation will be taken from the recipe room and the batch holding room. Trolleys will be labelled according to the meal to be produced and married together on the production floor. Equipment has been chosen for its throughput capability and versatility

Special needs kitchen 18°C

This kitchen will cater for special diet meals or meals of certain ethnicity. This kitchen could also be able to accommodate production of meals for school children

Centralized one-way wash-up

Garbage removal

Garbage removal

**Completion of cooking and the beginning of chilling
HIGH RISK**

Chilling

Blast chilling -15°C
Blast freezing - 35°C

All solid items in
1/1 Gastronome pans

Static chilling
1°C to 3°C

All solid items in casings

Tumble chilling
1°C to 3°C

All liquid items pumped
into casings

Stored on trolleys

Stored in
Swing bar crates

Dry
store

Bulk chilled storage 3°C

Small snacks and sashes, beverages,
crockery and equipment

Portioning

Starters/Salads	10°C	Sandwiches	10°C
Cooked dishes	10°C	Semi finished food	18°C
Soups	10°C	Bakery	18°C
Complete meals	10°C		

Packaging

**Personal meals
Packaging**

10°C

Trays packaging

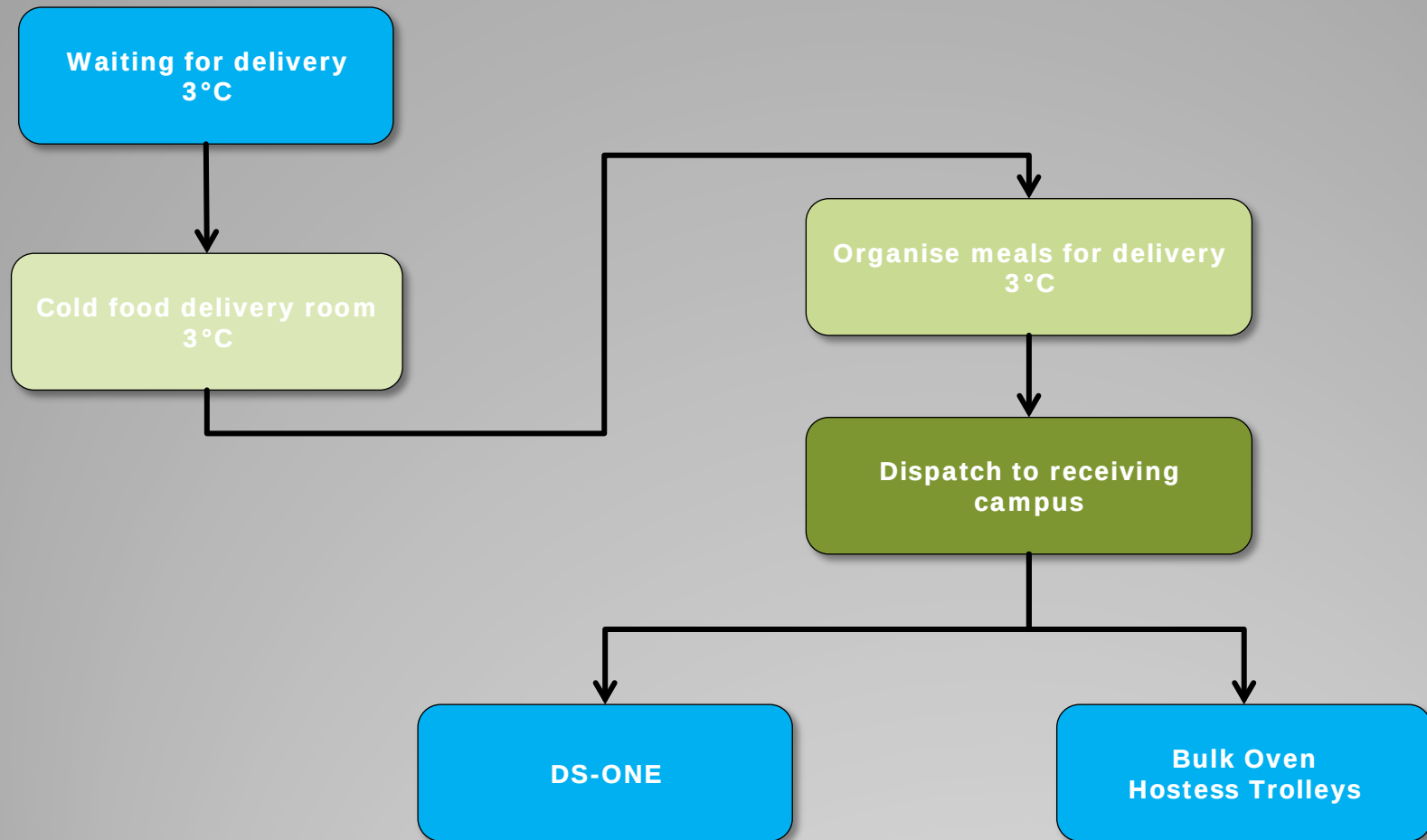
10°C

Vegetables and salads packaged	Cooked portioned and packaged meals	Packaged homogeneous soups	Meals in recyclable crockery	Sandwiches	Raw semi finished fruit and ved
Pasta salads	Cooked packaged souse dishes	Packaged heterogeneous soups	Meals in reusable crockery	Packaged sandwiches	Cooked semi finished food Meat, poultry and fish
					Cooked semi finished vegetable etc
					Semi finished deli snacks

Beverages

Small snacks and sashes

Delivery



Liquids processing



Production kettles
40 to 400 litre
Product can also
homogenised in
kettles



Wet product is pumped at
85°C using a pump station.
Soups, sauces, casseroles,
rice and pasta



Hot bags are
heat sealed
at 84°C

Solids processing



Cook tank used for
sous vide cooking
Vegetables and meat
in bags



Product placed in cook
tank for overnight cook



Overnight cook
automatically changes
to chill cycle ready for
morning shift

Liquids processing

Solids processing

Thermal processing complete – Beginning of chilling – HIGH RISK

Product in bags placed
in Tumble Chiller for
rapid chilling

Product transferred to
Blast chillers
Before being moved to
freezer for storage



Bulk Chilled Storage
Bags and casings in swing bar crates/Dishes on trolleys

Portioning Pre or Post delivery

Delivery and storage at 3deg C

Bulk or Plated Rethermalisation & Distribution

Meal distribution



Conveyor plating and line



Pre-plated hot and cold meals loaded into DS-ONE tray trolley

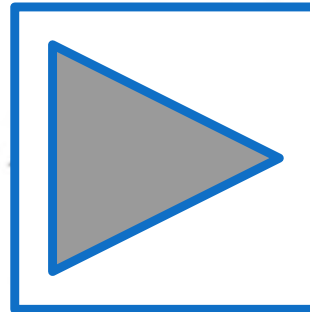
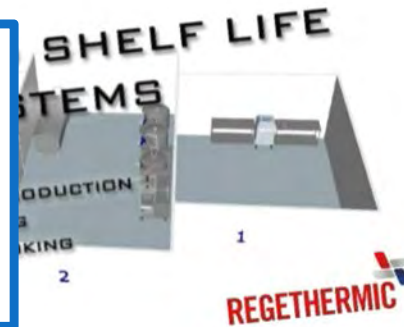


DS-ONE tray trollies docked ready for rethermalisation prior to meal delivery



Meals distributed with Hostess trollies

Click play to view our
Virtual extended shelf life
demonstration



Click play to view a video of a
Blanco Tray line and DS-ONE
trolley system in action



You tube video links

For printed versions of this presentation these videos and others can be found on
our Youtube channel at www.youtube.com/user/RegethermicAustralia

