



Australian Government

Assessment Requirements for FBPOPR2052 Operate a chocolate tempering process

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a chocolate tempering process on at least one occasion, including:

- accessing workplace information to identify tempering process requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting tempering process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - setting pump speeds
 - checking temperature/zone settings
 - checking chocolate temperatures
- monitoring supply and flow of materials to and from the tempering process and equipment operation to confirm process remains within specification
- conducting temper test, interpreting results and determining adjustments
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility

- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take tempering process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- conducting routine maintenance according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the tempering process, including:
 - basic understanding of the crystallisation behaviour of cocoa fat
 - relationship between crystal forms and melting points/temperatures
 - process stages, including heating, cooling, agitating, reheating and effect of each of these on outcomes
- basic operating principles of equipment for the tempering process, including:
 - main equipment components
 - temperature zones
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- services required for the chocolate tempering process and action to take if services are not available
- the flow of the tempering process and the effect of outputs on downstream processes
- quality characteristics required of chocolate for tempering and the effect of variation on tempering process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the tempering process, including temper test procedures and the significance of results for tempering process adjustments
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the tempering process and related control measures
- common causes of variation related to the chocolate tempering process and corrective action required

- work health and safety hazards and controls related to the chocolate tempering process
- requirements of different shutdowns as appropriate to the tempering process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities relevant to the chocolate tempering process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the tempering process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for operating the chocolate tempering process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - process and related equipment and services
 - chocolate to be tempered
 - tempermeter
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - recipe/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>