

## Overview

This standard is about the skills and knowledge needed for you to control screen room processes in milling.

You will need the skills and knowledge to control the screen room processes which include screening, cleaning and conditioning processes. This includes cleaning by separation, screening by sieving, gravity, shape, air resistance as well as metal detection. It also covers wheat damping, conditioning and drying.

This standard is for you if you work in food and drink manufacture and/or supply operations and carry out operative tasks in and around the screen room to control these screen room processes.

## Performance criteria

*You must be able to:*

### **Prepare for processing**

1. prepare for screening and cleaning in accordance with legal and regulatory requirements, organisational health and safety, hygiene and environmental standards and instructions
2. set up equipment according to specification
3. make sure that material is available and fit for use
4. start up the plant and check that it is running to specification
5. take action in response to operating problems in accordance with organisational requirements

### **Carry out processing**

6. carry out screening and cleaning in accordance with legal and regulatory requirements, organisational health and safety, hygiene and environmental standards and instructions
7. use equipment and make sure that it is supplied with materials and services
8. achieve the required output to the correct specification
9. make sure the material is transferred to the next stage in the process
10. take action in response to operating problems within the limits of your responsibility
11. maintain communication according to organisational procedures
12. complete all records according to organisational standards

## Knowledge and understanding

*You need to know and understand:*

1. what the legal or regulatory requirements, the organisational health and safety, critical control points, hygiene and environmental standards and instructions are and what may happen if they are not followed
2. what recording, reporting and communication is needed, how to carry this out and the reasons why it is important to do so
3. how to carry out the necessary pre-start checks and why it is important to do so
4. how to follow the start up procedures for the processing and why it is important to do so
5. how to follow work instructions and why it is important to do so
6. how to carry out processing and why it is important to do so
7. when and how to undertake routine maintenance and checks
8. what action to take when the process specification is not met
9. when it is necessary to seek assistance and how to seek it
10. how to operate, regulate and shut down the relevant equipment
11. how to make equipment ready for future use
12. what the limits of your own authority and competence are and why it is important to work within them
13. what the basic purposes of cleaning, damping and conditioning are
14. what basic effects cleaning, damping and conditioning have on the material being processed in the screen room
15. what the implications of incorrect cleaning, damping and conditioning are
16. the flow and order of processes which make up total screen room activity
17. the purpose and system for wheat cleaning
18. what the principles, purpose and importance of separation processes are including colour sorting
19. how modern milling separation plant is laid out and functions
20. how de-stoners and exhaust fans work including combinator/concentrator, combi-cleaner
21. how disc/cylinder separators work including spiral seed separators
22. what specific gravity tables are and how they work
23. what magnet separators are and how they work

24. how dry scourers work including vertical, horizontal and centrifugal impact
25. what aspirators are and how they work
26. what the purpose and importance of damping systems are including automatic (microwave/capacitance), water wheels/pumps and flow meters
27. how damping works based upon simple screw worm/special conveyor
28. how modern milling conditioning bins are laid out and function and how conditioning has an influence on milling
29. what measurers, weighers and blending weighers are and how they work
30. what the damping systems are in screen room processing
31. what the first break weigher is and how it works

Control screen room processes in milling

<b>Developed by</b>	NSAFD
<b>Version Number</b>	2
<b>Date Approved</b>	January 2019
<b>Indicative Review Date</b>	January 2024
<b>Validity</b>	Current
<b>Status</b>	Original
<b>Originating Organisation</b>	Improve
<b>Original URN</b>	IMPMC106S, IMPMC107K, IMPMC108K
<b>Relevant Occupations</b>	Manufacturing technologies; Food Preparation Trades; Elementary Goods Storage Occupations; Elementary Process Plant Occupations
<b>Suite</b>	Milling and Cereals
<b>Keywords</b>	Food; drink; manufacturing; milling; wheat; cleaning; de-stoners; combinator; concentrator; seed; conveyor; weigher