LANLEO18

Service and repair land-based harvesting and processing equipment

Overview

This standard covers the service and repair of land-based harvesting and processing equipment. It includes the underpinning knowledge of the construction and operating principles of:

- Implements and machinery
- Fixed equipment and storage facilities.

It includes the recognition of faults, methods of repair, calibration and verification of performance. Harvesting and processing equipment covered can be found in one or more of the following associated sectors of land-based engineering, e.g. agriculture, horticulture, amenities, ground care, arboriculture and forestry.

This standard is for those working in land-based engineering and is appropriate for persons working under supervision.

Performance criteria

You must be able to:

1. remove and replace components from land-based harvesting and/or processing equipment
2. dismantle, service/repair and reinstate harvesting and/or processing equipment to the manufacturers' specifications
3. set up harvesting and/or processing equipment for optimal performance
4. confirm faults in harvesting and/or processing equipment
5. rectify faults in harvesting and/or processing equipment which causes crop or product loss, damage, contamination or poor sample quality
6. prepare harvesting and/or processing equipment for **periods when not in use**

Knowledge and understanding

You need to know and understand:

1. how to remove and replace components from land-based harvesting and/or processing equipment
2. how to dismantle, service/repair and reinstate harvesting and/or processing equipment to manufacturers' specifications
3. the construction and operation of harvesting and/or processing equipment
4. the **methods and operating principles** of harvesting and/or processing equipment
5. how to set up harvesting and/or processing equipment for optimal performance
6. how to recognise and rectify faults in harvesting and processing equipment
7. the appropriate methods of removing blockages from harvesting and/or processing equipment
8. the **causes of crop or product loss** or poor sample quality
9. the effect of crop or product type and conditions on harvesting and/or processing operations
10. how to prepare harvesting and/or processing equipment for periods when they are not in use

Glossary

causes of crop or product loss - e.g. contamination, damage, wastage and non-compliance with specifications

methods and operating principles - e.g. movement of material within the harvesting process (elevating, lifting, conveying, transfer, metering and presentation), processing e.g. separation, drying, pasteurisation, compression/tying/wrapping, disposal/dispersal of waste products

prepare for **periods when not in use** - e.g. bulk storage facilities, seasonal equipment

Links to other NOS

Refer to LANLEO1 Recognise and reduce hazards in the land-based engineering work area, for guidance on safe working practices.

Refer to LANLEO4 Apply core land-based engineering principles: mechanical principles, for guidance related to fundamental engineering principles and practices.

Refer to LANLEO29 Monitor the handover and installation of land-based equipment, for guidance related to operational requirements.

Refer to LANLEO2 Implement organisational procedures in land-based engineering, for guidance related to procedural or administrative recording and reporting practices.

LANLEO18

Service and repair land-based harvesting and processing equipment

Developed by	Lantra
Version Number	2
Date Approved	December 2015
Indicative Review Date	December 2020
Validity	Current
Status	Original
Originating Organisation	Lantra
Original URN	LANLEO18
Relevant Occupations	Land-based Engineering
Suite	Land-based Engineering Operations
Keywords	land-based; equipment; machinery; harvesting; processing