



Australian Government

Department of Education, Employment and Workplace Relations

TLIW2019A Apply surface coatings using a spray gun

Release: 1

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Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to use a spray gun to apply surface coatings in accordance with workplace requirements, including planning surface coating process, undertaking surface preparation, applying surface coating, and completing workplace operations in accordance with requirements. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Work must be carried out in accordance with regulations and workplace requirements relevant to pallet manufacturing processes.

Work is generally performed under some supervision, within a team/group environment. It involves the application of regulatory requirements and workplace procedures to the application of surface coatings using a spray gun as part of pallet manufacturing processes in the transport, warehousing, distribution and/or storage industries.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Plan surface coating process	1.1 Equipment, accessories and consumables are assembled and checked for applicability to the surface coating task(s) 1.2 Material safety data sheets and/or product application and safety information are read and used to inform work practices 1.3 Particular process techniques, time and safety requirements are noted and used to inform work planning 1.4 Personal protective equipment is used/worn as required.
2 Undertake surface preparation	2.1 Characteristics of uncoated/raw material and the required surface coating materials are identified and appropriate action is taken to rectify the problem 2.2 Workplace instructions on surface preparation of materials are followed 2.3 Surface preparation is checked for conformity with required workplace standards
3 Apply surface coating	3.1 Sequence of work is identified maximising potential of the applied finish for the production operation 3.2 Equipment and accessories are used within manufacturers and workplace instructions 3.3 Trial applications of surface materials are made to check spray patterns, equipment operations, materials consistency and specified surface finish 3.4 Surface coating depth and coverage is checked for conformity with specifications 3.5 Surfaces are kept free of contamination 3.6 Faults/problems are identified and action is undertaken in accordance with workplace procedures
4 Complete workplace operations	4.1 Products are located to storage area or next production stage as required 4.2 Equipment is cleaned prior to storage 4.3 Equipment which is damaged, unserviceable or requiring service is tagged and appropriate steps are taken to arrange repair 4.4 Workplace documentation and records are completed as required

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Regulations relevant to the application of surface coatings using spray gun equipment
- Relevant OH&S and environmental protection procedures and guidelines
- Workplace procedures and policies for the application of surface coatings using spray gun equipment as part of pallet production
- Focus of operation of work systems, equipment, management and site operating systems for the application of surface coatings using a spray gun as part of pallet production
- Effects of the fumes, heat and other radiations
- Characteristics of the materials in terms of toxicity, reactivity, flammability, required viscosity and re-coatability
- Methods for preventing contamination of surfaces during and after surface coating
- Application of relevant hydraulic, mechanical and pneumatic principles to the spray process
- Problems that may occur when applying surface coatings using a spray gun and appropriate action that can be taken to resolve the problems
- Features and hazards of spray gun equipment used during pallet production and the precautions and procedures that should be followed in its use
- Housekeeping standards and procedures required in the workplace
- Site layout and obstacles

Required skills:

- Communicate effectively with others when applying surface coatings using a spray gun
- Read and interpret instructions, procedures, information and labels relevant to the application of surface coatings using a spray gun
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the application of surface coatings using a spray gun
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when applying surface coatings using a spray gun
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems, faults or malfunctions that may occur when applying surface coatings using a spray gun in accordance with regulatory requirements and workplace procedures
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Plan own work including predicting consequences and identifying improvements
- Monitor work activities in terms of planned schedule

Required skills:

- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Maintain spray gun equipment to manufacturers specifications
- Identify, select and efficiently and effectively use relevant materials and equipment when applying surface coatings using a spray gun
- Adapt to differences in equipment in accordance with standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards

Evidence Guide**EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and

EVIDENCE GUIDE

	operation manuals
Method of assessment	• Assessment of this unit must be undertaken by a registered training organisation • As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests • Practical assessment must occur: • through activities in an appropriately simulated environment at the registered training organisation, and/or • in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Work may be conducted:	• in a range of work environments by day or night
Customers may be:	• internal or external
Workplaces may comprise:	• large, medium or small worksites
Workplace environment may include:	• movement of equipment, goods, products, materials and vehicular traffic
The surface coating process is conducted:	• as part of manufacture/repair activities with the operator using discretion and judgement within established specifications
Spray guns may be:	• air or electrically powered
Coatings may be:	• water or chemically soluble
Spray guns may be:	• hand held or automated
OH&S requirements include:	• manual handling, personal protective equipment, elimination/control of hazards, machine isolation and machine guarding
Hazards in the work area may include exposure to:	• chemicals and fumes • dangerous or hazardous substances • stationary and moving equipment, parts and materials • noise, light, energy sources

RANGE STATEMENT

	• electrical equipment • humidity, air temperature, radiant heat • debris on floor • faulty racking • poorly stacked materials or finished pallets • faulty equipment
Personal protective equipment may include:	• gloves • safety headwear and footwear • safety glasses • respirators • protective clothing
Consultative processes may involve:	• workplace personnel • supervisors and managers • customers/clients • suppliers • contractors • union representatives • industrial relations and OH&S specialists • other professional or technical staff
Communication in the work area may include:	• phone • fax • email • internet • barcode readers • oral, aural or signed communications
Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:	• company procedures • enterprise procedures • organisational procedures • established or standard procedures
Information/documents may include:	• job specifications and workplace operating procedures • relevant Australian or international standards • manufacturers specifications for equipment/tools • supplier and/or client instructions • quality assurance standards for pallet manufacture • material safety data sheets (where applicable) • codes of practice including the National Standards for Manual Handling and the Industry Safety Code • relevant regulations including the ADG Code • award, enterprise bargaining agreement, other industrial arrangements

RANGE STATEMENT

Applicable regulations and legislation may include:

- standards and certification requirements
- emergency procedures
- relevant codes and regulations pertaining to pallet manufacture
- Australian Standards AS 2858 and AS 2082
- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation
- licence, patent or copyright arrangements
- ADG Code and regulations
- workplace relations regulations including equal opportunity, equal employment opportunity and affirmative action legislation
- workers compensation regulations

Unit Sector(s)

Not Applicable

Competency Field

Competency Field

W - Equipment and Systems Operations