

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

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| Title | Design the loading compartments of trucks |
| Code | 108767L5 |
| Range | This unit of competency is applicable to the builders of loading compartments of trucks or respective engineering staff. Practitioners should be able to master the specification requirements on the construction of loading compartments, preparing the design drawings on the basis of intact chassis of truck by means of appropriate drafting software, and listing the material required. |
| Level | 5 |
| Credit | 6 (For Reference Only) |
| Competency | <p>Performance Requirements</p> <p>1. Knowledge (Structure of trucks)</p> <ul style="list-style-type: none"> • Fully understand the overall structure and respective technical parameters of trucks (including chassis and cab), such as wheel base, wheel span, axle load, the dimension of cab, the shape and dimension of the frame. • Master the characteristics, application standard, joining methods and costs etc. of the construction materials for various kinds of loading compartments. • Master the construction process of the loading compartment, such as material shaping, construction and fixation of the skeleton, rust-proof, painting and installation of supplementary facilities. • Master requirements of customers on loading compartments, such as categories, sizes and weights of goods, interior environment of the loading compartment (including temperature, humidity, fire prevention, water-proof, vibration-proof, protection from electric shock and collision, etc.), security, loading and unloading locations of goods and appearance. • Master requirements of customers on the supplementary facilities inside and outside the loading compartment, such as the lifting tail gate, crane, dump truck and refrigerated truck. • Good understanding of legislative standards on truck body, such as lighting and warning lamps, reversing buzzer, dimension. <p>2. Performance (Design the loading compartment)</p> <ul style="list-style-type: none"> • Define the design objectives and technical specifications, and categorize the drawings for different sections by integrating the specification requirements of customers, legislative standards, chassis limitations and cost on the basis of intact chassis of truck. • Apply appropriate drafting software to prepare the design engineering drawings for the loading compartment according to the established design objectives while taking the possibility of supplementary facilities installation into account. • Compile the list of the materials required according to the design engineering drawing, and evaluate the man-hours required for construction, working procedures and costs to ensure that requirements of parties concerned are met. • Widely accept opinions from all concerned parties (such as builders, material suppliers and customers, etc.) and revise the design details when necessary without deviating from the design objectives. • Ensure that the design, appearance and safety standards of the loading compartment comply with respective legislative requirements. |
| Assessment Criteria | The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is: |

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| | <ul style="list-style-type: none">• Capable of mastering requirements of customers and respective regulations on loading compartments, and defining the design objectives and technical specifications based on an intact chassis of truck; and• Capable of applying appropriate drafting software to prepare the design engineering drawings for the loading compartment and compiling the list of required materials to ensure that the requirements on design objectives, technical specifications and costs are met. |
| Remark | <p>The credit value of this competency unit assumes that the practitioner has possessed knowledge of the car body structure.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of Vehicles) Regulations |