



Australian Government

RIIPSM305D Operate converters

Release: 2

RIIPSM305D Operate converters

Modification History

Release	Comment
1	This unit replaces RIIPSM305A Operate converters.
2	Performance Criteria numbering corrected. Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to operate converters in Metalliferous mining.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Relevant information must be sourced prior to application of the unit.

Unit Sector

Metalliferous mining

Elements and Performance Criteria

1. Plan and prepare for converter operation	1.1 Access, interpret and apply smelting documentation and ensure the work activity is compliant 1.2 Receive, interpret and clarify shift changeover details 1.3 Establish and maintain communications with other personnel 1.4 Select appropriate personal protective equipment for the work activity 1.5 Check and test control and monitoring systems 1.6 Select appropriate type of auxiliary equipment 1.7 Carry out computer systems and equipment pre-start checks 1.8 Identify, address and report potential risks, hazards and
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	environmental issues and implement control measures 1.9 Follow emergency procedures 1.10 Ensure approved dust suppression and extraction methods are in place 1.11 Ensure work area is adequately ventilated
2. Start-up converter	2.1 Perform pre-start checks 2.2 Carry out start-ups from standby and after maintenance 2.3 Carry out first charge 2.4 Stabilise the system
3. Monitor and control the process	3.1 Complete routine checks, logs and written paperwork 3.2 Identify and address signs of potential and actual problems 3.3 Monitor condition of metal and take action to maintain production schedule and quality 3.4 Monitor availability of feeds and take action to maintain production schedule and quality 3.5 Monitor and maintain blast air flow to converter 3.6 Monitor and maintain converter oxygen 3.7 Monitor cooling medium flow to converter to maintain converter temperatures 3.8 Maintain metal and gas temperatures 3.9 Control and monitor converter movement 3.10 Monitor and control rate and amount of additives to molten metal 3.11 Respond to warning alarms and lights and take action to rectify 3.12 Control and monitor metal and slag blow process and pouring 3.13 Complete written reports and log sheets
4. Maintain plant availability	4.1 Monitor plant throughout shift 4.2 Use measured/indicated data and sight to identify issues likely to impact on plant availability 4.3 Predict impact of change in one unit/area on other plant unit/areas and communicate to relevant personnel 4.4 Test trips and alarms 4.5 Inspect converter plant and rectify and/or report faults 4.6 Maintain furnace temperature during non-operating periods

	4.7	Operate Tuyere punching
	4.8	Prepare plant for maintenance
5. Shutdown converter	5.1	Determine type of shutdown required and give warning
	5.2	Shutdown furnace in required sequence
	5.3	Leave plant in a condition ready to restart

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

RIIPSM305A Operate converters

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>