Advanced On-Site Assessment
Stationary concrete placing boom - A72

Resources required

Machine	• Placing boom fixed to a relevant structure
Area	• Working area clear of hazards which must include: - place to receive poured material - wash-out point
Other equipment	• Pipe sections, taper and bends, including incorrect sized versions. • Ground lines with clips/couplings, seals, packing and anchors. • Pipe cleaning equipment. • Concrete pump able to supply a flow of suitable material with a competent operator. • Sufficient supply of concrete suitable for pumping. • Pipeline configuration. • Signaller assistance. • Radios for communication purposes. • Assistance to handle the placing hose and provide signals
Notes	• The boom selected for the test must be hydraulically operated via electrically-driven motor. • The boom must be able to be used both with direct-operated levers and remotely using a pendant or transmittable control unit. • The boom must have all controls (both fixed or remote control) clearly marked, be in serviceable condition and conform with current legislation. • The operator's manual and all other related supporting documents such as risk assessments etc. for the boom must be accessible during the test. • A pipeline specification must be constructed for the activity, requiring a pipe length of at least 15 metres consisting of steel tubes and flexible hosing. • Couplings must be fitted with locking facilities/safety securing equipment. • Assistance can be provided for the changing of the gasket. The candidate remains responsible for the process and sequence of work. The tester cannot undertake this risk • The Tester cannot provide signals or control the placing hose. • The risk assessment for the test must include working at height requirements for accessing the platform

Activity instructions

Sequence	• Due to the nature of the equipment, all activities can be undertaken on different booms, locations and different days. CPCS must be informed prior to any tests taking place and be given full details of any divided tests. The test must be completed collectively within a given time. The specifications' section gives further information
Preparing for work	1. Complete all manufacturers' pre use checks as detailed in the operator's manual which must be referred to by the candidate during the activity • Additional information to be identified by the candidate referring to the operator's manual. Tester to decide what information will be identified 2. Ensure that the boom radius working area is clear of hazards and segregate the working area
Setting up for work	3. Configure the boom to the given pour point/area 4. Prepare a pipeline to the given specification 5. Arrange the signalling procedures with the pump operator and at the pour point
Working tasks *(refer to specifications)*	6. Place pumped materials to the pour location whilst following given signals 7. Stop and restart the pour during work 8. Place the end of the hose at a specified height and travel from maximum to minimum radius 9. Change the gasket on the 90/90 degree bend 10. Carry out appropriate communication with the pump operator
Completing work	11. Clean all pumping system components 12. Demonstrate verbally the sequence of clearing blockages
Shutting down	13. Carry out shut-down and securing procedures
Notes	• There must be a change in radius of at least 10 metres and a change in rotation of at least 45 degrees • For activity 4, where part of the test is integrated with production activities, the pipeline specification using steel pipes and securing requirements may be simulated • At least 15 minutes of the pour must be undertaken using radios whilst the remaining time undertaken using hand signals • The boom must be operated during the test using both the levers and the remote unit and all boom movements must be demonstrated • Manual operation (of the levers) can be undertaken during folding procedures following the pouring activity

Activity measurements

Placing Hose Height	• Maximum of 1 metre (during pour)
Pour duration	• Minimum of 30 minutes
Test timings	• The test must collectively be completed within 1 hour 45 mins. Additional time may be given at the discretion of the Tester for boom cleaning functions

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Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A ☐ B ☐	Start time of test:
Make and model:	Duration:

Mandatory

	Correctly carried out during the test?	Y/N
Preparing (Boom)	1. All pre use checks including support and stabilisation	
	2. Accessing and egressing the work platform/area	
	3. Function of emergency systems (if applicable)	
	4. Working areas checked for hazards or controlled as per risk assessment	
	5. Boom hydraulics functional checks	
	6. Functional checks of remote operating unit	
	7. Remote box/controls isolated during preparation work	
Setting up	8. Configuration of the boom for the given working area	
	9. Boom extended to work area avoiding hazards and structures	
	10. Sequence of unfolding and folding of boom	
	11. Relevant piping selected	
	12. Piping checked for condition	
	13. Couplings compatible with, connected and locked to piping	
	14. Pipeline anchored, supported and secured	
	15. Pipeline conformed with specification	
	16. Fitment of safety strap	
	17. Arranged communicating procedure with pump operator and at pour point	
Working	18. Material pumped to required location at the given point	
	19. Operator positioning during pour	
	20. Repositioning of boom during and between pours followed given instructions	
	21. Measures taken to minimise falling material from placing hose during hose repositioning	
	22. Waste material disposed of following guidelines and regulations	
Completing work	23. Cleaning procedures followed	
	24. Sequence of clearing blockages explained	
Shutdown	25. All shutdown and securing procedures	
Other	26. Legislation, manufacturers' and health and safety requirements complied with	
	27. Test completed within the given time	

All of these items must be awarded | Achieved / Not achieved

Faults

	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Working	1. Full observation before starting placing work		3	
	2 Identify information from the Operator's Manual		2	
	3. Full observation during boom movements		3	
	4. Following instructions from pour point and pump operator		3	
	5. Providing instructions to the pour point and pump operator		2	
	6. Maximum height of placing hose not exceeded during pour		2	
	7. Components and pipework thoroughly cleaned after use		4	
	8. Sequence of using controls		2	
	9. Smooth use of all controls		2	
	Not exceeded five penalties	**Total penalties**		

Achieved / Not achieved