



Unit Assessment Record (UAR)

Pneumatics and Hydraulics (Services) (D3R6 04)

Credit Value: 1.5

NB: After entering your personal details please pass this document to your tutor for completion and eventual return to COLU. You may wish to retain a copy for your own use.

TITLE:	SURNAME:	UNIT TUTOR:
FORENAME(s):	CENTRE:	
HOME ADDRESS:	ADDRESS:	
.....	
.....	
POST CODE:	POST CODE:	
HOME TEL:	TEL NO:	
WORK TEL:	FAX NO:	
FAX NO:	E-MAIL:	
E-MAIL:	CENTRE CONTACT:	

SQA REG. NO:	UNIT START DATE:
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AUTHENTICATION OF EVIDENCE – INTERVIEW	DATE:
PORTFOLIO OF EVIDENCE AVAILABLE	<input type="checkbox"/>
EVIDENCE AUTHENTICATED	<input type="checkbox"/>
ALL OUTCOMES SATISFIED	<input type="checkbox"/>
Please initial as appropriate	
NOTES:	
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GRADE	REFER	PASS	MERIT	
FINAL GRADE:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please initial as appropriate
ASSESSOR:				DATE:



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VERIFIER:..... DATE:

Evidence Log – For each of the performance criteria please clearly identify the evidence within the portfolio that satisfies the criterion fully with respect to the range and evidence requirements as stated in the unit specification.

1) Relate the operating principles of compressed air generators to industrial requirements

TMA Evidence

Supplementary Evidence & Location

(a) Comparisons of air compressor types are appropriate in terms of operational performance.
(b) Descriptions of methods of output volume control are appropriate in terms of controller operation.
(c) Functions of compressor accessories are described correctly.

2) Assess the operational requirements of a compressed air distribution system

(a) The functions of components used in a compressed air distribution system are explained in terms of system requirements.
(b) Determination of pipe work sizes, using 'nomograms' and equivalent pipe length data, is correct for optimum operating conditions.
(c) Air leakage rates are correctly determined from given test data.

3) Design pneumatic control circuits

(a) Drawings of pneumatic components and circuits are in accordance with current standards.
(b) Designs of pneumatic circuits are suitable for specified operations.
(c) Techniques for the removal of trapped signals are effective for normal operation of circuit.
(d) Application of logic techniques to pneumatic circuits is in accordance with recognised practice.

4) Analyse functional requirements of a hydraulic system

(a) Drawings of hydraulic components are in accordance with current standards.
(b) Calculations of system requirements are correct for a given system.
(c) Comparison of hydraulic pumps relates to function and operation.
(d) Descriptions of the functions of hydraulic components are appropriate to the operational requirements.
(e) Properties of hydraulic fluids are related to system requirements.

Assessment Matrix – The matrix indicates which instruments of assessment, within the primary assessment package, are required to satisfy individual performance criteria.

The column titled **Merit** identifies where particular opportunities exist for candidates to develop their work with a view to satisfying the requirements for the award of merit.

The row titled **Minimum Evidence Requirement** indicates the minimum number of examples required (or times a task must be performed) to satisfy a particular performance criterion.

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OUTCOMES/PERFORMANCE CRITERIA		Qu	1a	1b	1c	2a	2b	2c	3a	3b	3c	3d	4a	4b	4c	4d	4e	5a	5b	5c	Merit	
TMA - 1 (v2)	1				X																	
	2		X																			
	3				X																	
	4				X														X	X		
	5																					X
TMA - 2 (v2)	1						X															X
	2					X																
	3				X																	
	4					X																
TMA - 3 (v2)	1								X	X												X
	2								X	X	X											
	3								X	X	X											
	4											X										
TMA - 4 (v2)	1													X								
	2														X							
	3															X						
	4			X									X			X						
	5												X			X						
	6																X					
	7																X					
	8																			X	X	
SUMMATIVE ASSIGNMENT (v2)	1		X																			
	2			X																		
	3																			X		
	4					X																
	5						X															
	6										X											
	7											X										
	8								X	X				X		X						
	9															X						
MINIMUM EVIDENCE REQUIREMENT			2	2	4	3	1	1	4	4	3	2	2	2	2	4	2	2	2	2	2	2

Merit Statement

To gain a pass in this unit, a candidate must meet the standards set out in the outcomes, performance criteria, range statements and evidence requirements.

To achieve a merit in this unit, a candidate must demonstrate a superior or more sophisticated level of performance. In this unit this might be shown in the following way:

- demonstrating an ability to relate theoretical principles to practical situations.