



*The Voice of the European  
Fluid Power Industry*

# ***EDUCATION RECOMMENDATIONS***

## **★ APPENDIX: CETOP QUALIFICATIONS APPROVED CENTRES GUIDELINE**

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# **APPENDIX: CETOP QUALIFICATIONS APPROVED CENTRES GUIDELINE**

## **APPENDIX CETOP RE 2021/06.01 - H/P**

*With examples that can be modified by the CETOP Member Associations*

### **Appendices:**

Typical Centre Approval Report Forms given for example that can be modified and used by the CETOP Member Associations.

- ★ **CENTRE APPROVAL REPORT FORM (CETOP/AR/1)**
- ★ **APPLICATION FOR CENTRE APPROVAL (CETOP/CA/1)**
- ★ **APPROVED CENTRE EXAMINATION ENTRY (CETOP/EE/1)**
- ★ **EXTERNAL VERIFIER'S VISIT REPORT (CETOP/EV/1)**
- ★ **INTERNAL VERIFIER'S REPORT (CETOP/IV/1)**
- ★ **INDUSTRY STANDARD QUALIFICATION, CANDIDATE REGISTRATION (CETOP/CR/1)**
- ★ **CANDIDATE WORK EXPERIENCE VERIFICATION, Level 3 Hydraulics (CETOP/WE/1/HY)**
- ★ **CANDIDATE WORK EXPERIENCE VERIFICATION, Level 3 Pneumatics (CETOP/WE/1/PN)**

1	CENTRE DETAILS	2	RECOMMENDATIONS
	Centre Name:		Full Approval <span style="float: right;">Tick</span>
	Address:		
	Centre Contact:		Conditional Approval
	Tel. No.		
	E-mail:		Period of Months
	External Verifier's Name:		
	Date/Time/Visit:		Rejection

3	CENTRE APPROVAL SOUGHT FOR	CODE	LEVELS		
			Please tick the appropriate box		
			1	2	3
	• Hydraulics and Control	H			
	• Industrial Hydraulics and Control	IH	NOT SELECTABLE		
	• Mobile Hydraulics and Control	MH	NOT SELECTABLE		
	• Power Pneumatics and Control	PP			

## 4 ACCOMMODATION/FACILITIES (Brief Report)

- a) Lecture Room Facilities/Layout
  
- b) Visual Aids/Presentation Methods
  
- c) Programme Notes/Support Materials/Software
  
- d) Manufactures Library, Catalogues
  
- e) Fluidpower Publications and Relevant Standards

Recommendations/Comments

**5**

**PRACTICAL FACILITIES/EQUIPMENT AVAILABILITY/ACCESS**

At this stage the External Verifier will make reference to relevant parts of Guideline Document relating to the equipment necessary to effectively deliver competence based programmes  
Report on the acceptability of the centre's resources to effectively deliver the programme

Comments

Quality of  
Equipment

Range of  
Equipment

Age/  
Current

Recommendations/Comments

Please tick the appropriate box

6	<b>SCHEME ADMINISTRATION</b>	<b>YES</b>	<b>NO</b>
	<ul style="list-style-type: none"> <li>Candidate Training Plans Established (Format) GDPR Secure Records Comments:</li> </ul>		
	<ul style="list-style-type: none"> <li>Candidate Personal Development Plans Established (Format) GDPR Secure Records, Comments:</li> </ul>		
	<ul style="list-style-type: none"> <li>Systems for Progress Monitoring/Maintaining/Confidential – GDPR Secure Records               <ol style="list-style-type: none"> <li>Assignments</li> <li>Practical Task Preparation</li> <li>Practical Task Assessment</li> <li>Written Examinations</li> </ol> </li> </ul>		
RESPONSIBILITY/CONTROLLED BY – (name)			
	Name of Examinations Officer <span style="float: right;">Met during visit</span>  Tel No.  E-mail		
	Recommendations/Comments		

7	<b>HEALTH AND SAFETY/HYGIENE</b>	Please tick the appropriate box <b>YES</b> <b>NO</b>	
	<ul style="list-style-type: none"> <li>• Health and Safety Policy Operational</li> <li>• Relevant Safety Notices in place</li> <li>• Risk Assessment carried out and recorded</li> </ul>		
	Recommendations/Comments		
8	<b>EQUAL OPPORTUNITIES POLICY IMPLEMENTED</b>		
	Comments		
9	<b>EXTERNAL VERIFIER'S SUMMARY/RECOMMENDATIONS</b>		
EVs Signature		Date	
Technical Manager National Fluid Power Association		Date	



Send Back to national CETOP Member Association

## Programme for Approval (name)

Name of Organisation

Full Address

Contact Name

Position Tel No

E-mail

Web

I have thoroughly read the CETOP Guideline Documents & Recommendations and I am fully aware of the necessary organisational commitment and equipment base required for Centre Approval.

I am aware of the associated costs for centre visits and would like you to arrange a visit to our organisation to carry out a Centre Approval investigation.

We will forward to the national CETOP Member Association:

Purchase order

Date

Signed

## For official use by CETOP Member Association staff

Date Application Received

Actioned by

Name of ET Member carrying out Centre Approval Visit

Visit Date Planned

Outcome of visit

Financial Transactions completed

Date completed

Any other info:

This form must be completed by the Approved Centre and returned to the CETOP M. A. at least 2 months before the examination date. Centres will be charged based upon the number of candidates recorded and examination scripts will be sent to the centre accordingly.

## Prescribed Programme/Scheme

Written Examination Date

Name of Organisation

Full Address

Contact Name

Tel No

E-mail

Web Signature

Date

The listed candidates will be sitting the written examination on the above date.

NOTE: This same form will also be used to record PASS or FAIL. From this information CETOP M. A. will send the respective Candidates' Qualification Certificates to the Approved Centres for dispatch.

No	Candidates Name	CETOP M. A. Registration No.	Examination Results P= Passed F= Fail	Competence-based-Units P= Passed	CETOP M. A. official use: Certificate Dispatched/Date
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

External Verifier's

Date:

Name: Approved

Schemes

Centre:

Approved: :

Centre Contact Person/IV:

Approval

## STANDARDS – (Tick a necessary)

	AUDIT CHECKS CARRIED OUT	UNSATISFACTORY	MEETING SCHEME REQUIREMENT
1	Overall Management Including:		
	• Scheme Management Candidate		
	• Systems for Tracking Progress		
	• Areas of Responsibility		
	• Document Control System		
	• Health and Safety Policy		
	• Quality Systems		
	• Internal Verifier Reports		
2	Individual Candidate Records (Random Check)		
3	Inspection of Candidate Assignments		
4	Inspection of Practical Task Assessments		
5	Inspection of Candidate Individual Portfolios		
6	Inspection of Completed Examination Scripts		

## ANY ADDITIONAL CHECKS CARRIED OUT

External Verifier's Comments:

Actions to be taken:

Copy Sent to Approved Centre

Tick

Date

Copy Sent to CETOP M. A.

Date

Copy to File

Date

Internal Verifier's Name:

Approved Centre:

Qualifications Under Review:

Candidate Start Date:

Date of Verification: ^

Report No:

## Initial Information Required

(Answer or Tick Box)

1 Number of candidates enrolled and registered with CETOP M. A.:

2 Number of candidates active on scheme to date:

3 Number of candidates taking next written examination:

4 Number of candidates successfully completed written examination:

5 Number of candidates preparing to resit examinations:

6 Number of candidates completed/part completed practical task:

## Verification

(Organizational and Quality Control)

	Yes		No
I Candidate individual record folders – content against checklist	<input type="checkbox"/>	CHECKED	<input type="checkbox"/>
II Candidate assignment progress records	<input type="checkbox"/>		<input type="checkbox"/>
III Register for candidates attending modules	<input type="checkbox"/>		<input type="checkbox"/>
IV Course feedback reports from candidates (4 monthly)	<input type="checkbox"/>		<input type="checkbox"/>
V Completed practical task assessment profiles	<input type="checkbox"/>		<input type="checkbox"/>

Please tick the appropriate box.

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## Verification

(Assessment Process)

Discussed candidate progress with assessor/

Yes

No

Please tick  
the appropriate box.

Assessor/s Name/s:

Comments:

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## Final Remarks

Overall performance of Centre to meet the scheme requirements as laid down by the national CETOP Member Association and meeting requirements of the External Verifier.

..... Acting as Internal Verifier on behalf of this Centre  
I am Satisfied/Not Satisfied with the scheme management, records and methodology.

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## Actions/Recommendations:

Tick

Copy Sent to External Verifier

Date:

Copy to File

Date

This form must be completed by the Candidate and the employer together and returned to the National Fluid power Association (CETOP M.A.).

Personal Details (To be completed by the Candidate - BLOCK CAPITALS)

Full Name

Position

Employer's Name

Employer's Address

Contact Address (Home)

Tel No

Date of Birth (Civil reg no)

E-mail

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## ***EMPLOYER WORK EXPERIENCE: Verification Entry***

This form must be completed by the Employer of the candidate and returned to the CETOP M. A. by the candidate.

### ***Employer Programme/Scheme***

Personal Details (To be completed by the Employer representative - BLOCK CAPITALS)

Verification Date

Name of Organization

Full Address

Contact Name

Position

Tel No

Fax No

E-mail

Web

Signature

Date

Practical task assessments to verify competency about:

- INSTALLATION
- COMMISSIONING
- PERFORMANCE TESTING
- PROACTIVE MAINTENANCE AND MACHINE MANAGEMENT
- SERVICING
- COMPONENT REMOVAL AND REPLACEMENT

***Verified by employer, system related,  
work based experience to CETOP Level 3 Hydraulics***

Instruction:

Describe what type of work the candidates have been done within:

- ***INSTALLATION***

**Describe the candidate's experience in reading hydraulic diagrams to be able to correct install a hydraulic system, including associated electronic diagrams and mechanical drawings.**

**Describe the candidate's experience of assembly based on cleanliness, security and quality.**



- **COMMISSIONING AND PERFORMANCE TESTING**

**Describe the candidate's experience of commissioning in respect by person, component, system security and cleanliness.**

**Describe the candidate's experience of system functional testing**

- ***PROACTIVE MAINTENANCE AND MACHINE MANAGEMENT***

**Describe the candidate's candidates experience in practical wor**

- ***SERVICING INC. COMPONENT REMOVAL AND REPLACEMENT***

**Describe the candidate's experience of fault finding and repair (dis-assembly and assembly of existing system)**

### Verification of the candidate's practical experience

1: Control and adjustment:	If experienced, tick
Flow	
Speed on certain movements	
Temperature	
Accumulator pressure/pre-charge pressure	
Fluid cleanliness according to ISO classification system	
Sensors and switches for fluid system	
2: Fault finding in systems:	
From diagram and symptom	
With test equipment	
Without test equipment; feel, smell, listen	
By phone description	
3: Understand security and environmental issues at dis-assembly of complete or part of fluid systems and machines:	
Read and understand maintenance and security instructions	
What means by Lockout and Tag out instructions	
Secure movements with plunge or similar equipment	
Check and dis-charge trapped pressure within pipes	
Dis-charge accumulators	
Without maintenance and safety instructions, from diagram and machine structure, analyze actions to be done to be able to work safe	
Cleanliness at dis-assembly of system.	
Understand the importance of managing waste fluids in a safe manner due to environmental issues	
Understand the importance of using relevant personal protection	
4: Maintain and repair hydraulic systems:	
<b>Maintaining systems:</b>	
Exchange sealing's	
Check mounting surfaces	
Couplings	
Flanges	
Valves	
Empty and refill fluid in systems	
Inside cleaning	
Cleaning coolers	
Exchange filter cartridges	
<b>Exchange components:</b>	
Pumps	
Valves	

#### 4: Maintain and repair hydraulic systems:

##### Exchange components:

Fluid motors

Electric motors

Accumulator piston and bladder

Cylinders

Hoses

Other components

##### Repair of components, dis-assemble, analyze status, exchange wear parts and re-mount:

Pumps

Motors

Valves

Cylinders

Accumulators

#### 5: Start-up of hydraulic systems after maintenance work I exchange of component:

Flushing

De-aeration

Adjust pressure and flow

Leakage control

Control of cleanliness level according to ISO code system

Cleaning of workplace

Documentation

For approved practical experience to CETOP level 3 Hydraulics shall the candidate have practical experience of at least 50% of above listed.

#### Comments about the candidate's experiences.

This form must be completed by the Candidate and the employer together and returned to the National Fluid power Association (CETOP M.A.).

Personal Details (To be completed by the Candidate - BLOCK CAPITALS)

Full Name

Position

Employer's Name

Employer's Address

Contact Address (Home)

Tel No

Date of Birth (Civil reg no)

E-mail

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## ***EMPLOYER WORK EXPERIENCE: Verification Entry***

This form must be completed by the Employer of the candidate and returned to the CETOP M. A. by the candidate.

### ***Employer Programme/Scheme***

Personal Details (To be completed by the Employer representative - BLOCK CAPITALS)

Verification Date

Name of Organization

Full Address

Contact Name

Position

Tel No

Fax No

E-mail

Web

Signature

Date

Practical task assessments to verify competency about:

- INSTALLATION
- COMMISSIONING
- PERFORMANCE TESTING
- PROACTIVE MAINTENANCE AND MACHINE MANAGEMENT
- SERVICING
- COMPONENT REMOVAL AND REPLACEMENT

***Verified by employer, system related,  
work based experience to CETOP Level 3 Pneumatics***

Instruction:

Describe what type of work the candidates have been done within:

- ***INSTALLATION***

**Describe the candidate's experience in reading pneumatic diagrams to be able to correct install a hydraulic system, including associated electronic diagrams and mechanical drawings.**

**Describe the candidate's experience of assembly based on cleanliness, security and quality.**

- **COMMISSIONING AND PERFORMANCE TESTING**

**Describe the candidate's experience of commissioning in respect by person, component, system security and cleanliness.**

**Describe the candidate's experience of system functional testing**



- ***PROACTIVE MAINTENANCE AND MACHINE MANAGEMENT***

**Describe the candidate's candidates experience in practical work**

- ***SERVICE INC. COMPONENT REMOVAL AND REPLACEMENT***

**Describe the candidate's experience of fault finding and repair (dis-assembly and assembly of existing system)**

### Verification of the candidate's practical experience

1: Control and adjustment:	If experienced, tick
Flow	
Speed on certain movements	
Pressure	
Accumulator pressure/site pressure awareness	
Air cleanliness according to ISO classification system	
Sensors and switches for air system	
2: Fault finding in systems:	
From diagram and symptom	
With test equipment	
Without test equipment. (look (visual), listen (auditory))	
By phone/email/conversational description	
3: Understand security and environmental issues at dis-assembly of complete or part of pneumatic systems and machines:	
Read and understand maintenance and security instructions	
What means by Lockout and Tag out instructions	
Secure movements with piston rod locking, 5/3 valves, shot bolts	
Check and safely dis-charge trapped pressure within pipes	
Without maintenance and safety instructions, from diagram and machine structure, analyze actions to be done to be able to work safe	
Cleanliness at dis-assembly of system.	
Understand the importance of managing waste fluids and condensate in a safe manner due to environmental issues	
Understand the importance of using relevant personal protection	
4: Maintain and repair pneumatic systems:	
<b>Maintaining systems:</b>	
Exchange seals within cylinders/valves	
Check mounting surfaces	
Fittings and connectors	
Valves	
Drains within Filter assemblies	
Bowl cleaning of air preparation equipment	
Vacuum components	
<b>Exchange components:</b>	
Filter Elements	
Cylinders	
Valves	

#### 4: Maintain and repair pneumatic systems:

##### Exchange components:

Proximity sensors (reed switches)

Hoses/Tubing

Vacuum components (cups, filters, generators)

Other components

##### Repair of components, dis-assemble, analyze status, exchange wear parts and re-mount:

Air filters, regulators, lubricators

Cylinders

Valves

Vacuum systems

Sensors

#### 5: Start-up of pneumatic systems after maintenance work I exchange of component:

Adjust pressure and flow

Leakage control

Control of cleanliness level according to ISO code system

Cleaning of workplace

Documentation

Cleaning of workplace

Documentation

For approved practical experience to CETOP level 3 Pneumatics shall the candidate have practical experience of at least 50% of above listed.

#### Comments about the candidate's experiences.