



Overview of the “Operational Control Procedure” CSA W47.2-2011

CSA Standard W47.2 – 2011 contains a new requirement for certified companies. This new requirement is that all certified companies must implement an “Operational Control Procedure” as part of their overall fabrication activities. This document is intended to give certified and applicant companies an overview of the new requirement, and ideas of potential ways to comply.

What does the new Clause say?

Below is the new clause in W47.2:

8 Operational control procedure

Each company shall produce and implement an operational control procedure (see Annex G) as part of the WPS or as a stand-alone procedure. The operational control procedure shall be used in connection with all projects completed in accordance with this Standard and cover, at a minimum, the following:

(a) base metal:

- (i) identification of base metal (e.g., mill test reports); and*
- (ii) special-handling or project-specific instructions relating to base metal;*

(b) filler metal:

- (i) identification of CWB-certified filler metal to be used; and*
- (ii) special-handling or project-specific instructions relating to filler metal;*

(c) WPDSs:

- (i) verification that the WPDSs are CWB accepted and available for fabrication of the project; and*
- (ii) a statement indicating whether new WPDSs will be required;*

(d) preweld checklist:

- (i) verification of material preparation in accordance with the WPS and/or the applicable Standard;*
- and*
- (ii) verification of CWB welder qualifications applicable to the project; and*

(e) postweld visual inspection: verification that the completed welds meet the visual acceptance criteria specified in the WPS, the governing Standard, and/or any project-specific inspection requirements.

The sample Operational Control Procedure from Annex G is reproduced below:

Annex G (informative)
Example of operational control procedure document

Note: This Annex is not a mandatory part of this Standard.

ALUMINUM OPERATIONAL CONTROL PROCEDURE		
COMPANY NAME/LOGO:		
PROJECT DESCRIPTION/JOB #:		
CLIENT:		
REFERENCE DWGS/SPEC:		
BASE METAL:		
FILLER METAL:		
REFERENCE STANDARDS/SPECS/CODE:		
SPECIAL BASE AND FILLER METAL INSTRUCTIONS		
SPECIAL INSTRUCTIONS/TEST REQUIREMENTS		
WELD CHECKLIST		
Do all materials have mill test reports?	Yes	No
Have any essential variables changed? (see WPS/CSA W47.2)	Yes	No
Are the electrodes stored in a sealed/dry source and in good condition?	Yes	No
Are preheats required?	Yes	No
Temperature used (if required)		
Was the base metal prepared as per WPS/Code requirements?	Yes	No
Are all required WPDS and WPS available?	Yes	No
Does the joint geometry conform to the applicable WPS/WPDS/Code?	Yes	No
Is the welder properly qualified?	Yes	No
Is the general weld appearance in accord with project code requirements?	Yes	No
<i>If any question was answered "no", explain mitigating action taken:</i>		
Approved by:	Signature	Date

Figure G.1
Example of operational control procedure document
 (See [Clause 8](#).)

Do I have to have a written procedure available?

No, there is no requirement that the “Operational Control Procedure” be documented in a written form. Provided all relevant employees understand and follow the approach the company implements to comply with this requirement, then this is acceptable.

However, it may be helpful to document the procedure and maintain records as this could assist in both employee understanding and for demonstrating compliance to both CWB and client auditors.

Do I have to use the sample Operational Control Procedure?

No. The CSA W47.2 Technical Committee has provided the sample in Annex G as one possible method to comply with the new requirement.

If a certified company chooses to use the sample, this would be an acceptable way to demonstrate compliance with the new requirement; however, its use is not mandatory.

I already have an inspection plan / Quality Management system in place. Do I still need this new procedure?

Companies that have inspection plans and/or quality management systems in place such as ISO 9001 will still need to demonstrate compliance with this new requirement. However, it is quite possible that the areas required in Clause 8 will be covered in whole or in part by procedures / processes / work instructions that companies already have in place as part of an existing inspection plan/Quality Management System.

For example:

- An ISO 9001 registered company may already have a documented system in place to verify the identification of incoming base metals and to verify base metal against client requirements. This system could be used to demonstrate compliance with clause 8 (a).
- A company may already use “in-process inspection records” or “product travellers” in their production. These systems could be used to demonstrate compliance with Clause 8.

Provided that the company can demonstrate to the CWB auditor that these existing procedures / processes / work instructions meet the requirements of Clause 8, they can be considered acceptable.

Do I have to have an Operational Control Procedure for each weld that I make?

No. Clause 8 states that the Operational Control procedure “shall be used in connection with all projects completed in accordance with this Standard”. It is up to the individual company to decide if this would be implemented at a shop level, project level, sub-assembly level, etc.

The correct level of implementation is dependent on what works for the company and the type of welding work the company does. For example:

- A company involved in production welding of multiple components may implement the procedure for each component or each “workstation”;
- A custom fabricator may implement the procedure for each project;
- A fabricator of large machinery may implement the procedure for fabrication of each sub assembly.

All of the above examples are acceptable; the choice is entirely up to the company based on their needs.

Who has to complete/sign off the Operational Control Procedure?

CSA W47.2 does not specify any one person to complete the document. This would be dependent on the specific procedure that the company chooses to implement. The different areas of review may be completed by several individuals, e.g. welders, welding supervisors, inspectors, QC/QA personnel, receivers, contract review staff, etc.

There is no requirement that the designated Welding Supervisor and/or Welding Engineer complete or sign off on the procedure. A physical sign off by any individual is not mandatory under W47.2; it is only required if defined in the company's procedure.

Where can I get more help?

The CWB is here to help guide you through this new requirement. Please contact your CWB Field Representative or the following individuals should you need assistance:

- Jim MacRae (1-800-844-6790 x209 or jim.macrae@cwbgroup.org)
- Craig Martin (1-800-844-6790 x202 or craig.martin@cwbgroup.org)

Companies who retain the services of a Welding Engineer may also wish to contact them for assistance.