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1. Tool control is a technical management function designed to maintain the technical integrity and sustainability of the technical facilities within the School of Engineering and Information Technology (SEIT). Tool control provides a means of standardising tools and technical equipment used within the school and ensuring the long-term availability and sustainability of the school’s technical facilities.

Aim

2. The aim of this document is to detail the processes and procedures in the application and management of tool control procedures as applied by the School of Engineering and Information Technology to the SEIT Bld18 Machine and Fabrication Workshops.

Authority

3. The Head of the School of Engineering and Information Technology through the authorised delegate, Deputy Head of School (Technical Support) provides authority for this document. This document is subordinate to the governing Workplace Health and Safety Regulations, associated University Policy and the SEIT Tool Control SOP. For further reference refer to the schools document tree.

General Overview of the Competency Based Training System

4. The SEIT Bld18 Workshops provides a means by which SEIT staff, students and approved personnel can enhance their educational experience whilst taking control of their practical projects and thesis experiments in a safe and competent manner. The workshops also empowers students and staff to access and use the technical facility in a safe and supervised manner in accordance with the SEIT Competency Based Training System. Due to the nature of the SEIT Bld18 Workshops and their flexible hours of operation and associated supervision, adherence to tool control procedures provides a mechanism for not only ensuring the quality of the school’s technical resources, but the application of those resources in a productive, safe and sustainable manner.

Application Responsibilities

5. Like Workspace Health and Safety, everybody is essentially responsible for the application and adherence to tool control processes and procedures within the SEIT Bld18 Workshop technical facility. However, oversight of the tool control processes and procedures, including specific Standard Operating Procedure (SOP), is the responsibility of the technical facility supervisor. In the absence of the technical facility supervisor or during after hours access, enforcement of the tool control processes and procedures is the responsibility of the level 3 and above who is identified as the workshop supervisor at that time. The dedicated SEIT Bld18 Workshops supervisor has overall responsibility for
maintaining and developing tool control procedures specific to the SEIT Bld18 Workshops technical facility.

**Tool Identification**

6. A comply with the SEIT Tool Control SOP, the SEIT Bld18 Workshops have adopted a colour coding system, similar to that used by the RAAF, to identify authorised tools and equipment belonging to the SEIT Bld18 Workshop technical facility. Tools that do not have the approved colour coding or authorised for use within the SEIT Bld18 Workshops are to be quarantined and removed from circulation within the facility. The layout of the colour coding and the meaning of each band are indicated at Figure 1.

![Figure 1 – SEIT Bld18 Workshops colour coding layout](image)

7. The colour coding depicted in Figure 1, illustrates the three elements of the colour coding used within the SEIT Bld18 Workshop technical facility. Each element will be described in detail:
   a.  1 – is the first colour of the code system, it is twice as large as the other two and provides orientation upon which to read the colour code i.e. left to right. The first colour also identifies the technical facility in which the tool belongs; in this case yellow depicts the SEIT B18 Machine Workshop technical facility.
   b.  2 – the second colour identifies what equipment type within the technical facility the tool board from which the subject tool belongs. In this case the second colour is red and identifies the equipment type tool board belongs to one of the workshop's basic centre lathes which all have red as their second colour.
   c.  3 – the third colour identifies the specific tool board from which the subject come from and belongs.

8. Tools that do not have the associated colour coding are not authorised for use within the specific technical facility and are not to be used within that facility unless authorised by a level 4 supervisor. Tools not authorised for use within the SEIT Bld18 Workshops are to be quarantined immediately pending an investigation.

**Tool Reconciliation**

9. The colour coding system used within the SEIT Bld18 Workshops is designed to provide a quick and easy means of visually reconciling tools are present and accounted for. Each tool board within the SEIT B18 Workshop uses shadow boarding techniques to provide
a visual cue that no tools are missing from the tool board in question. The colour coding ensures that the tool placed on the shadow board belongs on that shadow board. Tool reconciliations are to take place whenever someone is about to accept responsibility for the equipment type for which the tool board belongs, another reconciliation is carried out when the SEIT Bld18 Workshops user is about to hand back the equipment when before leaving the technical facility.

**Unserviceable Tools**

10. Through normal workshop use, it is inevitable that tools will become subject to fair wear and tear and become unserviceable. In the event of a tool becoming unserviceable, the subject tool is to be quarantined and replaced by an unserviceable tag. In order to obtain an unserviceable tag the SEIT Bld18 Workshops user is to surrender the tool to his or her level 3 or above supervisor who has the responsibility of logging the unserviceable tool in the register. Upon logging the tool on the unserviceable register the level 3 or 4 supervisor is to annotate the tag number against the unserviceable tool and the tool board to which it belonged. The tag can then be issued and placed on the associated tool board where the original unserviceable tool belonged. Once the tag is placed on the tool board, the tool board is considered complete and can be returned by returned by the SEIT Bld18 Workshops user if all other tools are present and correct. The SEIT Bld18 Workshop supervisor is to complete a reconciliation of all unserviceable tools up on opening the SEIT Bld18 Workshops on a daily basis.

11. In the meantime, whilst the tool is being replaced and has an unserviceable tag against it, workshop users allocated the tool board with the unserviceable tag are to utilise the tool tag system to obtain the a replacement tool from the SEIT Bld18 Workshops tool store board. The tool must be returned to the store and the associated tool tag returned to the tool board before the workshop user can return the tool board and leave the technical facility.

**Broken or Missing Tools**

12. If a tool is broken it is to be immediately quarantined and replaced with a tag as per the unserviceable tool procedure. An assessment is to be carried out to determine if the damage is a result of negligence or misuse. If negligence or misuse is found, an incident report is to be raised and the workshop user at fault is to have their authorisation removed pending retraining. The workshop user will be liable for the replacement of the broken tool and the re tool colour coding of that tool to the colour coding acceptable standard.

13. If a tool goes missing work is to immediately cease and a thorough search carried out by everybody in the vicinity. If the tool cannot be found an incident report is to be raised and the responsible SEIT Bld18 Workshops user and the responsible level 3 or 4 supervisor are to have their authorisations removed pending an investigation. The associated tool is to have an unserviceable tag procedure applied in accordance with the unserviceable tool procedure described above.

**Tool Board Access Procedure**

14. Upon accessing the SEIT Bld18 Workshops to conduct work within the facility, the SEIT Bld18 Workshop user is to report to the responsible supervisor in order to be allocated a workstation (workbench) or equipment depending on the work to be completed. Before accepting the workstation or equipment from the responsible level 3 or 4 supervisor, the user is to conduct a tool board reconciliation to ensure the following:
a. The SEIT Bld18 Workshop user is to check the associated tool board to ensure that all tools are present or have an unserviceable tag in place.

b. The tool colour coding is consistent with the tool board and that all tools have the same colour coding.

c. All tool tags are present, have the same colour coding as the associated tool board.

15. Any anomalies are to be reported immediately to the responsible level 3 or 4 supervisor. If the SEIT Bld18 Workshop user accepts the tool board and starts work, he or she is accepting the status of the tool board as complete and will be made responsible for any anomalies when work is complete and the tool board is returned to the supervisor. If the tool board is complete the SEIT Bld18 Workshop user is to have his or her name annotated against the workstation or equipment to be used. Only a level 3 or 4 supervisor can remove the workshop user’s name against the associated workstation or equipment. Before the supervisor can release the SEIT Bld18 Workshop user the level 3 or 4 workshop user is to ensure the following:

a. the workstation or equipment has been cleaned and returned to the original configuration,

b. the associated tool board has been refurbished and all tools have been returned or have an unserviceable tag against missing tools, and

c. all tools on the tool board have the correct and consistent colour coding.

16. Once the equipment has been fully refurbished and checked by the level 3 or 4 supervisor, only then can the SEIT Bld18 Workshops user be release and have his or her name removed from against the associated workstation or equipment.

17. Failure to comply with the requirements stipulated within this SOP, both the responsible SEIT Bld18 Workshops user and responsible level 3 or 4 supervisor will have their authorisation removed, including technical facility access, pending an investigation and retraining if deemed necessary by the allocated investigating officer.

**Conclusion**

18. Tool control is the foundation of the effective and sustainable operation of the school’s SEIT Bld18 Workshops technical facility. It provides the mechanisms to ensure that tools and equipment are readily available to those facility users authorised and competent to access them. It also protects the availability for those resources for future facility users.

19. For general details associated with the application of tool control procedures within the school, refer to the School of Engineering and Information Technology (SEIT), Tool Control SOP. For any general enquiries and advise in the application of this document please contact Technology Support Group Coordinator, on extension 88047.

[Signature]

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