1.0 PURPOSE

This document details the recommended procedure to be followed when using the Leco CM 12 cut off machine.

2.0 SCOPE

This procedure applies to all personnel who use the Leco CM 15 cut off machine for cutting samples.

3.0 REFERENCES

NIL

4.0 DEFINITIONS

NIL

5.0 PROCEDURE

5.1 SAFETY ASPECTS

Operators must wear safety glasses when using this machine.

As samples may be sharp, care must be taken when handling.

All guards must be in place before machine is operated.

Machine has a main switch also serving as an emergency STOP, in the event of failure in the Red Stop Button.

Take extra care when removing sample from machine after cutting as sample may be HOT.

Isolate machine from power when carrying out any maintenance.
5.2 **APPLICATION**

*The Leco CM 12 cut off machine is designed for rapid cutting of metallographic specimens, particularly hard samples.*

5.3 **OPERATIONS**

- Check that unit is connected to power supply
- Lift protective lid and position sample in sample clamping vice. Select appropriate wheel for cutting sample. (see Technical staff for advice) Clamp wheel by tightening locking nut against central arbor with spanner and rod provided. Turn on coolant and check that flow of coolant is directed onto sample when in cutting position.

- Lower protection lid.

- Switch on by turning on coolant first (blue button) then turn on wheel by pushing green button.

- Pull handle towards you until contact is made with the sample and gently pulse the blade the sample until it is cut.

- Press ‘Stop’ red button when sample is finished, lift lid, release clamps and remove sample.  
  **Note:** Sample may be HOT use extreme care.
- Install new wheel by reverse process. **Note**: Place new paper discs on each side of new wheel. Do not overtighten nut. Never use wheels where the hole does not fit properly.

5.5 MAINTENANCE

5.5.1 Daily Tasks

- Wash and clean all sludge from unit after cutting is complete. Wear safety glasses and gloves.

5.5.2 Weekly Task

- Check cooling fluid
- Lubricate clamping device.

6.0 REFERENCE PERSONNEL LIST

Prior to amending this standard procedure refer proposed amendments to:

Technical staff in charge.

7.0 DOCUMENTATION

NIL

Dated; 15/7/2004