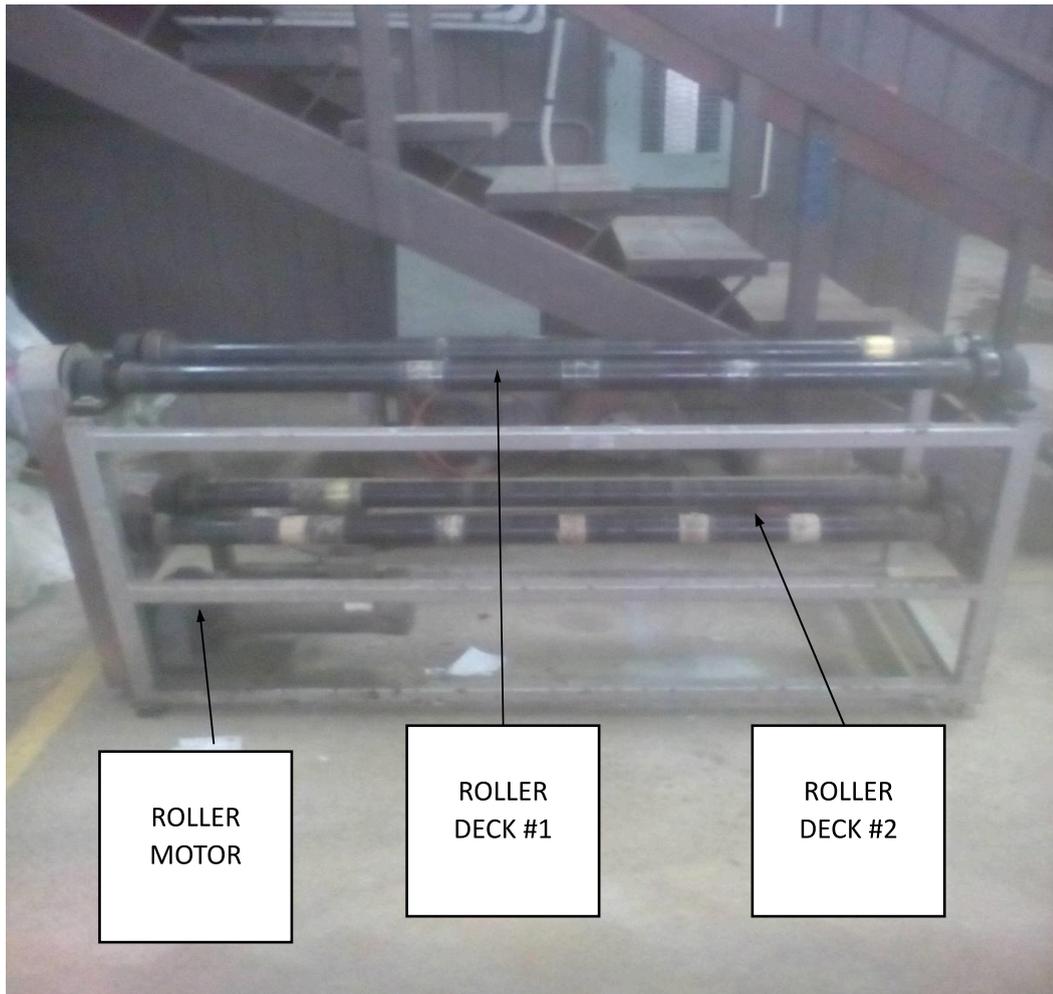


STANDARD OPERATING PROCEDURE (SOP) LEACH TEST BOTTLE ROLLER



OBJECTIVE

This Standard Operating Procedure (SOP) is specifically designed for the purpose of safe operation of the LABORATORY equipment '**BOTTLE ROLL LEACH TEST ROLLER**'. The equipment operator must read through the procedure carefully and should fully understand it before operating the equipment and or otherwise consult the senior laboratory personnel for any clarifications prior to operation.

HADARDS

- High speed rollers – Loose clothing may be strapped by the rollers when in operation
- Hot motor – Extended time of operation of the roller heats up the roller motor and may cause light burns to the fingers when accidentally touched

- Noise – Medium noise level created by the machine could induce stress or hearing impairment over an extended period of exposure
- **Sodium Cyanide powder – Sodium Cyanide (NaCN) is a very toxic chemical when dissolved in solution as it is colourless. The pH of cyanide solution MUST be above 9 and if less than 9 it will break down very quickly producing hydrogen cyanide gas which is VERY FATAL if inhaled or ingested**

SAFETY – Personal Protective Equipment (PPE)

The following safety gears must be worn when operating the **LEACH TEST BOTTLE ROLLER**. It is a standard safety requirement that every person who is participating in the laboratory experiments or engage in any other activities in the laboratory **MUST** wear appropriate safety gears as listed below for this particular equipment;

- Dust mask
- Safety glass
- Safety boots
- Rubber hand gloves

APPARATUS AND MATERIALS REQUIRED

- Prepared ore samples
- 2.5 L Winchester bottles
- pH meter
- 50 – 100 ml solution bottles
- Bench top electronic balance
- Metal scoop
- Spatula
- Sample trays
- Lab funnels
- Note pad

REAGENTS REQUIRED

- Calcium Oxide (Lime)
- Sodium Cyanide powder (NaCN)
- Process water
- Distilled water

STANDARD OPERATING PROCEDURE (SOP)

1. Place the Winchester bottle containing the slurry pulp sample onto the roller
2. Connect the 3phase power cable to the wall power socket and screw on tightly
3. Switch 'ON' the 3phase main power supply on the wall
4. The double deck rollers will start rolling which will then force the Winchester bottle(s) to roll with the roller direction
5. In the event of a power failure, please switch OFF the main power supply switch

6. Switch it ON when the power stabilizes after 1 minute. (This is to protect the roller motor from any electrical damage due to power surge when power comes back on)
7. DO NOT remove sample bottle(s) while the roller is in operation. Remove sample bottle(s) after the roller is switched OFF
8. Do housekeeping around the work area before you leave