

# Forensic examination of tool marks

# Examination of tool marks

## ▶ Photography

- . Tool marks should be photographed.
  - . At list two photograph should be taken, one showing the background with the impression and another close up of the impression.
  - . Scale should always be kept at the same level of the tool marks while taking the photographed.
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# Tracing

- ▶ Tool marks can be traced on a tracing paper. This helps in comparing the class characteristics.

# Lifting of tool marks

- ▶ A cast or mould is simply a reverse or negative three dimensional image of an impression.

a. Plastic/rubber or dental casing material:

This is a material for lifting fine details of a tool marks. A lump of material is soften by pressing in fingers and then applied on the surface.

b. Plaster of paris: this material is used when the impression is of large size.

Step1 – place the form around the impression.be careful not to place the form so close to the impression that it risk distorting it. place 1 kg of plaster of paris in the mixing container. add roughly 1 liter of water.

# Cont..

mixing usually takes about 5 to 7 minutes or until pancake batter consistency.

Step 2 – pour the casting material from outside the perimeter and direct the flow into the impression.

## C. Metal casting

The mould of tool mark can also be made by metal casting. The suitable metal for this purpose is known as wood metal.

This is a metal of low melting point 71 degree celcius, which is suitable for casting tool marks.

# Cont..

Its composition by weight is bismuth 50%, lead 25%, tin 12.5% cadmium 12.5%.

## D. Cellulose acetate

Tool marks from stone, concrete, wood etc. can be lifted by cellulose acetate dissolved in acetone.

A layer of 1/6 inch is made. However the cellulose acetate cast should be photographed, with scale, immediately otherwise the layer is likely to shrink

Thank you

