

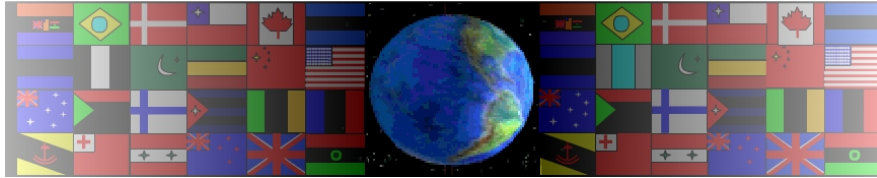
REVISION CARDS - METAL FINISHES - 2

MACHINE SURFACE FINISHES

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On behalf of The World Association of Technology Teachers

W.A.T.T.



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REVISION CARDS - METAL FINISHES - 2

THE LATHE - TYPICAL MACHINE FINISH

Lathe tools produce a machined finish. They can be shaped to produce a range of different machined finishes - two are shown below. A machined finish can be attractive and also have a practical function, such as a grip.

LATHE TOOL FINISH



A KNURLED FINISH



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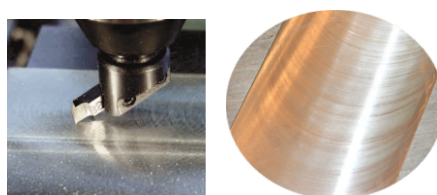
THE MILLING MACHINE TYPICAL FINISHES

Milling machines can be used in conjunction with a variety of cutting tools. Often the tools produce a very accurate, distinctive and fine circular pattern.

END MILL SURFACE FINISH



FLY CUTTER FINISH



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THE SURFACE GRINDER - FINISHES

A surface grinding machine is used to accurately produce a flat surface, after some machining has already taken place (for example, through the use of a vertical miller). A surface grinder is used where absolute precision is required. As the grinding wheel revolves at high speed, it produces a smooth, flat surface, giving a distinct finish (samples shown below). If real precision is required, a surface grinder is used.

SURFACE GRINDER FINISHES



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1. Describe two reasons for a machined finish being applied to metals? *4 marks*

2. What type of work is carried out by a surface grinder? *4 marks*
