

Pattern Reference: Section 2, Linear Waves, cut parallel.

Simple Wavy Lines, Linear. 3.75 pattern bar.

These patterns are in work surface geometry group 1.

Scalability: Not directly scalable, but by changing the size of the pattern bar, scalability can be achieved, provided different sized bars are available or it is economical to make them to order.



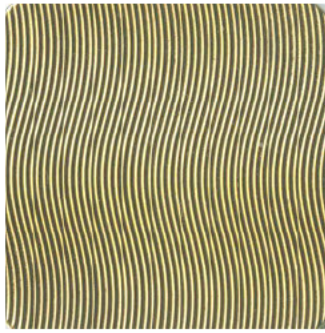
Segment from 3.75 wave Pattern Bar, scanned at 200dpi, illustrated here approx 2 x actual size on a 100 dpi screen

Example Geometries of the numerous Applications:

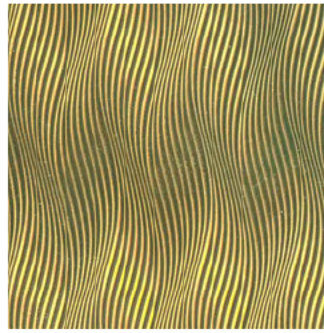
Tubes and cylindrical shapes with diameters larger than about 1 inch (25mm) cut along the axial direction, flat surfaces, slightly domed surfaces - such as brush backs, hip flasks cut vertically.

N.B. because of the way that an engine turning machine works, with the depth of cut controlled by the guide immediately to the right of the tool as the cut progresses, large deep waves of high amplitude can only be cut on gently curving surfaces because the left part of the wave will be shallower than the right, if you consider just a single cut as it is made.

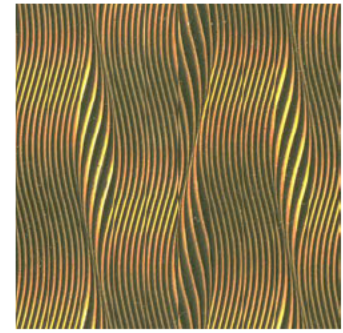
All pattern images on this page are illustrated at approx twice life size on a standard 100 dpi screen. Click images for a close-up full-screen view.



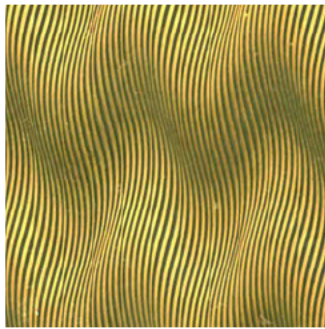
1 The basic wave, repeated at about 0.5mm intervals in parallel cuts. Please note that any moiré effects in this image are screen interference. The full screen image is clearer.



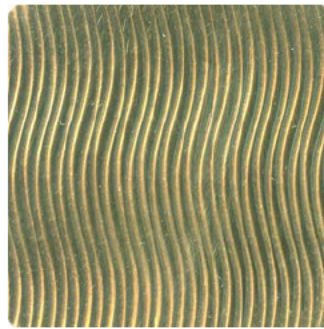
2 Moving the pattern bar vertically after each cut, by the same amount, for a few cuts and then reversing the direction gives a zig-zag effect.



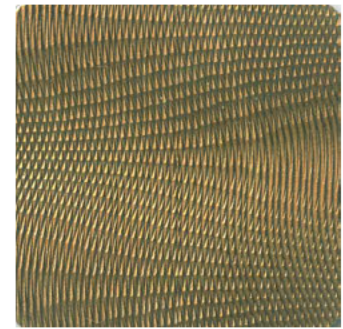
3 If we stop at the top of the zig-zag and cut a series of parallel waves, the effect is strikingly different. A cross between basket and zig-zag.



4 If we vary the vertical movement of the pattern bar each cut, we can obtain a moiré pattern.



5 The pattern bar in this image has been moved by just a few millimeters up and down each cut to create a more defined look with greater depth.



6 Cutting as in fig 1 above twice, in slightly different directions, here at an angle of about 30 degrees, gives an interference moiré pattern.



7 In this example the pattern as in fig 1 but finer, has been recut at 90 degrees, and small areas quasi-randomly missed to give a more sophisticated design.



8 Another twist: This is cut the same wave as in fig 1, but finer, and added low relief to the design from a cylinder.