

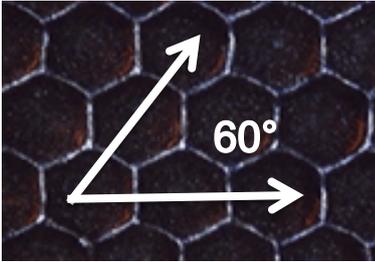


## MAIN PARAMETERS OF LASER ENGRAVED CERAMIC ANILOX ROLLERS

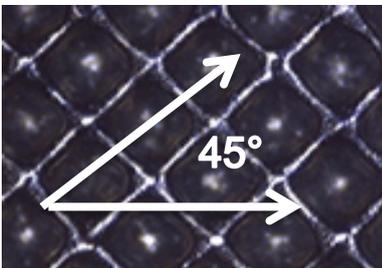
### ENGRAVING ANGLE O PATTERN

This refers to the special orientation of cells in subsequent rows of engraving as referenced from the horizontal axis of the roll:

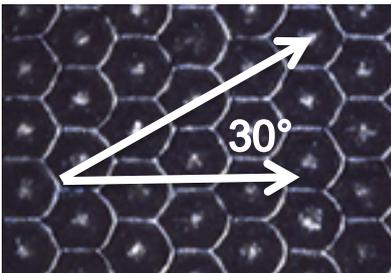
#### STANDARD PATTERNS:



60° hexagonal pattern

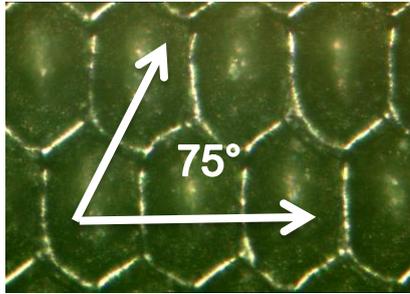


45° diamond pattern

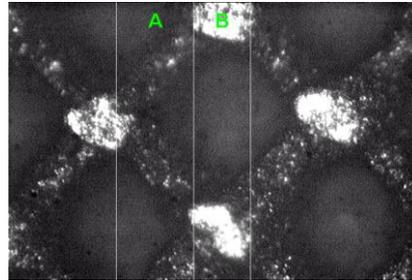


30° hexagonal pattern

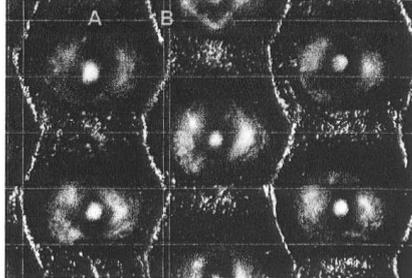
#### SPECIAL PATTERNS:



Maxflo- 75° hex. elongated cell pattern

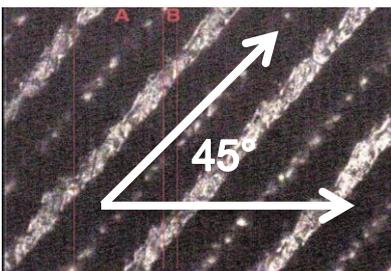


Twinflo- crossed helical engraving at 45°

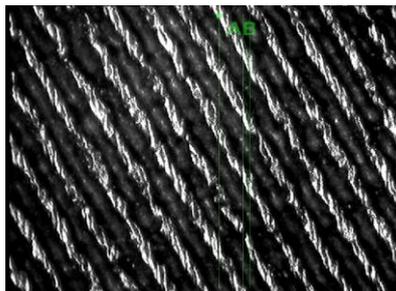


Easyflo: Channel engraving at 30°

**TRIHELICAL ENGRAVING:** Screen engraved as a continuous line around the roller at various angles from 30 to 60°.



Trihelical engraving at 45°



Trihelical engraving at 60°



## LINE COUNT

Line count or screen count refers to the number of cells per lineal inch/centimetre as measured along the engraving angle (because that is where the cells line up in closest proximity to each other).

L/cm stands for lines per centimetre

L/in stands for lines per inch, this refers to the number of cells per lineal inch

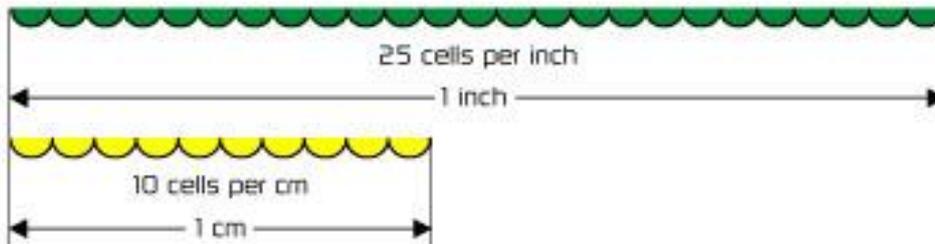
L/cm is used in Europe while North American OEMs use L/in.

To convert LPC in to LPI you must multiply by 2.54

$$1 \text{ LPC} = 2.54 \text{ LPI}$$

Example:  $100 \text{ L/cm} \times 2.54 = 254 \text{ LPI}$

Line count is the # of cell per lineal inch or centimetre



## CELL VOLUME

Cell volume is the ink carrying capacity of a cell multiplied by the number of cells in a given square inch/meter of roll surface.

The common unit of measurement in North America is BCM/in<sup>2</sup> or billion cubic microns per square inch

In Europe the unit more commonly used is cm<sup>3</sup>/m<sup>2</sup> (cubic centimetres per square meter)

$$1 \text{ BCM/sq in} = 1.55 \text{ cm}^3/\text{m}^2$$

Example:  $10 \text{ BCM} \times 1.55 = 15.5 \text{ cm}^3/\text{m}^2$

Volume is determined by the depth, diameter, and profile of the cell

## CELL DEPTH

Cell depth is usually measured in microns.

It can be also measured in thousands of an inch

$$1 \text{ INCH} = 25400 \text{ microns}$$

Example:  $0.003" \times 25400 \text{ microns} = 76.2 \text{ microns}$