MARGINS

A. End Margins: The stepped perforating procedure (see page 88) results in an unfinished pattern at the beginning and at the end of the workpiece. This unfinished pattern is the standard IPA end pattern.

The finished end pattern required special tooling or at best idling of the last row of punches to complete the pattern, thus slowing the perforating process and increasing costs. The finished end pattern is non-standard and must be specified if desired. Some special dies may also be made with the finished end pattern.

Note: Cost savings may be attained by specifying minimum or no end margins.

IPA members with roll-fed perforating presses may require +2-1/4˝ blank margins on one end of 16ga through 1˝ thicknesses when producing certain hole patterns through these particular machines.

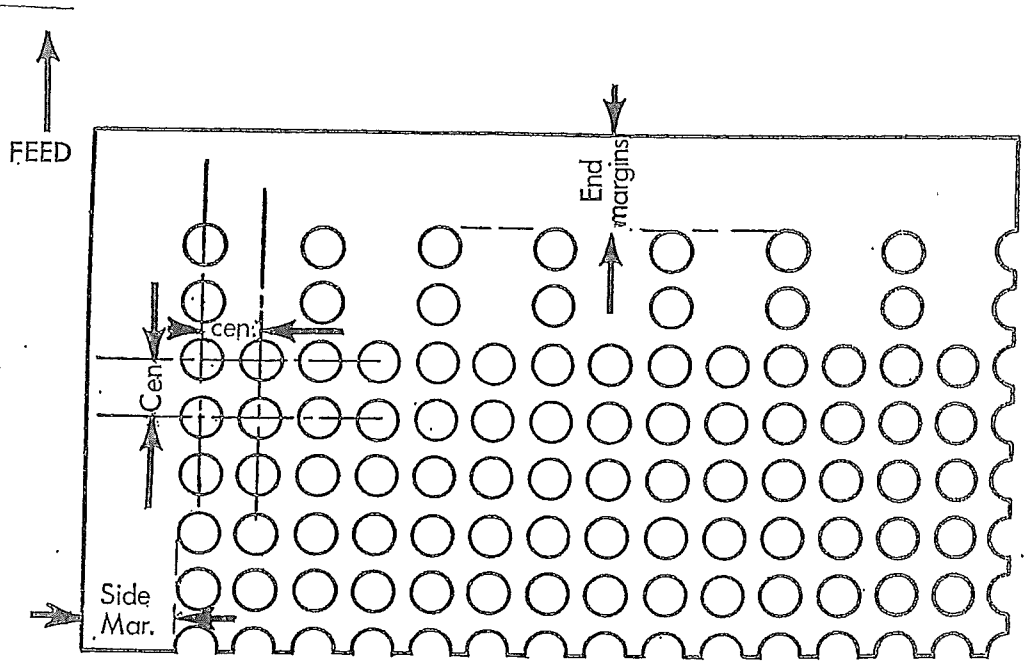
B. Side Margins: Margins along the sides of the perforated sheet introduce stresses into the sheet and cause distortion. The wider the side margin the greater the distortion, so they should be kept to a minimum width. Excessive or uneven margins can actually cause buckling or a degree of distortion that cannot be completely corrected by roller leveling. Additionally, when holes are small and the percentage of open areas is high, distortion can become exaggerated.

The minimum side margin is determined by the die layout and the width of the material.

Consult with your IPA member supplier.

Approximate side margins of perforated metal in sheet, plate or coil form as produced thru presses and limited by the die layout.

Thickness	Approximate Minimum Unperforated Side Margins
30GA-20GA	Sage Edge
Over 20GA-14GA	1/8"
Over 14GA-8GA	1/4"
Over 8GA-3/8"	1/2"
Over 3/8"-5/8"	3/4"
Over 5/8"-1"	1"



Straight formation of round holes (in line both ways).

MARGINS

Side and end margins are shown above.

Side margins are always placed on long dimensions of sheets.

End margins are in short dimensions of sheets.

Note end margins, missing holes at start and end of sheet. In most cases the missing holes may be filled in but this procedure results in additional expense.