

III. GRAPHICS FORMAT

The final version of the graphics files that accompany the text files must be prepared as **TIFF or EPS files at the proper resolution and size.**

Guidelines for Preparing Graphics

- **Format and Resolution.** Use the proper file format, resolution and color settings to ensure images are of high-quality.
 - **TIFF Format**
 - For use with gray scale, color and/or bitmap graphics
 - Resolution must be set to 600 dpi minimum for line art, 264 dpi minimum for halftone work (photographs), and 600 dpi minimum for combination work
 - The color mode must be set to CMYK (Cyan, Magenta, Yellow, Black)
 - **EPS Format**
 - For use with vector graphics, with/without color
 - Resolution must be set to 150 dpi or higher
 - The color mode for EPS files containing color should be RGB-encoded at 8 bits/channel
- **Cropping and Orientation.** Individual graphics files should be submitted as follows.
 - Graphics should be cropped to remove any unnecessary white space around the image, and should not include borders.
 - Image size and orientation should be the same as intended for publication.
 - Single Column Width: 8 cm (3.25 in., 20 picas)
 - Double Column Width: 16 cm (6.5 in., 40 picas)
 - Length: in proportion to width [maximum length = 23 cm (9.5 in., 57 picas)]
- **Color Graphics.** Color graphics will be used in the on-line version of the journal. However, in the print version all graphics will appear in black and white (unless you agree to pay for the color printing costs). Click here to review the [Publication Charges](#). Prior to submission, make sure that the color graphics will reproduce well in black and white. The easiest way to do this is to convert any color graphics to grayscale to see how they will appear in black and white. If the graphic does not convert well to black and white (i.e., the grayscale version does not contain sufficiently different levels of gray), revise graphic prior to submission.
- **Fonts.** The appropriate font(s) should be used when labeling your figures.
 - Font Family: True Type (Arial, Helvetica, Times New Roman, Courier) or Adobe fonts
 - Font Format: embedded in graphic
 - Font Size: 6 pt minimum when graphic is submitted at final size
- **Miscellaneous**
 - Line weights should be 0.5 pt - 1.5 pt in thickness (line weights below 0.5 points will reproduce poorly).
 - Providing graphics at a lower resolution than required, or at a size less than 100% of final, will result in jagged lines, pixilated type, and an unacceptable final image.
 - Providing graphics at a higher resolution than required, or at a size above 100% of final, will result in unnecessarily large files.

Submitting Graphics

- Each graphic file must be submitted individually, after the text file(s).

- **Graphic files should be uploaded in order** (Fig. 1, Fig. 2, etc.).
[NOTE: Our system will number the files as they are received. For example, if Figure 7 is uploaded first, this image will be numbered as Figure 1.]
- Each graphic should be identified in the files as Fig. 1, Fig. 2, etc.
- Please include a separate list of figure captions with your text file ([See II. Text-Only Files.](#))
- Each graphic file cannot exceed 15 MB.
- Submit only one graphic file per figure.
- All files must be properly named with the journal paper number, the figure number, and the proper extension. Example: HT-05-1115_1.eps, HT-05-1115_2.eps, etc.

Checking Graphics

Prior to submitting final graphics to ASME, you can submit them for a free on-line review through the DigitalExpert website at <http://dx.sheridan.com/>