

Visual Encyclopedia of Chemical Engineering Equipment

The Visual Encyclopedia of Chemical Engineering Equipment, now available free online at <encyclopedia.che.engin.umich.edu>, has been developed over the past 20 years to help students and faculty learn how chemical engineering equipment works. More than 100 kinds of equipment are covered, and for each piece students can see photographs, drawings, animations, and videos that demonstrate what the equipment looks like and how it works. Advantages and disadvantages of various types of equipment are also included, as well as visuals of installed equipment.

You can implement the encyclopedia into your courses to give your students a depth beyond the fundamentals:

- Incorporate graphics, animations, and videos from the encyclopedia into your class presentations, with the reference included.
- Use the encyclopedia directly in lectures to familiarize your students with it.
- If you are using the 3rd edition of Felder and Rousseau^[1] or the 4th edition of Fogler,^[2] take advantage of the references that already exist.
- Include a link to the encyclopedia in your class website.
- Supplement your homework assignments by requiring students to search the encyclopedia and answer simple questions about equipment.
- Add simple extra credit problems on exams based on the encyclopedia, to give students an added incentive to explore it.
- If your course projects include equipment, require students to use the encyclopedia as a reference.
- Encourage students in design courses to refer to the encyclopedia to have a better understanding of the equipment they are designing.

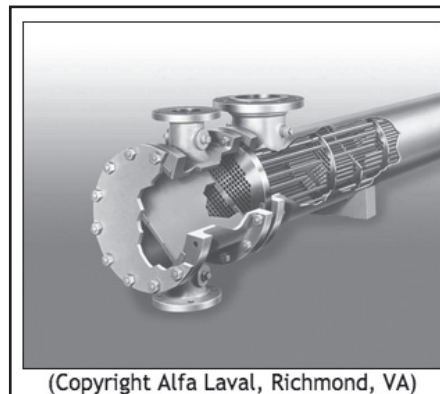
REFERENCES

1. Felder, R.M., and R.W. Rousseau, *Elementary Principles of Chemical Processes*, 3rd ed., John Wiley & Sons (2000)
2. Fogler, H.S., *Elements of Chemical Reaction Engineering*, 4th ed., Prentice Hall PTR (2005) □



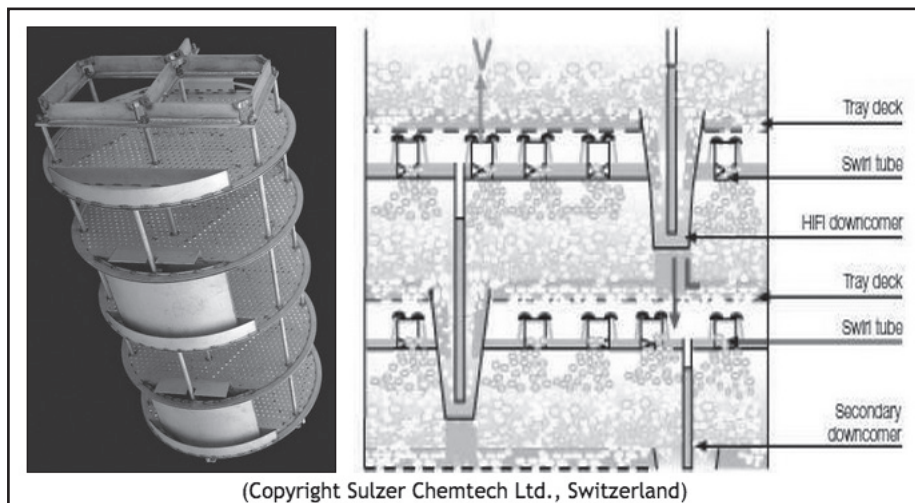
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Figure 1. Examples of orifice meters.



(Copyright Alfa Laval, Richmond, VA)

Figure 2. Heat exchanger.



(Copyright Sulzer Chemtech Ltd., Switzerland)

Figure 3. Distillation column.

—SUSAN MONTGOMERY, UNIVERSITY OF MICHIGAN, ANN ARBOR, MI

This one-page column presents practical practical teaching, advising, and diversity tips in sufficient detail that others can adopt the tip. Focus on the teaching method, not content. The column should be maximum 550 words, but subtract 50 words for each figure or table. Submit as a Word file to Phil Wankat <wankat@ecn.purdue.edu>.