

MEMO

From: F. Baneyx
Subject: Pump Characteristics

We have just received two surplus pumps from our Paper Products Division. Unfortunately, the manuals have been lost and we do not have any information on their operating characteristics. The pumps are quite different in size and appearance. Your first assignment is to find out what types of pumps do we have.

For each pump, determine the electrical power consumption (watts), the pump head (m), and the efficiency. You can prepare a chart similar to that shown in Fig. 10-58, page 1061 of Perry's Handbook, 8th Edition.

Please study the performance of the pumps at different percentages of full speed. Determine the pumps' efficiency from measurements of the power input and the work done by the pump at various flow rates to be selected by you.

Based on your findings, suggest applications for each pump. How can we use them?