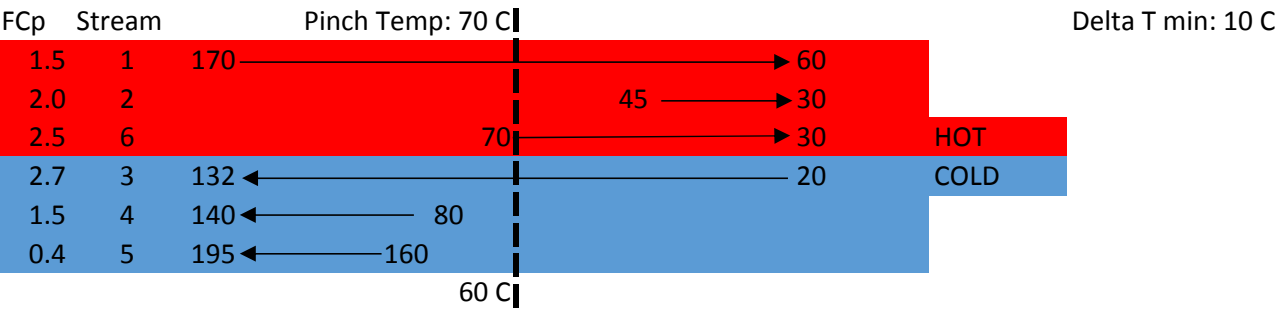
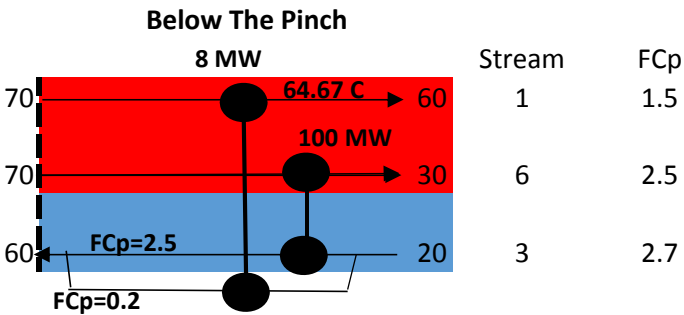
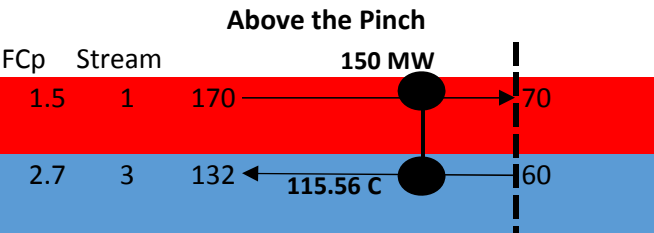


HW 4 Problem 1

We first need to construct a chart showing our streams and their temperatures.



Now we must make pinch matches

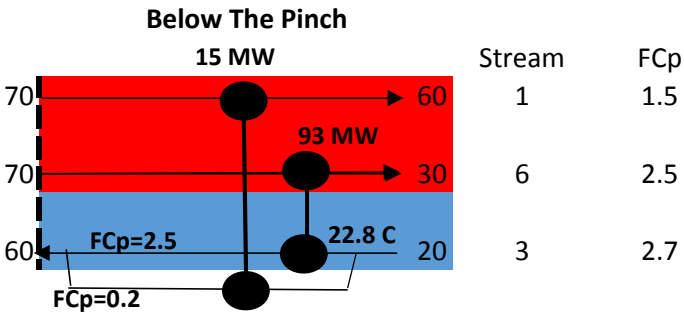


You can only match stream 1 with stream 3

You first must split stream 3 to satisfy the rule:  $FCp_c \leq FCp_h$ . I choose to split it between 2.5 and 0.2 because when  $FCp=2.5$  is matched with stream 6, you can fully cool stream 6 without utilities. Next we can match  $FCp=0.2$  with stream 1.

Remember  $FCp_h \leq FCp_c$   
all hot streams need to participate

Other Possibilities



This option would require 2 utilities instead of one and would be suboptimal

