

# De Bruijn graph edge reduction benchmark results

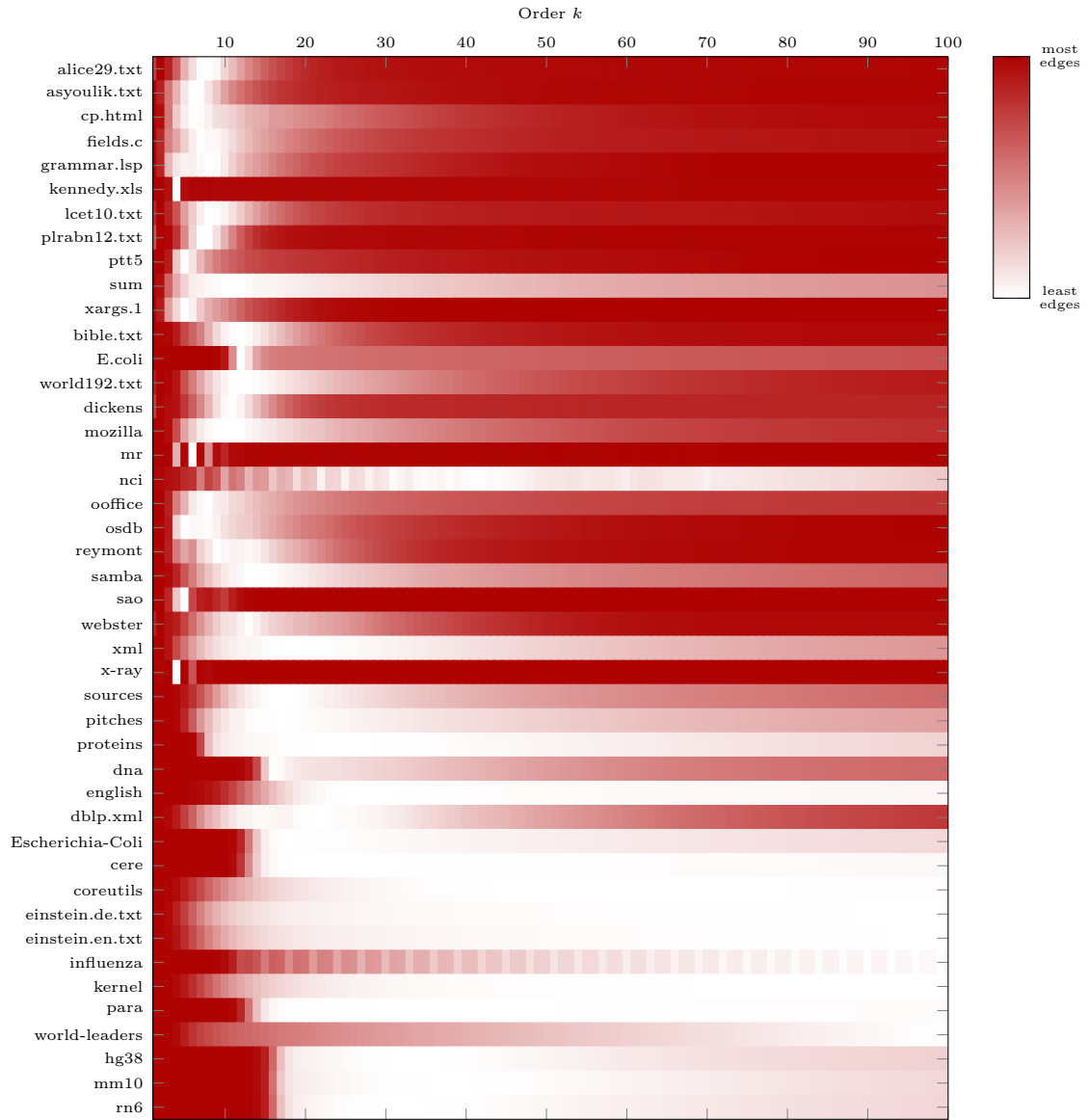


Figure 1: Dependence between de Bruijn graph order and number of edges in an edge-reduced de Bruijn graph.

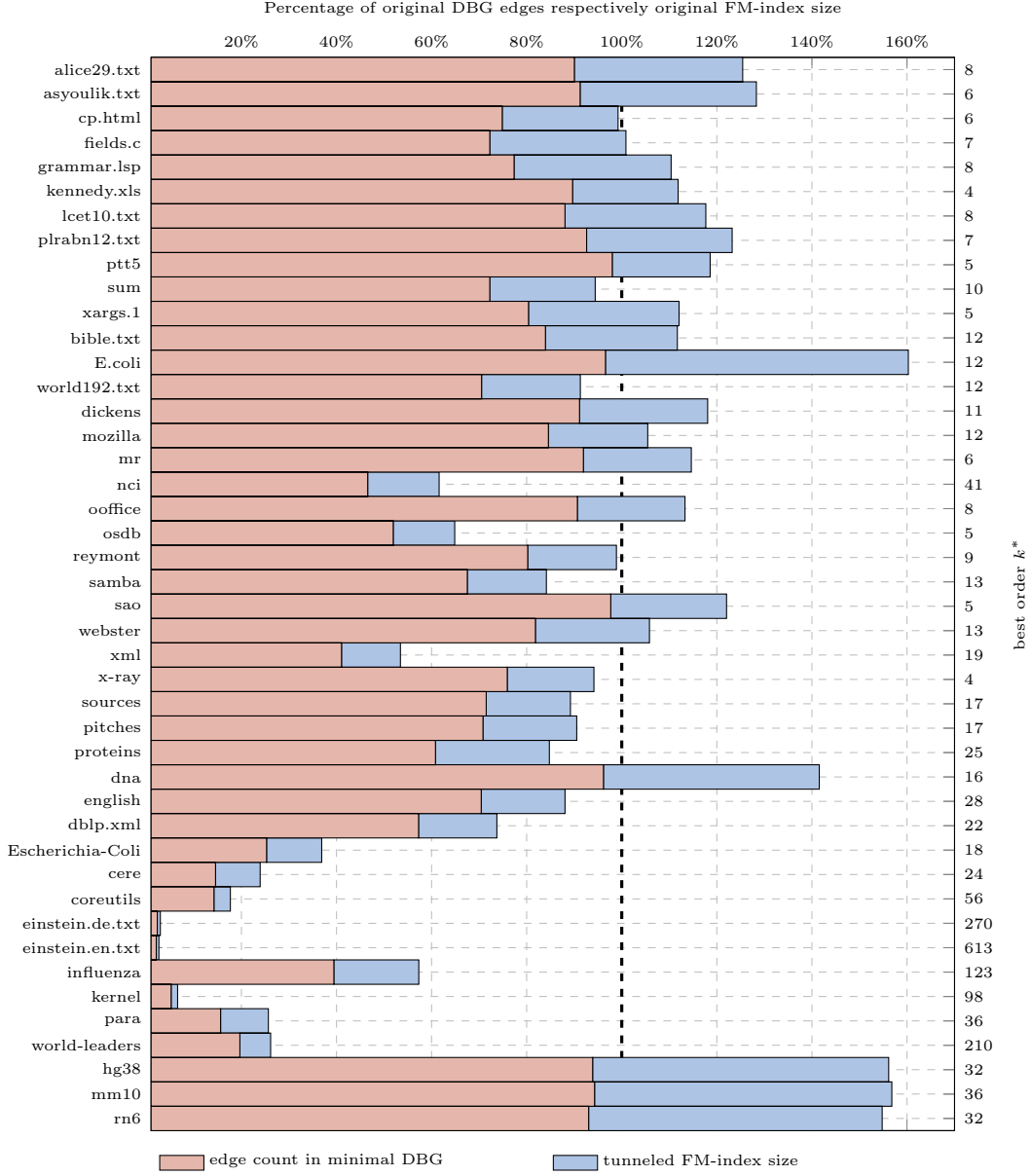


Figure 2: Amount of reduced edges for minimal edge-reduced de Bruijn graphs as well as size of corresponding tunneled FM index compared to a normal FM-index. The overhead between the amount of reduced edges and the tunneled FM-index size comes from the two additional bitvectors required in the tunneled FM index.

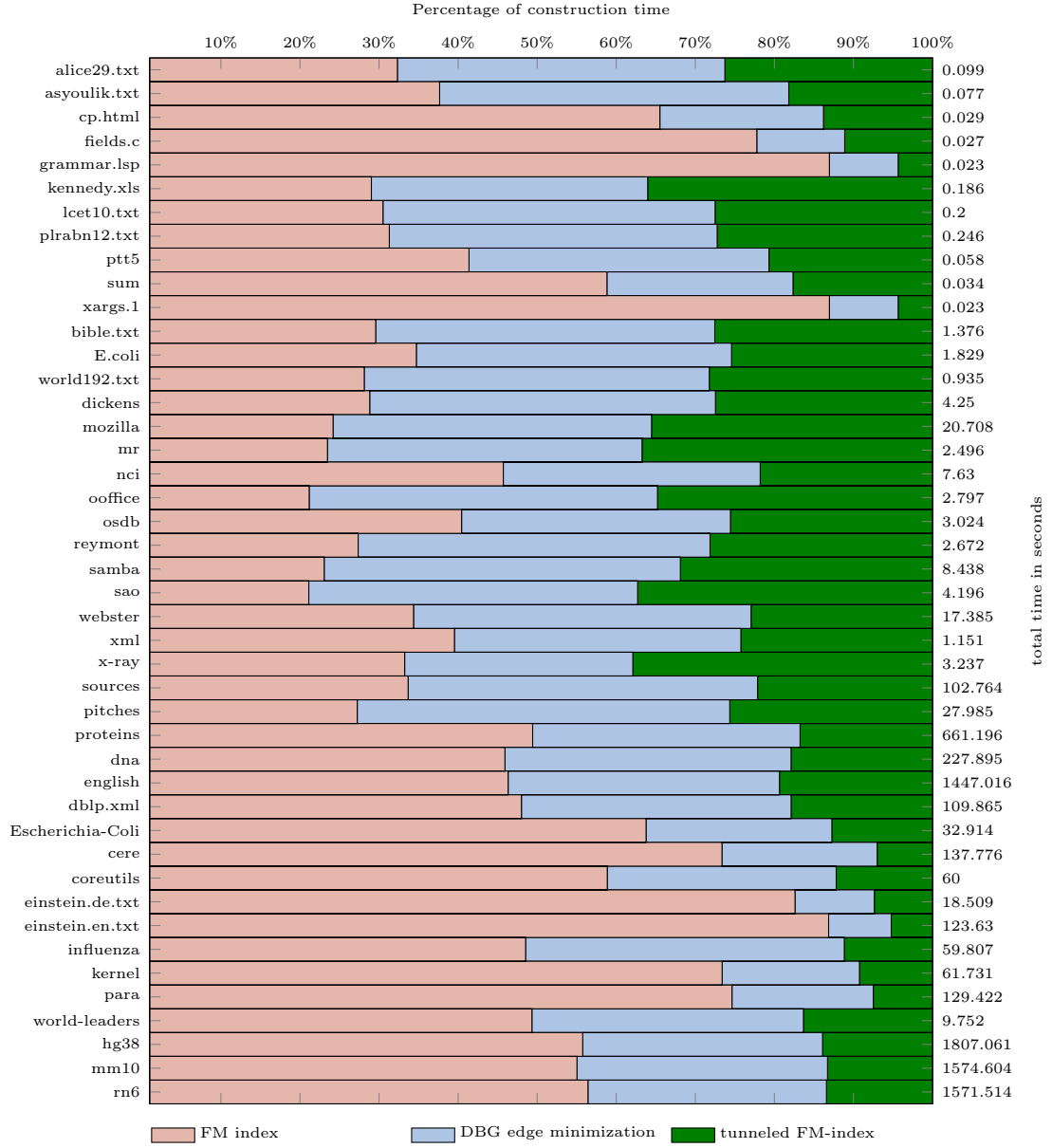


Figure 3: Construction timings of tunneled FM-index construction broken down into FM-index construction, de Bruijn graph edge minimization and tunneled FM-index construction.

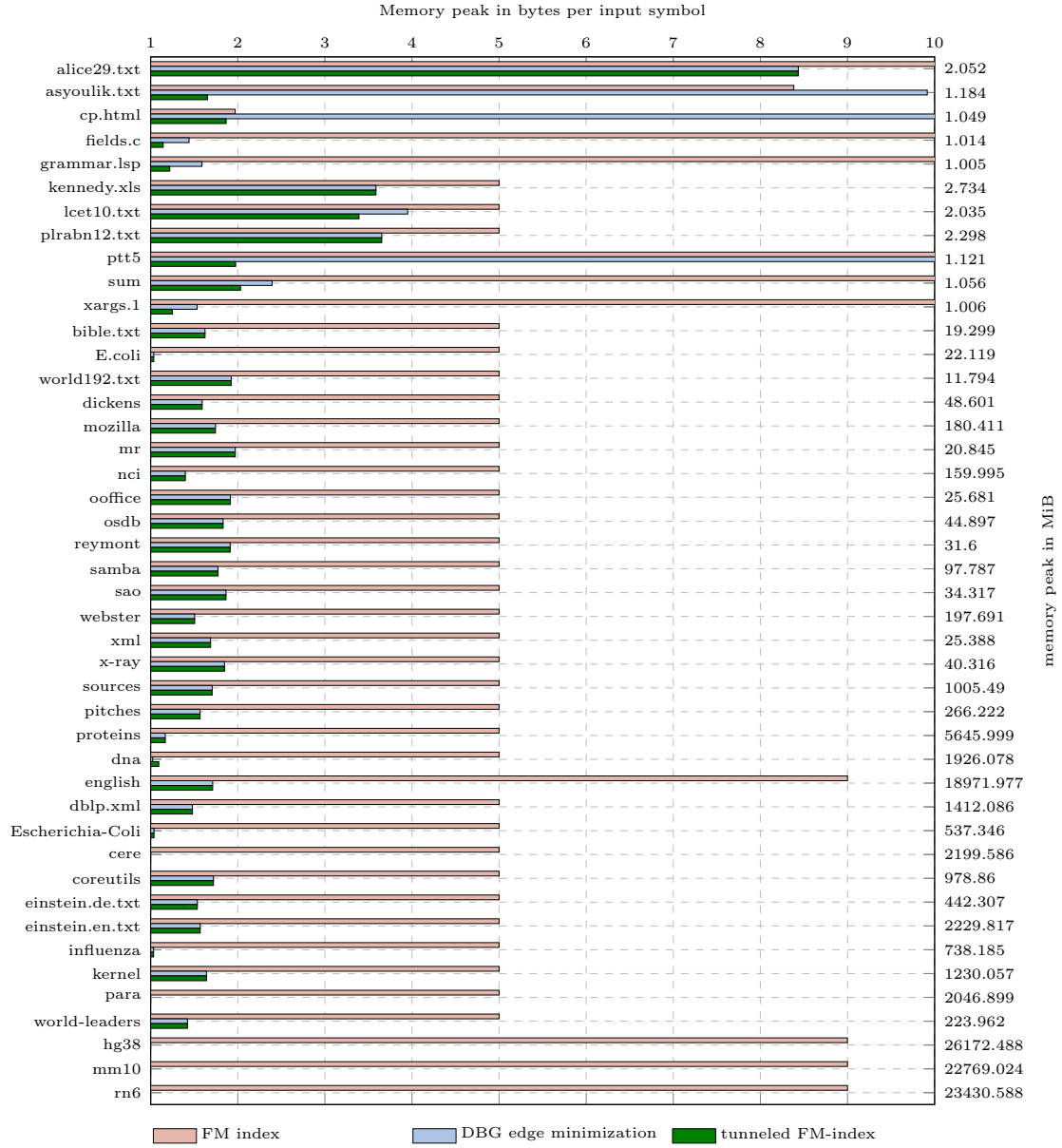


Figure 4: Memory peak during tunneled FM index construction, measured in bytes per symbol of the input data.