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Assumptions to the Annual Energy Outlook 2009

Table 6.4. Cost and Performance Parameters for Industrial Motor Choice Model

Industrial Sector Horsepower Range	2002 Stock Efficiency (%)	Premium Efficiency (%)	Premium Cost (2002$)
Food			
1 - 5 hp	81.3	89.2	607
6 - 20 hp	87.1	92.5	1,352
21 - 50 hp	90.1	93.8	2,612
51 - 100 hp	92.7	95.3	6,354
101 - 200 hp	93.5	95.2	11,548
201 - 500 hp	93.8	95.4	30,299
> 500 hp	93.0	96.2	36,187
Bulk Chemicals			
1 - 5 hp	82.0	89.4	607
6 - 20 hp	87.4	92.6	1,352
21 - 50 hp	90.4	93.9	2,612
51 - 100 hp	92.4	95.4	6,354
101 - 200 hp	93.5	95.3	11,548
201 - 500 hp	93.3	95.5	30,299
> 500 hp	93.2	96.2	36,187
Metal-Based Durables[1]			
1 - 5 hp	81.9	89.2	607
6 - 20 hp	89.9	92.5	1,352
21 - 50 hp	89.9	93.9	2,612
51 - 100 hp	92.0	95.3	6,354
101 - 200 hp	93.5	95.2	11,548
201 - 500 hp	93.7	95.4	30,299
> 500 hp	93.0	96.2	36,187
Other Non-Intensive Manufacturing[2]			
1 - 5 hp	83.0	89.2	607
6 - 20 hp	88.3	92.5	1,352
21 - 50 hp	90.3	93.9	2,612
51 - 100 hp	92.7	95.3	6,354
101 - 200 hp	94.3	95.2	11,548
201 - 500 hp	94.3	95.4	30,299
> 500 hp	92.9	96.2	36,187

[1] The Metal-Based Durables group includes five sectors that are modeled separately: Fabricated Metal Products; Machinery; Computer and Electronic Products; Electrical Equipment, Appliances, and Components; and Transportation Equipment

[2] The Other Non-Intensive Manufacturing group includes three sectors that are modeled separately: Wood Products; Plastics and Rubber Products; and Balance of Manufacturing.

Source: Energy Information Administration, *Model Documentation Report, Industrial Sector Demand Module of the National Energy Modeling System*, DOE/EIA-M064(2008) (Washington, DC, 2008).

Note: The efficiencies listed in this table are operating efficiencies based on average part-loads. Because the average part-load is not the same for all industries, the listed efficiencies for the different motor sizes vary across industries.