



Smaller, smarter, faster

The facts speak for themselves – ABB AC drives deliver substantially reduced energy costs, rapid payback time, increased productivity, and long service life. ABB innovations are making these benefit-rich machines smaller, faster and smarter than ever before.

ABB has a massive installed base of AC drives - one million over the past 20 years - that are used in a wide range of applications. They regulate the speed of motors and the work of machinery in factories, mills, mines and ships; they control air conditioning, regulate baggage handling conveyor belts at airports, and even manage sprinklers on golf courses.

Electric motors consume 65 percent of the energy used by the world's factories and production facilities, but only five percent of electric motors are fitted with variable speed drives. The rest are often running constantly at full speed, even when they don't need to, which wastes vast amounts of expensive electricity. ABB's AC variable speed drives can solve this wasteful problem.

Key facts about ABB drives:

1: An ABB variable speed drive can cut the average running speed of a pump or fan in half. A pump or fan running at half speed consumes only one-eighth the energy of one running at full speed.

2: ABB is the world's leading manufacturer of AC variable speed drives, with a market share that is nearly twice as big as its nearest rival, and a product range considered the broadest, most complete offering in the industry.

3: ABB's Direct Torque Control (DTC) platform is the single most important innovation in drive technology of the past decade. Unique to ABB, DTC ensures the fastest torque and speed response times for all ABB drives.

4: Recent ABB innovations in power semiconductors and cooling techniques have reduced the size of drives by up to 80 percent and the number of components needed by up to 70 percent.

5: The installed base of ABB AC drives reduces the world's annual consumption of electricity by 81,000 GWh, which is equivalent to 68 million tons of CO2 emissions each year.

6: The mean time between failure (MTBF) for an ABB drive is once every 50 years.

7: ABB invests heavily in product development, and has earmarked some 1,200 man-years for drives R&D projects in the next five years.

8: ABB has the most advanced drives assembly plants (located in China, Finland and the United States) and the most comprehensive service offering to ensure customers get rapid deliveries, maximum availability, and minimal lifecycle costs.