

## Facilities Management from A to Z

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# V

## acuum Cleaners

The first manual vacuum cleaners, using bellows, were invented in the 1860s, and the first motorized models came in the beginning of the 20th century. In 1907, James Murray Spangler, a janitor from Canton, Ohio, invented the first practical, portable vacuum cleaner. He sold the patent in 1908 to William Henry Hoover who became very wealthy from the invention. Subsequent innovations included the first disposal filter bags and the first upright vacuum cleaner in 1926.

Backpack vacuum cleaners are increasingly used for commercial cleaning as they allow the user to move rapidly about a large area. They are essentially cylinder vacuum cleaners strapped on the user's back. There is evidence to show that such equipment is more ergonomically sound than using upright cleaners leading to fewer back problems among operatives.

Vacuum cleaners by their nature cause dust to become airborne, by exhausting air that is not completely filtered. This can cause health problems since the operator ends up inhaling this dust. Manufacturers use several methods to solve this problem which may even be combined together in a single vacuum. Typically the filter is positioned so that the incoming air passes through it before it reaches the motor; the filtered air then passes through the motor for cooling purposes

As with all equipment used in the workplace, vacuum cleaners used in commercial cleaning must be properly maintained and cared for. The working conditions and hazards must be taken into account in the selection and purchase of equipment. The facilities manager must ensure they are suitable for the job, safe to operate, safe to use, well-maintained and all the other relevant duties under PUWER 98.

Regular condition inspections should include ensuring the cable is clean and is not broken and showing loose wires. The inside of tub vacuum cleaners should be wiped out and wheels kept free from debris. For upright vacuum cleaners, all filters should be kept clean and casing to the unit wiped down. Whoever is responsible for the equipment must keep a record of all repairs together with records of portable appliance testing.

*Useful information on legislation affecting the cleaning industry and the safe use of equipment can be found at [www.hse.gov.uk/cleaning](http://www.hse.gov.uk/cleaning)*