It is only since the 17th century that people became aware of the existence of vacuum. People like Galileo, Torricelli and von Guericke were the first to build equipment using vacuum as the principle of operation. One of the first main applications of vacuum was the development of electric lighting in the 19th century.

In industrial vacuum processes, 4 pressure regions can be distinguished:

- Rough Vacuum 10⁵ 10² Pa
- Medium Vacuum 10² 10⁻¹ Pa
- High Vacuum 10⁻¹ 10⁻⁵ Pa
- Ultra High Vacuum 10⁻⁸ 10⁻⁵ Pa

Recalculation between the several units for pressure is straight forward, since they are all lineary proportional. Their value for ambient atmospheric pressure is given below, allowing conversion between the different pressure units:

- Standard Atmosphere 1 atm
- Pascal (official SI-unit) 101325 Pa (=Nm-2)
- 1013 mbar
- (obsolete unit) 760 torr

At present, the fields of application of vacuum techniques are multiple:

- Electronics (e.g. CRT, drying of electric components,...)
- Deposition techniques (e.g. evaporation, sputtering (DC, MF, RF,...)
- Food and pharmaceutical industry

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- Chemical analysis techniques (e.g. RBS, SEM, SIMS, AES,...)

Future tendencies in the vacuum market are difficult to predict, though some trends can be expected:

- Cleaner and more powerful pumping units
- Plasma treatment of polymers for superior properties
- Coating of various materials for quality improvement
- Advanced research and analytical equipment

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