Boiler Safety Stats and Facts



FACTS

1. Dangerous boilers – Switch off immediately when:

- The smell of spent gas or fumes is present.
- There are any visible signs of scorching, sooting or black spillage marks (also applies to room-sealed appliances).
- The pilot light continually goes out or a yellow flame is present.
- Experiencing a frequent feeling of headaches or nausea when the boiler is running

2. Common (non-dangerous) boiler faults

- Loss of pressure
- Overheating due to blockages
- Air in the system
- Sticking pumps or valves

3. Boiler explosion

Boiler explosion incidences are known to be catastrophic. Boiler explosions are caused by a faulty pressure valve or internal corrosion of the boilerplates. In most instances, only a professional can identify these faults and repair them effectively.

4. Carbon Monoxide poisoning

Carbon monoxide is one of the deadliest gases on the globe today. It is characterised by inhibiting someone’s ability to breathe leading to an untimely death. Carbon monoxide poisoning is more common in older open flued boilers.

STATS

- Tragically, a total of 127 people have lost their lives as the result of boiler and pressure vessel accidents.
- Of the 23,338 accidents, 83 % were a direct result of human oversight or lack of knowledge (i.e., low-water condition, improper installation, improper repair, operator error or poor maintenance).

- A total of 64 persons were killed by unfired pressure vessels, followed by power boilers (44 fatalities), water-heating boilers (14), and steam-heating boilers (5).
- Unfired pressure vessels were also the leading cause of injuries (289), followed again by power boilers (250), water-heating boilers (92), and steam-heating boilers (89).
- Hydrogen boilers could cause 39 explosions and 65 injuries or fatalities each year, compared to the nine explosions and 17 injuries or fatalities estimated to be caused by the natural gas boilers currently in use.
- In 2019 the number of boilers, pressure vessel, and refrigeration incidents reported to us increased by 4 (11%) compared to 2018. Most of the incidents reported were from the refrigeration arena industry.