



Stainless steel low-pressure steam boiler (0,5 bar)

Steamproduction 130-1.400 kg/hr

NOx emission 50-70 mg/nm³

High efficiency 95-103%

Compact design

Pressure 0,3-0,4 bar

Made in the Netherlands

Novumax LD-HR

Novumax LD-HR: a new dimension in gas-fired low-pressure steam generation. Low pressure steam (up to 0.5 bar) is a widely used medium for, among other things, heat transfer in processes, air humidification and food industry. Novum has developed a completely new concept for these applications.



A stainless steel low pressure steam boiler with high efficiency.

This boiler was developed by Novum in Oss; production takes place in our factory. The power range is 95-1040 kW (130-1.400 kg/hr). The **Novumax LD-HR** is supplied complete with the required accessories, burner and control and is ready for operation. The boiler-efficiency is 95-103% depending on the water inlet temperature. This means an energy saving of 5-10% compared to traditional low-pressure steamboilers.

The innovation

The **Novumax LD-HR** is entirely made of stainless steel 316L. This eliminates oxygen corrosion and makes the dosing of chemicals (oxygen binders) unnecessary. In a specially developed heat exchanger, the cold, softened feed water is brought into counter-current with the already cooled flue gases. These flue gases condense in the heat exchanger, resulting in a high efficiency (up to 103%). This saves considerably on energy costs.

The design

Thanks to the well thought-out design, the **Novumax LD-HR** is lightweight and compact in design. All connections and accessories are located on the top and rear of the boiler. At the rear of the boiler can also be found a large, round sight glass. This makes the water level visible, but can also be viewed inside the boiler when the boiler is under pressure. The daily flushing of gauge glasses is no longer necessary. The boiler can be fed with softened tap water (<0.1°dH), with demiwater or with reverse osmosis water.

Accessories and equipment

The **Novumax LD-HR** is equipped with the following accessories and equipment:

- 1 safety valve (adjusted to a pressure of 0.5 bar (o))
- 1 main steam valve
- 1 water level control through electrodes, switching amplifiers and electric supply valve
- 2 water level protection (redundant) with electrodes and switching amplifiers
- 1 modulating boiler pressure control
- 1 automatic drain valve (solenoid valve) with ball valve
- 1 modulating low NOx gas burner
- 1 switch panel
- 1 pressure manifold with a pressure gauge, max. pressure switch and pressure sensor

Optionally, the boiler can be equipped with a proportional supplement-purge system with heat recovery, consisting of:

- 1 drain water make-up water heat exchanger
- 2 automatic flow regulators
- filters, non-return valve and ball valves