



## HOT WATER HEATERS

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## HOT WATER HEATERS

We design and manufacture direct fired heaters for hot water with capacity from 50 to 20,000 kW.

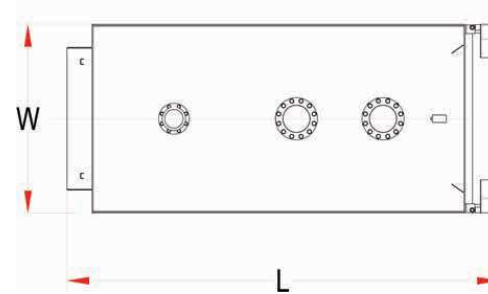
Various options are available such as one or more circulation pumps connected to the heater, burners for various fuels, economizers, combustion air preheaters, horizontal and vertical configurations.

All heaters are designed, tested, built on the basis of the latest standards and can be certified according to PED, ASME, naval or other regulations depending on the country of installation.



HOT WATER HEATERS  
**NPR  
MODEL**

**Pressurized steel boiler for hot water production.**  
It can be equipped with a normal market burner and is suitable for liquid or gaseous fuels. Two-position adjustment or, on request, modulating. Water efficiency of over 90%.



**PRODUCT**

- Pressurized heater for hot water

**TYPOLOGY**

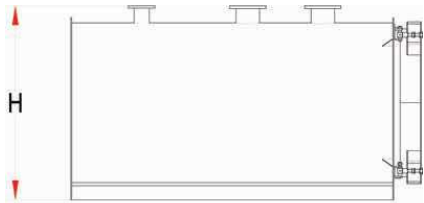
- Fire tube • 3 passes • Wet back • Flame inversion • Horizontal

**CAPACITY**

- 64 kW - 7,000 kW

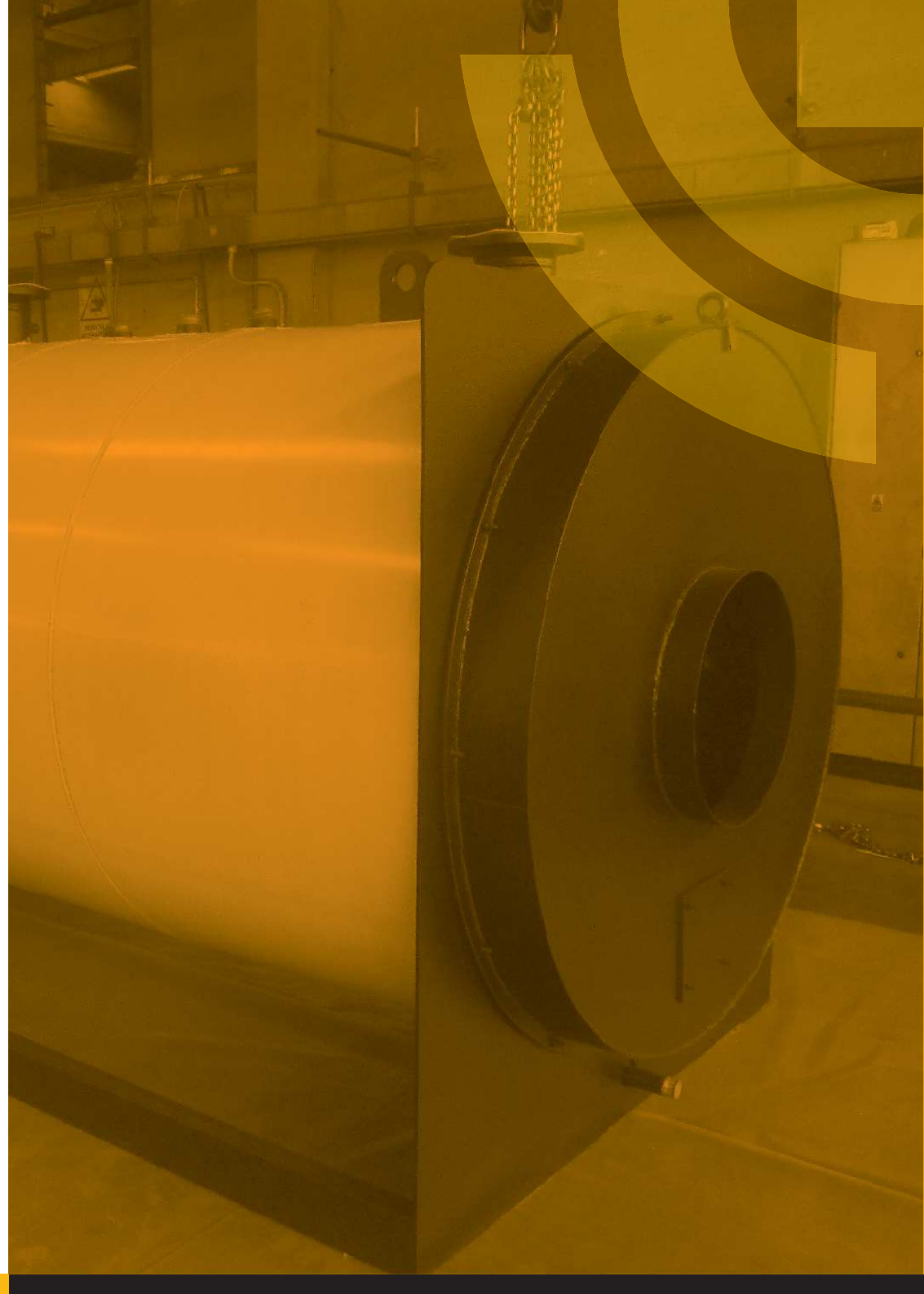
TECHNICAL DATA HOT WATER HEATER							NPR					
TYPE		NPR 64	NPR 76	NPR 93	NPR 105	NPR 116	NPR 140	NPR 163	NPR 186	NPR 233	NPR 291	NPR 340
Max net output	kW	64	76	93	105	116	140	163	186	233	291	340
Max furnace output	kW	71	84	102	115	128	155	180	206	258	322	371
Water content	liters	86	86	86	126	126	126	151	151	203	247	298
Design pressure	bar	6	6	6	6	6	6	6	6	6	6	6
Efficiency	%	90.1%	90.5%	91.2%	91.3%	90.6%	90.3%	90.6%	90.3%	90.3%	90.4%	91.6%
Furnace pressure drop	mm H2O	1.5	1.8	2.5	3	3	4	8	14	18	22	34
Length (burner excluded)	L - mm	990	990	990	1,205	1,205	1,205	1,385	1,385	1,437	1,687	1,541
Width	W - mm	690	690	690	760	760	760	760	760	860	860	890
Height	H - mm	722	722	722	812	812	812	812	812	937	937	1,310
Empty weight	kg	212	212	212	309	309	309	349	349	485	555	629





TECHNICAL DATA HOT WATER HEATER		NPR										
TYPE		NPR 420	NPR 510	NPR 630	NPR 760	NPR 870	NPR 970	NPR 1100	NPR 1320	NPR 1570	NPR 1850	NPR 2200
Max net output	kW	420	510	630	760	870	970	1,100	1,320	1,570	1,850	2,200
Max furnace output	kW	459	557	688	830	950	1,060	1,200	1,442	1,715	2,020	2,400
Water content	liters	398	462	565	671	753	836	1,040	1,242	1,418	1,617	2,086
Design pressure	bar	6	6	6	6	6	6	6	6	6	6	6
Efficiency	%	91.5%	91.6%	91.6%	91.6%	91.6%	91.5%	91.7%	91.5%	91.5%	91.6%	91.7%
Furnace pressure drop	mm H2O	29	43	55	51	57	49	52	67	60	73	65
Length (burner excluded)	L - mm	1,606	1,801	2,113	1,989	2,184	2,379	2,346	2,686	2,781	3,151	3,225
Width	W - mm	890	890	890	1,122	1,122	1,122	1,352	1,352	1,462	1,462	1,622
Height	H - mm	1,485	1,485	1,485	1,540	1,540	1,540	1,540	1,540	1,650	1,650	1,810
Empty weight	kg	796	919	1,049	1,341	1,447	1,553	1,821	2,030	2,780	3,280	4,145

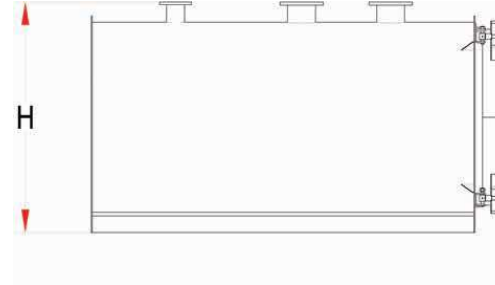
TECHNICAL DATA HOT WATER HEATER		NPR									
TYPE		NPR 2650	NPR 3000	NPR 3500	NPR 4000	NPR 4500	NPR 5000	NPR 5500	NPR 6000	NPR 6500	NPR 7000
Max net output	kW	2,650	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000
Max furnace output	kW	2,890	3,280	3,825	4,371	4,838	5,422	5,914	6,507	6,990	7,591
Water content	liters	2,324	2,667	4,142	4,455	6,012	6,012	7,058	7,058	7,909	7,909
Design pressure	bar	6	6	6	6	6	6	6	6	6	6
Efficiency	%	91.7%	91.5%	91.5%	91.5%	93.0%	92.2%	93.0%	92.2%	93.0%	92.2%
Furnace pressure drop	mm H2O	76	60	74	80	8	110	100	120	105	120
Length (burner excluded)	L - mm	3,545	3,835	3,879	4,279	4,282	4,282	4,872	4,872	5,484	5,484
Width	W - mm	1,622	1,720	1,970	1,970	2,088	2,088	2,214	2,214	2,380	2,380
Height	H - mm	1,810	1,990	2,271	2,271	2,533	2,533	2,653	2,653	2,860	2,860
Empty weight	kg	4,465	5,110	6,700	7,500	4,682	4,682	4,872	4,872	5,484	5,484



HOT WATER HEATERS  
**NPR - 3S  
MODEL**

**Pressurized steel boiler for hot water production. It can be equipped with a normal market burner and is suitable for liquid or gaseous fuels. Two-position adjustment or, on request, modulating.**

The **NPR 3S** boiler is designed to guarantee a very high efficiency, over 94% for power up to 250 kW and more than 95% for models with power of 300 kW and above.



**PRODUCT**

- Pressurized heater for hot water with high efficiency

**TPOLOGY**

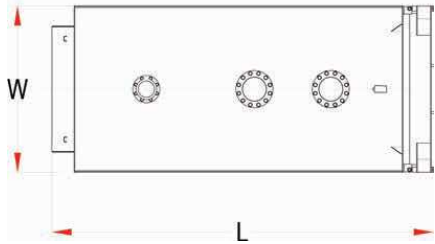
- Fire tube • 3 passes • Wet back • Flame inversion • Horizontal

**CAPACITY**

- 80 kW - 6,100 kW

TECHNICAL DATA HOT WATER HEATER		NPR - 3S						
TYPE		NPR 80 3S	NPR 120 3S	NPR 160 3S	NPR 200 3S	NPR 250 3S	NPR 300 3S	NPR 370 3S
Max net output	kW	80	120	160	200	250	300	370
Max furnace output	kW	85.2	127.4	169.4	211.3	263.6	315.8	388.7
Water content	liters	86	126	151	203	247	298	398
Design pressure	bar	5	5	5	5	5	6	6
Efficiency	%	93.9%	94.2%	94.5%	94.7%	94.8%	95.0%	95.2%
Furnace pressure drop	mm H2O	6.8	10.8	15.8	19.7	23.6	28.4	32.2
Length (burner excluded)	L - mm	995	1,210	1,390	1,442	1,692	1,541	1,606
Width	W - mm	690	760	760	860	860	860	890
Height	H - mm	912	1,002	1,002	1,127	1,127	1,372	1,542
Empty weight	kg	221	325	366	505	583	665	845

TECHNICAL DATA HOT WATER HEATER		NPR - 3S						
TYPE		NPR 450 3S	NPR 560 3S	NPR 680 3S	NPR 780 3S	NPR 870 3S	NPR 1000 3S	NPR 1180 3S
Max net output	kW	450	560	680	780	870	1,000	1,180
Max furnace output	kW	472.4	587.9	713.9	818.9	913.4	1,049.8	1,238.8
Water content	liters	462	565	617	753	836	1,040	1,242
Design pressure	bar	6	6	6	6	6	6	6
Efficiency	%	95.3%	95.3%	95.3%	95.2%	95.2%	95.3%	95.3%
Furnace pressure drop	mm H2O	35.8	42.1	49.4	55	58.6	69.9	68.6
Length (burner excluded)	L - mm	1,801	2,113	1,989	2,184	1,989	2,346	2,686
Width	W - mm	890	890	1,122	1,122	1,122	1,352	1,352
Height	H - mm	1,542	1,542	1,622	1,622	1,622	1,622	1,622
Empty weight	kg	986	1,119	1,435	1,557	1,656	1,970	2,175



TECHNICAL DATA HOT WATER HEATER		NPR - 3S						
TYPE		NPR 1400 3S	NPR 1650 3S	NPR 2000 3S	NPR 2350 3S	NPR 2700 3S	NPR 3100 3S	NPR 3500 3S
Max net output	kW	1,400	1,650	2,000	2,350	2,700	3,100	3,500
Max furnace output	kW	1,469.8	1,732.3	2,099.7	2,467.1	2,834.6	3,254.5	3,674.5
Water content	liters	1,418	1,617	2,086	2,324	2,667	4,142	4,455
Design pressure	bar	6	6	6	6	6	6	6
Efficiency	%	95.3%	95.2%	95.3%	95.3%	95.3%	95.3%	95.3%
Furnace pressure drop	mm H2O	74.9	80.9	72	76.9	81	769	89.5
Length (burner excluded)	L - mm	2,781	3,151	3,225	3,545	3,835	3,879	4,279
Width	W - mm	1,462	1,462	1,622	1,622	1,720	1,970	1,970
Height	H - mm	1,732	1,732	1,892	1,892	2,020	2,280	2,280
Empty weight	kg	2,975	3,465	4,390	4,700	5,370	6,990	7,790

TECHNICAL DATA HOT WATER HEATER		NPR - 3S					
TYPE		NPR 3900 3S	NPR 4400 3S	NPR 4800 3S	NPR 5200 3S	NPR 5700 3S	NPR 6100 3S
Max net output	kW	3,900	4,400	4,800	5,200	5,700	6,100
Max furnace output	kW	4,094.4	4,619.3	5,039.3	5,459.2	5,984.1	6,404.1
Water content	liters	6012	6012	7058	7058	7909	7909
Design pressure	bar	6	6	6	6	6	6
Efficiency	%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%
Furnace pressure drop	mm H2O	79	58.6	92.2	105.4	90.5	100.7
Length (burner excluded)	L - mm	4,738	4,738	4,928	4,928	5,484	5,484
Width	W - mm	2,088	2,088	2,214	2,214	2,380	2,380
Height	H - mm	2,533	2,533	2,653	2,653	2,860	2,860
Empty weight	kg	8,630	8,630	9,675	9,675	13,060	13,060

