

HP REGENERATIVE PREHEATERS





PRODUCT **OFFER**

The **High Pressure (HP) regenerative preheaters** are used in high pressure heat recovery system to heat up the boiler feeding water from temperature of the Feed Water Tank up to temperature required at the boiler inlet. This heat recovery system consists of few HP preheaters working in series which are installed horizontally or vertically. The feed water is heated up with steam extracted from turbine and with secondary steam.

The condensate subcooler is installed in bottom part of the shell side. Condensate level in subcooling zone is controlled by use of level controller and control valves on condensate outlet line from preheater. Design of subcooling zone depends on condensate amount and preheater size.

Non-condensed steam and inerts are extracted from the shell-side, through perforated deaeration tube out of shell to the turbine condenser.

The **HP preheaters** are shell & tube exchanger with U-tubes, infull welded design, with hemispherical chambers. For the maintenance service the manholes with high pressure closure are provided on chambers. The thickness of tubesheet can reach up to 600 mm. The tubes are fixed into tube-sheet by expanding or expanding and seal welding or strength welding. To protect the tube / tubesheet joint special inserts (ferrules) are sometimes used.

The materials selection is according to Client requirements. Usual boiler carbon steel i used.

Design of HP preheaters is made by Famet using ASPEN/HTRI and HEI softwares

 $\begin{tabular}{ll} \textbf{Documentation} is made in accordance with PED 2014/68/EC, \\ \textbf{UDT, ASME or AD 2000 Code}. There is also possible to fabricate HP heaters according to Client documentation. \\ \end{tabular}$

The reference list for HP heaters designed and fabricated by FAMET are to be found on **www.famet.com.pl**









FAMET S.A.

ul. Szkolna 15A 47-225 Kędzierzyn-Koźle POLAND

www.famet.com.pl e-mail: office@famet.com.pl

06-2017



EXEMPLARY DELIVERIES HP REGENERATIVE PREHEATERS

End User Company Name	Year	Quantity [pcs]	Name	Temp. [°C]	Pressure [bar]	Material	Weight [kg]	Code Inspection
Doosan Skoda Power Lisbjerg Power Plant DENMARK	2015	1	HP Heater	395/237	33,5/200	CS/ 20Mn- MoNi4-5	10 750	PED + EN13445
Doosan Skoda Power Lisbjerg Power Plant DENMARK	2015	1	HP Heater	310/237	20/200	CS/ 20Mn- MoNi4-5	11 650	PED + EN13445
SIEMENS Brno Bielsko-Biała POLAND	2012	1	HIGH PRESSURE HEATER HP	230 / 320	240 / 20	13Cr Mo45 +CS +SS	6 200 6 100 11 800	PED + EN13445
ALSTOM POWER Power Plant ŁAGISZA POLAND	2007	1	HP 1	310/500	362/37	CS	21.900	PED+EN13445 UDT
ALSTOM POWER Power Plant ŁAGISZA POLAND	2007	1	HP 2	310/307	362/87	CS	45.700	PED+EN13445 UDT
ALSTOM POWER Power Plant ŁAGISZA POLAND	2007	1	HP 3	310/285	362/68	CS	57.400	PED+EN13445 UDT
ALSTOM POWER Power Plant ŁAGISZA POLAND	2007	1	HP 4	310/250	362/37	CS	47.500	PED+EN13445 UDT
ALSTOM POWER Power Plant TURÓW 6 POLAND	2003	1	WP 7	270/450	320/52	C-Steel	30.400	UDT UDT
ALSTOM POWER Power Plant TURÓW 6 POLAND	2003	1	WP 6	240/290	320/27	C-Steel	26.300	UDT UDT
ALSTOM POWER Power Plant PĄTNÓW POLAND	2002	1	WP 3	300/490	345/36	C-Steel	17.700	UDT UDT
ALSTOM POWER Power Plant PĄTNÓW POLAND	2002	1	WP 2	300/405	345/65	C-Steel	70.600	UDT UDT
ALSTOM POWER Power Plant PĄTNÓW POLAND	2002	1	WP 1	300/310	345/36	C-Steel	55.800	UDT UDT
ALSTOM POWER Power Plant TURÓW 4 POLAND	2002	1	WP 7	270/450	320/52	C-Steel	30.400	UDT UDT
ALSTOM POWER Power Plant TURÓW 4 POLAND	2002	1	WP 6	240/490	320/27	C-Steel	26.300	UDT UDT
ALSTOM POWER Power Plant TURÓW 5 POLAND	2001	1	WP 7	270/450	320/52	C-Steel	30.400	UDT UDT
ALSTOM POWER Power Plant TURÓW 5 POLAND	2001	1	WP 6	240/490	320/27	C-Steel	26.300	UDT UDT