

#### Doosan Škoda Power

#### LIST OF REFERENCES LOW PRESSURE HEATERS

Note: Figures mentioned below are meant for one turboset.

Legend:

F - fossil fuel fired N - nuclear

H - horizontal V - vertical

u - water chamber upwards d - water chamber downwards U - U-tubes type S - straight tubes

O - other (biomass, waste etc.)

C - drain cooler

F - floating head

(R) - redesigned unit

No. of Surface Design No. of units Power Material of each stages Type Year Country pressure and output Project name plant of tubes and lines of production of destination heater water / steam [MW]  $\lceil m^2 \rceil$ per unit [MPa(g)]V-d-U 700 3.5 / 0.35Stainless Steel V-d-U 900 3.5 / 0.35Stainless Steel 2003 Shen Tou 3,4 China 2 x 500 F 4 1 3.5 / 0.35V-d-U 790 Stainless Steel 830 3.5 / 0.40V-d-U Stainless Steel V-u-U 2004 Třebovice TG16 Czech Rep. 1 x 72 F 1 1 240 1.6 / 0.35Stainless Steel 3.0 / 1.9Stainless Steel 2005 Amager Denmark 1 x 80 F 1 1 240 H-U 2006 Tornio Finland 1 x 40 C 1 80 2.5 / 0.32V-u-S Stainless Steel F 240 2.8 / 0.25V-u-U 2006 Ledvice TG4 Czech Rep. 1 x 110 Stainless Steel 260 2.5 / 0.25V-u-U Stainless Steel 2.5 / 0.25370 V-u-U Stainless Steel 2006 Tušimice Czech Rep. 4 x 200 F 5 335 2.5 / 0.25V-u-U Stainless Steel 335 2.5 / 0.4V-u-U Stainless Steel 335 2.5 / 0.55V-u-U Stainless Steel 155 2.5 / 0.25H-U Stainless Steel 2 2007 Hoechst Ebara 1 x 86 0 Germany 1 155 2.5 / 0.25H-U Stainless Steel 120 2.5 / 0.25V-u-U Stainless Steel 2007 2 Fynsvaerket Denmark 1 x 38  $\mathbf{O}$ 1 120 2.5 / 0.7V-u-U Stainless Steel 33 2.5 / 0.25V-u-U Stainless Steel F 2 2008 Plzeňská teplárenská Czech Rep. 1 x 10 33 2.5 / 0.25V-u-U Stainless Steel 880 3.1 / 0.25H-U Stainless Steel 825 3.1 / 0.25H-U Stainless Steel Czech Rep. F 5 2008 Ledvice 1 x 660 1 030 3.1 / 0.25V-d-U Stainless Steel 1 055 3.1 / 0.35V-d-U Stainless Steel 1 135 3.1 / 0.7V-d-U Stainless Steel



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C - ura

F - floating head

Year of production	Project name	Country of destination	No. of units and output [MW]	Power plant *	No. of stages and lines per unit		Surface of each heater [m <sup>2</sup> ]	Design pressure water / steam [MPa (g)]	Type *	Material of tubes
2009	Prunéřov	Czech Rep.	3 x 250	F	5	1	300	2.5 / 0.25	V-d-U	Stainless Steel
							400	2.5 / 0.25	V-d-U	Stainless Steel
							390	2.5 / 0.25	V-d-U	Stainless Steel
							425	2.5 / 0.25	V-d-U	Stainless Steel
							505	2.5 / 0.4	V-d-U	Stainless Steel
2010	Slovnaft	Slovakia	1 x 60	F	3	1	215	2.5 / 0.25	V-d-U	Stainless Steel
							195	2.5 / 0.73	V-d-U	Stainless Steel
							125	2.5 / 0.75	V-d-U	Stainless Steel
2011	Cankiri Orta (suspended)	Turkey	3 x 133	F	3	1	185	2.8 / 0.05	H-U	Stainless Steel
							180	2.8 / 0.05	H-U	Stainless Steel
							185	2.8 / 0.2	H-U	Stainless Steel
2012	Lund	Sweden	1 x 40	О	1	1	132	1.8 / 0.4	V-d-U	Stainless Steel
2013	Bolu Goynuk	Turkey	2 x 135	F	3	1	227	1.9 / 0.5	H-U	Stainless Steel
							180	2.4 / 0.25	H-U	Stainless Steel
							180	2.4 / 0.25	H-U	Stainless Steel
2013	Vartan	Sweden	1 x 154	О	2	1	340	2.5 / 0.2	H-U	Stainless Steel
							340	2.5 / 0.6	H-U	Stainless Steel
2014	Växjö	Sweden	1 x 39	О	1	1	138	2.5 / 0.15	V-d-U	Stainless Steel
2014	Gardanne	France	1 x 160	О	1	1	315	2.65 / 0.25	V-d-U	Stainless Steel
2014	EC Nowa	Poland	1 x 55	F	4	1	180	2.0 / 0.1	V-d-U	Stainless Steel
							35	2.0 / 0.1	C-S	Stainless Steel
							119	2.0 / 0.35	V-d-U	Stainless Steel
							120	2.0 / 0.9	V-d-U	Stainless Steel



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2014	ZW Tychy	Poland	1 x 65	F	2	1	120 135	2.4 / 0.05 2.4 / 0.27	V-d-U V-d-U	Stainless Steel Stainless Steel
2015	Lisbierg	Denmark	1 x 39	0	1	1	123	2.5 / 0.4	H-U	Stainless Steel

ANOTHER 1106 LOW PRESSURE HEATERS WERE DESIGNED IN DOOSAN ŠKODA POWER BETWEEN YEAR 1951 AND 1999.