

**List of Kalugin's shaftless hot air stoves built and planned for construction
(according to the situation on 15.10.2018)**

Year	Plant	Number & volume of BF, m ³	Quantity of HS in block, pcs.	Quantity of shaftless HS in block, pcs.	Notes
Russia:					
1982	Nizhny Tagil Iron & Steel plant (Nizhny Tagil) KSS 23	No.4, 1513	3	1	in operation*
1992	Satka Iron & Steel plant (Satka)	No.3, 350	3	3	in operation
1998	Magnitogorsk Iron & Steel plant (Magnitogorsk)	No.1, 1370	4	4	in operation
2000	Nizhny Tagil Iron & Steel plant (Nizhny Tagil) KSS No.3	No.1, 1242	3	1	in operation*
2002	West-Siberian Iron & Steel plant (Novokuznetsk) KSS No.12	No.3, 3000	4	1	in operation
2004	Nizhny Tagil Iron & Steel plant (Nizhny Tagil)	No.6, 2200	3	3	in operation
2004	West-Siberian Iron & Steel plant (Novokuznetsk) KSS No.2	No.1, 3000	4	1	in operation
2005	"Severstal" Iron & Steel plant (Cherepovets)	No.4, 2700	4	4	in operation
2005	"Tulachermet" Company (Tula)	No.2, 1033	3	3	in operation
2005	Nizhny Tagil Iron & Steel plant (Nizhny Tagil) KSS No.2	No.1, 1242	3	1	in operation*
2005	West-Siberian Iron & Steel plant (Novokuznetsk) KSS No.3	No.1, 3000	4	1	in operation
2006	Nizhny Tagil Iron & Steel plant (Nizhny Tagil)	No.5, 2200	3	3	in operation
2010	"Severstal" Iron & Steel plant (Cherepovets)	No.3, 3200	4	4	under construction
2011	Novolipetsk Iron & Steel plant (Lipetsk)	No.7, 3800	3	3	in operation
2013	West-Siberian Iron & Steel plant (Novokuznetsk) KSS No.4	No.1, 3000	4	1	in operation
2017	"Severstal" Iron & Steel plant (Cherepovets)	No.5, 5500	4	4	in operation
2017	Magnitogorsk Iron & Steel plant (Magnitogorsk) KSS 23-бис	No.7, 1370	4	1	in operation
2016	"Severstal" Iron & Steel plant (Cherepovets) KSS No.3	No.1, 1380	4	1	in process of designing
2017	Novolipetsk Iron & Steel plant (Lipetsk)	No.6, 3800	3	3	under construction
2018	Nizhny Tagil Iron & Steel plant (Nizhny Tagil)	No.7, 2200	3	3	in operation
2018	Magnitogorsk Iron & Steel plant (Magnitogorsk) KSS 35	No 10, 2014	4	1	under construction
2018	Magnitogorsk Iron & Steel plant (Magnitogorsk) KSS 23-бис	No.7, 1370	4	1	in process of designing
<i>*Kalugin shaftless hot-air stoves, decommission from operation in 2011</i>					
Ukraine:					
2004	Zaporozhye Iron & Steel plant (Zaporozhye)	No.2, 1513	3	3	in operation
2004	Enakievo Iron & Steel plant (Enakievo)	No.5, 1513	3	3	in operation
2009	Enakievo Iron & Steel plant (Enakievo)	No.3, 1719	3	3	in operation
2009	Dneprovsky Iron & Steel Plant (Dzerzinsk)	No.4M, 1640	3	3	in process of designing
India:					
2006	Sunflag Iron & Steel Co.Ltd (Bhandara)	350	3	3	in operation
2006	Kirloskar Ferrous Industries Limited (Hospet)	No.1, 254	3	3	in operation
2009	Kirloskar Ferrous Industries Limited (Hospet)	No.2, 254	3	3	in operation
2010	Essar Steel Ltd. (Surat)	2200	3	3	in operation
2010	India BIL Steel Co.	1780	3	3	in operation
2010	LANCO Industries Ltd. (Srikalahasti)	No.1, 250	3	3	in operation
2011	MUKAND Limited (Hospet)	No.2, 254	3	3	in process of designing
2012	JAYASWALS NECO INDUSTRIES LTD	No.1, 680	3	3	in operation
2013	MUKAND Limited (Hospet)	No.1, 254	3	3	in operation
2014	JSW STEEL LTD	No.1, 2300	3	3	in operation
P.R. China					
2002	Shandong Laiwu Steel International Corp. (Laiwu)	No.2, 750	3	3	in operation
2003	Jinan Iron & Steel Co.Ltd. (Jinan)	No.1, 1750	3	3	in operation
2003	Qingdao Iron & Steel Imp. and Exp.Corp. (Qingdao)	No.5, 500	3	3	in operation
2003	Qingdao Iron & Steel Imp. and Exp.Corp. (Qingdao)	No.6, 500	3	3	in operation
2004	Jinangsu Huaigang Group Co.Ltd (Huaian)	No.1, 450	3	3	in operation
2004	Jinangsu Huaigang Group Co.Ltd (Huaian)	No.2, 450	3	3	in operation
2004	Shandong Laiwu Steel International Corp. (Laiwu)	No.3, 2200	3	3	in operation
2004	Qinhuangdao Shouqin Metal materials Co.(Qinhuangdao)	No.1, 1160	3	3	in operation
2004	Jinan Iron & Steel Co.Ltd. (Jinan)	No.2, 1750	3	3	in operation
2005	Qinhuangdao Shouqin Metal materials Co.(Qinhuangdao)	No.2, 1780	3	3	in operation
2005	Chongqin Steel Co. (Chongqin)	No.4, 1350	3	3	in operation

2005	XinYu Iron &Steel Co.Ltd. (XinYu)	No.6, 1300	3	3	in operation
2005	Jinan Iron & Steel Co.Ltd. (Jinan)	No.3, 1750	3	3	in operation
2005	Angang (Anyang)	No.2, 2800	3	3	in operation
2005	Hunan Valin Xiang Tan Iron & Steel Co.Ltd. (Xiangtan)	No.5, 2200	3	3	in operation
2006	TianJin Iron & Steel Co. Ltd. Company (Tianjin)	No.2, 3200	4	4	in operation
2006	Tangshan Iron & Steel Co.Ltd (Tangshan)	1080	3	3	in operation
2006	Tangshan Guofeng Iron & Steel Co.Ltd (Tangshan)	No.1, 1780	3	3	in operation
2007	Tangshan Iron & Steel Co.Ltd. (Tangshan)	3200	3	3	in operation
2007	KISCO Honghe Iron & Steel Co., Ltd (Honghe)	1350	3	3	in operation
2008	Zhong Tian Iron & Steel Co.Ltd. (Changzhou)	No.4, 550	3	3	in operation
2008	Handan Iron & Steel Co., Ltd. (Handan)	3200	3	3	in operation
2009	Iron Making Plant of Angang Steel Co. Ltd (Anshan)	2580	3	3	in operation
2009	Tangshan Guofeng Iron & Steel Co.Ltd (Tangshan)	No.2, 1780	3	3	in operation
2009	Shougang Jingtang United Iron & Steel Co.Ltd.	No.1, 5500	4	4	in operation
2010	Shougang Jingtang United Iron & Steel Co.Ltd.	No.2, 5500	4	4	in operation
2010	Tangshan Shougang Baoye Iron & Steel Co.Ltd. (Shougang)	3200	4	4	in process of designing
2010	Jinan Iron & Steel Co.Ltd. (Jinan)	No.4, 3200	3	3	in operation
2011	Yuxi Xinxing Steel Co. Ltd. of Kungang Stock Company of Wugang Group	1080	3	3	in operation
2013	Anyang Iron & Steel INC (Anyang)	No.3, 4747	4	4	in operation
2013	Taiyuan Iron & Steel Co. (TISCO), (Taiyuan)	No.4, 4350	4	4	in operation
2013	Xutie Casting Group (Linyi)	450	3	3	in operation
2013	Yunnan Muguan Industry &Trand Co.,Ltd	630	3	3	under construction
2014	Inner Mongolia Baotou Steel Union Co., Ltd	No.1, 4150	4	4	in operation
2014	Inner Mongolia Baotou Steel Union Co., Ltd	No.2, 4150	4	4	in operation
2014	Henan Jiyuan Iron & Steel (Group) Co., Ltd - KSS No.4	№6, 508	4	1	in operation
2014	Henan Jiyuan Iron & Steel (Group) Co., Ltd- KSS No.3	№6, 508	4	1	in operation
2014	Maanshan Iron & Steel (GROUP) Co., Ltd- KSS No.4	№ 3, 907	4	1	in operation
2014	Maanshan Iron & Steel (GROUP) Co., Ltd- KSS No.2	№ 3, 907	4	1	in operation
2014	Maanshan Iron & Steel (GROUP) Co., Ltd- KSS No.3	№ 3, 907	4	1	in operation
2014	Liaozha Steel Group	№1, 630	3	3	in operation
2015	Baosteel Group Zhanjiang Iron & Steel Co. Ltd., Co	№ 1, 5050	4	4	in operation
2016	Baosteel Group Zhanjiang Iron & Steel Co. Ltd., Co	№2, 5050	4	4	in operation
2017	Magang (Hefei) Steel & Iron Co.,	№4, 3200	3	3	in operation
2016	HeBei YongYang Special-Steel Group Co.,LTD.	№ 1, 1280	3	3	under construction
2018	Shougang Jingtang United Iron & Steel Co.Ltd.	No.3, 5500	4	4	constrction
Japan					
2010	JFE Steel Corporation (Fukuyama) KSS No.4	No.4, 5000	4	1	in operation
2011	JFE Steel Corporation (Fukuyama) KSS No.3	No.3, 4300	4	1	in operation
1018	JFE Steel Corporation (Fukuyama) KSS No.3	No.3, 4300	4	1	in operation
2012	MFCL (Kurashiki)	No.2, 450	3	3	in operation
2018	JFE Steel Corporation (Fukuyama) KSS No.1	No.3, 4300	4	1	in process of designing
Kazakhstan					
2010	ArcelorMittal Temirtau, KSS No.5	No.2, 2000	4	1	in operation
2011	ArcelorMittal Temirtau, KSS No.6	No.2, 2000	4	1	in operation
2014	ArcelorMittal Temirtau, KSS No.14	No.4, 3200	4	1	in operation
Syria					
2012	EMMAR Steel	No.1, 250	3	3	in operation
2013	EMMAR Steel	No.2, 250	3	3	under construction
Indonesia					
2014	KRAKATAU, POSCO Steel Works (Cilegon)	No.1, 3800	3	3	in operation
Turkey					
2014	Kardemir A.S. (Karabuk), KSS No. 1, 2 ,3	No. 5, 1650	3	3	in operation
Brazil					
2016	CSPECEM Steel Plant, (Fortaleza, Ceara)	№ 1, 3800	3	3	in operation
Czech Republic					
2016	Trzhinetski zhelezarny, (Trinec), KSS 64	№6, 1372	4	1	in operation
Total: 218 Kalugin shaftless hot-air stoves (KSS) have been in operation; 36 KSS have been in process of designing and construction. Totally there are 254 KSS.					