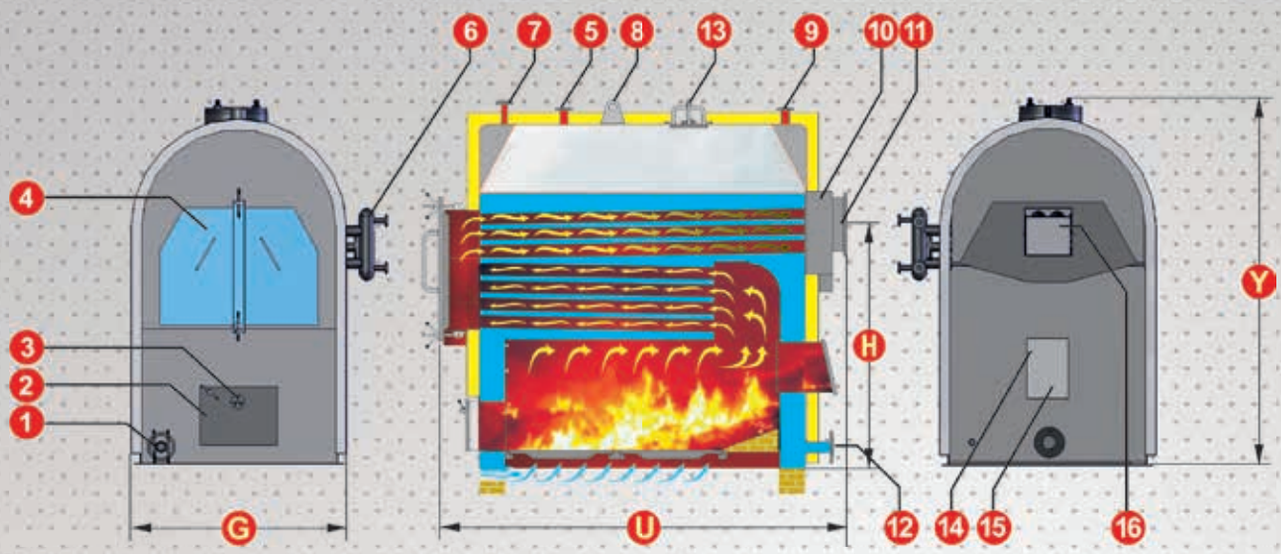
TS EN 12953-1-3
TS 377-1-2-3-4-5
ISO 9001–2008
BFPN:153-1000

THE FEATURES OF AYSK-B SOLID FUEL HALF-CYLINDRICAL THREE PASS STEAM BOILERS

- It complies with TS EN 12953-1-3, TS 377-1-2-3-4-5-6-7-8-10-11-12-14, TS EN 12953-1-2-3-4-5-6-7-8-10-11-12- 14 standards.
- It has operational flexibility compatible with different combustion systems.
- It is produced with superior manufacturing and design technology.
- It burns all solid fuels with high efficiency.
- Thanks to large water and steam, it easily meets the necessary steam need in intensive and persistent working conditions and sudden steam traction.
- It is manufactured with computer aided design and manufacturing technology in accordance with CE quality standards, TRD pressure vessels directive, EN, TSE standards.
- With the advantage of high heating surface, it provides acquiring drier steam with higher energy.
- With low counter pressure values, it provides better burning and less energy consumption.
- It operates safer with the pipes welded to the mirrors and it is more durable than the equivalents.
- With Optimum isolation, it ensures maximum efficacy and maximum performance.
- Optimum combustion chamber dimensions ensure high heat transfer, radiation, more efficient usage of heat transfer surfaces and the occurrence of full burning in combustion chamber.
- It has minimum chimney gas emission rates and it is environmentally-friendly.
- It provides high efficient full burning without economizers; it provides an environmentally friendly burning graph and reduces fuel consumption.
- In order to meet customer expectations, it increases production capacity range appropriate for need and the manufacturing is conducted.
- It provides the opportunity to obtain steam at higher capacities with stoker and other automatic loading systems and it has the flexibility of burning different fuels.
- Upper pressure limit for designing and manufacturing in semi-cylindrical steam boilers has been detected to be 5 Bar.
- BFPN : 153.1100 are solid fuel boilers made from steam producer steel material under 3 atm construction pressure.



1. Hand hole
2. Coal throwing cover
3. Flare peep cover
4. Front steam boxes
5. Steam exit
6. Level collector
7. Prosestad, manometer and thermometer nozzles
8. Transport ring
9. Safety output
10. Rear smoke boxes
11. Smoke channel
12. Foot bluff hole
13. Man hole
14. Cleaning cover
15. Bursting hinge
16. Chimney Clapper

TECHNICAL DIMENSIONS OF AYSK-B SOLID FUEL HALF-CYLINDRICAL THREE PASS STEAM BOILERS

BOILER TYPE	UNIT	AYSK-B 5	AYSK-B 10	AYSK-B 15	AYSK-B 20	AYSK-B 25	AYSK-B 35	AYSK-B 40	AYSK-B 45	AYSK-B 60
Total heating surface	m	5	10	15	20	25	35	40	45	60
Heating capacity (with stocker)	Kcal/h	50.000	100.000	150.000	200.000	250.000	350.000	400.000	450.000	600.000
Heating capacity (loaded by hand)	Kcal/h	30.000	60.000	90.000	120.000	150.000	210.000	240.000	270.000	360.000
Width G	mm	1.040	1.110	1.100	1.200	1.240	1.440	1.540	1.640	1.740
Length U	mm	1.330	2.025	2.180	2.515	2.680	2.880	2.950	2.980	3.250
Height Y	mm	1.535	1.780	1.880	2.025	2.500	2.400	2.480	2.700	2.790
Funnel axis height H	mm	1.025	1.270	1.370	1.515	1.990	1.890	1.970	2.250	2.340
Base width x length	mm	1140x1430	1210x2125	1200x2280	1300x2615	1340x2780	1540x2980	1640x3050	1740x3080	1840x3350
Max. Steam Dome Volume	Lt	290	575	865	1.150	1.440	2.050	2.300	2.400	3.200
Water volume	Lt	260	570	960	1.462	1.637	2.030	2.750	3.601	3.711
Funnel diameter	Ø mm	150x150	200x200	250x250	300x300	350x350	400x400	400x400	450x450	500x500
Steam exit diameter	Ø mm	25	32	32	32	50	50	50	50	50
Security valve output	Ø mm	20/32	20/32	20/32	20/32	20/32	20/32	20/32	20/32	25/40
Foot bluff hole	Ø mm	40	40	40	40	40	40	40	40	40
Weight (6 Atü)	Kg	730	1.130	1.520	1.840	2.820	3.110	3.830	4.210	4.730
Weight (8 Atü)	Kg	767	1.187	1.596	1.932	2.961	3.266	4.022	4.421	4.967
Weight	Kg	805	1.246	1.676	2.029	3.109	3.429	4.223	4.642	5.215
Counter pressure	mBar	2,2	3,5	4	4,5	6	6	6,7	8	8

BOILER TYPE	UNIT	AYSK-B 65	AYSK-B 70	AYSK-B 80	AYSK-B 85	AYSK-B 90	AYSK-B 100	AYSK-B 120	AYSK-B 140	AYSK-B 150
Total heating surface	m	65	70	80	85	90	100	120	140	150
Heating capacity (with stocker)	Kcal/h	650.000	700.000	800.000	850.000	900.000	1.000.000	1.200.000	1.400.000	1.500.000
Heating capacity (loaded by hand)	Kcal/h	390.000	420.000	480.000	510.000	540.000	600.000	720.000	840.000	900.000
Width G	mm	1.740	1.740	1.740	1.740	1.740	1.940	1.940	1.940	1.940
Length U	mm	3.250	3.310	3.350	3.350	3.770	3.950	4.500	5.880	6.030
Height Y	mm	2.870	2.890	2.940	2.940	3.060	3.150	3.220	3.310	3.310
Funnel axis height H	mm	2.420	2.440	2.490	2.490	2.610	2.700	2.770	2.860	2.860
Base width x length	mm	1840x3350	1840x3410	1840x3450	1840x3450	1840x3870	2040x4050	2040x4600	2040x5980	2040x6130
Max. Steam Dome Volume	Lt	3.300	3.400	3.450	3.500	3.600	3.800	4.500	4.850	5.200
Water volume	Lt	260	570	960	1.462	1.637	2.030	2.750	3.601	3.711
Funnel diameter	Ø mm	500x500	550x550	600x600	600x600	600x600	650x650	700x700	750x750	800x800
Steam exit diameter	Ø mm	65	80	80	80	80	80	100	100	100
Security valve output	Ø mm	25/40	25/40	25/40	25/40	25/40	25/40	32/50	32/50	32/50
Foot bluff hole	Ø mm	40	40	40	40	40	40	40	40	40
Weight (6 Atü)	Kg	4.820	5100	5.330	5.850	6.210	6.720	7.960	8.960	9.220
Weight (8 Atü)	Kg	5.061	5355	5.597	6.143	6.521	7.056	8.358	9.408	9.681
Weight	Kg	5.314	5623	5.876	6.450	6.847	7.409	8.776	9.878	10.165
Counter pressure	mBar	8	8	8	8	8	8	8	8	8

- The capacities specified on the table were calculated due to the input values of 3 bar operating water volume and 800°C sap.
- Security exits specified on the table was detected due to full lifting security valves emptying capacity and opening adjustment pressure was detected according to 3,5 bar.
- Base width must be accepted minimum as 100 mm.
- The right of making change in technical issues is reserved by our firm.
- Special designs and manufacturing can be done.