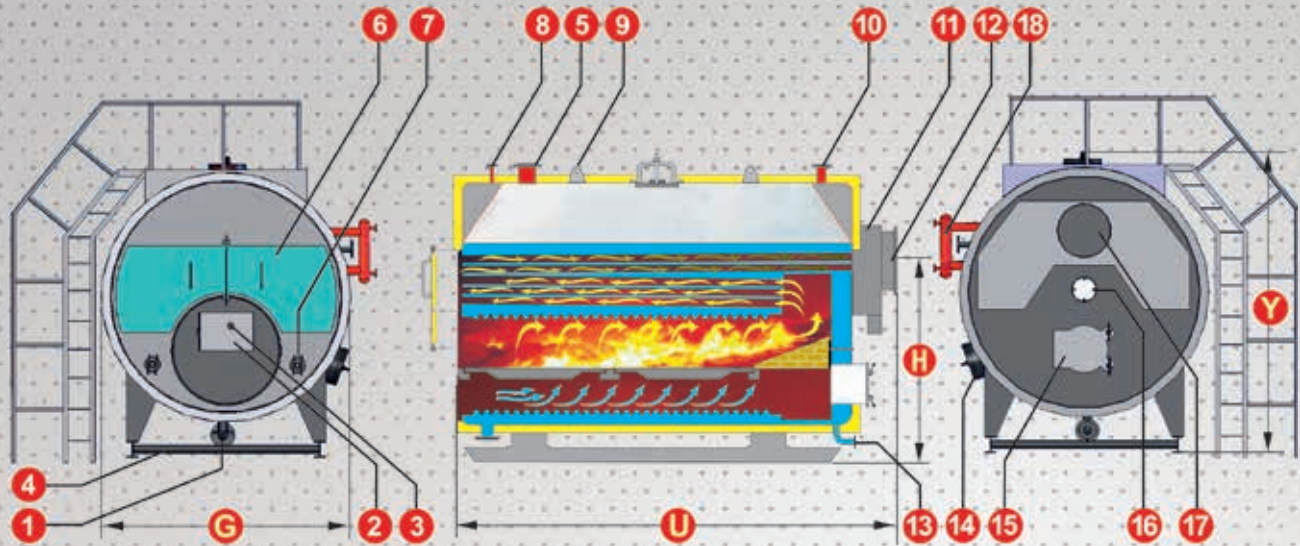


TS EN 12953-1-3  
TS 377-1-2-3-4-5  
ISO 9001-2008  
BFPN:153-1000



### THE FEATURES OF ASSK-B SOLID FUEL CYLINDRICAL SCOTCH TYPE THREE-PASS SINGLE-FURNACE 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 burns solid fuel with high efficacy.
- Stoker crucible or grills within combustion chamber are removed easily and they are made suitable for burning liquid and gas fuel in a short time.
- It is manufactured with computer aided design and manufacturing technology in accordance with CE quality standards, TRD pressure vessels directive, EN, TSE standards.
- Thanks to large water and steam, it easily meets the necessary steam need in intensive and persistent working conditions and sudden steam traction.
- With the advantage of high heating surface, it provides acquiring drier steam with higher energy.
- It is three transitional and it allows maximum utilization from the fuel with tube bundle design between the transitions.
- 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 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.
- BFPN : 153.1100 are solid fuel boilers made from steam producer steel material under 3 atm construction pressure.
- BFPN : 153.1400 are solid fuel boilers made from steam producer steel material under 6 atm construction pressure.



|                          |   |                      |                     |
|--------------------------|---|----------------------|---------------------|
| 1. Drainage              | 6. Front steam boxes                          | 10. Safety output    | 15. Cleaning cover  |
| 2. Coal throwing cover   | 7. Hand hole                                  | 11. Rear smoke boxes | 16. Bursting hinge  |
| 3. Flare peep cover      | 8. Prostad, manometer and thermometer nozzles | 12. Smoke channel    | 17. Chimney clapper |
| 4. Ground anchor profile | 9. Transport ring                             | 13. Foot bluff hole  | 18. Level collector |
| 5. Steam exit            |   | 14. Man hole         |                     |

## TECHNICAL DIMENSIONS OF ASK-B SOLID FUEL CYLINDRICAL SCOTCH TYPE THREE-PASS SINGLE-FURNACE STEAM BOILERS

| BOILER TYPE                       | UNIT           | ASK-B 30  | ASK-B 40  | ASK-B 50  | ASK-B 55  | ASK-B 60   | ASK-B 65  | ASK-B 70  | ASK-B 75    | ASK-B 80   |
|-----------------------------------|----------------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-------------|------------|
| Total Heating Surface             | m <sup>2</sup> | 30        | 40        | 50        | 55        | 60         | 65        | 70        | 75          | 80         |
| Heating Capacity (with stocker)   | Kcal/h         | 300.000   | 400.000   | 500.000   | 550.000   | 600.000    | 650.000   | 700.000   | 750.000     | 800.000    |
| Heating Capacity (manual loading) | Kcal/h         | 180.000   | 240.000   | 300.000   | 330.000   | 360.000    | 390.000   | 420.000   | 450.000     | 480.000    |
| Width <b>G</b>                    | mm             | 2.250     | 2.250     | 2.300     | 2.300     | 2.450      | 2.500     | 2.500     | 2.500       | 2.500      |
| Length <b>U</b>                   | mm             | 3.500     | 3.750     | 3.650     | 3.850     | 3.900      | 3.850     | 4.100     | 4.100       | 4.100      |
| Height <b>Y</b>                   | mm             | 2.500     | 2.500     | 2.550     | 2.550     | 2.700      | 2.700     | 2.750     | 2.750       | 2.750      |
| Funnel axis height <b>H</b>       | mm             | 1.940     | 1.990     | 2.100     | 2.100     | 2.250      | 2.300     | 2.300     | 2.300       | 2.300      |
| Base width x length               | mm             | 2350x3600 | 2350x3850 | 2400x3750 | 2400x3950 | 2.550x4000 | 2600x3950 | 2600x4200 | 2.600x4.200 | 2.600x4200 |
| Max. Steam Dome Volume            | Lt             | 2.100     | 2.300     | 2.400     | 2.600     | 3.200      | 3.300     | 3.400     | 3.450       | 3.450      |
| Water volume                      | Lt             | 4.400     | 4.800     | 5.000     | 5.300     | 6.300      | 6.400     | 6.500     | 6.200       | 6.000      |
| Funnel diameter                   | Ø mm           | 450       | 500       | 500       | 500       | 500        | 500       | 500       | 500         | 550        |
| Steam outlet diameter             | Ø mm           | 50        | 50        | 65        | 65        | 65         | 65        | 80        | 80          | 80         |
| Security Valve Outlet             | Ø mm           | 20/32     | 20/32     | 25/40     | 25/40     | 25/40      | 25/40     | 25/40     | 25/40       | 25/40      |
| Foot blowdown outlet              | Ø mm           | 40        | 40        | 40        | 40        | 40         | 40        | 40        | 40          | 40         |
| Weight (6 Atü)                    | Kg             | 3.800     | 5.000     | 6.300     | 6.400     | 6.480      | 6.525     | 6.650     | 6.775       | 6.900      |
| Weight (8 Atü)                    | Kg             | 5.215     | 6.665     | 8.400     | 8.530     | 8.640      | 8.700     | 8.865     | 9.032,5     | 9.200      |
| Weight (10 Atü)                   | Kg             | 6.630     | 8.330     | 10.500    | 10.660    | 10.800     | 10.875    | 11.080    | 11.290      | 11.500     |
| Counter Pressure                  | mBar           | 5,0       | 6,7       | 7,0       | 8,0       | 8,0        | 8,0       | 8,0       | 8,0         | 8,0        |

| BOILER TYPE                       | UNIT           | ASK-B 85  | ASK-B 90  | ASK-B 95  | ASK-B 100 | ASK-B 125 | ASK-B 150 | ASK-B 175 | ASK-B 200 | ASK-B 250 |
|-----------------------------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Total Heating Surface             | m <sup>2</sup> | 85        | 90        | 95        | 100       | 125       | 150       | 175       | 200       | 250       |
| Heating Capacity (with stocker)   | Kcal/h         | 850.000   | 900.000   | 950.000   | 1.000.000 | 1.250.000 | 1.500.000 | 1.750.000 | 2.000.000 | 2.500.000 |
| Heating Capacity (manual loading) | Kcal/h         | 510.000   | 540.000   | 570.000   | 600.000   | 750.000   | 900.000   | 1.050.000 | 1.200.000 | 1.500.000 |
| Width <b>G</b>                    | mm             | 2.500     | 2.550     | 2.550     | 2.550     | 2.250     | 2.750     | 2.800     | 2.900     | 2.900     |
| Length <b>U</b>                   | mm             | 4.200     | 4.650     | 4.650     | 4.650     | 5.250     | 5.250     | 5.750     | 6.250     | 6.750     |
| Height <b>Y</b>                   | mm             | 2.750     | 2.800     | 2.800     | 2.800     | 2.800     | 3.050     | 3.100     | 3.200     | 3.200     |
| Funnel axis height <b>H</b>       | mm             | 2.300     | 2.350     | 2.350     | 2.350     | 2.350     | 2.600     | 2.650     | 2.750     | 2.750     |
| Base width x length               | mm             | 2600x4300 | 2650x4750 | 2650x4750 | 2650x4750 | 2350x5350 | 2850x5350 | 2900x5850 | 3000x6350 | 3000x6850 |
| Max. Steam Dome Volume            | Lt             | 3.500     | 3.600     | 3.700     | 3.800     | 3.900     | 5.200     | 5.500     | 5.900     | 6.300     |
| Water volume                      | Lt             | 6.400     | 6.800     | 7.750     | 8.500     | 10.000    | 11.800    | 14.600    | 16.000    | 17.400    |
| Funnel diameter                   | Ø mm           | 550       | 550       | 550       | 550       | 550       | 650       | 750       | 800       | 850       |
| Steam outlet diameter             | Ø mm           | 80        | 80        | 80        | 80        | 100       | 100       | 100       | 125       | 125       |
| Security Valve Outlet             | Ø mm           | 25/40     | 25/40     | 25/40     | 25/40     | 32/50     | 32/50     | 40/65     | 40/65     | 50/80     |
| Foot blowdown outlet              | Ø mm           | 40        | 40        | 40        | 40        | 40        | 40        | 40        | 40        | 40        |
| Weight (6 Atü)                    | Kg             | 7.150     | 7.550     | 7.950     | 8.400     | 9.100     | 10.760    | 12.420    | 14.080    | 15.741    |
| Weight (8 Atü)                    | Kg             | 9.525     | 10.065    | 10.600    | 11.200    | 12.130    | 14.345    | 16.560    | 18.770    | 20.988    |
| Weight (10 Atü)                   | Kg             | 11.900    | 12.580    | 13.250    | 14.000    | 15.160    | 17.930    | 20.700    | 23.460    | 26.235    |
| Counter Pressure                  | mBar           | 8,0       | 8,0       | 8,0       | 8,0       | 8,0       | 8,0       | 8,0       | 8,0       | 9,0       |

- The capacities specified on the table were calculated due to the input values of 6 bar operating water volume and 100°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 6,5 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.