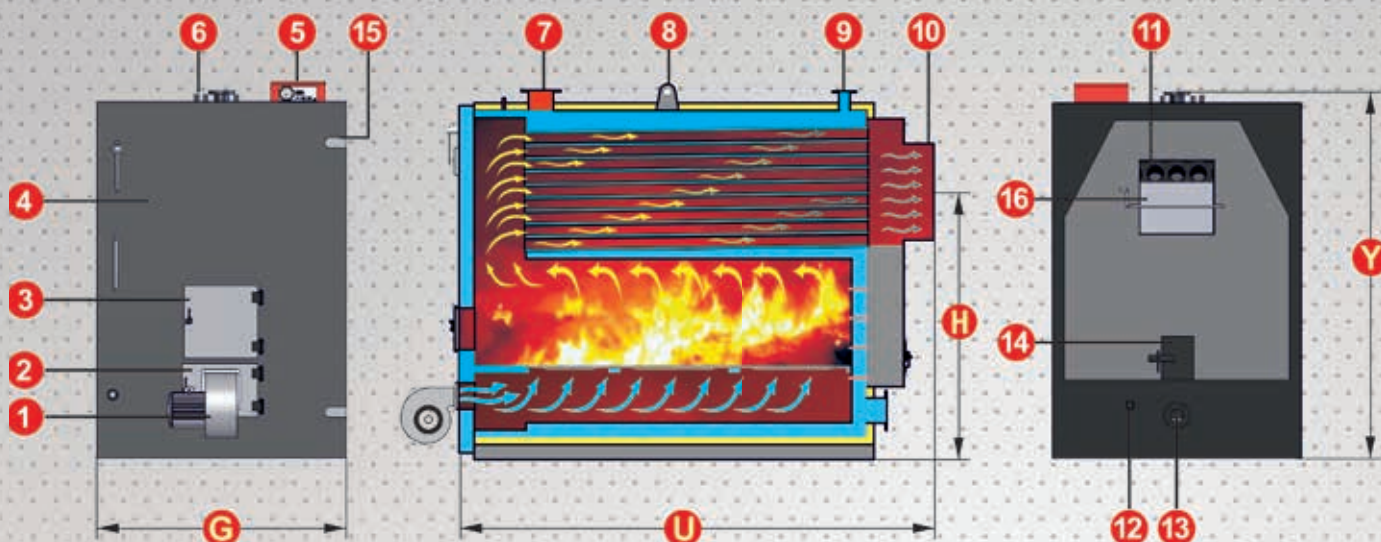


TS EN 12953-1-3
 TS EN 303-5
 ISO 9001-2008
 BFPN : 152-1000
 BFPN : 152-1700



FEATURES OF AKK SOLID FUEL FAN HEATING BOILERS

- They have design and manufacture appropriate to burn low calorie lignite coal with its developed special burning chamber and grid design.
- They work very quietly and efficiently owing to its high design and manufacturing technology.
- They transmit burning air that they take from the pressure air fan to the burning room and accomplish high efficiency burning.
- With the water pocket technology, they save 3% from energy losses with the burning room and grid life time and boiler efficiency is improved 3%.
- Heat efficiency is 86% and higher in full automatic AKK type hot water boilers that are designed according to pressure burning principle.
- Spiral deflector turbulators direct the gases that are generated as a result of burning and hot smoke gases within the boiler pipes and thus the energy amount transferred to water increases maximally. Chimney gas temperatures drop and energy amount discarded from the chimney and chimney losses are decreased.
- 5% increase is achieved in boiler efficiency thanks to fluid cap and cap problems generated because of fire concrete are prevented.
- Turbulators generate turbulent flow within the pipes and enables emission gases to gain speed and prevent condensing within the pipes. Therefore, pipe deformations occurring due to acid corrosion are prevented within the boiler and pipes.
- Sufficient amount of fuel burning is achieved in the burning chamber by the automatic digital and analogous control system. Inefficient burning of the fuel is prevented.
- AKK Type heating boilers have 2 transitive structure, and radiation type energy transfer surface is formed causing efficiency increase during natural gas transformation.
- In case excessive fuel is loaded, the automatic burning system controls the heat and burning air and prevents excessive burning and achieves economic consumption of fuel.
- Owing to the fan and pump that are directed by the automatic control system, complete burning and homogenous heat control is achieved within the system.
- Their outer body and front caps are designed to be dismantled easily for service and assembly convenience.
- Owing to the design and manufacturing technology that is designed by R&D studies, equal amount of homogenous heat transfer is achieved in all surfaces within the boiler.
- Thermic tensions, which occur during welding with the boiler plates that are cut in special angles, are distributed to the entire boiler surface homogenously and boiler life is extended.
- Mirror pipe holes are cut in an angle by the angled plasma cut technology. This situation will prevent the deformation of the boiler mirror when it is necessary to change the boiler pipes in the following years.
- They have very good heat insulation. The entire boiler is coated with isolation material.
- In the manual loaded models, the control system works at 220V/50H and 380V/50H mains voltage. In the models with a stoker, 380V/50H mains voltage is used.
- High efficiency burning is achieved in conformity with the automatic burning units and mechanical dust coal burner AST (stoker) systems.
- The automatic control unit can be controlled remotely without a cable.
- Fluid cap technology is applied in AKK heating boilers up to 700.000 Kcal/h. Starting from 800.000 Kcal/h, a cap technology with reflector application and reflector isolation.



1. Radial pressure air fan	5. Control panel	8. Carriage ring	12. Safety entry
2. Cinder taking cap	6. Connection nozzles of thermometer, manometer and hydrometer	9. Safety exit	13. Hot water return
3. Coal loading cap	7. Hot water exit	10. Back smoke box	14. Cleaning cap
4. Fluid front cap		11. Smoke canal	15. Fluid hinge
			16. Chimney valve

TECHNICAL MEASUREMENTS OF AKK SOLID FUEL FAN HEATING BOILERS

BOILER TYPE	UNIT	AKK 80	AKK 90	AKK 100	AKK 120	AKK 150	AKK 200	AKK 250	AKK 300	AKK 350	AKK 400
Capacity	Kcal/h	80.000	90.000	100.000	120.000	150.000	200.000	250.000	300.000	350.000	400.000
Capacity	kW	93	105	116	140	174	233	291	349	407	465
Width	mm	1.100	1.100	1.100	1.100	1.150	1.150	1.480	1.480	1.480	1.750
Length	mm	1.850	1.820	1.890	2.190	2.240	2.240	2.400	2.480	2.600	2.500
Height	mm	1.370	1.370	1.580	1.580	1.740	1.740	1.690	1.690	1.690	1.940
Chimney axial height	mm	1.060	1.060	1.090	1.115	1.345	1.320	1.265	1.265	1.265	1.450
Base width	mm	1.200	1.200	1.200	1.200	1.250	1.250	1.580	1.580	1.580	1.850
Base length	mm	1.950	1.920	1.990	2.290	2.340	2.340	2.500	2.580	2.700	2.600
Boiler departure/ return	PN6	2"	2"	2"	Ø 65	Ø 65	Ø 65	Ø 80	Ø 80	Ø 80	Ø 100
Electrical connection	Volt/Hz	220/50	220/50	220/50	220/50	220/50	220/50	220/50	220/50	220/50	220/50
Safety departure	PN6	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"
Safety return	PN6	1"	1"	1"	1"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/2"
Chimney exit	mm	250x250	250x250	250x250	250x250	250x250	300x300	350x350	350x350	350x350	400x400
Weight	Kg	1.060	1.060	1.202	1.394	1.600	1.715	1.791	1.895	2.715	2.867
Water volume	Lt	722	780	828	956	1.251	1.178	1.465	1.615	2.002	2.156
Counter pressure	mbar	1,6	1,7	1,8	2,5	2,5	3,2	4,4	5,4	6,2	6,2

BOILER TYPE	UNIT	AKK 450	AKK 500	AKK 550	AKK 600	AKK 700	AKK 750	AKK 800	AKK 900	AKK 1000	AKK 1200
Capacity	Kcal/h	450.000	500.000	550.000	600.000	700.000	750.000	800.000	900.000	1.000.000	1.200.000
Capacity	kW	523	581	640	698	814	872	930	1.047	1.163	1.395
Width	mm	1.750	1.750	1.900	1.900	1.900	2.070	2.070	2.070	2.200	2.300
Length	mm	2.750	3.000	2.600	2.750	3.000	2.750	2.900	3.050	3.200	3.200
Height	mm	1.940	1.940	2.070	2.070	2.070	2.190	2.190	2.190	2.390	2.490
Chimney axial height	mm	1.425	1.425	1.575	1.575	1.575	1.590	1.590	1.590	1.800	1.800
Base width	mm	1.850	1.850	2.000	2.000	2.000	2.170	2.170	2.170	2.300	2.400
Base length	mm	2.850	3.100	2.700	2.850	3.100	2.850	3.000	3.150	3.300	3.300
Boiler departure/ return	PN6	Ø 100	Ø 100	Ø 100	Ø 100	Ø 125	Ø 125	Ø 125	Ø 125	Ø 125	Ø 150
Electrical connection	Volt/Hz	220/50	220/50	220/50	220/50	380/50	380/50	380/50	380/50	380/50	380/50
Safety departure	PN6	2"	2"	2"	2"	Ø 65	Ø 65	Ø 65	Ø 65	Ø 65	Ø 80
Safety return	PN6	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"	Ø 65
Chimney exit	mm	400x400	500x500	500x500	500x500	600x600	600x600	600x600	600x600	600x600	650x650
Weight	Kg	3.056	3.275	3.447	3.700	4.393	4.700	4.922	5.515	6.052	6.500
Water volume	Lt	2.450	2.505	2.699	3.064	3.271	3.500	3.749	4.380	4.922	5.500
Counter pressure	mbar	6,7	6,7	7,0	7,0	9,0	9,0	9,0	9,6	10,1	10,6

- In heating boilers with stoker, U2 length belonging to the relevant capacity shown in the stoker table is added to the length given in the table.
- Base height must be accepted as minimum 100mm.
- The right to make modification in the technical matters is reserved by our company.
- Special designs and manufacturing can be made.