AB-2PDB SERIES

ALLIED BOILER & SUPPLY INC.

TWO PASS DRY BACK
PACKAGE SCOTCH BOILERS

ALLIED WORK FORCE BOILERS

- **Two pass design eliminates refractory baffles between flue gas passes.**
- **Minimum maintenance with rugged construction for extra-long life.**

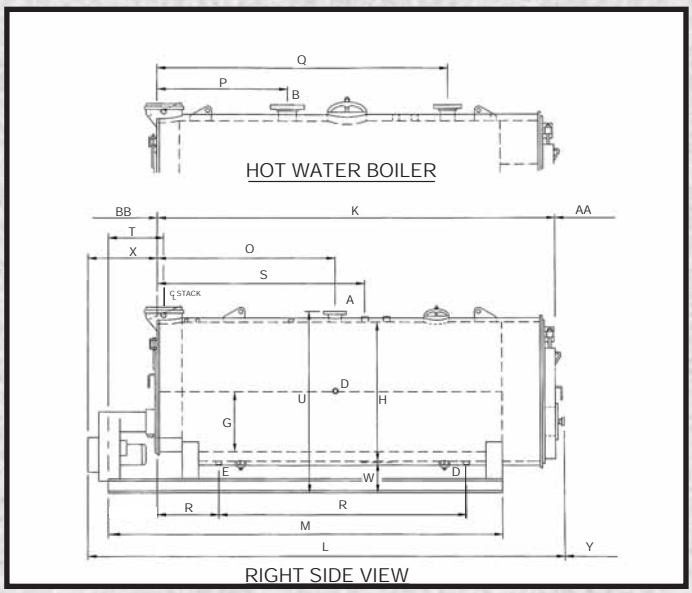
Available in Steam or Hot Water Versions. 15-800 HP with pressure to 300 psig

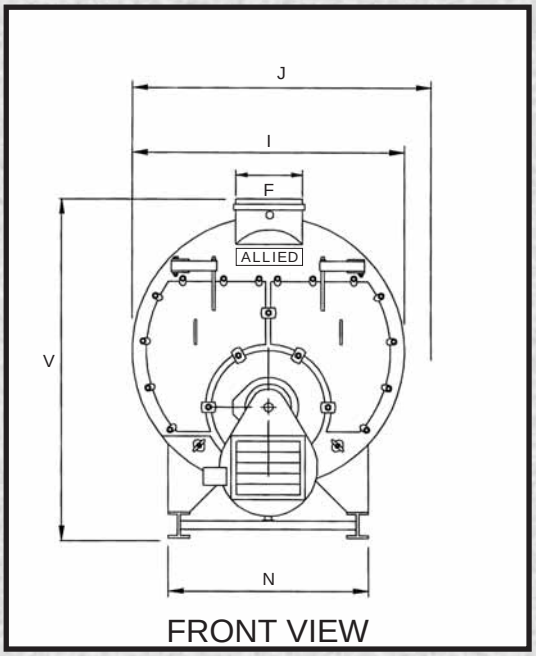
Available in LOW NOx

Inspected and registered with the National Board of Boiler & Pressure Vessel Inspectors.

Designed, constructed and stamped in accordance with the requirements of the ASME Boiler Codes.

ALLIED BOILER & SUPPLY INC.





BOILER SPECIFICATIONS

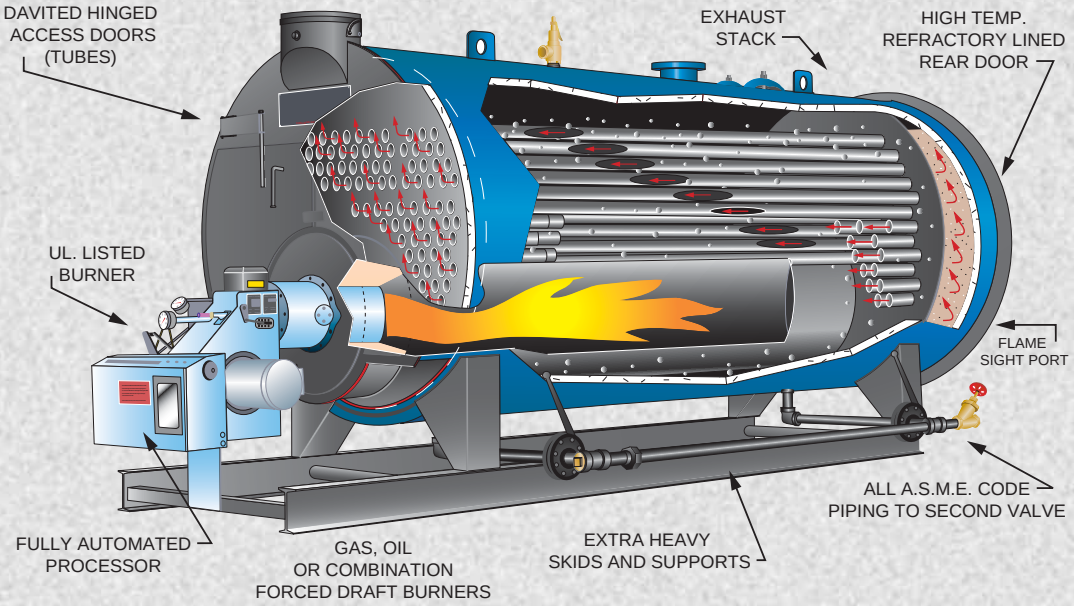
(ALL DIMENSIONS ARE IN INCHES)

	BOILER HORSEPOWER			15	20	25	30	40	50	60	70	80	100	
	HEATING SURFACE	FIRESIDE	SQ. FT	75	100	125	150	200	250	300	350	400	500	
	STEAM OUTPUT	FROM & @212° F	LB/HR	517	690	862	1035	1380	1725	2070	2415	2760	3450	
	GROSS OUTPUT		MBH	502	670	837	104	1339	1675	2008	2343	2687	3348	
	FIRING RATE, GAS	1,000 BTU	CFH	630	840	1050	1260	1680	2100	2520	2940	3360	4200	
	FIRING RATE, LP GAS	91,500 BTU	GPH	6.9	9.2	11.5	13.8	18.4	23	27.5	32.1	36.7	45.9	
	FIRING RATE, #2 OIL	140,00O BTU	GPH	4.5	6	7.5	9	12	15	18	20.7	24	30	
	FIRING RATE, #5 & #6 OIL	150,000 BTU	GPH	4.2	5.6	7	8.4	11.2	14	16.8	19.3	22.4	28	
A	*NOTE: 1 STEAM OUTLET SIZE	150 PSI	IN	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	2	2	2 1/2	2 1/2	3	A
A	*NOTE: 2 STEAM OUTLET SIZE	15 PSI	IN	2 1/2	3	3	4	4	4	6	6	6	6	A
B	*NOTE: 2 WATER SUPPLY SIZE	30 PSI	IN	2 1/2	3	3	3	4	4	4	6	6	6	B
C	*NOTE: 2 WATER RETURN SIZE	30 PSI	IN	2	2 1/2	3	3	3	3	4	4	4	6	C
D	FEEDWATER CONNECTION		IN	1	1	1	1	1	1	1	1 1/4	1 1/4	1 1/4	D
E	BLOWDOWN CONNECTION (VESSEL)	BOTTOM	IN	1	1	1	1	1 1/4	1 1/4	1 1/4	1 1/4	(2) 1 1/2	(2) 1 1/2	E
F	STACK OUTLET SIZE OD.		IN	8	8	10	10	12	12	12	16	16	16	F
G	FURNACE OD.		IN	16	16	18	18	20	20	20	24	24	24	G
H	SHELL ID.		IN	36	36	42	42	48	48	48	54	54	54	H
I	WIDTH WITHOUT TRIM		IN	44	44	50	50	56 1/2	56 1/2	56 1/2	62	62	62	I
J	WIDTH WITH TRIM		IN	49	49	55	55	61	61	61	68	68	68	J
K	LENGTH, FRONT TO REAR		IN	69	84	78	89	99	119	135	117	129	153	K
L	LENGTH OVERALL		IN	103	118	113	124	134	154	170	155	167	191	L
M	SKID LENGTH		IN	72	90	84	96	102	120	138	117	132	150	M
N	SKID WIDTH		IN	30	30	36	36	40	40	40	44	44	44	N
O	STEAM SUPPLY LOCATION		IN	29	26	30	35	40	48	48	53	53	67	O
P	WATER SUPPLY LOCATION		IN	18	24	23	27	30 1/2	30 1/2	36	36	33	39	P
Q	WATER RETURN LOCATION		IN	45	56	51	59	68	84 1/2	84	78	87	105	Q
R	BLOWDOWN LOCATION	15 PSI & UP	IN	18	17	18	18	23	23 1/4	23 1/4	25	25 - 66	25 - 89	R
S	1 1/4" SURFACE BLOW-OFF CONNECTION		IN	41	50	36	53	61	39	40	45	41	51	S
T	STACK OUTLET LOCATION		IN	21	25	25	26	25	23	25	25	29	23	T
U	SUPPLY HEIGHT		IN	51	51	57	57	63	63	63	71	71	75	U
V	STACK HEIGHT		IN	54 1/2	54 1/2	60 1/2	60 1/2	66 5/8	66 5/8	66 5/8	74 5/8	74 5/8	74 5/8	V
W	SHELL TO FLOOR HEIGHT		IN	12	12	12	12	12	12	12	14	14	14	W
X	BURNER PROJECTION		IN	32	32	32	32	32	32	32	32	32	36	X
Y	DOOR SWING		IN	0	23 1/4	23	23	28	28	28	31	31	31	Y
AA	TUBE REMOVAL	REAR	IN	32	47	39	50	58	78	94	66	78	102	AA
BB	TUBE REMOVAL	FRONT	IN	41	56	48	59	63	83	99	73	85	109	BB
	WATER CAPACITY @ NWL		GAL.	123	165	193	233	330	425	502	436	510	628	
	WATER CAPACITY FLOODED		GAL.	146	195	225	271	383	493	582	528	606	761	
	APPROX. SHIPPING WEIGHT (HIGH PRESS.)	150 PSI & UP	LBS.	2975	3225	3850	4125	6100	7375	8250	9400	10300	12450	
	APPROX. SHIPPING WEIGHT (LOW PRESS.)	15 & 30 PSI	LBS.	2850	3075	3650	3925	5750	6950	7550	8100	9300	11100	
	BOILER HORSEPOWER			15	20	25	30	40	50	60	70	80	100	

NOTE: 1 3" & ABOVE ARE 300# ANSI FLANGE
NOTE: 2 4" & ABOVE ARE 150# ANSI FLANGE

70 HP & LARGER 12" X 16" MANWAY
DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE, CERTIFIED DRAWINGS AVAILABLE ON REQUEST.

CUT-AWAY V IEW



	125	150	200	250	300	350	400	500	600	700	800	
	625	750	1000	1250	1500	1750	2000	2500	3000	3500	4000	
	4312	5175	6900	8625	10350	12075	13800	17250	20700	24150	27600	
	4184	5021	6695	8369	10042	11716	13390	16738	20085	23432	26780	
	5250	6300	8400	10500	12600	14700	16800	21000	25200	29400	33600	
	57.3	68.8	91.8	114.7	137.7	160.6	183.6	229.5	275.4	321	367	
	37.5	45	60	75	90	105	120	150	180	210	240	
	35	42	56	70	84	98	112	140	168	196	224	
A	4	4	4	6	6	6	6	6	8	8	8	A
A	8	8	8	10	10	10	12	12	12	12	12	A
B	6	8	8	8	10	10	10	12	12	12	12	B
C	8	6	6	6	8	10	10	10	10	12	12	C
D	1 1/2	1 1/2	2	2	2	2	2	2	2	2	2	D
E	(2) 1 1/2	(2) 1 1/	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	E
F	16	16	20	20	20	24	24	24	26	26	30	F
G	26	26	34	34	34	42	42	42	48	48	48	G
H	60	60	75.5	75.5	75.5	90	90	90	102	102	102	H
I	68.5	68.5	84.5	84.5	84.5	99	99	99	111	111	111	I
J	73	73	89	89	89	105	105	105	118	118	118	J
K	175	195	164	195	216	177	189	224	216	246	278	K
L	214	234	210	241	262	223	236	274	270	300	331	L
M	174	198	168	192	216	168	180	220	216	258	288	M
N	48	48	60	60	60	70	70	70	78	78	78	N
O	70	82	60	85	84	75	79	102	84	99	84	O
P	48	48	39	48	54	39	48	54	60	60	60	P
Q	120	132	117	138	150	117	132	162	158	180	204	Q
R	26 - 112	26 - 130	27 - 94	27 - 125	33 - 135	27 - 99	30 - 108	30 - 144	39 - 120	39 - 150	39 - 174	R
S	52	64	81	64	60	60	65	78	66	80	65	S
T	25	29	34	27	30	25	25	29	36	48	49	T
U	82	82	100 1/2	100 1/2	100 1/2	115	115	115	127	127	127	U
V	84	84	102 1/2	102 1/2	102 1/2	116	116	116	128	128	128	V
W	15	15	18	18	18	18	18	18	18	18	18	W
X	36	36	42	42	42	42	43	45	48	48	48	X
Y	34	34	43	43	43	50	50	50	57	57	57	Y
AA	118	138	103	134	155	105	117	153	141	171	193	AA
BB	131	151	112	143	164	119	131	167	152	182	209	BB
	999	1142	1274	1598	1815	1684	1872	2349	2739	3240	3687	
	1160	1326	1547	1939	2204	2133	2364	2966	3427	4048	4607	
	15000	16500	17900	25700	28000	32000	33900	39900	49800	55400	59800	
	14350	15800	16500	23900	25250	31000	33000	38800	48700	54300	57900	
	125	150	200	250	300	350	400	500	600	700	800	

CONSULT ALLIED BOILER FOR LARGER SIZES

★ *DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE, CERTIFIED DRAWINGS AVAILABLE UPON REQUEST*

AB-2PDB SERIES

ALLIED WORK FORCE BOILERS

STANDARD FEATURES-SERIES AB-2PDB

- Boiler is of the two-pass, scotch type, built and stamped in accordance with the requirements of the ASME Code, and listed by the National Board of Boilers and Pressure Vessel Inspectors.
- Large combustion chamber with low heat release for complete combustion.
- Smoke box is front-mounted with slip-on stack connector.
- Access to fireside is accomplished with hinged and davited rear door (40 HP & larger) and with split front doors. Flame observation ports are on front and rear.
- Openings for cleanout inspection of waterside are provided with 3" x 4" hand holes, and with 12" x 16" Manholes (80 HP & larger)
- Insulated with 2" high-density mineralwool, lagged with 22 gauge grip jacketing, baked on epoxy enamel to resist chipping and fading.
- Firetubes are rolled and beaded on power boilers, expanded and flared on low pressure boilers (2" dia. through 30 HP, 2 1/2" dia. 40 HP up).
- Supports include lifting lugs securely welded to the top of the shell; structural steel support legs on skids support the boiler so that special foundations are not required.

STANDARD STEAM TRIM

- Operating & limit control
- Modulating pressure control(when appl.)
- Water column with guage glass, MM 157 combination low water cut-off & pump control.
- Probe Aux, L.W.C.O.
- Steam Pressure gauge, syphon & test cock
- Water column drain valve
- Safety relief valve(s) per ASME Code

STANDARD WATER TRIM

- Operating & limit temperature control
- Modulating temperature control (when appl.)
- Probe type low water cut-off control
- Combination pressure, temperature, altitude gauge
- Hot water return baffle for shock resistance
- Safety relief valve(s) per ASME Code

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The Spirit of Service ***alliedboiler.com***

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