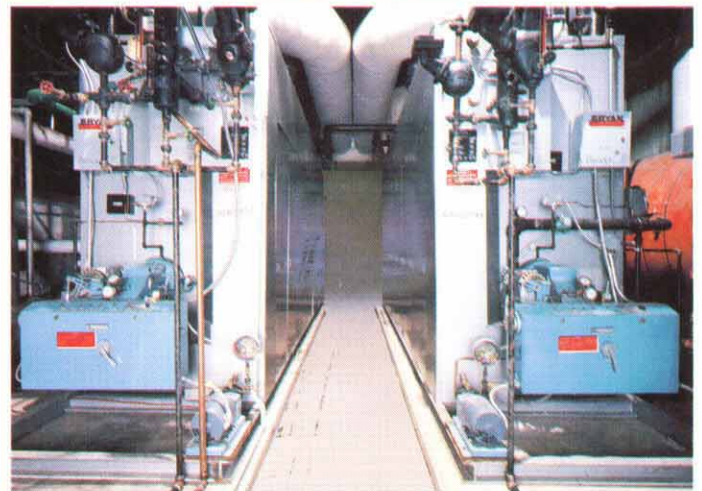
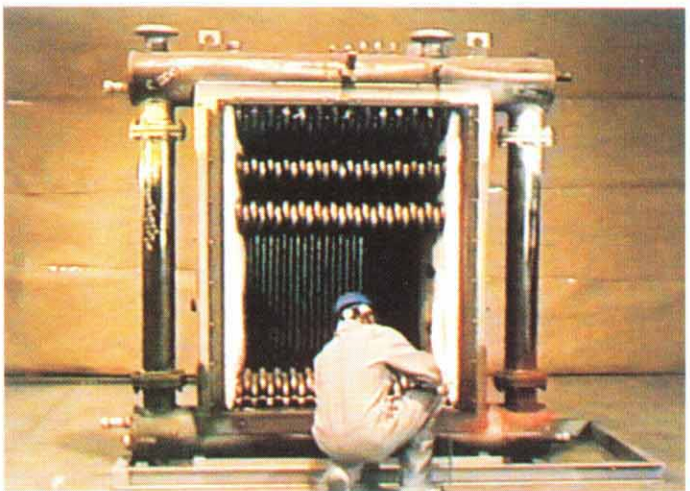
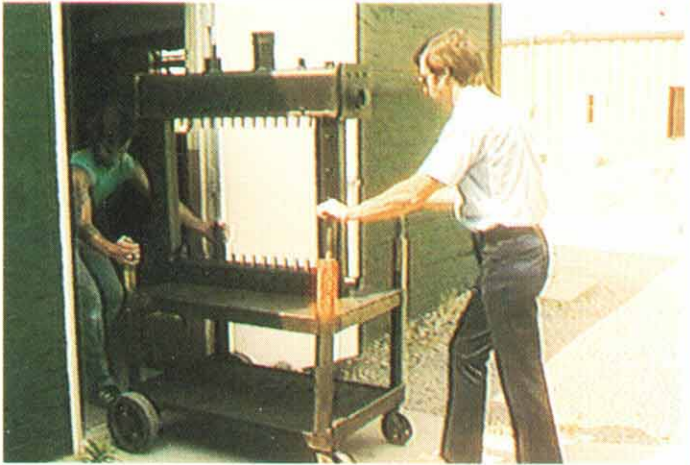


# Bryan Knockdown™ Boilers

**for easy field replacement**  
**Hot Water Heating and Steam Boilers**  
**750,000 BTUH to 8 million BTUH**  
**18 BHP to 191 BHP**



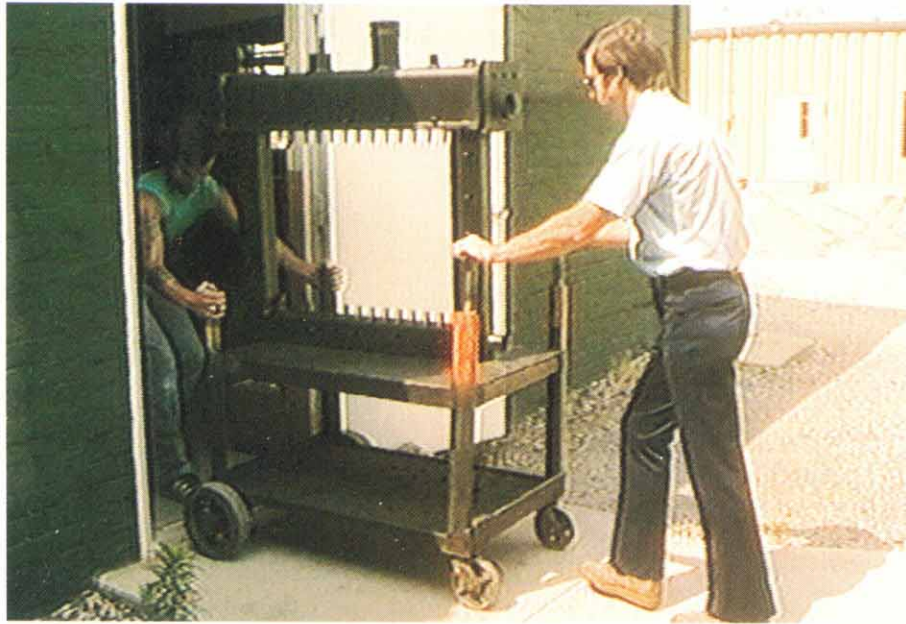
# BRYAN BOILERS

*Featuring the exclusive Bryan "Flexible Water Tube" design*





## Bryan Knockdown™ boilers for stage-by-stage entry through most standard door openings



### Replace old inefficient boilers without extra construction expense

#### Sizes from 18 BHP to 191 BHP

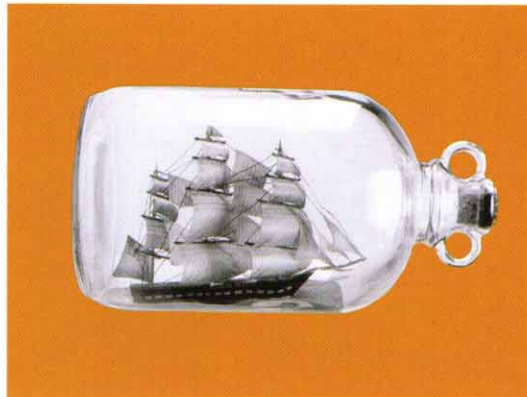
Bryan offers a large selection of hot water and steam industrial and commercial boilers that have been designed for delivery to the site partially assembled in an easy-to-knockdown configuration.

**Reassemble inside** The individual components will all easily fit through standard door openings. The boilers can then be readily reassembled inside so you can replace old boilers even in closed-in restricted space.

**No demolition and reconstruction expense** All of this can be done without tearing out walls, and without requiring the services of an ASME welder.

**Bryan high efficiency performance** All feature Bryan's flexible water tube design which ensures fast, efficient conversion of fuel to heat, easy removal and replacement without welding. Dramatically reduced floor space is required by the compact designs and an absolute minimum area is needed to service water tubes.

**A variety of knockdown stages** Several states of partial to complete assembly are available depending on boiler size and on-site considerations. Consult your



Bryan Boilers Representative to select the configuration best suited to your particular requirements. These are:

**KD-1** Boiler is shipped completely assembled ready for knockdown, single screws, tack welds, not welded to base.

**KD-2** Disassembled after inspection, shipped as vessel with tubes installed, base with burner (atmospheric) or refractory (forced draft), controls, jacket and flue collector packed in separate crates.

**KD-3** Same as KD-2 except tubes removed from vessel.

**KD-4** (RV only) Partially assembled ready for knockdown. Single screws and tack welded, burner not installed, refractory not poured, assembly required. Welding required, but no ASME code work needed.

**KD-5** (RV only) All components disassembled after inspection and shipped in crates. Refractory not poured, assembly with welding required, but no ASME code work needed.

**KD-6** All custom knockdown configurations other than above. Specify exact requirements and contact factory for availability and pricing.

# Step-by-step how to do it

## Bryan Knockdown™ boilers Disassembly

1. RV Series boiler shown. This is KD-4 condition as the boiler is delivered to the job site.
2. After unbolting clips remove burner.
3. Remove control devices, gauges and valves, jacket access doors and panels. Jacket panels are fastened with single screws.
4. Flanges are color coded with their mates to make correct reassembly easy. White stripes guide accurate re-alignment.
5. Jacket frames are tack welded and coded for easy reassembly. Break tack welds and remove frame.
6. Remove tube panels (secured by bolts and angles) tube clamps, and back flue panel (tack welded).
7. Remove baffles and with tube puller furnished, remove tubes. Remove flue collector end panels.
8. Remove bolts holding upper tube header and remove pressure vessel assembly using permanent lift lugs on the assembly.

## Reassembly

9. Transport components through doors to boiler site for reassembly. Install monoblock insulation in floor frame, mix cement reinforced with stainless steel needles, pour refractory base in floor frame.
10. Matching flange colors reassemble pressure vessel. Prepare tube holes and install tubes.
11. Install tube clamps. Install flue collector panels, position tube panel frame and weld into place.
12. Insert baffles and install flue collector back and side panels. Install flue collector top. Install tube panels.
13. Seal weld entire flue collector to prevent flue gas leaks. Reassemble jacket framework following color codes and aligning tack welds, then weld into place.
14. Apply insulation all around and secure.
15. Attach jacket panels to framework.
16. Install burner, pack around head with ceramic blanket.
17. Install control devices using pre-drilled holes and outlet openings. Install control panel.
18. Wire controls into burner panel.



1



2



3



4



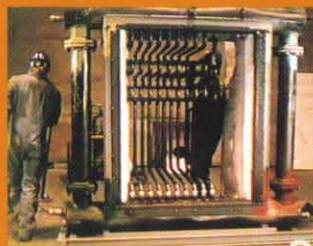
5



6



7



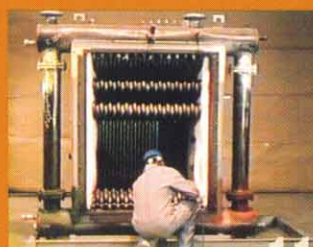
8



9



10



11



12



13



14



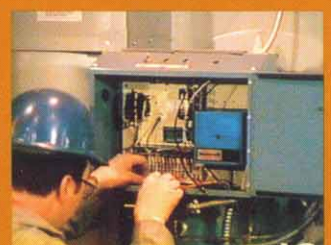
15



16



17



18

# Select the Knockdown™ solution for your replacement problem

## Dimensions and Weight for CL Series Knockdown Construction (in Inches and Pounds)

Model	BHP	Steam Frame				Water Frame				Boiler Base			
		With Tubes Installed		Without Tubes Installed		With Tubes Installed		Without Tubes Installed		Atmospheric		Forced Draft	
		LxWxH	Wgt.	LxWxH	Wgt.	LxWxH	Wgt.	LxWxH	Wgt.	LxWxH	Wgt.	LxWxH*	Wgt.
CL-75	18	NA	NA	NA	NA	35x30x41	540	35x12x41	240	NA	NA	32x36x28	560
CL-90	21	42x36x55	680	42x17x55	440	40x30x41	660	40x12x41	420	36x36x18	230	36x36x28	560
CL-120	29	51x36x55	840	51x17x55	520	50x30x41	810	50x12x41	490	43x36x18	260	47x36x28	620
CL-150	36	61x36x55	1000	61x17x55	590	59x30x41	960	59x12x41	560	53x36x18	320	56x36x28	850
CL-180	43	NA	NA	NA	NA	68x30x41	1110	68x12x41	630	62x36x18	380	65x36x28	970
CL-210	50	79x36x55	1300	79x17x55	730	77x30x41	1270	77x12x41	700	71x36x18	430	75x36x28	1100
CL-240	57	NA	NA	NA	NA	87x30x41	1420	87x12x41	770	80x36x18	480	84x36x28	1200
CL-270	64	98x36x55	1600	98x17x55	870	96x30x41	1570	96x12x41	840	90x36x18	540	93x36x28	1300
CL-300	71	NA	NA	NA	NA	105x30x41	1850	105x12x41	1040	99x36x18	600	103x36x28	1450

\*Width over base is 31 1/2" if bolt-down angles are deleted.

## Dimensions and Weight for K Series Knockdown Construction (in Inches and Pounds)

Model	BHP	Steam Frame				Water Frame*				Boiler Base			
		With Tubes Installed		Without Tubes Installed		With Tubes Installed		Without Tubes Installed		Water		Steam	
		LxWxH	Wgt.	LxWxH	Wgt.	LxWxH	Wgt.	LxWxH	Wgt.	LxWxH	Wgt.	LxWxH	Wgt.
K-250	60	79x48x85	2390	79x24x85	1060	82x41x71	2040	82x13x71	710	98x49x17	480	98x54x17	490
K-300	72	92x48x85	2820	92x24x85	1200	95x41x71	2420	95x13x71	800	111x49x17	520	111x54x17	530
K-350	84	105x48x85	3260	105x24x85	1350	108x41x71	2790	108x13x71	890	124x49x17	550	124x54x17	560
K-400	96	115x48x85	3610	115x24x85	1480	118x41x71	3100	118x13x71	980	133x49x17	600	133x54x17	610
K-450	108	127x48x85	4260	127x24x85	1630	131x41x71	3480	131x13x71	1060	146x49x17	610	146x54x17	620
K-500	120	140x48x85	4470	140x24x85	1770	144x41x71	3850	144x13x71	1150	159x49x17	630	159x54x17	640
K-550	131	153x48x85	4910	153x24x85	1920	156x41x71	4230	156x13x71	1240	172x49x17	660	172x54x17	670
K-600	143	163x48x85	5230	163x24x85	2030	166x41x71	4500	166x13x71	1300	181x49x17	690	181x54x17	700
K-650	155	176x48x85	5760	176x24x85	2170	179x41x71	4880	179x13x71	1390	194x49x17	720	194x54x17	730

\*Add 6" to length of frame for "WT" boilers.

## Dimensions and Weight for RV Series Knockdown Construction (in Inches and Pounds)

Model	BHP	Steam Frame				Water Frame			
		Upper Header		Lower Header*		Upper Header		Lower Header*	
		LxWxH	Wgt.	LxWxH	Wgt.	LxWxH	Wgt.	LxWxH	Wgt.
RV-250	60	94x24x35	1070	120x55x20	1320	94x13x21	640	120x50x20	1020
RV-300	72	107x24x35	1180	133x55x20	1480	107x13x21	710	133x50x20	1120
RV-350	84	116x24x35	1260	142x55x20	1560	116x13x21	750	142x50x20	1190
RV-400	96	129x24x35	1390	157x55x20	1650	129x13x21	830	157x50x20	1330
RV-450	108	139x24x35	1470	165x55x20	1750	139x13x21	880	165x50x20	1400
RV-500	120	149x24x35	1550	175x55x20	1830	149x13x21	930	175x50x20	1470
RV-550	131	162x24x35	1660	187x55x20	1930	162x13x21	990	187x50x20	1570
RV-600	143	171x24x35	1740	197x55x20	2010	171x13x21	1040	197x50x20	1640
RV-700	167	194x24x35	1920	226x55x20	2220	194x13x21	1150	226x50x20	1890
RV-800	191	216x24x35	2110	249x55x20	2530	216x13x21	1260	249x50x20	2020


\*Includes Channel Iron Base

Specifications subject to change without notice. Consult Factory for other boiler options.



**Bryan Steam LLC — Leaders Since 1916**  
 783 N. Chili Ave., Peru, Indiana 46970 U.S.A.  
 Phone: 765-473-6651 • Internet: www.bryanboilers.com  
 Fax: 765-473-3074 • E-mail: bryanboilers@iquest.net

**New Video Demonstrates Advantages of Bryan Knockdown™ Boilers**



The video "How to Save Time and Money with Bryan Knockdown™ Boilers" is available for your viewing on request. Phone 765-473-6651 or Fax 765-473-3074.