

## SERIES 19HE BOILER CARLIN OIL BURNERS SETUP INFORMATION

	_		I=B=R	Actual					Prelim	inary
Boiler Model Number	Burner Model Number	Burner Motor HP	Burner Input GPH	Fuel Delivery GPH (Max.)	Nozz Size &		Nozzle Mfg.	Pump Pressure	Head Setting	Air Setting
19HE-S/W- 3	201 CRD-PA	1/4	2.6	2.45	2.00	70 B	Delavan	150	7/16	25%
19HE-S/W- 4	301 CRD-PA	1/4	3.6	3.37	2.75	80 SS	Hago	150	5/16	50%
19HE-S/W- 5			5.0	4.90	4.00	60 PLP	Monarch	150	13/16	100%
19HE-S/W- 6			6.5	6.50	3.75	60 P	Hago	100/300	1/16	5/16*
19HE-S/W- 7	702 CRD	1/2	7.9	7.80	4.50	60 P	Hago	100/300	3/16	1/2*
19HE-S/W- 8			9.3	9.5	5.00	60 P	Hago	100/300	3/8	7/16*
19HE-S/W- 9			10.8	10.39	6.00	60 P	Hago	100/300	1	5/8*
					Low High Fire Fire					
19HE-S/W-10			12.2	12.2	5.50 4.00	45 H	Hago	150	5/8	1/4*
19HE-S/W-11	801 CRD	3/4	13.6	13.42	5.50 5.50	45 H	Hago	150	5/8	3/8*
19HE-S/W-12			15.0	15.25	6.00 6.00	45 H	Hago	150	7/8	7/16*

\*Preliminary Low Fire Air Setting

Above settings for steam or hot water boilers.

3-6 section boilers have target wall.

All burner settings are preliminary.

Final Burner adjustment must be done with combustion test instruments.

S/W insert "S" for Steam / "W" for Water.

Nozzle: 201 CRD Delevan 70° B, 301 CRD (4 section) Hago 80° SS 301 CRD (5 section) Monarch 60° PLP,

702 CRD Hago 60° P, 702 CRD Hago 60° P, 801 CRD Hago 45° H

Motor Current: All Burners = 1 Phase, 115/208-230V, 60 Hz.

Option for: 3 Phase, 208/230-460V, 60 Hz.

Control Circuit Current: 1 Phase, 115V, 60 Hz.

THESE INSTRUCTIONS TO BE LEFT WITH THE BOILER FOR REFERENCE PURPOSES.



## **SERIES 19HE BOILER**

## **BURNERS FIRESIDES MUST BE CLEANED AT LEAST ANNUALLY**

The following safety checks must be made at initial start-up and on an annual basis thereafter:

High Limit Operation (MR)		Set at	<u>°F</u>
Operating Limit Operation		Set at	°F
Low Water Cutoff			
Backup Low Water Cutoff			
Service Switches			
All additional limits			
Safety Valve Capacity*	MBH (LBS/HR)		
Burner Motor Amps			
Flame Failure			
$CO_2$	%		
Smoke (oil)			
Carbon Monoxide (CO)	ppm		Boiler Room Draft
Draft in Smokehood	in. wc		negative
Draft Overfire**	in. wc		positive
Stack Temperature	°F		balanced
Efficiency	%		
Combustion Makeup Air***			

Proper operating and safety instructions must be given to boiler operator.

<sup>\*</sup> Safety valve capacity must be at least equal to gross output of boiler.

<sup>\*\*</sup> Draft should be adjusted to .05" to .1" wc positive pressure in smokehood. If vent system is under positive pressure, it must be gas-tight.

<sup>\*\*\*</sup> There must be at least 30 sq. in. of free area per gallon of oil burned. When louvers are used, double the figure listed above.