

ROCKWELL

ANNEALING,
CASE - HARDENING,
HARDENING,
TEMPERING
and HEAT TREATING

FURNACES

STATIONARY TYPE



W. S. ROCKWELL COMPANY

Furnace Engineers and Contractors

50 CHURCH STREET

NEW YORK

(Hudson Terminal Building)

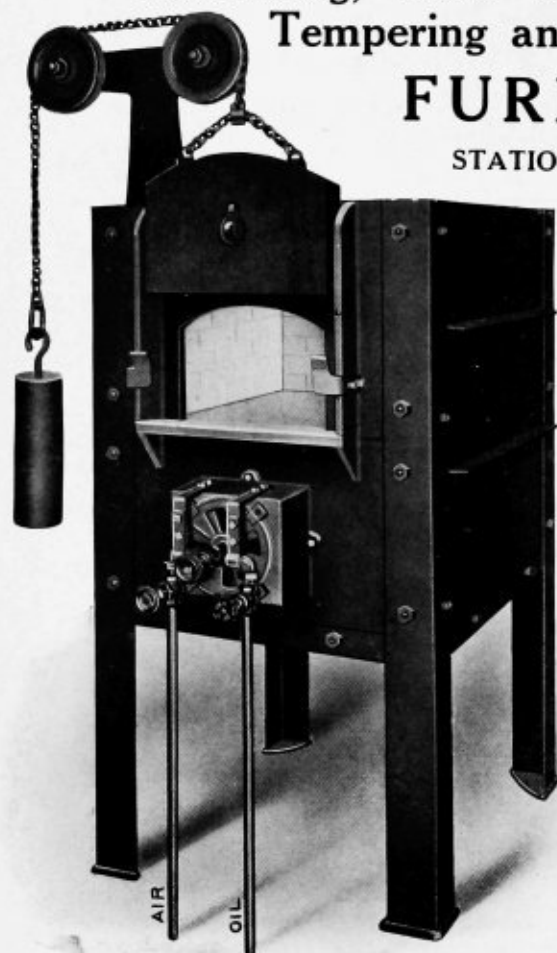
CABLE ADDRESS
"LEWKCOR" NEW YORK
WESTERN UNION AND LIEBER CODES

MARCH, 1913

ROCKWELL

Annealing, Case - Hardening, Hardening, Tempering and Heat Treating FURNACES

STATIONARY TYPE



These furnaces are suitable for that large volume of work comprising the annealing, hardening, case-hardening, tempering or heat treatment of any small pieces of regular or irregular shapes and sizes in either aluminum, brass, copper, german or sterling silver, steel, etc., such as

Buttons	Eyelets	Punches
Springs	Cutters	Rivets
Shells	Screws	Rings
Bolts	Nuts	Tacks
Cups	Caps	Tools
Machine Parts, etc.		

The ultimate value of such work depends largely on three conditions of the heat treatment: first—the right degree of heat; second—thorough saturation and uniformity; third—freedom from oxidation or scale.

These furnaces make it easy to obtain all these conditions.

Combustion is clean and complete and the heat fills the chamber uniformly and without risk of injury to the contents.

The furnaces may be operated with either fuel oil or gas. (State which with order.) They cannot be operated with coal or coke. They require no chimney.

If oil is used the pressure may be 5 pounds per square inch or higher and it may be atomized either with dry steam at boiler pressure or air at 2 pounds per square inch or higher.

The door is clamped snug when closed. It is lined with fire brick and has peep hole and cover.

The furnace lining is amply thick to retain the heat and make it comfortable for the operator.

Fig. 1. Rockwell Annealing and Hardening Furnace — Oil or Gas Fuel.

STANDARD SIZES OF Annealing, Case-Hardening, Hardening, Tempering and Heat Treating Furnaces Stationary Type, Fig. 1.

The furnaces listed below are shipped lined complete, including oil or gas burner. Full directions for setting up and operating are sent with every furnace.

Furnace No.	Width of Chamber, Inches	Length of Chamber, Inches	Width of Entrance, Inches	Height of Entrance, Inches	Floor Space, Inches	Height to Door Sill, Inches	Height over all Brickwork, Inches	Approximate Oil Consumption per Hour, Gallons	Shipping Weight, Lined complete, pounds	Code Word
A	B	C	D	E - F	G	H				
81	13 1/2	13 1/2	13 1/2	8	33 x 26	40	60	3/4	2200	Abkin
82	13 1/2	18	13 1/2	8	31 x 33	40	60	1	2400	Abkop
83	18	18	18	10 1/2	32 x 40	40	64	1 1/2	3400	Ablop
84	18	22 1/2	18	10 1/2	36 x 40	40	64	1 1/2	3900	Ablus

Height from floor to sill may be varied to suit, but unless otherwise stated it will be made 40 inches as listed. Oil pressure MUST be uniform — 5 pounds per square inch or over will do.

Air or steam pressure as well as oil pressure should be uniform.

If gas is used, state kind and at what pressure when placing order for furnace.

7 U. S. gallons of oil equal 1000 cubic feet of natural gas.

5 U. S. gallons of oil equal 1000 cubic feet of city gas.

The cost of fuel, whether oil or gas, for a small furnace of this character is quite immaterial. The quantity and quality of the work which the furnace can turn out as compared with a coal or coke furnace, are the items of real importance.

The furnaces are simple and strong, and with reasonable care will last many years without repairs. They are built in standard sizes as per tables on pages 2 and 4.

In selecting a furnace reasonable clearance between the walls of the furnace and material to be heated should be allowed to afford access of the heat to all parts.

These furnaces are **not adapted** for hardening high speed steels. Write for particulars for such work.

Large furnaces of similar character for heavy work will be built to order and satisfaction guaranteed.

See our catalog No. 15 for automatic annealing, hardening and tempering.

See also our catalog No. 16 for semi-automatic annealing, hardening and tempering.

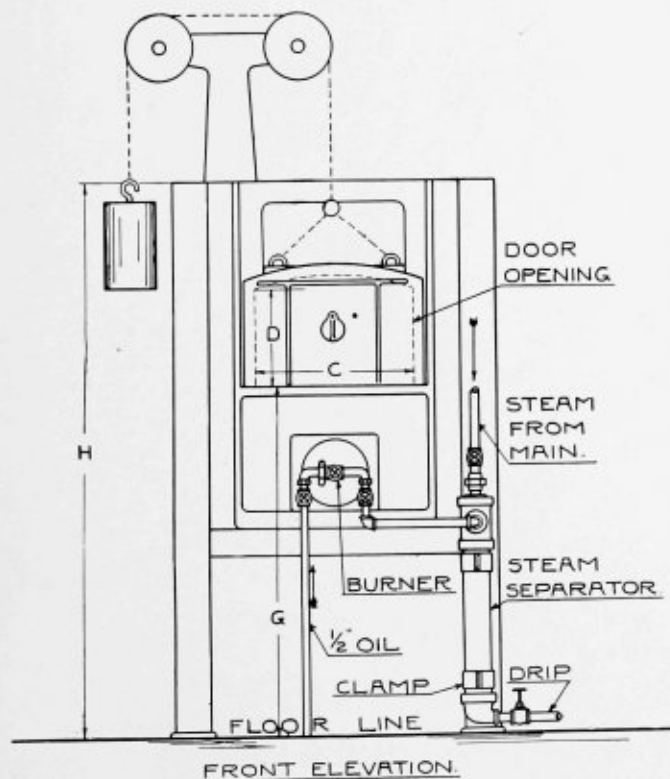
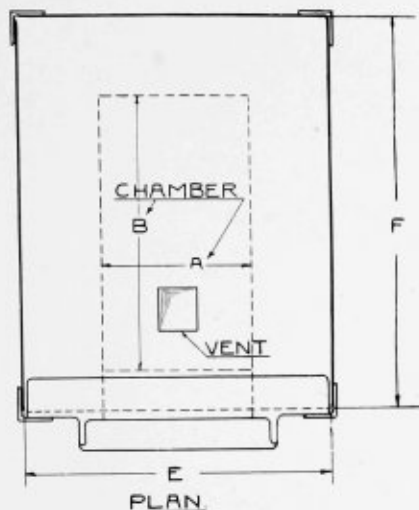


Fig. 2—Rockwell Annealing and Hardening Furnace

Showing dimensions and method of attaching oil burner and steam separator.



Fig. 3 — Rockwell Annealing and Hardening Furnace — Oil or Gas Fuel.



STANDARD SIZES OF Annealing, Case-Hardening, Hardening, Tempering and Heat Treating Furnaces STATIONARY TYPE

The furnaces listed below are too heavy to ship lined complete. They are shipped knocked down, and consist of all iron work, machined ready for re-erection, special tiles, oil or gas burner, and full detail construction drawings showing how to erect at destination. The standard fire brick shapes and labor are furnished by purchaser.

Furnaces Nos. 84 to 87 inclusive are built on legs as shown in Fig. 1, but they can be built solid as shown in Fig. 3 if desired. Unless otherwise specified they will be furnished with legs.

Furnaces Nos. 88 to 116 inclusive are built solid as shown in Fig. 3.

Furnace No.	Width of Chamber, Inches	Length of Chamber, Inches	Width of Entrance, Inches	Height of Entrance, Inches	Floor Space, Inches	Height to Door Sill, Inches	Height over all Brickwork, Inches	Approximate Oil Consumption per Hour, Gallons	Shipping Weight all Iron Work, pounds	Code Word
A	B	C	D	E - F	G	H				
84	18	27	18	10 1/2	40 x 40	40	66	1 1/2	1600	Abmum
85	18	36	18	10 1/2	40 x 50	40	66	1 3/4	1750	Abmus
86	18	27	18	13	40 x 40	40	68	1 1/2	1650	Abmot
87	18	36	18	13	40 x 50	40	68	1 3/4	1800	Abnin
88	22 1/2	27	22 1/2	10 1/2	50 x 38	40	64	2	2000	Abnix
89	22 1/2	36	22 1/2	10 1/2	54 x 64	40	64	2	2150	Abnok
90	22 1/2	45	22 1/2	10 1/2	54 x 74	40	64	2 1/4	2300	Abpak
91	22 1/2	27	22 1/2	15 1/4	50 x 38	40	70	2	2050	Abpet
92	22 1/2	36	22 1/2	15 1/4	54 x 64	40	70	2	2100	Abpot
93	22 1/2	45	22 1/2	15 1/4	54 x 74	40	70	2 1/4	2200	Abpus
94	22 1/2	54	22 1/2	15 1/4	54 x 85	40	70	2 1/2	2400	Abrik
95	27	36	27	13	76 x 68	40	76	3	2500	Abrus
96	27	45	27	13	76 x 76	40	76	3 1/4	2700	Absek
97	27	54	27	13	76 x 85	40	76	3 1/2	3100	Abset
98	27	63	27	13	76 x 94	40	76	3 3/4	3300	Absic
99	27	36	27	15 3/4	76 x 68	40	78	3	2600	Absub
100	27	45	27	15 3/4	76 x 76	40	78	3 1/4	2800	Abtac
101	27	54	27	15 3/4	76 x 85	40	78	3 1/2	3200	Abtex
102	27	63	27	15 3/4	76 x 94	40	78	3 3/4	3500	Abtis
103	30	36	30	15 3/4	76 x 68	40	78	4	3600	Abtan
104	30	45	30	15 3/4	76 x 76	40	78	4	3900	Abtux
105	30	54	30	15 3/4	76 x 85	40	78	4 1/4	4100	Abunk
106	30	63	30	15 3/4	76 x 94	40	78	4 1/2	4300	Abunx
107	30	36	30	18 1/2	76 x 68	40	81	4	3750	Abvac
108	30	45	30	18 1/2	76 x 76	40	81	4	3950	Abvek
109	30	54	30	18 1/2	76 x 85	40	81	4 1/4	4500	Abvux
110	30	63	30	18 1/2	76 x 94	40	81	4 1/2	5000	Abwac
111	36	45	36	15 3/4	85 x 76	40	78	4 1/2	5300	Abwik
112	36	54	36	15 3/4	85 x 86	40	78	4 1/2	5600	Abwun
113	36	63	36	15 3/4	85 x 94	40	78	4 3/4	6300	Abwim
114	36	45	36	18 1/2	85 x 76	40	81	4 1/2	5700	Abyac
115	36	54	36	18 1/2	85 x 86	40	81	4 1/2	6000	Abyim
116	36	63	36	18 1/2	85 x 94	40	81	4 3/4	6500	Abyuz

Special sizes built to order.

Height from floor to sill may be varied to suit, but unless otherwise stated it will be made 40 inches as listed.

Oil pressure MUST be uniform—5 pounds per square inch or over will do.

Air or steam pressure as well as oil pressure should be uniform.

If gas is used, state kind and at what pressure when placing order for furnace.

7 U. S. gallons of oil equal 1000 cubic feet of natural gas.

5 U. S. gallons of oil equal 1000 cubic feet of city gas.

LET US HANDLE YOUR FURNACE PROBLEMS

We make inspection of plant, devise methods and means of working, prepare plans, furnish complete industrial furnace equipment and guarantee results using either coal, gas or oil, as the best interests of our patrons require.

"FURNACE AND FUEL TO SUIT THE WORK"

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