

Health Care

Cleveland CombiCraft Combination Ovens offer versatility and production unmatched by convection ovens and steamers alone. Combi/ovens can be operated in steam, convection (hot air) or combination steam and convection (combi) models. Following is a brief guide to which foods may be cooked in each of these cooking modes. Note that many foods can be successfully prepared in more than one mode; your choice depends on personal preference in the finished product.

Combination steam and convection (combi) mode: Most foods usually prepared in a convection oven will be even better when cooked in the combi mode (hot air+steam), which produces a browned surface but helps retain moisture, resulting in a higher yield on meats, entrees and other food items. Meats, poultry, crusty breads and rolls, cakes and many fresh and frozen entrees and side dishes are better prepared in the combi mode in the combi/oven.

Foods cooked in the combi mode are browned as in a regular convection oven, but are more moist, have a higher yield and generally have a higher overall quality. Following is a guide to some of the foods which may be prepared in the combi mode. Timer settings are approximate due to differences in density, shape and the degree of "doneness" desired.

Combi Cooking Guide

Breakfast Items	Minutes
Waffles or French toast, frozen, single layer, 300°F	5–8
Pancakes, frozen, 4" diameter, 300°F	8–10

Note: Meat and poultry products should be heated to 160-170°F internal temperature.

Beef	Minutes
Beef roast, 10lb/pan, 300°F	1 hr 15 min
Corned beef, 6–8lb/pan, 275°F	1 hr 20 min
Hamburger patties, 4oz each, 6lb/pan, 375°F	8–10
Meatballs, 1oz each, 5lb/pan, 300°F	10–12
Meatloaf, 4lb loaf, 2/pan, 325°F	40–45
Ribs, beef or pork, 8lb/pan, 300°F	50–55

Pork	Minutes
Chops, 8oz each, 5lb/pan, 350°F	12–15
Ham, baked, 8–20lb/pan, 350°F	8 min/lb
Hot dogs, 5lb/pan, single layer, 375°F	6–8
Rib roast, 6lb/pan, 375°F	55–60
Sausage patties/links, 2–3oz each, 5lb/pan, 325°F	9–12
Tenderloin, 2–3lb each, 325°F	35–40

Poultry	Minutes
Chicken nuggets, 5lb/pan, 325°F	15–20
Chickens, whole, 3–4lb each, 325°F	40–50
Chickens, half, 1½–2lb each, 325°F	30–35
Chicken pieces, 6lb/pan, 325°F	35–40
Chicken breasts, 6–8oz each each, 6lb/pan, 325°F	20–25
Turkeys, whole, fresh/thawed, 12–18lb/pan, 375°F	2 hours 10–20 min
Turkeys, whole, frozen, 12–18lb/pan — Steam	1 hr
— Combi 325°F	1 hr

Poultry (continued)	Minutes
Turkey breast, fresh, 6–8lb each, 325°F	1 hr

Fish/Seafood	Minutes
Fish fillets, fresh, 4oz each, 5lb/pan, 325°F	5–10
Fish sticks, frozen, 5lb/pan, 325°F	10–12

Bread/Baked Goods	Minutes
Bread dough, proofed, 325°F	20–25
Brownies, unbaked batter, 18"x26" pan, 300°F	20–25
Cake from mix or recipe, 12"x20" pan, 325°F	22–26
Cinnamon rolls, proofed, 2–3oz each, 325°F	20–22
Cookies, fresh or frozen dough, 300°F	10–12
Croissants, proofed, 12–18/pan, 325°F	12–14
Cupcakes, unbaked batter, 300°F	18–20
Dinner rolls, proofed, 3 doz, 325°F	10–12
Fruit pies and cobbler, fresh, 10" pie or 12"x20" pan, 350°F	25–45
Fruit pies, frozen, 325°F	45–50
Muffins, unbaked batter, 350°F	10–12
Pizza with toppings, fresh, 12", 450°F	6–10
Pizza with toppings, frozen, 6", 400°F	12–18

Prepared Entrees and Side Dishes	Minutes
Fresh prepared entree/casserole/side dish, 12"x20" pan, 325°F	30–45
Frozen prepared entree/casserole/side dish, half pan, 325°F	40–60, or follow package instructions
Frozen prepared individual meal, f12–16oz, 300°F	25–45 or follow package instructions

Heat to 160°F internal temperature.



Enodis

Fresh Ideas In Steam Cooking

Cleveland Range, LLC • 1333 East 179th Street • Cleveland, Ohio 44110
Toll Free: 1-800-338-2204 • Tel: 216-481-4900 • Fax 216-481-3782
<http://www.clevelandrange.com>

CombiCraft®

Convection (hot air) mode: Best for some cookies, biscuits, bacon, meringue, pizza and pie crusts, and to sear meats directly on the racks at a high temperature. Any other foods normally cooked in a convection oven may be cooked in the hot air mode; however, preparing foods in the combi mode (steam+hot air; see other side) may result in a higher quality product.

Convection (Hot Air) Cooking Guide

Minutes

Various Foods		Minutes
Bacon, sliced, 425°F		4-6
Biscuits, 3" diameter, unbaked dough, 400°F		7-9
Cookies, unbaked or preformed frozen dough, 300°F		8-12
Meringue, unbaked, 250°F		3-5
Pie crust, 10" diameter, unbaked dough, 350°F		12-14
Pizza crust, unbaked, 10-12" diameter, 350°F		6-10

Steam mode: Use for fresh and frozen vegetables, fish and seafood, meats and poultry, many frozen and fresh prepared entrees and side dishes which do not need browning. Steamed foods are more moist and can be held on a steamtable for a longer period of time.

Steam Cooking Guide

Minutes

Breakfast Items	Minutes	
	Fresh	Frozen
Eggs, hard cooked in shell, 3-4 dozen/pan	12-14	-
Eggs, scrambled, 4 dozen/5lb carton/pan	10-12*	-
Eggs, poached in muffin pans	4-5	-
Pancakes, pre-cooked, single layer	-	3-4

* stir halfway through cooking time.

Vegetables	Minutes	
	Fresh	Frozen
Broccoli, spears/florets, 6lb/pan	4-6	5-8
Cabbage, wedges, 6lb/pan	10-12	-
Carrots, sliced or whole baby, 6lb/pan	6-8	6-8
Cauliflower, florets, 6lb/pan	6-8	10-12
Corn on the cob, 8lb/pan	7-9	8-10
Corn, whole kernel, 8lb/pan	-	5-7
Green beans, 6lb/pan	8-10	8-10
Mixed vegetables, 6lb/pan	-	6-8
Onions, sliced/diced, 6lb/pan	4-5	4-5
Peas, 8lb/pan	-	7-9
Potatoes, fresh diced, 8lb/pan	18-20	-
Potatoes, fresh whole, 8lb/pan	35-40	-
Spinach or greens, block frozen, 6lb/pan	-	15-20
Sweet potatoes, whole, 8lb/pan	30-35	-
Winter squash, halved, 8lb/pan	25-30	-
Zucchini/summer squash, sliced, 6lb/pan	3-5	4-6

Rice/Beans/Pasta	Dried
Egg noodles, 3lb/pan, covered with cold water	8-12*
Spaghetti, 3lb/pan, covered with cold water	10-12*
Rice, long grain, 4 cups water/lb, 3lb/pan	18-20
Dried beans, presoaked, 1lb+1 1/4 qts water	45-55

*Stir halfway through cooking time. Remove pan from steamer very carefully.

Steam Cooking Guide

Minutes

Rice/Beans/Pasta	Dried
Lentils, barley, bulgar, millet, 4 cups water/lb, 3lb/pan	35-50
Refried beans, canned, 7lb/pan	45-50

Meats/Poultry/Protein	Fresh	Frozen
-----------------------	-------	--------

Note: Meat and poultry products should be heated to 160-170°F internal temperature.

Beef or pork ribs, 10lb/pan	45-50	-
Chickens, whole, 3lb average, 10lb/pan	50-60	-
Chicken pieces, 8lb/pan	30-40	60-65
Chicken pieces, breaded, steam then fry to brown as needed	30-35	-
Corned beef brisket, 6-8lb	2 hrs	-
Fish fillets, 5lb/pan	5-10	6-12
Hot dogs, 8lb/pan	10-12	14-18
Ham, boneless, fully cooked, 10lb average	55-60	-
Hamburger/ground turkey patties, 4oz ea., 6lb/pan	-	14-16
Meatballs, 1" diameter, 6lb/pan	16-20	20-25
Turkey, 14-16lb average whole	2 hrs	2 1/2-3 hrs
Turkey breast, 6-8lb each, 2/pan	55-60	-
Taco meat/sloppy joe meat, 6lb/pan	30-40 min	-
Veggie burgers, 4oz ea., 6lb/pan	-	12-14

Prepared entrees/side dishes	Fresh	Frozen
------------------------------	-------	--------

Frozen prepared entrees/side dishes, covered, 5-6lb average		40-60
Fresh prepared entrees/side dishes, covered, 5-6lb average	30-45	
Frozen prepared individual meal, covered, 12-16oz		20-30 or follow package instructions

Heat to 160°F internal temperature.



Health Care

Timer settings are approximate due to the differences in density, shape and the degree of “doneness” desired. Meats, eggs and frozen entrees should be heated to an internal temperature of 160–170°F. Use of 2½" deep steamtable pans is recommended. Perforated pans used where appropriate may decrease cooking times.

Breakfast Items	Minutes	
	Fresh	Frozen
Eggs, hard cooked in shell, 3-4 dozen/pan	12–14	–
Eggs, poached in muffin pans	4–5	–
Eggs, scrambled, 4 dozen/5lb carton/pan	10–12*	–
Pancakes, frozen pre-cooked, single layer	–	3–4
Sausage links/patties, 5lb/pan	–	8–10

* stir halfway through cooking time.

Vegetables	Minutes	
	Fresh	Frozen
Broccoli, spears/florets, 6lb/pan	3–4	5–8
Cabbage, wedges, 6lb/pan	8–10	–
Carrots, sliced or whole baby, 6lb/pan	5–8	5–8
Cauliflower, florets, 6lb/pan	6–8	10–12
Corn on the cob, 8lb/pan	7–9	8–10
Corn, whole kernel, 8lb/pan	–	5–7
Green beans, cut, 6lb/pan	6–8	6–8
Greens, fresh, 1lb/pan	10–15	–
Mixed vegetables, 6lb/pan	–	6–8
Onions, sliced, diced, 6lb/pan	4–5	4–5
Peas, 8lb/pan	–	4–6
Peas and carrots, 8lb/pan	–	4–6
Potatoes, whole, 8lb/pan	35–40	–
Potatoes, peeled, quartered or diced, 8lb/pan	18–20	–
Spinach, or greens, block frozen, 6lb/pan	–	15–20
Spinach, fresh, 1lb/pan	2–4	–
Sweet potatoes, whole, 8lb/pan	30–35	–
Winter squash, halved, 8lb/pan	25–30	–
Zucchini/summer squash, sliced, 6lb/pan	3–5	4–6

Meats/Poultry/Protein	Minutes	
	Fresh	Frozen
Chicken pieces, 8lb/pan	30–40	50–60
Corned beef, brisket, 6–8lb	2 hrs	–
Fish fillets, 5lb/pan	8–10	12–15
Ground beef/turkey, 8lb/pan	35–40	60–70
Ham, boneless, fully-cooked, 10lb average	55–60	–
Hamburger patties, 4oz ea., 6lb/pan	–	14–16
Hot dogs, 8lb/pan	10–12	14–18
Meatballs, 1" diameter, 6lb/pan	16–20	20–25
Meatloaf, 4lb loaf	40–45	90
Pork roast, boneless rolled, 4" diameter	45–50	–
Ribs, beef or pork, 8lb/pan	55–60	–
Smoked sausage dinner links, 8–10lb/pan	30–35	40–45
Turkey breast, 6–8lb ea., 2/pan	6–8*	8–10*
Turkey, 14–16lb average, whole	6–8*	8–10*
Veggie burgers, 4oz ea., 6lb/pan	–	10–14

* minutes per pound.

Frozen prepared entrees/side dishes	Frozen
Most single pans of the following foods weigh 4-6lbs. Keep frozen entrees covered.	
Beef Stew	35–40
Cabbage Rolls with Tomato Sauce	55–60
Lasagna	60–65
Macaroni and Cheese	35–40
Swedish Meatballs	40–45
Tuna Noodle Casserole	30–35
Potatoes Au Gratin/Scalloped Potatoes	40–45
Frozen prepared individual meals, 12–16oz	20–30, or follow package instructions



Minutes

Frozen prepared soups

Bean with ham soup, 8lb bag	60-65
Chicken noodle soup, 8lb bag	45-50
Chili con Carne w/Beans, 6lb pan	50-55
Clam chowder, 4lb bag	45-50
Vegetable soup, 4lb bag	30-35

Canned entrees/soups/sauces

Beef, chicken or turkey gravy, 8lb/pan	12-15
Cheese sauce, 8lb/pan	10-12
Tomato/spaghetti sauce, 6-8lb/pan	12-15
Chili with beans, 8-10lb/pan	20-25
Ravioli, beef or cheese, 8-10lb/pan	12-15
Spaghetti with meatballs, 8-10lb/pan	12-15
Vegetable/chicken noodle/tomato soup, 8lb/pan	12-18

Canned vegetables

Baked beans, in sauce, 6-8lb/pan	8-10
Beans, navy, pinto or butter, 6-8lb/pan	6-8
Carrots, sliced, 6-8lb/pan	6-8
Corn, whole kernel, 6-8lb/pan	6-8
Green beans, cut, 6-8lb/pan	6-8
Mixed vegetables, 6-8lb/pan	6-8
Peas, 6-8lb/pan	6-8
Potatoes, small whole or sliced, 6-8lb/pan	6-8
Tomatoes, stewed, 6-8lb/pan	6-8

Minutes

Rice/Beans/Pasta

Rice, long grain, 4 cups water/lb, 3lbs/pan	18-20
Lentils, barley, bulgar, millet, 4 cups water/lb, 3lbs/pan	35-50
Dried beans, pre-soaked, 1lb beans + 1 1/4 qts water	45-55
Dried beans, unsoaked, 1lb beans + 1 1/2 qts water	2 1/2 hrs
Refried beans, canned, 7lb/pan	45-50
Egg noodles, 3lb/pan covered with cold water*	8-12
Lasagna noodles, 3lb/pan covered with cold water*	10-14
Macaroni, 3lb/pan, covered with cold water*	10-14
Spaghetti, 3lb/pan, covered with cold water*	10-12

* Stir halfway through cooking time. Remove pan from steamer very carefully.

Cakes/Muffins

Cake, 5lb cake mix plus water, 12"x20" pan	25-30
Muffins, from commercial mix or recipe	10-12





Health Care

Kettles make cooking sauces, soups, pasta and rice, entrees and side dishes a snap. Compared to rangetop cooking, kettles have precise temperature controls and require little attention during cooking. Tilting kettles or stationary kettles with tangent draw-offs make emptying cooked product out of the kettle much easier and safer than pouring out of a large stockpot. Kettles are available in sizes ranging from one gallon to 150 gallons or more, to suit every need. Mixer kettles make mixing large quantities or heavy food products much easier and the finished product more consistent than doing the same job by hand, and are available in 12 gallon sizes and larger.

General Cooking Procedures:

Preheat kettles for all products except milk and eggs.

Rice, white: Add 2 cups water per 1 cup rice, or 5 cups water per 1 pound rice. Turn kettle temperature control to #10 to boil water, then add rice and bring back to a boil. Turn dial to #4, cover kettle and simmer for 20 minutes. Empty cooked rice into large colander and drain if necessary. **For brown rice:** after adding rice to boiling water, turn dial to #4, cover and simmer for 40 minutes.

Pasta, noodles, spaghetti, macaroni: Turn kettle temperature dial to #10 to boil water, add salt and oil if desired, add pasta (1lb dry pasta to 6 quarts water), return to boil, turn dial to #4 to maintain slow boil, stirring frequently to prevent sticking, cook pasta to al dente stage (usually 8–12 minutes, depending on thickness of pasta). Drain cooked pasta.

Potatoes, cubed or small whole fresh: Set temperature control to #10 to boil water, add potatoes (salt if desired), reduce temperature dial setting to #5–6. Recommended boiling times: 25–40 minutes, depending on size of potatoes. Drain.

Potatoes, dehydrated sliced: 5lb dehydrated yields approximately 20lbs cooked. Place dehydrated potatoes in kettle, add water to cover (salt if desired), turn temperature dial to #10 until water boils, reduce temperature dial to #6 to simmer. Simmer potatoes 10–12 minutes after water boils. Drain.

Meat: Brown meat on #10 temperature setting, stirring frequently: internal temperature of meat should reach at least 160–170°F. Drain if desired. Note: ground meat at refrigerated temperature takes approximately 10–15 minutes per 10lbs. meat to brown. Additional time may be necessary to thoroughly cook and tenderize larger, solid pieces of meat. Add any liquid or additional ingredients necessary to recipe and simmer until done on #5.

Sauces/soups, canned or frozen and thawed: Place sauce or soup in kettle, turn kettle temperature dial to #5–7, depending on density of product and sensitivity to heat; stir frequently until product reaches temperature of 160–170°F.



Enodis

Fresh Ideas In Steam Cooking

Cleveland Range, LLC • 1333 East 179th Street • Cleveland, Ohio 44110

Toll Free: 1-800-338-2204 • Tel: 216-481-4900 • Fax 216-481-3782

<http://www.clevelandrange.com>

Cleveland Kettles



Cleveland Kettle Portions and Cooking Times

Item	Servings	Wt of dry product (lbs)	Water (gallons)	Salt (optional)	Cooking Time (minutes)
Oatmeal	100/5oz	5	4	2oz	15-20
Farina	110/5oz	4	4	2oz	10-15
Grits	100/6oz	5	4	2oz	15-20
Noodles	50/4oz	5	5	2oz	5-10
Macaroni	50/5oz	4	4	2oz	10-15
Spaghetti	50/5oz	4	4	2oz	10-15

Cooking method: Measure water into kettle. Turn on power switch. Turn control to MAX to bring water to a boil. Add salt. Turn control to #6, add cereal or pasta very slowly. Stir to control foaming and sticking. Cook on #6 for the time indicated. The surface should have a gentle rolling boil; adjust temperature control accordingly. Stir occasionally during cooking.

*Add 2oz margarine or oil to pasta to control excessive foaming.

White rice	50/3oz	3	3¼ quarts	1oz	20-25
Brown rice	50/3oz	3	3¼ quarts	1oz	35-40

Cooking method: Measure water into kettle. Turn on power switch, turn control to MAX. Bring water to boil. Add salt. Add rice slowly; stir to control foaming and break up lumps. When water is back to a boil, turn control to #4. Cover kettle, cook for time indicated without stirring.

Volume Measure (Liquid)

How Many Portions or Servings (Calculated):

Gallons	1 oz	2 oz	3 oz	4 oz	6 oz	8 oz
5	640	320	213	160	106	80
10	1280	640	426	320	213	160
20	2560	1280	853	640	426	320
25	3200	1600	1066	800	533	400
30	3840	1920	1280	960	640	480
40	5120	2560	1706	1280	853	640
60	7680	3840	2560	1920	1280	930
80	10,240	5120	3413	2560	1706	1280
100	12,800	6400	4266	3200	2133	1600



Health Care

Cleveland skillets can be used to grill, braise, fry, poach or steam a wide variety of foods. The following list is to be used as a guide on approximate cooking times. Some items should be grilled to brown at 350-375°F, then cooked slowly (250-275°F) in a small amount of liquid to tenderize and complete the cooking process. Ground meats, pork, chicken, turkey, eggs and many protein-based dishes need to be cooked to an internal temperature of at least 160-170°F.

	Size/Amount*	Minutes
Meats		
Beef roast, 4-8lb	5-20 each	30-35/lb
Beef steaks, 1½-2" thick	10-40lb	6 (rare) 10 (medium) 15 (well done)
Corned beef, 6-8lb	4-12 each	30-35/lb
Beef, pork cubes 1-2"	20-40lb	30-60
Ground beef (bulk)	20-40lb	15-30
	50-100lb	35-60
Hamburger patties, 4oz	20-60 each	5-15
Meatballs, 1½-2"	15-50lb	12-15
Hot dogs, 8/lb	8-20lb	5-6
Swiss steak, ½" thick	40-80lb	60-80
Liver, 8oz	10-30lb	8-10
Pork chops, 6oz	10-40lb	45-50
Lamb chops, 6oz	10-40lb	15-18
Ham steaks, 8"	10-40lb	8-10
Spare ribs, slabs, 3lb	15-60lb	20-30
Sausage, Italian/smoked	10-40lb	20-25
Sausage, breakfast links	10-30lb	10-15
Bacon slices	5-15lb	4-6

	Size/Amount*	Minutes
Chicken/Turkey		
Chicken pieces, fried	20-40lb	45-50
Chicken pieces, simmered	20-40lb	50-55
Chicken, whole, 3-5lb each	20-40lb	60-90
Chicken patties, breaded, 4oz	10-20lb	12-15
Chicken nuggets, 2oz	15-30lb	8-10
Turkey, whole, thawed, 12-14lb	4-10	2½-3 hrs

	Size/Amount*	Minutes
Seafood		
Fish fillets, 4-8oz each	10-25lb	6-10
Shrimp, fried or grilled	10-20lb	5-7
Scallops, grilled	10-20lb	6-8
Salmon, whole poached, 5-7lb	2-8 each	40-50

	Size/Amount*	Minutes
Eggs		
Scrambled eggs	5-15 gal	10-12
Fried eggs	2-5 doz	3-5
Omelets, 8" diameter	6-20 each	8-10

* Capacity varies with size of skillet



	Size/Amount*	Minutes
Bread		
French toast	10-30 slices	4-6
Pancakes, 5"	10-30 each	4-6
Grilled sandwiches	10-30 each	6-10
Fritters, apple or corn, 4"	10-25 each	8-10

Vegetables		
Grilled/stir fry vegetables	10-20lb	10-12
Hash brown potatoes	20-40lb	25-30
Potatoes, cubed, 1-2"	20-50lb	25-40

	Size/Amount*	Minutes
Pasta/Rice/Beans		
Noodles, macaroni, spaghetti	1lb/6qts boiling water	6-15
Rice, white long grain	1lb/1qt water	15-20
Fried rice (using cooked white rice)	10-20lb	12-15
Dried beans, soaked overnight	1lb beans/2qts water	50-55
Dried beans, unsoaked	1lb beans/2½qts water	2½ hrs
Dried lentils, unsoaked	1lb lentils/2½qts water	45-50

How many fit in each skillet?

Skillet Size

Item	10gal	15gal	30gal	40gal
Meats				
Ground beef	25lb	30lb	75lb	100lb
Hamburger patties, 5oz	24	24	54	72
Chili, sloppy joes	9gal	10gal	27gal	37gal
Stew meat, cubes	20lb	26lb	60lb	80lb
Pot roasts, 5lb	5 roasts	6 roasts	15 roasts	21 roasts
Liver, 8oz	12	14	26	39
Meatballs, 2oz	15lb	20lb	35lb	50lb
Hot dogs, 8/lb	66	66	110	154
Beef steaks, 10oz	18	17	45	60
Corned beef, 7lb	5	5	8	12
Pork chops, 5oz	15	18	30	40
Ham steaks, 8" diameter	6	6	12	15
Bacon slices, 1oz	32	27	48	64
Sausage, Italian	12lb	12lb	27lb	39lb
Chicken/Turkey				
Chicken breasts, 8oz	20	17	36	54
Chicken legs and thighs, 4oz	48	33	96	129
Roasting chickens, 5-6lb	8	6	12	16
Whole turkey, 15lb	3	3	6	10