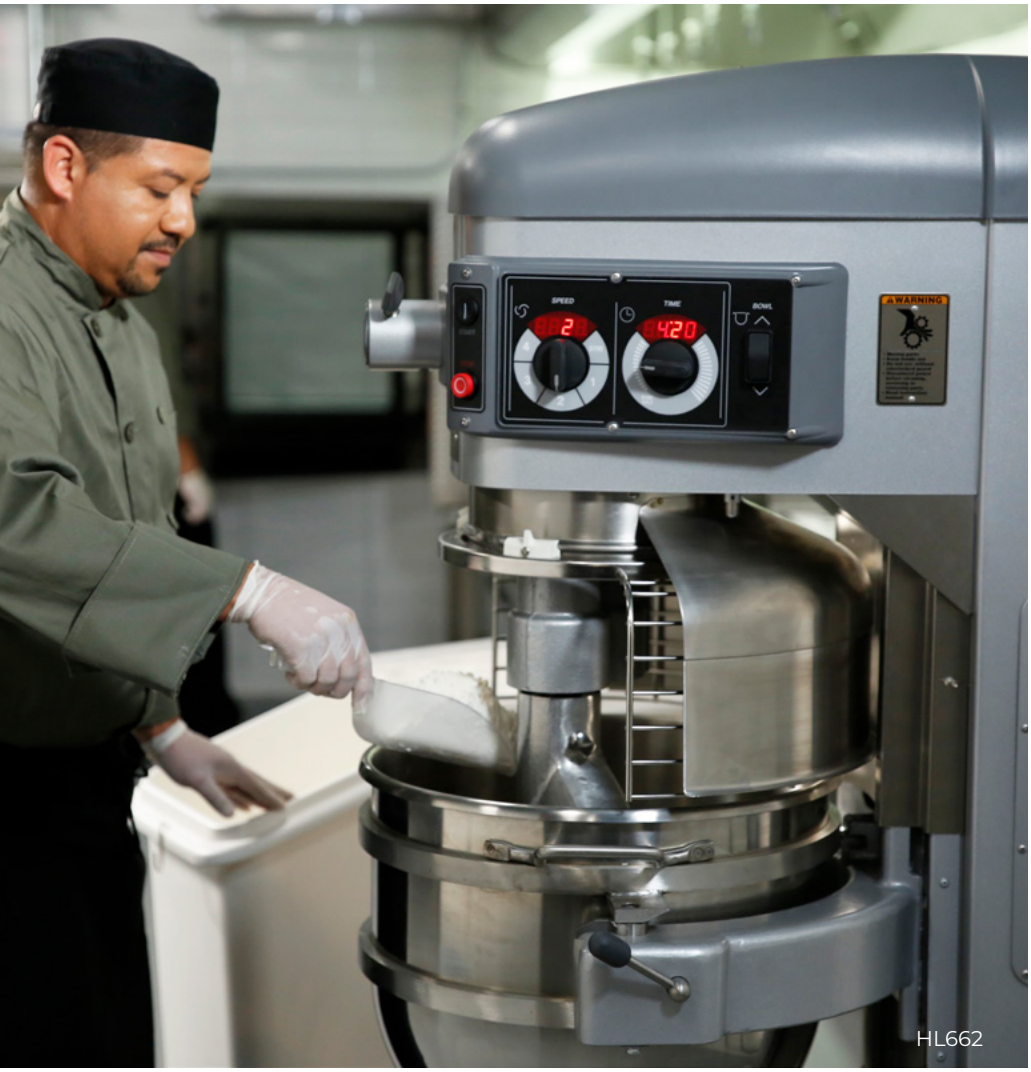
02 MIXERS

THE HIGHLIGHTS



HL662

PLANETARY
N50 (5 QT.)

LEGACY® SERIES
PLANETARY
HL120 (12 QT.)
HL200 (20 QT.)
HL300 (30 QT.)
HL400 (40 QT.)
HL600 (60 QT.)
HL662 (60 QT.)
HL800 (80 QT.)
HL1400 (140 QT.)

CENTERLINE™
PLANETARY
HMM20 (20 QT.)

SPIRAL
HSL180 (180 LBS.)
HSL220 (220 LBS.)
HSL300 (300 LBS.)
HSL350 (350 LBS.)
HSU440 (440 LBS.)

KEY DIFFERENCES IN PLANETARY AND SPIRAL MIXERS:

PLANETARY

- Fixed bowl
- Capacity measured by volume of the ingrediants it can hold (5 - 140 quarts)
- Countertop & Floor standing
- Typical uses: general-purpose kitchens, bakeries and pizzarias

SPIRAL

- Rotating bowl
- Capacity measured by maximum weight of the dough batch (180 - 440 lbs)
- Floor standing
- Typical uses: specialized dough such as artisan bread, bagels, and Neapolitan pizza

PLANETARY MIXERS

All planetary mixers have one motor and a non-rotating bowl. Planetary mixers are sized by the volume of the ingredients they can hold in their bowls, and their capacities can range from five to 140 quarts, adding to the flexibility these mixers offer.

COUNTERTOP MIXER

Countertop mixers are ideal for operations with limited kitchen space. It's able to handle egg whites, blueberry batter, heavy bread dough and more—simply in a smaller size.

N50 (5 QT.)
countertop

HL120 (12 QT.)
countertop

HL200 (20 QT.)
countertop

HMM20 (20 QT.)
countertop

KEY DIFFERENCES	LEGACY MAXIMUM HEAVY DUTY	centerline STANDARD HEAVY DUTY
MODELS	**HL120 & HL200**	**HMM20**
Mixing usage	More than 4 hours per day	Less than 4 hours per day
Applications	Heavy doughs, challenging batters	Batters, mashed potatoes, sometimes heavy doughs
Performance	Superior	Limited batch use
Pricing	Mid to High	Moderate

FLOOR MIXER

The Legacy series are larger, floor-standing planetary mixers, ranging from 30 quart to 140 quart capacity. Typical users mix for more than 4 hours per day. **They are currently the most commonly-used commercial mixer on the market.**

HL300
floor

HL400
floor

HL600
floor

HL662
floor

HL800
floor

HL1400
floor

COMMON APPLICATIONS

- Bread dough (medium & heavy)
- Pizza dough
- Cake batter
- Whipping meringues & cream
- Heavy cookie doughs

SEGMENT SPECIFIC OPPORTUNITIES

- Bakeries
- Pizzerias
- Schools
- Large chain restaurants
- Independent restaurants
- Mixing 4+ hours per day

PLANETARY MIXERS

KEY ATTRIBUTES AND VALUE PROPOSITION

Maximum heavy-duty means a mixer can operate continuously, batch after batch, for more than 4 hours/day. Legacy mixers last up to 3 times the life of traditional gear-driven machines. Variable Frequency Drive (VFD) technology is what makes this maximum heavy-duty mixer perform.

Shift-on-the-Fly™ technology
No need to stop the machine to change speeds. Pulse and jog as needed.

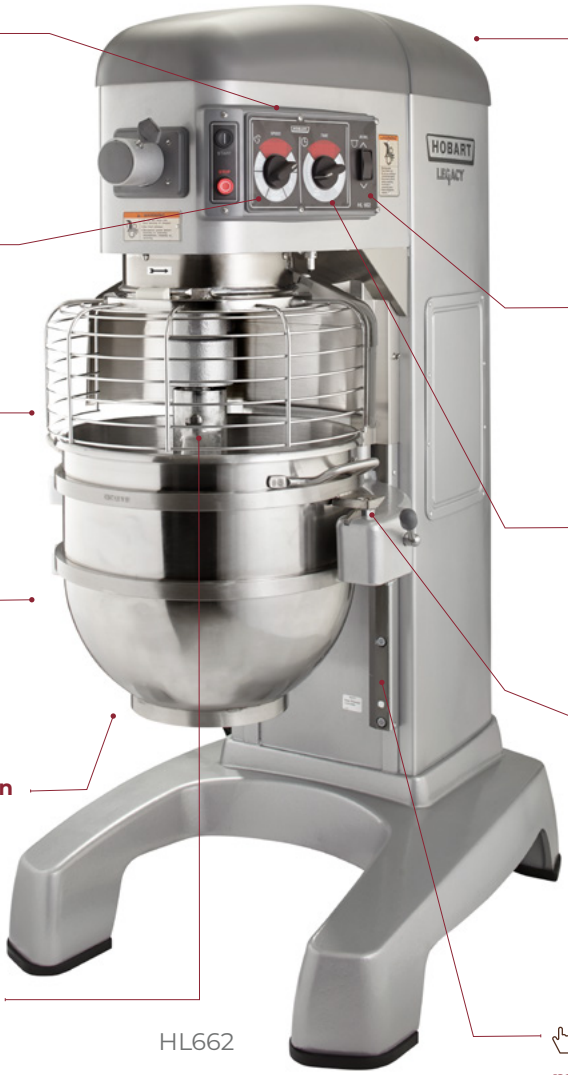
4 mixing speeds
Includes stir speed.

Removable bowl guard
Easy to remove without tools for cleaning and sanitizing.

Swing-out bowl
Patented feature adds convenience and saves time.

Single-point bowl installation
Simplifies attaching the bowl to the mixer.

Quick-Release™ agitators
Quick and easy to remove. Pin locks agitator to shaft, eliminating the up/down play of bayonetstyle agitators. The consistent agitator-to-bowl ratio delivers superior mixing performance.



HL662

Variable Frequency Drive (VFD)
All-gear, direct-drive system ensures superior mixing consistency, motor protection and long life.

Soft Start
Minimizes the risk of ingredient splash-out (the flour shower) for less cleaning time.

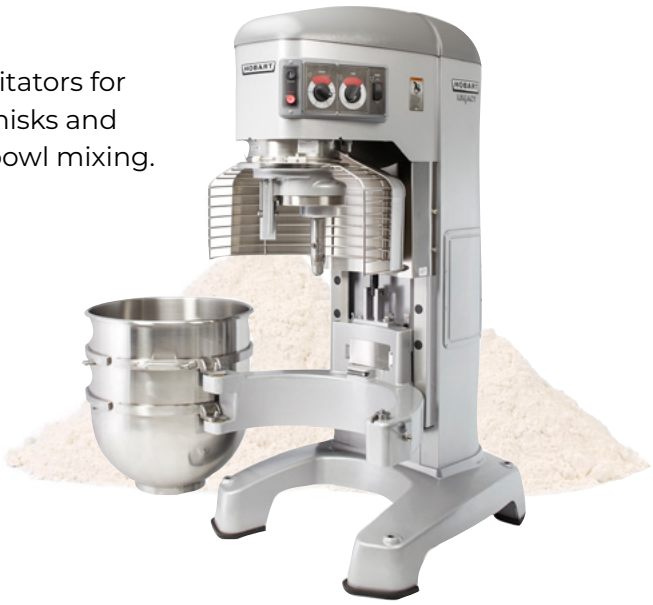
SmartTimer™ feature
Automatic recall of time and speed.

Triple Interlock System
Prevents mixer from operating unless the bowl is fully up and locked in place and the bowl guard is secured.

Electronic Bowl Lift (60 qt. models and above) or Ergonomic Bowl Lift (40 qt. model and below)
Smoothly moves the bowl into mixing position.

AGITATORS AND ATTACHMENTS

Planetary mixers need the proper attachments and agitators for optimal performance. Whips, beaters, dough hooks, whisks and pastry knives are common kinds of agitators used for bowl mixing.



C Wing Whip
Best for maximum blending of air into light products. Applications include whipping cream, beating egg whites, light icings and meringues.

D Wire Whip
Good for heavy whipping. Applications include light creaming and beating, potatoes, butter, mayonnaise, and light icing.

E Dough Hook
Used for mixing, stretching and folding most bread, roll and pizza doughs. Also good for lighter breads.

ED Dough Hook
Used for mixing, stretching and folding most bread, roll and pizza doughs. Also good for lighter breads.

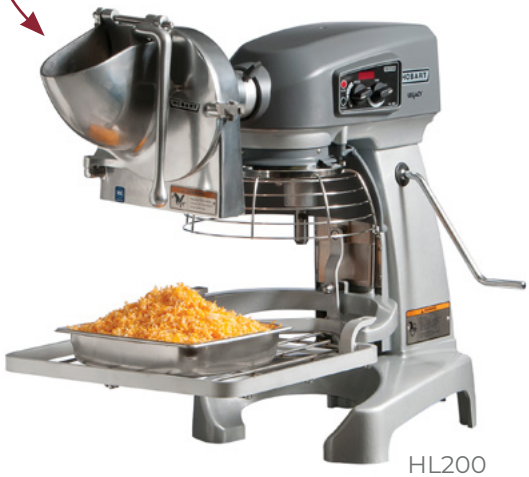
I Heavy-Duty Wire Whip
Used for heavy whipping. Applications include sponge cakes and light marshmallow.

P Pastry Knife
Combines shortening with flour, and is ideal for light pastry shells, flaky pie doughs and similar mixes.

Bowl Scraper
Used for scraping the sides of the bowl after operation.

B Flat Beater
Multi-purpose agitator, good for mashing potatoes, mixing cakes, batters, icings, creaming/uniform dispersion of ingredients

Use attachments VS9 and Meat Chopper to slice, grate, shred and chop with the mixer.



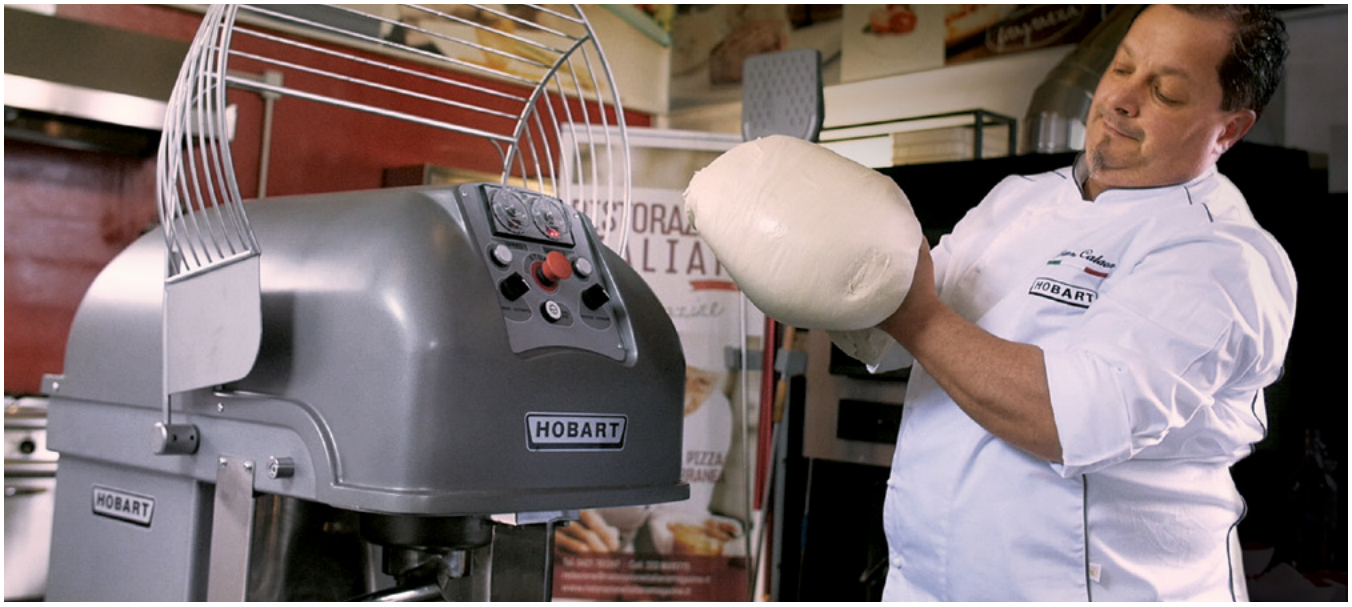
HL200 with VS9

Meat chopper attachment

VS9 Slicer / Shredder attachment

SPIRAL MIXERS

Creating great dough is both an art and a science. Our customers deliver the artistry - we deliver the science. The rotations of the dough hook and bowl in the Hobart spiral mixers are precisely engineered to quickly and gently knead dough. This lowers friction and minimizes temperature increases to promote ideal leavening - even with small batches of dough and with doughs having up to a 90% absorption ratio.



HSL180
(180 lbs)

HSL220
(220 lbs)

HSL300
(300 lbs)

HSL350
(350 lbs)

HSU440
(440 lbs)

Spiral mixers take up a significant footprint in a kitchen. Space should always be a consideration when planning for a spiral mixer. Capacity is measured by maximum weight of dough. Please refer to our capacity chart on page 13 to confirm needed size (180 - 440lbs).

COMMON APPLICATIONS

- Artisan Breads
- Bagels
- Neapolitan pizza doughs
- Pastries

SEGMENT SPECIFIC OPPORTUNITIES

- Bakeries
- Pizzerias
- Colleges & Universities

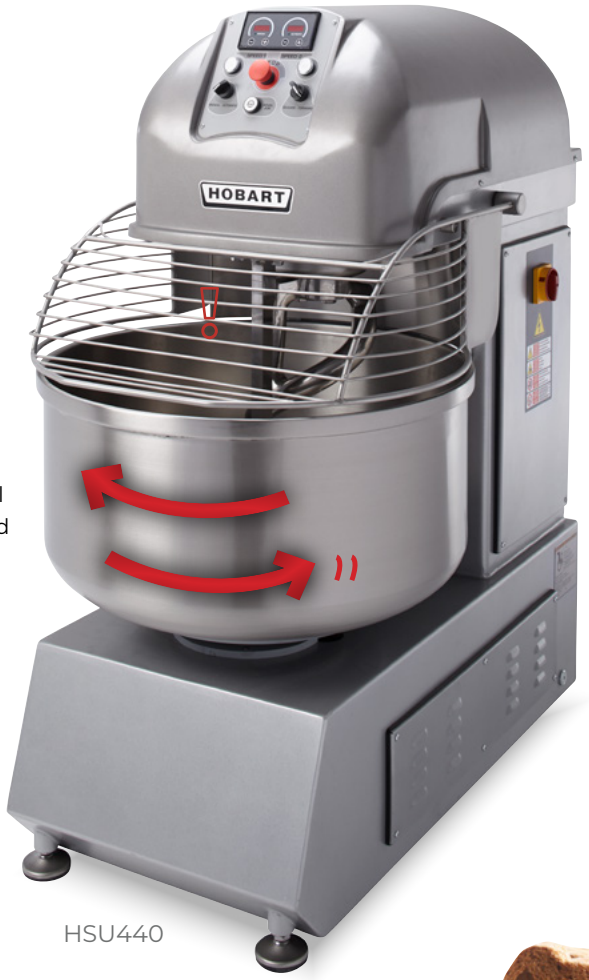
KEY ATTRIBUTES AND VALUE PROPOSITION

Double-pulley belt-driven motor
Creates more torque to handle heavy loads.

Electronic Controls
Modern, easy-to-use, digital design.

Two mixing speed settings
Automatically shift from Speed 1 to Speed 2.

Easy-to-clean kneading zone
No debris-collecting crevices—so cleanup is fast and simple.



HSU440

20 Minute Timer
Set your timer right on the mixer.

Bowl guard
Wireform, stainless steel bowl guard interlock prevents spiral arm operation when the guard is up

Bidirectional Bowl Rotation
Improves mix consistency, makes the mixer easier to use, speeds cleaning and lets you run batches of dough as small as 10% of maximum capacity.

Bowl-pulsing system
Designed to make removing dough quick and easy.

Hobart quality
The standard for quality food equipment, Hobart mixers deliver a long lifetime of reliable service.

MIXERS - UNDERSTANDING ABSORPTION RATIO

Understanding absorption ratios is the best way to determine the right mixer size for your operation. The recommended maximum mixer capacity depends on the moisture content of the ingredients and application.

EXAMPLE 1:

Recipe calls for 1 gallon of water and 20 lbs. of flour, you would calculate:

1 gallon X 8.33 lbs/gallon = 8.33 lbs. of water.
8.33 divided by 20 lbs. of water = 42% absorption ratio.

8.33 LBS WATER ÷ **20 LBS** FLOUR = **42% AR** ABORSORPTION RATIO

EXAMPLE 2:

Recipe calls for 3 gallons of water and 50 lbs. of flour, you would calculate:

3 gallons X 8.33 lbs/gallon = 25 lbs. of water.
25 divided by 50 lbs. = 50% absorption ratio.

25 LBS WATER ÷ **50 LBS** FLOUR = **50% AR** ABORSORPTION RATIO

MIXERS - UNDERSTANDING ABSORPTION RATIO

Recommended Maximum Capacities—dough capacities based on 70°F water and 12% flour moisture.

Product	Absorption Rate	HL120	HL200	HL300	HL400	HL600	HL662	HL800	HL1400
CAPACITY OF BOWL (QTS. LIQUID)		12	20	30	40	60	60	80	140
Dough, Bread or Roll (Lt.-Med.)	60%	13 lbs.*	25 lbs.*	45 lbs.*	45 lbs.*	80 lbs.*	90 lbs.*	170 lbs.*	210 lbs.*
Dough, Heavy Bread	55%	8 lbs.*	15 lbs.*	30 lbs.*	35 lbs.*	60 lbs.*	85 lbs.*	140 lbs.*	175 lbs.*
Dough, Thin Pizza**	40%	5 lbs.*	9 lbs.*	14 lbs.*	25 lbs.*	40 lbs.*	60*/40 lbs.**	85 lbs.*	135 lbs.*
Dough, Med. Pizza**	50%	6 lbs.*	10 lbs.*	20 lbs.*	32 lbs.*	70 lbs.*	90*/70 lbs.**	155 lbs.*	190 lbs.*
Dough, Thick Pizza**	60%	11 lbs.*	20 lbs.*	40 lbs.*	45 lbs.*	70 lbs.**	90 lbs.**	155 lbs.*	190 lbs.*
Dough, Raised Donut	65%	4 lbs.*	9 lbs.*	15 lbs.*	25 lbs.**	30 lbs.***	75 lbs.**	60 lbs.***	100 lbs.***
Dough, Whole Wheat	70%	11 lbs.*	20 lbs.*	40 lbs.*	45 lbs.*	70 lbs.*	90 lbs.*	150 lbs.*	185 lbs.*

* 1st Speed
** 2nd Speed - (should never be used on 50% AR or lower product with the exception of the HL662)
*** 3rd Speed
Use of ice requires a 10% reduction in batch size.

Click here for Full Capacity Chart

The thicker the dough, the higher the AR%. The higher the AR, the more power and capacity is needed in a mixer.

EXAMPLE 1:

**Visual purposes only. Not actual representation.*

If someone has a 50% AR dough and they have a **HL200 mixer**, the most they could mix at one time would be **10 lbs.**

EXAMPLE 2:

**Visual purposes only. Not actual representation.*

If someone has a 70% AR dough and they have a **HL600 mixer**, the most they could mix at one time would be **70 lbs**.

Note: If water temperature is under 55°F or if 25% or more of the water is ice, reduce batch size by reducing the flour by 25 lb. and reduce other ingredients accordingly. Cold water or ice causes dough to be stiff and hard to mix, increasing the load on the mixer transmission and motor.