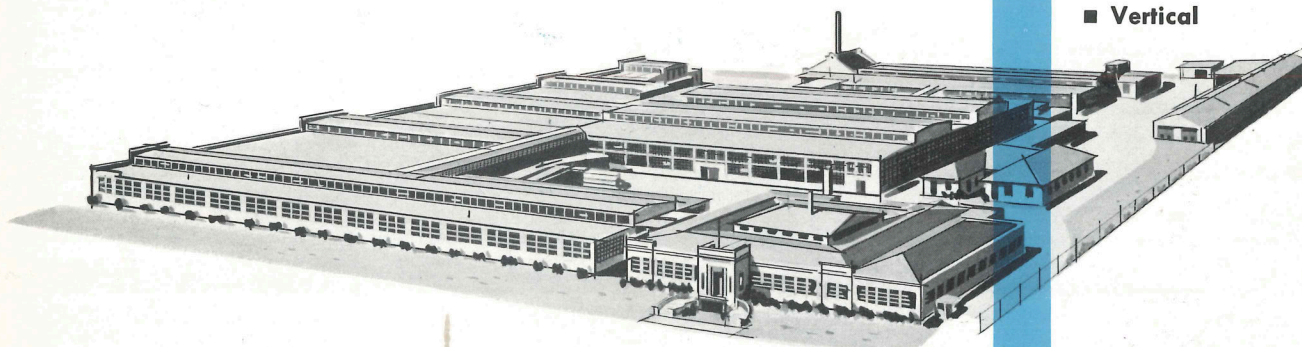




## processing equipment



### MIXERS

- Batch
- Continuous
- Double Arm
- Jacketed
- Laboratory
- Pilot Plant
- Spiral Ribbon
- Split Level
- Stationary Bowl
- Tilting Bowl
- Vacuum
- Vertical

## The Reliable Source for Chemical Processing Equipment

For over half a century the experience and facilities of Read Standard have gone into the manufacture of processing equipment for the chemical industry. Read offers machines built for consistent and dependable operation for long periods of sustained rugged service.

Dry or wet materials are dispatched with accuracy and efficiency, to a consistent homo-

geneous mix in a minimum of time. Readco machines are available for pressure or vacuum operation, with or without temperature controlling jackets. Versatility of mixing is yours, from creams and light plastics, to the more dense, dry solid or viscous materials. Increased production is accomplished with a Readco mixer, meaning a reduction in the cost of your operation.

## READ STANDARD

York, Pennsylvania

A Division of  
Capitol Products Corporation



## Get complete dispersion, shorter cycles at lower cost with Readco Double Arm Mixers

Rugged Readco Double Arm Mixers are designed for heavy duty mixing, kneading or blending of medium to high-density ingredients. They can be supplied for atmospheric, vacuum or pressure operation, with single or dual drive, single or variable speed, with or without temperature controlling jackets.

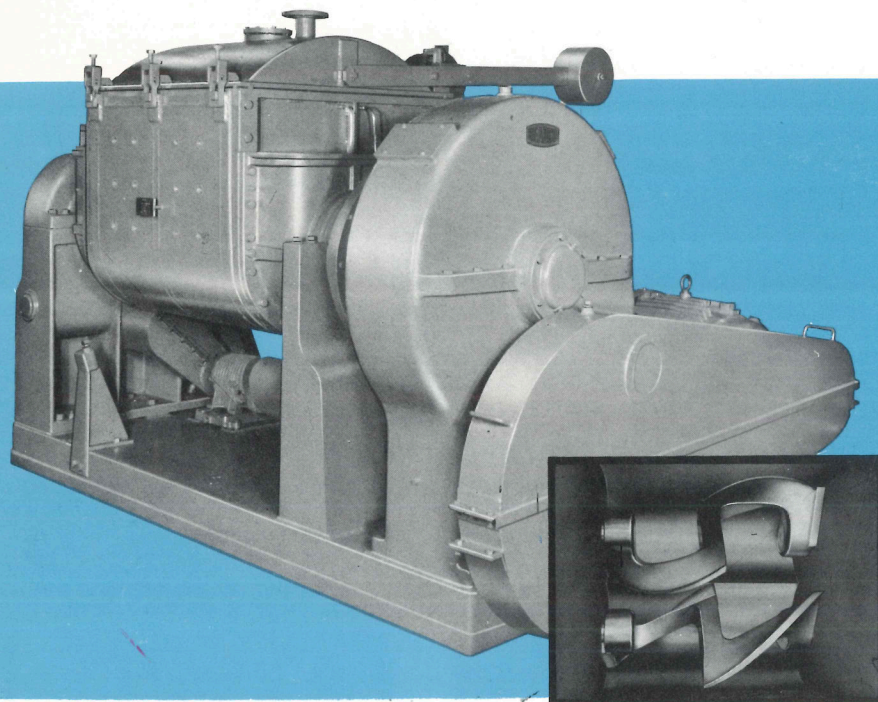
Overlapping action of mixing arms speeds dispersion, eliminates dead spots. While sigma arms suit most requirements, other designs are available. All are interchangeable.

Both bowl and arms are accurately machined and fitted to assure constant close clearance, prevent

build-up, cut processing time. Built of carbon or stainless steel, or any commercial alloy, Readco Double Arm Mixers take the severest production service in stride.

Tilting bowl models have heavy base and columns, supporting large diameter trunnions which carry the load of the mixing bowl assembly.

Stationary bowl models are built with columns and bowls joined to form one rigid, rugged unit. In the dual-drive model for heavy loads, agitators are driven from both ends. Equipped with either hand or power-operated bottom discharge valve.



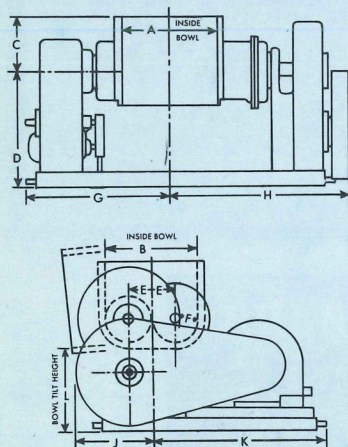
Double Arm Mixer blades

### Medium Duty Double Arm Mixers

This fabricated unit is designed for mixing, kneading and blending of materials of medium density. Mixing action is the same as that of the heavy duty Double Arm Mixer. Working capacities range from 75 to 400 gallons. Made in Tilting Bowl Model only.

### Laboratory and Pilot Plant Mixers

Ruggedly built of Type 316 stainless steel or any commercial alloy. Easily interchangeable mixing arms adapt to various materials or processes. Will handle efficiently the heaviest viscous materials. Available from stock in 1, 3, 6, 20 and 40 quart mixing capacities with constant speed drives. Variable speed drives available on request. All mixers available for atmospheric, vacuum, or pressure operation, with or without temperature controlling jacket.

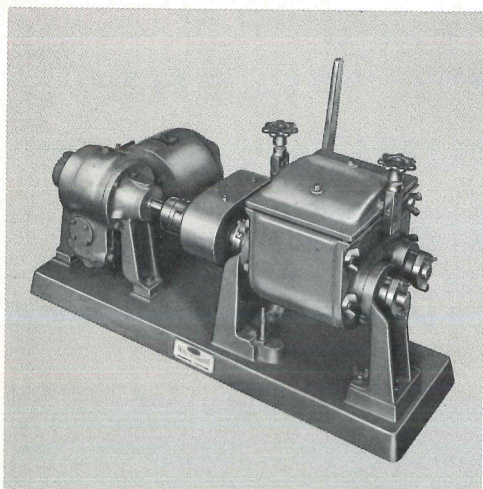


## Readco Double Arm Mixers

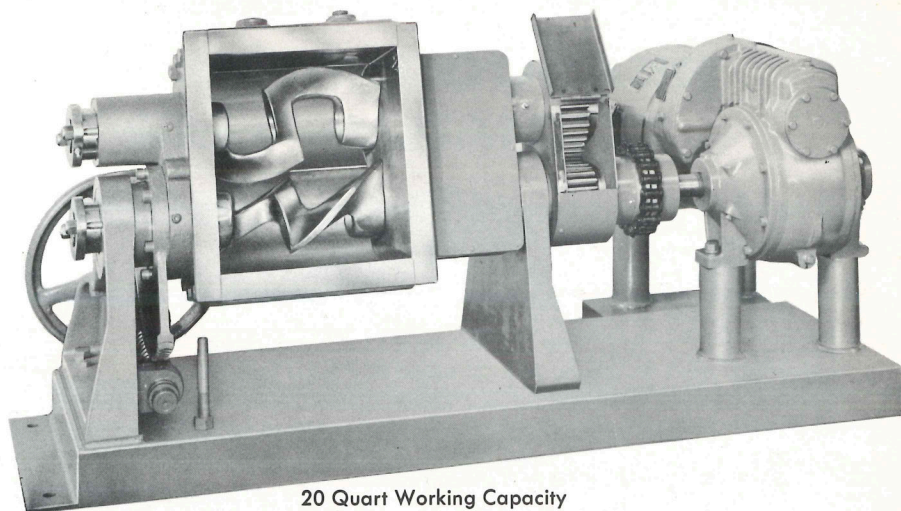
Working Capacity Gallons	Total Capacity Gallons	*Nominal H.P.	R.P.M.	DIMENSIONS IN INCHES										
				A	B	C	D	E	F	G	H	J	K	L
10	15	* 7½	*45	15	16¾	12	34	3½	5	34	40	14	41	24
15	23	* 10	*40	18	19½	13	34	4	5¾	34	40	16	46	23
25	38	* 15	*35	20	24¾	13	31	5½	7	34½	58	19	55	19
50	75	* 20	*30	29	28	17¾	36	6	8	42	56	25	52	22
75	115	* 30	*28	30	33	20½	40	7½	9¾	42½	69	27	65	25
100	150	* 50	*25	36	36½	21½	40	8	10¼	46	75	28	65	22
150	225	* 60	*22	44	42	20	44½	9	12	49	82	30	74	25
225	340	* 60	*21	46	45	28½	43	10	12½	51	86	30	80	22
300	450	* 75	*18	55	52¼	32½	56	12	14¾	100	100	33	80	30
400	600	*100	*17	55	56	35	56	12½	15½	102	102	42	83	30

\*NOTE: H.P. and R.P.M. are approximate—furnished to suit requirements.





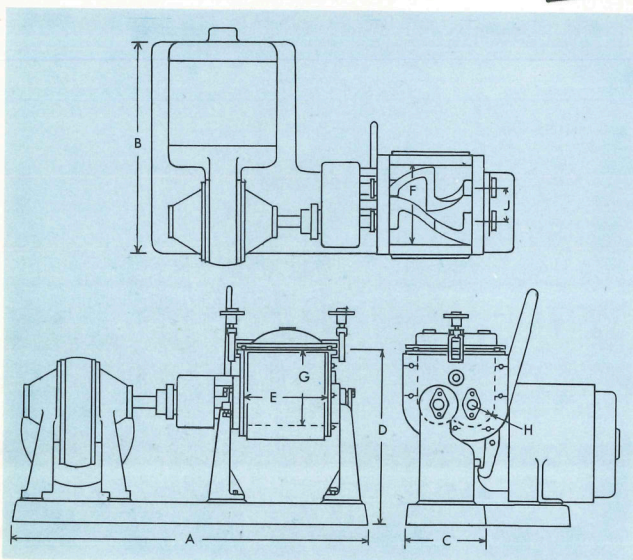
3 Quart Working Capacity



20 Quart Working Capacity

## Pilot & Laboratory Models

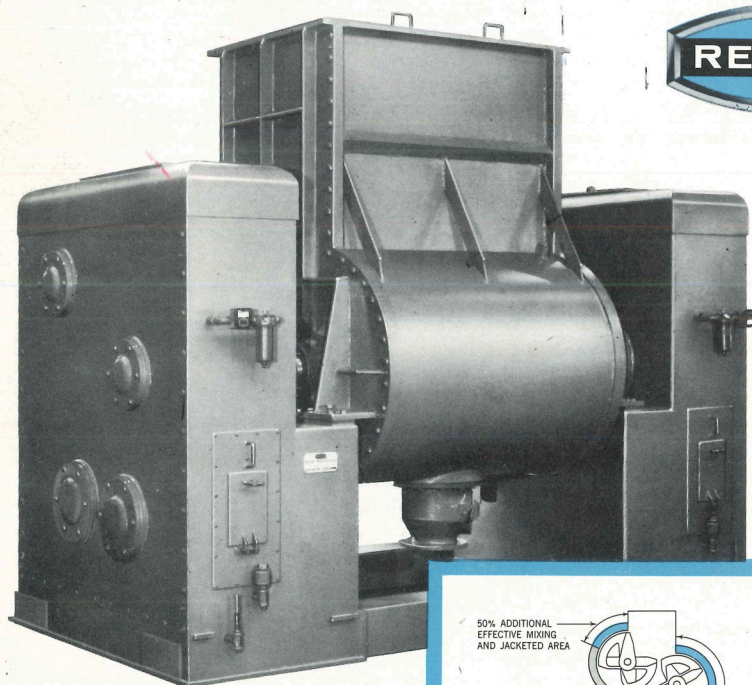
Capacity (Quarts)		DIMENSIONS IN INCHES											
Work- ing	Total	A	B	C	D	E	F	G	H	J	Motor H.P.	Arm R.P.M.	
1	1½	26	13⅞	9	10⅜ <sub>16</sub>	4	5¾	4⅓ <sub>16</sub>	19 <sub>16</sub>	2⅝	⅓	72	
3	4½	35	15	10½	14⅞	6¾	8½	7¼	2¼	4	¾	58	
6	9	38⅝	17¾	8¾	18⅞	9	8½	8⅞	2½	3½	1½	42	
20	30	65	30	18	20½	12½	13½	12¼	3¾	6	5	50	
40	60	67	22	22	36	15	17	17	5	7	7½	37	



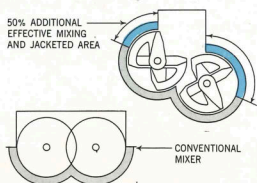
## SPLIT-LEVEL MIXER

The special design of the mixing bowl provides a 50% greater effective mixing area to speed the mixing process. This also permits maximum heat transfer from the jacket when used. Combined with overlapping sigma arm action, this design means you'll get complete dispersion of materials in substantially shorter cycles.

Working Cap. Gallons	Total Cap. Gallons	Nominal H. P.	Overall Length	Overall Width	Overall Height	Net Weight
10	15	5	6'0"	1'9"	4'0"	2,500
25	38	7.5	7'2"	2'4"	4'4"	4,500
75	115	25	7'9"	3'6"	5'6"	7,500
150	225	50	9'2"	4'0"	6'3"	11,000
350	425	100	12'0"	5'6"	8'0"	21,000
550	775	150	14'0"	6'0"	9'0"	33,000
750	1125	200	15'2"	6'3"	9'7"	36,000
900	1340	200	16'8"	6'3"	9'7"	38,000



50% ADDITIONAL  
EFFECTIVE MIXING  
AND JACKETED AREA

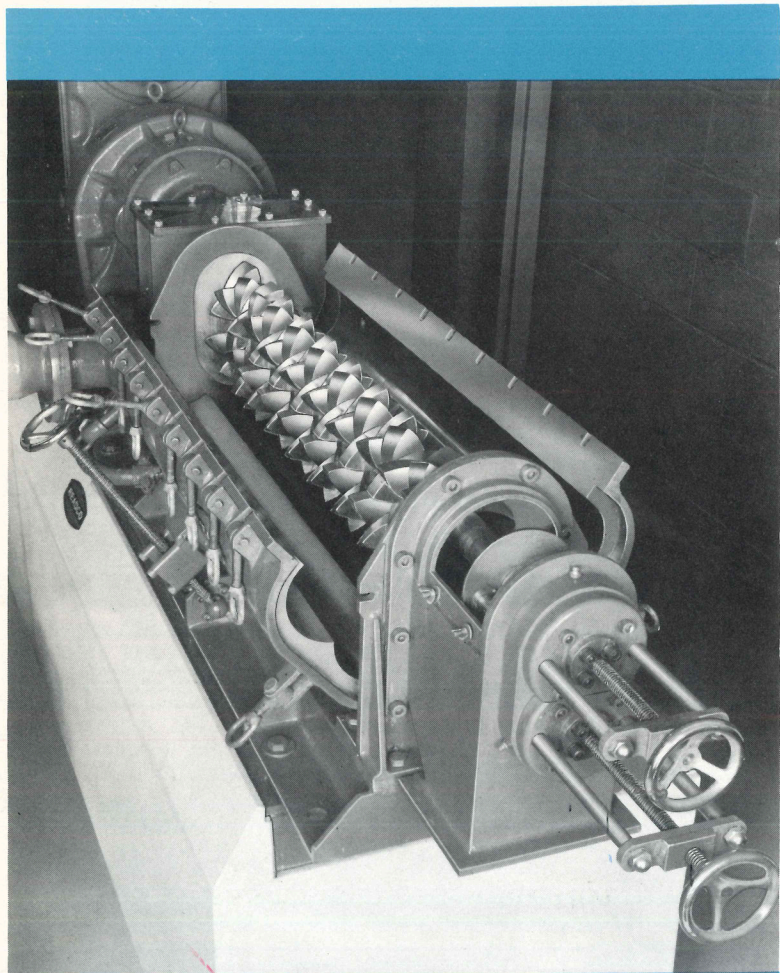


CONVENTIONAL MIXER





## NEW CONTINUOUS SELF-CLEANING PROCESSOR...opens new fields for continuous processing



Readco's Continuous Self-Cleaning Processor makes continuous mixing practical for high-viscosity materials, pastes and semisolids formerly restricted to batch procedures. In addition, this new processor can be used for continuous reaction, polymerization, heating and cooling of high-viscosity materials.

The Readco Continuous Processor has lens-shaped agitators mounted on two parallel shafts which rotate in the same direction within a figure-8-shaped barrel. The shape of the agitators assures their close clearance with each other as well as with the barrel to provide an efficient, self-cleaning action.

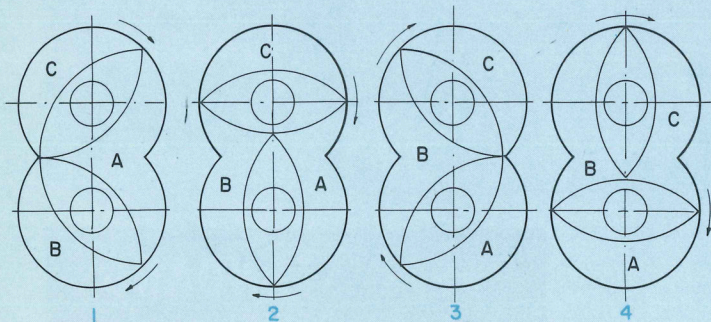
With each rotation of the agitator assemblies, there is a variation of the volume between the agitator faces and the barrel (see diagram). This alternating compression and suction provides a backward-forward motion additional to the progressive motion.

The Readco Continuous Processor is available in six standard sizes, with agitator diameters of 5, 7½, 10, 15, 25 and 30 inches, and with horsepower ranging from 5 to 200. Units are constructed of carbon steel, stainless steel or any commercial alloy. Power requirements, production rates and agitator speeds vary depending upon the materials being processed. Available also are various agitator designs and, for applications requiring long retention times, multiple units with transfer sections to provide equal agitation of all portions of the material at all times.

Optional features include: sectionalized temperature-controlling jackets; temperature sensing wells; special charging and discharging provisions; variable speed drives.

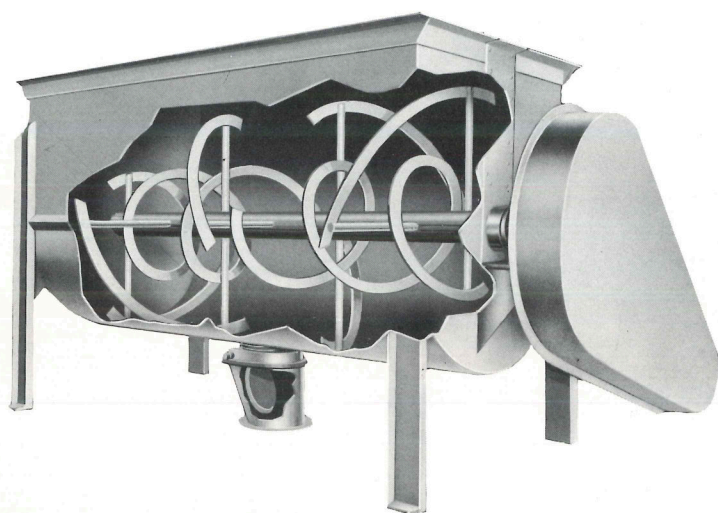
### Volume Variation

As agitators rotate from position 1 to position 2, volume A decreases, volume B increases, volume C remains constant. From position 2 to 3, A decreases, B increases, C is constant; from position 3 to 4, A is constant, B decreases, C increases.





## Counterflow is key to rapid, thorough mixing in READCO SPIRAL RIBBON MIXERS

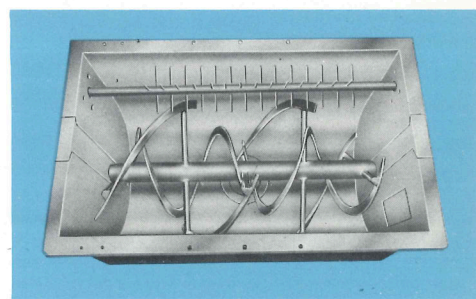
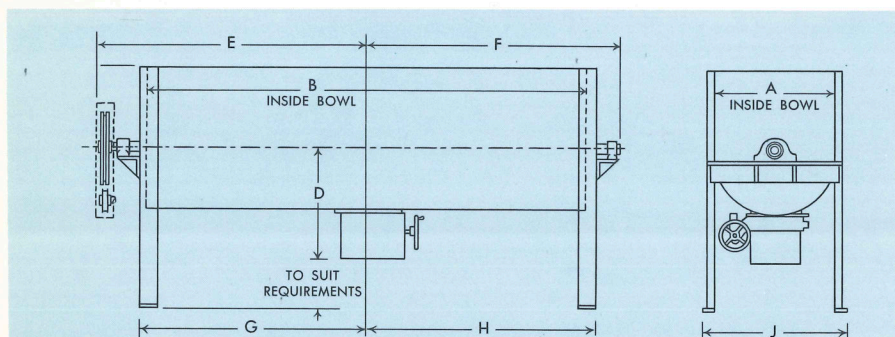


Available with Vaulted Cover

Designed for batch or continuous mixing or blending of pulverized, granular, dry or wet materials, Read Spiral Ribbon Mixers are available for operation under pressure or vacuum, with or without temperature controlling jackets.

Counterflow action of ribbon agitators produces thorough, high-speed mixing or blending of free-flowing materials.

Heavy-duty construction of carbon or stainless steel means efficient service under long runs and rugged operating conditions. Discharge is provided through flush, plug or slide gates. Working capacities range from 1 to 650 cu. ft.



## HURRICANE MIXERS

The Hurricane is a high-speed agitator designed for processing materials that tend to agglomerate. Materials from the main ribbon or paddle agitator are thrown up into the high-speed revolving Hurricane beater which is mounted in the upper part of the unit. The resulting impact breaks the agglomerates, producing fine particles which fall into the blender to be mixed. The Hurricane is particularly effective for mixing liquids with dry materials.

Working Capacity Cu. Ft.	Working Capacity U.S. Gal.	DIMENSIONS IN INCHES									Flush Plug Gate Dia.	Agitator Speed in R.P.M.	Nominal Horse-Power
		A	B	C	D	E	F	G	H	J			
1	7½	12	18	8	14	18	15	10	10	22	4	95	1
2	15	12	36	8	14	27	24	19	19	22	4	95	1½
3	22½	16½	30	11	16½	25	21	16½	16½	24	4	65	1½
5	37½	16	48	11	16½	36	31	26	26	24	4	65	2
7	52	18	48	12	20½	34	31	26	26	24	5	60	3
10	75	18	72	12	20½	48	45	38	38	24	5	60	5
15	112	24	60	15	23½	42	38	32	32	28	8	50	5
18	134	24	72	15	23½	48	44	38	38	28	8	50	5
25	186	24	96	15	23½	60	56	51	51	28	8	50	7½
30	223	30	72	20	31	56	47	39	39	36	10	40	7½
40	298	30	96	20	31	62	59	51	51	36	10	40	10
50	372	30	120	20	34½	76	72	63	63	36	10	40	10
56	416	36	96	24	37½	64	58	51	51	44	10	30	15
70	520	36	120	24	37½	75	70	63	63	44	10	30	15
87	647	42	108	26	42	71	65	57	57	48	12	25	20
96	715	42	120	26	42	79	72	64	64	48	12	25	20
125	930	48	120	32	45	77	72	63	63	54	12	25	25
150	1115	48	144	32	45	82	78	75	75	54	12	20	25
195	1450	60	120	36	50	79	72	64	64	64	12	20	30
260	1933	63	144	38	52	82	78	75	75	69	12	20	30
285	2120	66	144	42	55	82	78	75	75	76	12	18	30
395	2940	78	144	48	59	96	86	76	76	84	12	15	40
490	3640	87	144	55	64½	100	88	76	76	98	12	12	50

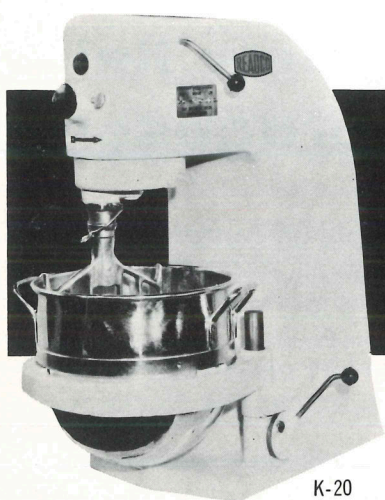
DRIVE ARRANGEMENT AND BLENDER MOUNTINGS TO SUIT REQUIREMENTS.

### Pilot Ribbon Mixers

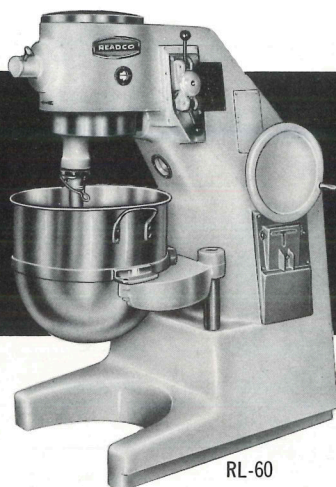
Readco laboratory-size spiral ribbon mixers employ the same efficient counterflow action as production models. They are available for batch or continuous operation in 1, 2 and 3 cu. ft. working capacities.



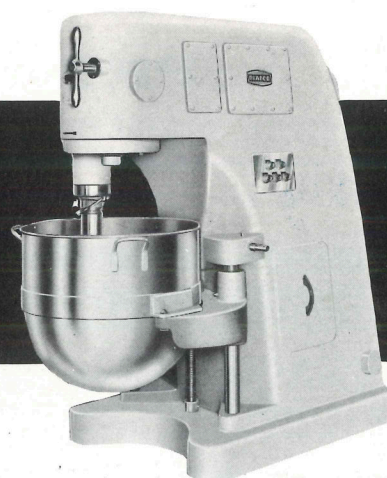
# VERTICAL MIXERS



K-20



RL-60



V-4-120 V-4-140 S-4-175

You can handle a countless variety of mixing jobs—blending, stirring, mixing, beating of dry materials, creams, emulsions and light plastic masses—quickly and easily with Readco Vertical Mixers. Planetary action and variable beater speeds produce controlled mixing in batches ranging from 12 to 175 quarts.

Each mixer accommodates bowls of several sizes. An assortment of beaters and auxiliary attachments adds to their versatility. Jacketed or bottom discharge bowls are available, as well as scrapers, fume hoods, splash guards, and water baths to heat or cool material being mixed.

Model	Total Capacity Quarts	Beater Speeds R.P.M. Obtained	Attachment Speeds	Motor H.P.	Net Wt. Lbs.
K-20	20-12	111-193-356	109-189-346	$\frac{1}{3}$	240
RL-30	30-20-15	101-174-324	65-112-206	$\frac{1}{2}$	405
RL-60	60-40-30	62-116-170-320	94-176-259-486	1	875
D-80	80-30	86-171-291	113-226-382	2	1300
K-4-80	80-40-30	65-126-166-320	63-120-158-306	2	1600
V-4-120	120-80-40	63-120-158-306	63-120-158-306	3	2420
V-4-140	140-80-40	63-120-158-306	63-120-158-306	5	2500
S-4-175	175-120-80	60-99-149-244		5	3150

For unusual equipment or design requirements, Readco offers valuable technical assistance. To its broad facilities for design and fabrication, research and testing, Readco adds over half a century of experience in working with the process industries.

May we assist in solving your processing equipment problems? Your inquiry to our Research and Development Laboratory will receive immediate attention.

## OTHER READCO PROCESSING EQUIPMENT

### MATERIALS HANDLING EQUIPMENT

Bins

Conveyors

Elevators

Sifters

Weigh Hoppers



## READ STANDARD

York, Pennsylvania

A Division of  
Capitol Products Corporation