

## STEARNS CERAMIC 8 PERMANENT MAGNETIC DRUM SEPARATORS

These separators provide automatic and continuous removal of tramp iron in process industries, including: ceramics, chemicals, foods, grain, minerals, plastics, rubber and tobacco. The **Ceramic 8 Separator** offers positive protection and low cost, lifetime dependability. Inspired by the design advantages of the **Ceramic 8**, Stearns engineers pioneered a new era in the development of efficient magnetic separation equipment. In the **Ceramic 8**, the exclusive ceramic magnet assembly produces a uniform magnetic field...to **40% more powerful** than in ordinary permanent magnet systems.



### IDEAL FOR SPOUT SYSTEMS!

Here is a unit that is ideal for process industries wherever granular or pulverized materials are conveyed in closed chutes and spouts. The **Ceramic 8 Drum Separator** continuously and automatically removes tramp iron, carries it out of the material flow and returns a clean product to the production process.

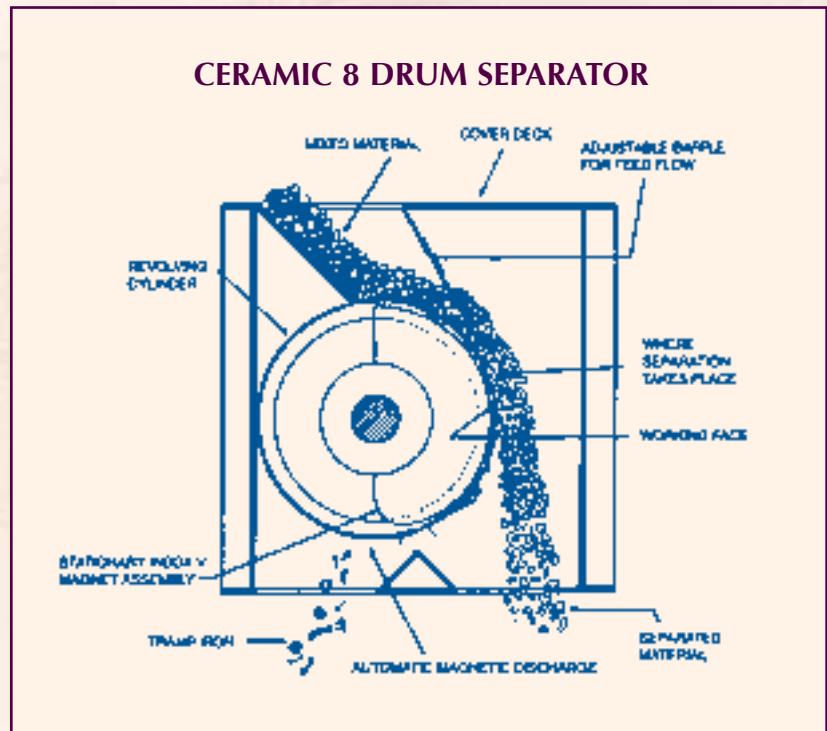
### WORKING PRINCIPLE IS SIMPLE

In operation, the **Ceramic 8 Drum Separator** consists of a revolving non-magnetic cylinder inside a steel welded housing. Material is fed onto the cylinder at the top and is carried over the stationary magnet assembly (see illustration). The deep uniform field attracts and holds tramp iron particles beyond the discharge of the clean, non-magnetic product. Tramp iron is released into a separate discharge as it passes out of the magnetic field.

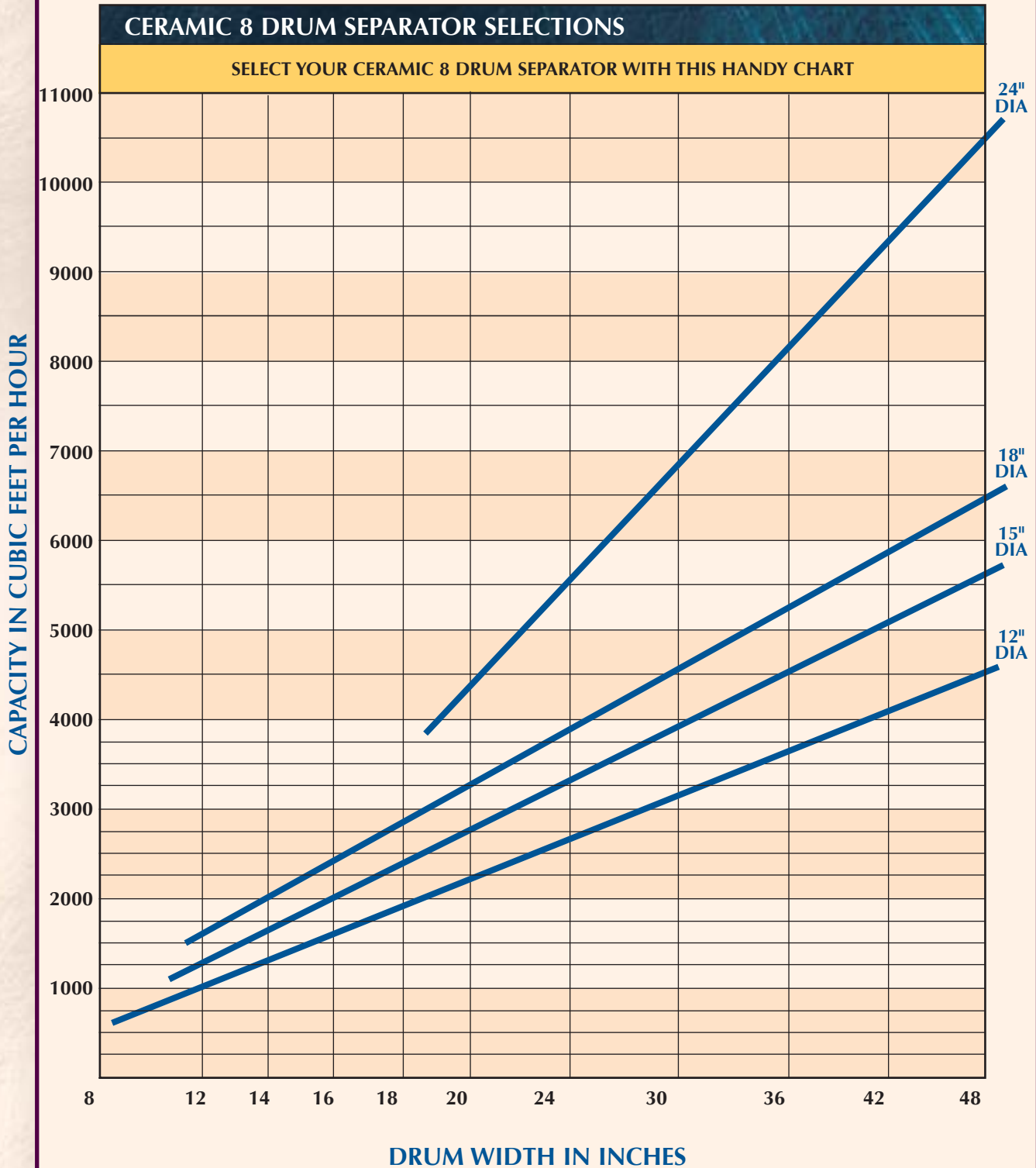
### IMPORTANT FEATURES...deliver superior performance

There are numerous important features built into the Stearns **Ceramic 8 Drum Separator** and all are designed to provide superior performance and service, including:

- **Reliable Holding Power at drum surface assures positive attraction and transportation of tramp iron particles**
- **Factory Sealed Bearings**
- **Optional Spouting Arrangements**
- **Direct Gear-Motor Drive eliminates belts, chains or sprockets**
- **Flanged Housing mounts easily in any spouting system**
- **Totally Enclosed with dust protective housing**
- **Ceramic 8 Magnet Assembly is lightweight and provides resistance to demagnetization**
- **Rare Earth Magnetic Field Models are available on request**



### STEARNS CERAMIC 8 PERMANENT MAGNETIC DRUM SEPARATORS



**DRUM WIDTH IN INCHES**  
THIS IS A TYPICAL CHART USED FOR GRAINS. CONSULT FACTORY FOR SEPARATOR SIZE ON DIFFERENT MATERIALS.

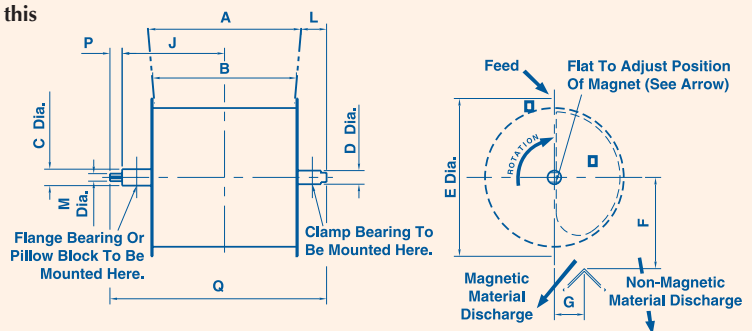
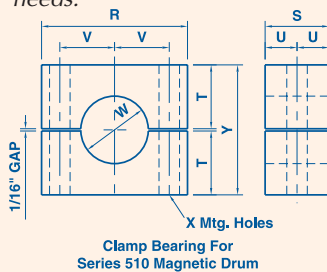
## SERIES 510

### TECHNICAL SPECIFICATIONS AND DIMENSIONS (INCHES)

A	B	C*	D*	E*	F*	G*	J	L*	M	P*	Q	Mech. H.P. Req'd	Approx. R.P.M. Req'd	Ship.Wt. (lbs)
<b>12-INCH DIAMETER</b>														
8	7	1-15/16	1-9/16	13-1/8	7-1/4	2-1/4	7-1/4	3-1/4	1	1-1/8	15-5/8	1/4	58	120
12	11	↓	↓	↓	↓	↓	9-1/4	↓	↓	↓	19-5/8	1/4	↓	135
14	13	↓	↓	↓	↓	↓	10-1/4	↓	↓	↓	21-5/8	1/4	↓	150
16	15	↓	↓	↓	↓	↓	11-1/4	↓	↓	↓	23-5/8	1/4	↓	175
18	17	↓	↓	↓	↓	↓	12-1/4	↓	↓	↓	25-5/8	1/3	↓	185
20	19	↓	↓	↓	↓	↓	13-1/4	↓	↓	↓	27-5/8	1/3	↓	195
24	23	↓	↓	↓	↓	↓	15-1/4	↓	↓	↓	31-5/8	1/3	↓	215
30	29	↓	↓	↓	↓	↓	18-1/4	↓	↓	↓	37-5/8	1/3	↓	255
36	35	↓	↓	↓	↓	↓	21-1/4	↓	↓	↓	43-5/8	1/2	↓	285
42	41	↓	↓	↓	↓	↓	24-1/4	↓	↓	↓	49-5/8	1/2	↓	335
48	47	↓	↓	↓	↓	↓	27-1/4	↓	↓	↓	55-5/8	1/2	↓	350
<b>15-INCH DIAMETER</b>														
12	11	1-15/16	1-9/16	17	9-1/4	2-1/4	9-1/4	3-1/4	1	1-5/8	20-1/8	1/4	58	260
14	13	↓	↓	↓	↓	↓	10-1/4	↓	↓	↓	22-1/8	1/4	↓	320
16	15	↓	↓	↓	↓	↓	11-1/4	↓	↓	↓	24-1/8	1/3	↓	335
18	17	↓	↓	↓	↓	↓	12-1/4	↓	↓	↓	26-1/8	1/3	↓	350
20	19	↓	↓	↓	↓	↓	13-1/4	↓	↓	↓	28-1/8	1/3	↓	370
24	23	↓	↓	↓	↓	↓	15-1/4	↓	↓	↓	32-1/8	1/2	↓	435
30	29	↓	↓	↓	↓	↓	18-1/4	↓	↓	↓	38-1/8	1/2	↓	480
36	35	↓	↓	↓	↓	↓	21-1/4	↓	↓	↓	44-1/8	1/2	↓	550
42	41	↓	↓	↓	↓	↓	24-1/4	↓	1-1/4	↓	50-1/8	3/4	↓	610
48	47	↓	↓	↓	↓	↓	27-1/4	↓	1-1/4	↓	56-1/8	3/4	↓	685
<b>18-INCH DIAMETER</b>														
12	11	2-3/16	1-3/16	21	12-3/4	3-1/2	9-5/8	3-1/2	1	1-5/8	20-3/4	1/3	43	360
14	13	↓	↓	↓	↓	↓	10-5/8	↓	↓	↓	22-3/4	1/3	↓	410
16	15	↓	↓	↓	↓	↓	11-5/8	↓	↓	↓	24-3/4	1/3	↓	455
18	17	↓	↓	↓	↓	↓	12-5/8	↓	↓	↓	26-3/4	1/2	↓	490
20	19	↓	↓	↓	↓	↓	13-5/8	↓	↓	↓	28-3/4	1/2	↓	530
24	23	↓	↓	↓	↓	↓	15-5/8	↓	↓	↓	32-3/4	1/2	↓	590
30	29	↓	↓	↓	↓	↓	18-5/8	↓	1-1/4	↓	38-3/4	3/4	↓	725
36	35	↓	↓	↓	↓	↓	21-5/8	↓	1-1/4	↓	44-3/4	3/4	↓	755
42	41	↓	↓	↓	↓	↓	24-5/8	↓	1-1/4	↓	50-3/4	1	↓	1075
48	47	↓	↓	↓	↓	↓	27-5/8	↓	1-1/4	↓	56-3/4	1	↓	1330
<b>24-INCH DIAMETER</b>														
18	17	2-7/16	2-1/16	27-1/4	17-1/8	4-1/2	13	4	1-1/4	1-3/4	27-3/4	3/4	43	885
20	19	↓	↓	↓	↓	↓	14	↓	1-1/4	↓	29-3/4	3/4	↓	930
24	23	↓	↓	↓	↓	↓	16	↓	1-1/4	↓	33-3/4	3/4	↓	1050
30	29	↓	↓	↓	↓	↓	19	↓	1-1/2	↓	39-3/4	1	↓	1400
36	35	↓	↓	↓	↓	↓	22	↓	1-1/2	↓	45-3/4	1	↓	1600
42	41	↓	↓	↓	↓	↓	25	↓	1-1/2	↓	51-3/4	1-1/2	↓	1740
48	47	↓	↓	↓	↓	↓	28	↓	1-1/2	↓	57-3/4	1-1/2	↓	2130

\* Where only one dimension appears in the column, this dimension is the same for all separators in group.

Stearns Series 510 Ceramic 8 Drum (Only) is supplied without housing. Can be installed directly in spout system or equipped with special enclosure to meet your needs.



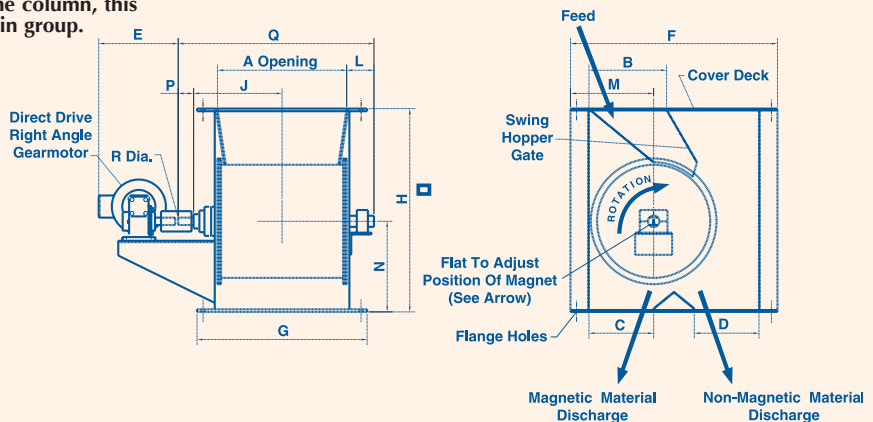
SIZE DRUM DIA.	R	S	T	V	U	W	X	Y	WEIGHT (lbs)
12	3-1/4	1-1/2	1-1/2	1-3/8	3/4	1-19/32	9/16	3-1/16	3.50
15	3-1/4	1-1/2	1-1/2	1-3/8	3/4	1-19/32	9/16	3-1/16	3.50
18	4	1-3/4	1-1/4	1-1/2	7/8	1-27/32	9/16	3-9/16	5.25
24	4-1/4	2	2	1-3/4	1	2-3/32	11/16	4-1/16	8.00

**SERIES 520**

**TECHNICAL SPECIFICATIONS AND DIMENSIONS (INCHES)**

A	B*	C*	D*	E	F	G	H*	J	L*	M*	N*	P*	Q	R	Flange Holes	Mech. H.P. Req'd	Approx. R.P.M. Req'd	Ship. Wt. (lbs)
<b>12-INCH DIAMETER</b>																		
8	8-1/2	7	7	11-3/16	21-1/2	11-1/2	22	7-1/4	3-1/4	8-1/2	9-1/2	1-1/8	15-5/8	1	11/32	1/4	58	170
12	↓	↓	↓	11-3/16	↓	15-1/2	↓	9-1/4	↓	↓	↓	↓	19-5/8	↓	↓	1/4	↓	195
14	↓	↓	↓	11-3/16	↓	17-1/2	↓	10-1/4	↓	↓	↓	↓	21-5/8	↓	↓	1/4	↓	215
16	↓	↓	↓	11-3/16	↓	19-1/2	↓	11-1/4	↓	↓	↓	↓	23-5/8	↓	↓	1/4	↓	245
18	↓	↓	↓	11-3/16	↓	21-1/2	↓	12-1/4	↓	↓	↓	↓	25-5/8	↓	↓	1/3	↓	260
20	↓	↓	↓	11-3/16	↓	23-1/2	↓	13-1/4	↓	↓	↓	↓	27-5/8	↓	↓	1/3	↓	275
24	↓	↓	↓	11-3/16	↓	27-1/2	↓	15-1/4	↓	↓	↓	↓	31-5/8	↓	↓	1/3	↓	305
30	↓	↓	↓	11-3/16	↓	33-1/2	↓	18-1/4	↓	↓	↓	↓	37-5/8	↓	↓	1/3	↓	360
36	↓	↓	↓	12-3/16	↓	39-1/2	↓	21-1/4	↓	↓	↓	↓	43-5/8	↓	↓	1/2	↓	405
42	↓	↓	↓	12-3/16	↓	45-1/2	↓	24-1/4	↓	↓	↓	↓	49-5/8	↓	↓	1/2	↓	470
48	↓	↓	↓	12-3/16	↓	51-1/2	↓	27-1/4	↓	↓	↓	↓	55-5/8	↓	↓	1/2	↓	500
<b>15-INCH DIAMETER</b>																		
12	10-1/2	8-3/4	8-3/4	11-3/16	28	17	27-1/2	9-1/4	3-1/4	11-1/4	12-1/4	1-5/8	20-1/8	1	11/32	1/4	58	315
14	↓	↓	↓	11-3/16	↓	19-1/2	↓	10-1/4	↓	↓	↓	↓	22-1/8	1	↓	1/4	↓	380
16	↓	↓	↓	11-3/16	↓	21-1/2	↓	11-1/4	↓	↓	↓	↓	24-1/8	1	↓	1/3	↓	400
18	↓	↓	↓	11-3/16	↓	23-1/2	↓	12-1/4	↓	↓	↓	↓	26-1/8	1	↓	1/3	↓	420
20	↓	↓	↓	11-3/16	↓	25	↓	13-1/4	↓	↓	↓	↓	28-1/8	1	↓	1/3	↓	450
24	↓	↓	↓	12-3/16	↓	29	↓	15-1/4	↓	↓	↓	↓	32-1/8	1	↓	1/2	↓	530
30	↓	↓	↓	12-3/16	↓	35	↓	18-1/4	↓	↓	↓	↓	38-1/8	1	↓	1/2	↓	600
36	↓	↓	↓	12-3/16	↓	41	↓	21-1/4	↓	↓	↓	↓	44-1/8	1	↓	1/2	↓	670
42	↓	↓	↓	12-3/16	↓	47	↓	24-1/4	↓	↓	↓	↓	50-1/8	1-1/4	↓	3/4	↓	750
48	↓	↓	↓	12-3/16	↓	53	↓	27	↓	↓	↓	↓	56-1/8	1-1/4	↓	3/4	↓	830
<b>18-INCH DIAMETER</b>																		
12	14	12	12	11-3/16	35	17	35	9-1/8	3-1/2	14	16	1-5/8	20-3/4	1	13/32	1/3	43	425
14	↓	↓	↓	11-3/16	↓	19	↓	10-5/8	↓	↓	↓	↓	22-3/4	1	↓	1/3	↓	470
16	↓	↓	↓	11-3/16	↓	21	↓	11-5/8	↓	↓	↓	↓	24-3/4	1	↓	1/3	↓	510
18	↓	↓	↓	12-3/16	↓	23	↓	12-5/8	↓	↓	↓	↓	26-3/4	1	↓	1/2	↓	550
20	↓	↓	↓	12-3/16	↓	25	↓	13-5/8	↓	↓	↓	↓	28-3/4	1	↓	1/2	↓	595
24	↓	↓	↓	12-3/16	↓	29	↓	15-5/8	↓	↓	↓	↓	32-3/4	1	↓	1/2	↓	660
30	↓	↓	↓	12-3/16	↓	35	↓	18-5/8	↓	↓	↓	↓	38-3/4	1-1/4	↓	3/4	↓	800
36	↓	↓	↓	12-3/16	↓	41	↓	21-5/8	↓	↓	↓	↓	44-3/4	1-1/4	↓	3/4	↓	940
42	↓	↓	↓	12-3/16	↓	47	↓	24-5/8	↓	↓	↓	↓	50-3/4	1-1/4	↓	1	↓	1175
48	↓	↓	↓	12-3/16	↓	53	↓	27-5/8	↓	↓	↓	↓	56-3/4	1-1/4	↓	1	↓	1445
<b>24-INCH DIAMETER</b>																		
18	19-1/2	17	17	12-3/16	48	24	48	13	4	19-1/2	21-1/2	1-3/4	27-3/4	1-1/4	9/16	3/4	43	945
20	↓	↓	↓	12-3/16	↓	26	↓	14	↓	↓	↓	↓	29-3/4	1-1/4	↓	3/4	↓	1000
24	↓	↓	↓	12-3/16	↓	30	↓	16	↓	↓	↓	↓	33-3/4	1-1/4	↓	3/4	↓	1140
30	↓	↓	↓	13-3/8	↓	36	↓	19	↓	↓	↓	↓	39-3/4	1-1/2	↓	1	↓	1520
36	↓	↓	↓	13-3/8	↓	42	↓	22	↓	↓	↓	↓	45-3/4	1-1/2	↓	1	↓	1750
42	↓	↓	↓	14-5/16	↓	48	↓	25	↓	↓	↓	↓	51-3/4	1-1/2	↓	1-1/2	↓	1920
48	↓	↓	↓	14-5/16	↓	54	↓	28	↓	↓	↓	↓	57-3/4	1-1/2	↓	1-1/2	↓	2340

\* Where only one dimension appears in the column, this dimension is the same for all separators in group.



*Stearns Series 520 Ceramic 8 Drum Separator, for vertical spouting systems, provides openings for discharge of tramp iron and clean product in an integral housing*