



## STANDARD WEBB-STILES CONVEYOR ROLLS

Ten standard Webb-Stiles conveyor roll sizes with capacities from 75 to 4000 pounds are available in any length and quantity as listed on the following pages.

All rolls are available as pre-engineered components. They are also used in our gravity and live roller conveyors as shown in the catalog. All Webb-Stiles conveyor rolls shown are manufactured by us to the highest standards and quality that have been proven in hundreds of installations.

All standard rollers feature hexagon shafts in rolls of 1" to 3-1/2". These rollers are furnished with spring loaded shafts that can be instantaneously installed or removed from the conveyor frame by simple pressure on the end of the shaft without special tools.

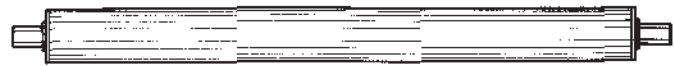
All Webb-Stiles conveyor rolls are furnished with bearings specifically engineered for conveyor service. Bearings are available in free-running type, normally used in gravity conveyors. Grease-packed, sealed for life bearings, normally used in live roller conveyors. Precision bearing on certain roller sizes for heavy-duty and special application. Webb-Stiles can also quote as options other bearing requests.

See individual roller specifications on following pages for complete specifications.

Bearing ratings are based on 60SFM and 2500 hours operation which exceeds the normal L parameters of 33-1/3 RPM and 500 hours.

All Webb-Stiles rollers are available in any quantity in any length up to 96" "BF" for swaged rolls and 104" "BF" for reamed rolls. Those rollers specially marked are also available with lineshaft grooving or chain driven live roller sprockets.

Webb-Stiles can also quote you custom built rollers of larger diameter and tapered rollers on special order.



1" DIA. — 70# CAP.



Chain sprockets available

1 1/4" DIA. — 250# CAP.



1.9" DIA. x 16 GA — 260# CAP.



Lineshaft available

1.9 DIA. x 12 GA — 260# CAP.



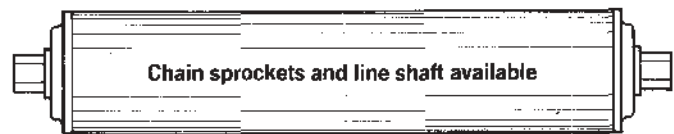
Chain sprockets available

1.9" DIA. x 9 GA — 250# CAP.



Chain sprockets and lineshaft available

2 1/2" DIA. — 250# CAP.



Chain sprockets and line shaft available

2 1/2" DIA. — 580# CAP.  
3350# with precision bearings



Chain sprockets available

2 1/8" DIA. — 580# CAP.  
3350# with precision bearings



Chain sprockets available

3 1/2" DIA. — 580# CAP.



Chain sprockets available

3 1/2" DIA. — 1090# CAP.  
5850# with precision bearings



## CONVEYOR ROLLER DESIGN FEATURES

**ROLLERS:** All WEBB-STILES conveyor rolls are built to the highest standard of quality. The rolls are made from heavy wall steel tubing with ends carefully reamed or swaged to accept the bearings.

**BEARINGS:** WEBB-STILES conveyor bearings are specifically designed for roller conveyor application. All bearings feature full complement of balls for maximum efficiency.

For most gravity conveyor applications, free-running bearings are used and preferred over grease-packed bearings. Free-running bearings require no lubrication and the rolls are livelier — start from rest quicker and continue turning longer. Since conveyor speed is not a factor in gravity conveyor systems, the free-running bearings perform much better under most conditions.

Grease or heavy oil destroys the free running affect and roller action becomes sluggish, conveyor pitch must be increased and loads are harder to push on level systems. On very special occasions, a lubricated bearing may be used for protection against moisture or corrosive conditions. Grease-packed bearings also may be used when an application requires a short run at a steep pitch.

Grease-packed bearings are recommended for use on most belt driven and on all chain driven live roll conveyors.

**SHAFTS:** All WEBB-STILES conveyor rolls feature hexagonal shafts, with the flat sides horizontal in the conveyor frame.

1" thru 3-1/2" x 10 GA wall rolls are furnished with spring loaded shafts as standard. The spring loaded shaft feature eliminates the use of pig rings, cotter pins, and retainers, yet the spring securely locks the shaft against horizontal movement. Spring loaded rolls can be instantaneously installed or removed from conveyor frame sections by simple pressure on the end of the shaft, without the use of special tools, thus simplifying changing of roll center or replacement.



## HOW TO ORDER STANDARD ROLLERS

The widths of Webb-Stiles rollers are based on the inside distance between frames or "BF". Under normal conditions the "BF" dimension will be approximately 1" more than the nominal roller length. This is emphasized to avoid confusion between frame width "BF" and nominal roller length. All Webb-Stiles rollers are built to "BF".

Conveyor widths should be specified with the inside frame dimensions "BF", not the length of the roller. Because of the variation of hub lengths on bearings, the nominal roller length is also variable. All roller axles are approximately 1" longer than the inside frame dimension "BF", depending on roll size.

**When ordering "rollers only" or replacement rolls, always specify:**

### GRAVITY ROLLS

1. "BF" inside distance between frames.
2. Bearings, free-running, grease-packed, precision or special order.
3. Type and size of conveyor frame.
4. Axles, be sure our standard axles are the size you need. If not order as custom roller as bearing will change.
5. Type of axles. Spring, cotter or hog ring.

### SPROCKET ROLLERS

1. "BF" inside distance between frames.
2. Bearings, grease-packed, precision or special order.
3. Sprocket size.
4. Sprocket distance, supply dimensions requested on sprocket roller specification.
5. Axles, be sure our standard axles are the size you need. If not order as custom roller as bearings will change.

### LINESHAFT ROLLERS

1. "BF" inside distance between frames.
2. Bearings, grease-packed, precision or special order.
3. Groove size; 3/16" or 1/4" urethane belt size.
4. Groove distance, supply dimensions requested on lineshaft roller specifications.
5. Axles, be sure our standard axles are the size you need. If not order as custom roller as bearings will change.

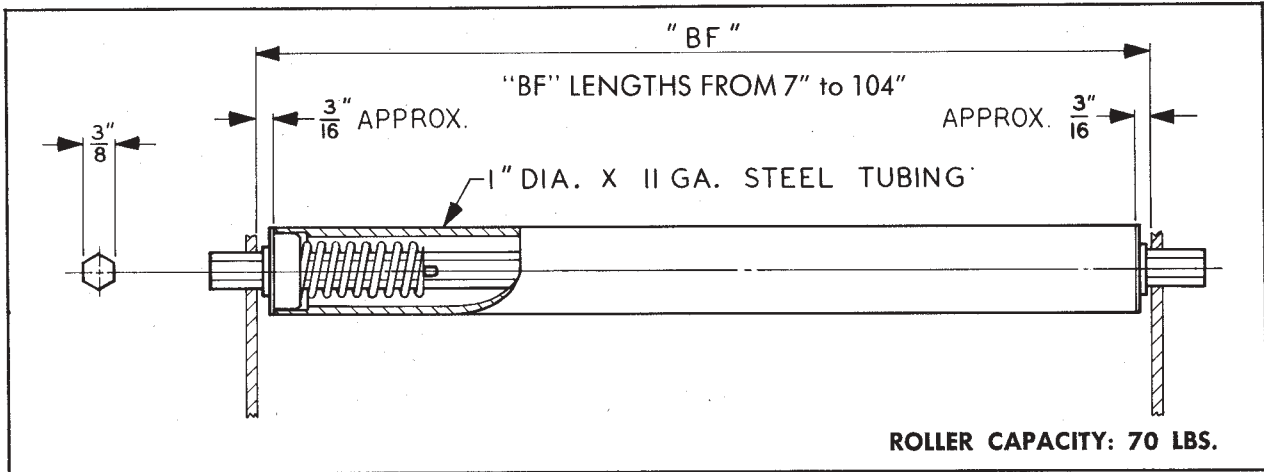
### CUSTOM ROLLERS

1. All custom rollers requested should be accompanied with an engineering drawing and all roller specifications.

Outlined on the following pages are individual conveyor rolls Webb-Stiles can supply as standard conveyor rolls.



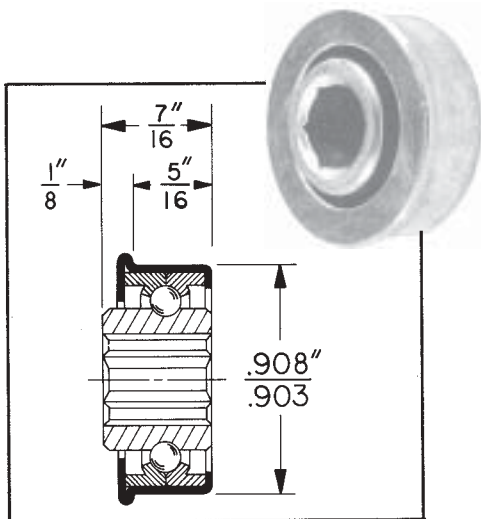
## 1" DIAMETER x #11 GA. ROLLER



**ROLLER:** 1" O.D. x #11 Ga. Welded Steel Tubing, straight ends.  
Tubing reamed at ends to receive bearing.

**BEARING:** No. 1945, Specifically Designed for Conveyor Use.  
No. 1903, Optional for  $\frac{5}{16}$ " Hex shaft, free running.  
Inner race and outer race rings heat treated, hardened and tempered.  
Inner race broached to fit on hexagon shaft, positively locking inner race against rotation.  
15 -  $\frac{1}{8}$ " dia. Hardened Steel Balls.  
Pressed Steel Outer Casing.

**SHAFT:**  $\frac{3}{8}$ " Hexagon Cold Rolled Steel.  
Positively locked against rotation by hexagon holes in conveyor frame.  
Optional  $\frac{5}{16}$ " Hexagon cold rolled steel shaft.



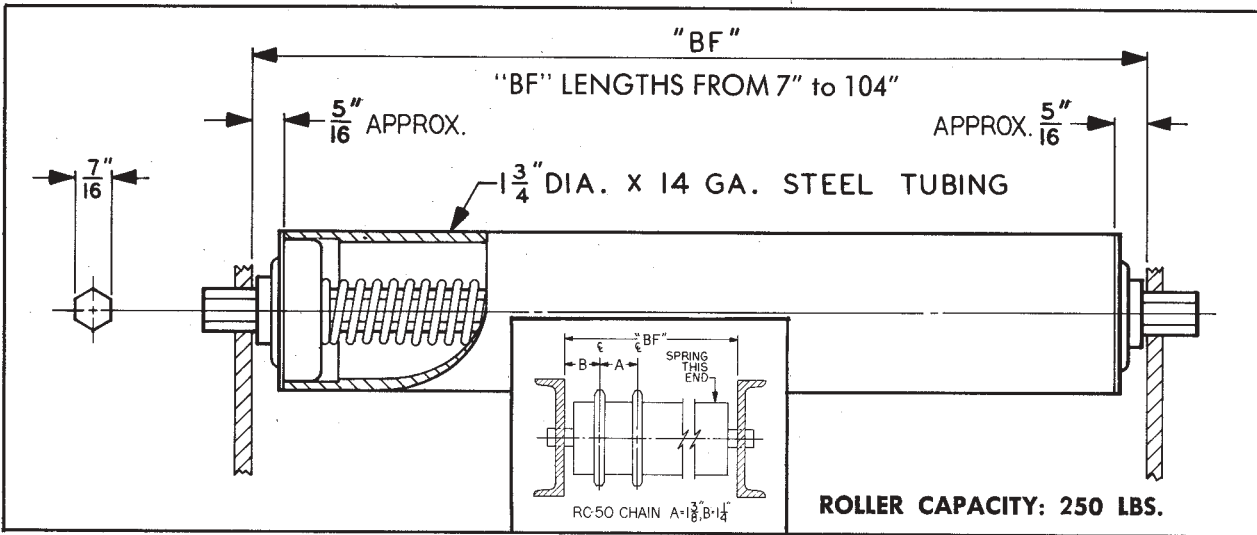
**#554 BEARING**  
**FREE RUNNING**  
**15 HARDENED STEEL BALLS**  
 **$\frac{1}{8}$ " DIA.**

For Estimating Roller  
Weight Only

BF	WT.
7	.9 #
9	1.15
11	1.4
13	1.65
15	1.9
17	2.15
19	2.4
21	2.65
23	2.9
25	3.15
27	3.4
31	3.9
37	4.65



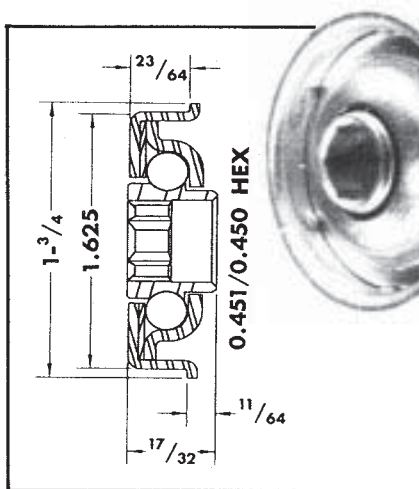
## 1 3/4" DIAMETER x #14 GA. ROLLER



**ROLLER:** 1 3/4" O.D. x #14 Ga. Welded Steel Tubing, straight ends.  
Tubing-reamed at ends to receive bearing.

**BEARING:** No. F-1625-7H, Standard Free-Running or Grease Packed.  
No. 1639, Optional - Grease packed.  
Inner race and outer race rings heat treated, hardened and tempered.  
Inner race broached to fit on hexagon shaft, positively locking inner race against rotation.  
11 - 1/4" dia. Hardened Steel Balls.  
Pressed Steel Outer Casing.

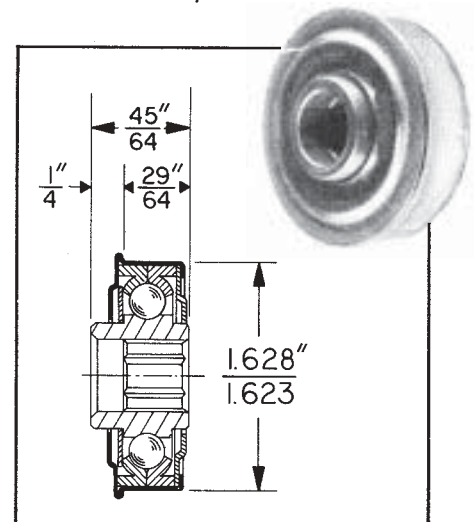
**SHAFT:** 7/16" Hexagon Cold Rolled Steel, Spring loaded for instantaneous removal.  
Positively locked against rotation by hexagon holes in conveyor frame.



**STANDARD**  
F-1625-7H BEARING  
FREE RUNNING OR GREASE PACKED  
11 HARDENED STEEL BALLS  
1/4" DIA.

BF	WT.
7	1.6 #
9	1.9
11	2.3
13	2.6
15	2.9
17	3.3
19	3.6
21	4.0
23	4.3
25	4.7
27	5.0
31	5.7
37	6.7
43	7.7
49	8.7

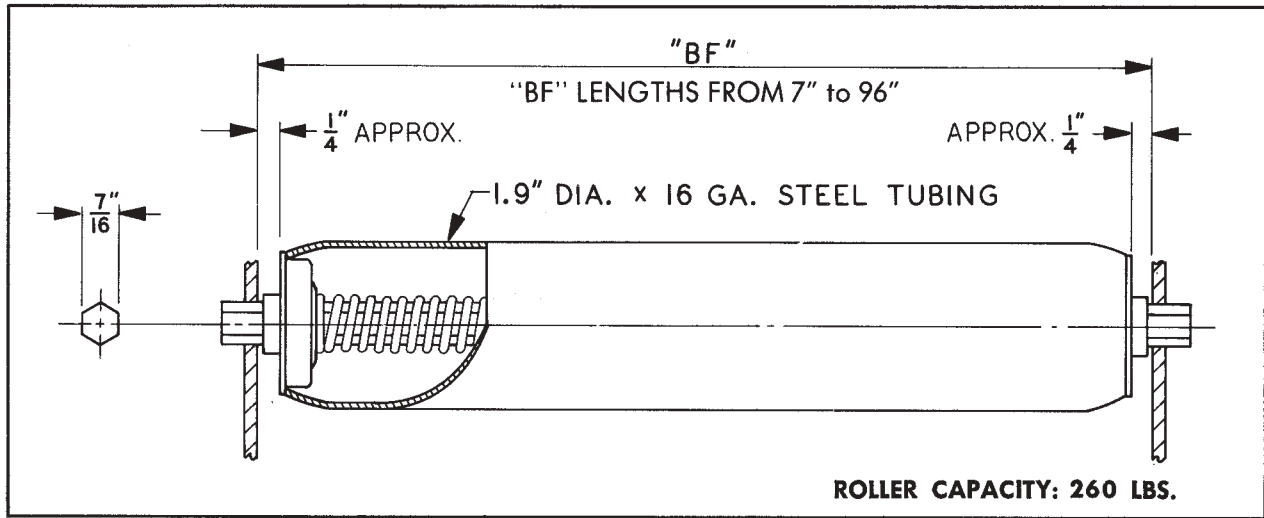
For Estimating Roller  
Weight Only



**OPTIONAL**  
#1629 BEARING - FREE RUNNING  
#1639 BEARING - GREASE PACKED  
13 HARDENED STEEL BALLS  
1/4" DIA.



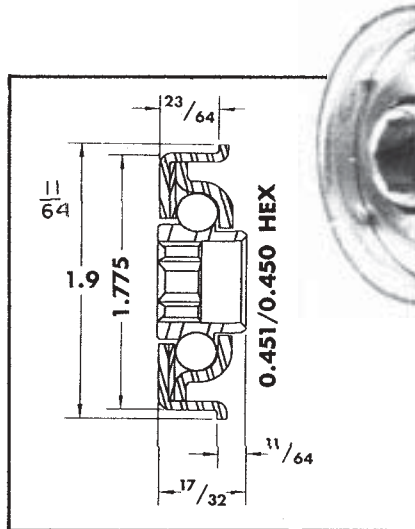
## 1.9" DIAMETER x #16 GA. ROLLER



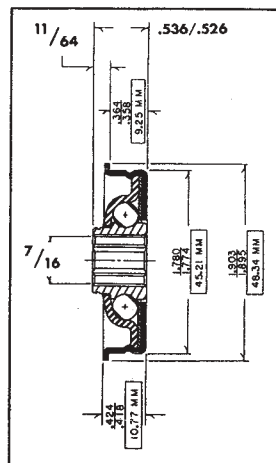
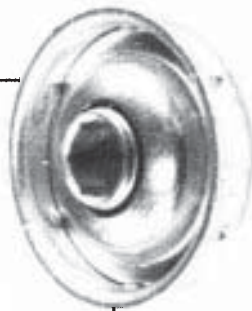
**ROLLER:** 1.9" O.D. x #16 Ga. Welded Steel Tubing, rounded end.  
Tubing ends swaged to receive bearing.

**BEARING:** F-1775-7H, Standard Free-Running or Grease Packed.  
No. 1005, Optional Grease Packed  
Inner race and outer race rings heat treated, hardened and tempered.  
Inner race broached to fit on hexagon shaft, positively locking inner race against rotation.  
11 - 1/4" dia. Hardened Steel Balls.  
Pressed Steel Outer Casing.

**SHAFT:** 7/16" Hexagon Cold Rolled Steel, Spring loaded for instantaneous removal.  
Positively locked against rotation by hexagon holes in conveyor frame.



**STANDARD**  
F-1775-7H BEARING  
FREE RUNNING  
11 HARDENED STEEL BALLS  
1/4" DIA.



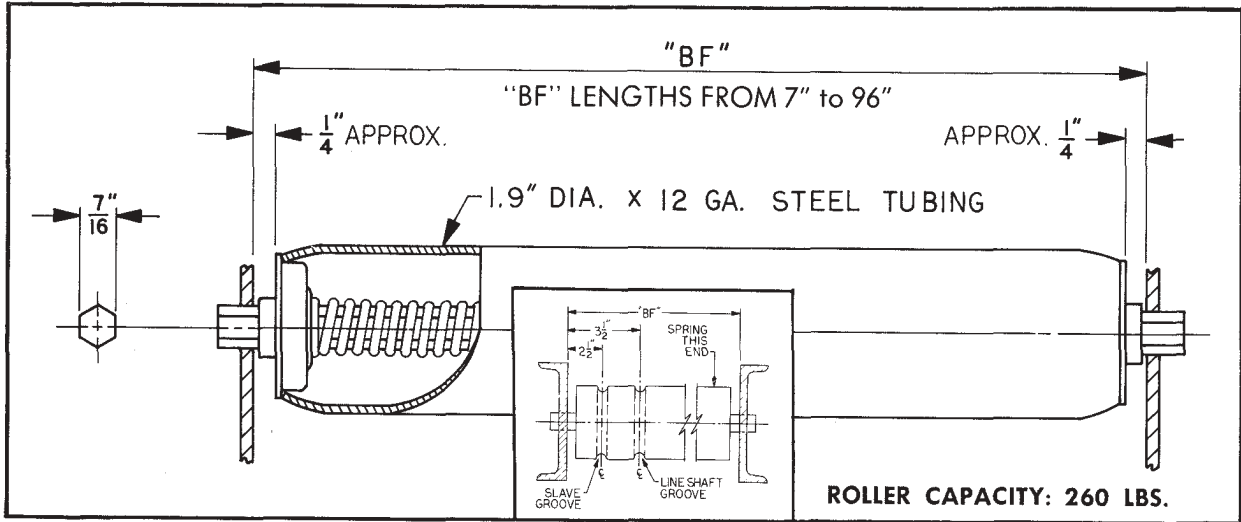
**OPTIONAL**  
#1005 BEARING - GREASE PACKED

For Estimating Roller  
Weight Only

BF	WT. #
7	1.5 #
9	1.8
11	2.1
13	2.4
15	2.7
17	3.0
19	3.6
21	3.7
23	4.0
25	4.3
27	4.6
31	5.2
37	6.1
43	7.0
49	7.9



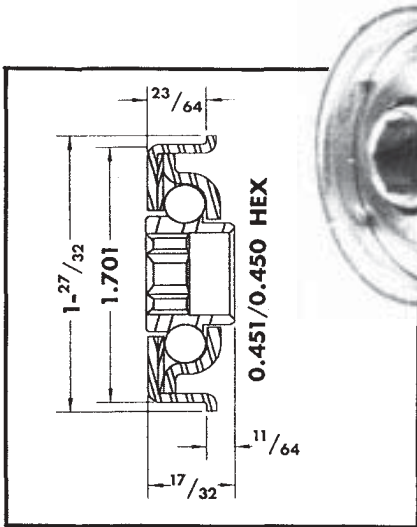
## 1.9" DIAMETER x #12 GA. ROLLER



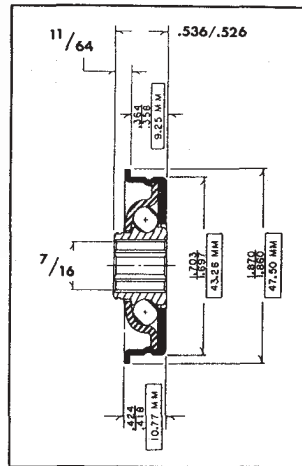
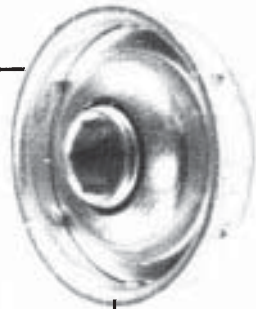
**ROLLER:** 1.9" O.D. x #12 Ga. Welded Steel Tubing, swaged ends. Tubing ends swaged and reamed to receive bearing.

**BEARING:** F-1701-7H, Standard bearing, Free Running.  
 No. 1705, Optional bearings, Grease Packed.  
 Bearings press fitted with no crimp.  
 Inner race and outer race rings heat treated, hardened and tempered.  
 Inner race broached to fit on hexagon shaft, positively locking inner race against rotation.

**SHAFT:** 7/16" Hexagon Cold Rolled Steel, Spring loaded for instantaneous removal.  
 Positively locked against rotation by hexagon holes in conveyor frame.



**STANDARD**  
 #f-1701-7H BEARING  
 FREE RUNNING  
 11 HARDENED STEEL BALLS  
 1/4" DIA.



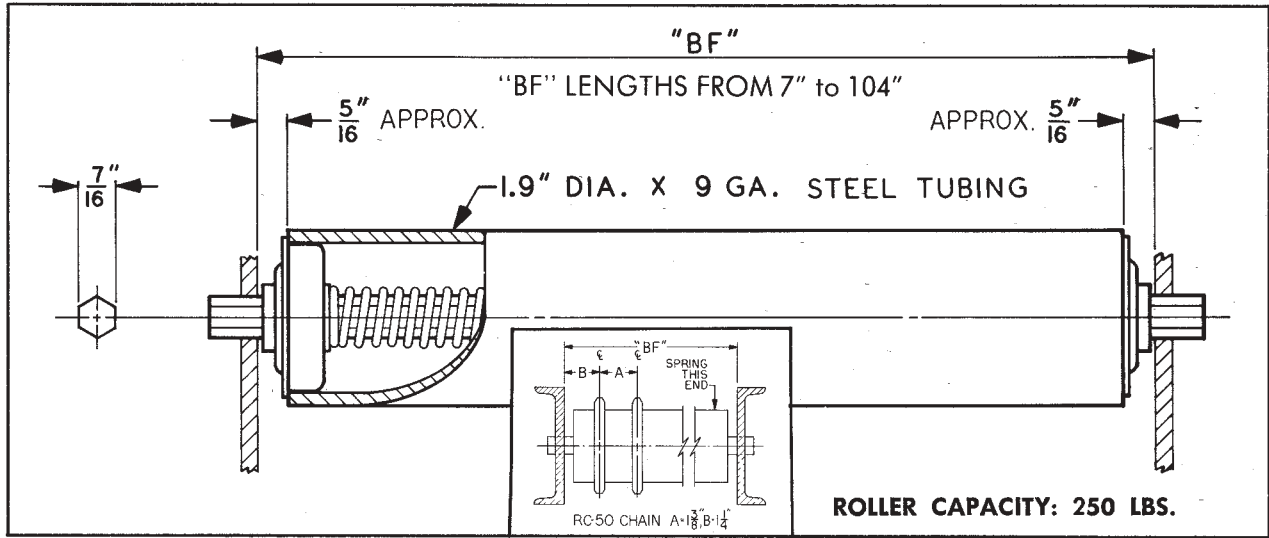
**OPTIONAL**  
 #1705 BEARING - GREASE PACKED

BF	WT
7	1.9#
9	2.4
11	2.8
13	3.3
15	3.7
17	4.2
19	4.6
21	5.0
23	5.5
25	5.9
27	6.4
31	7.3
37	8.6
43	9.9
49	11.3

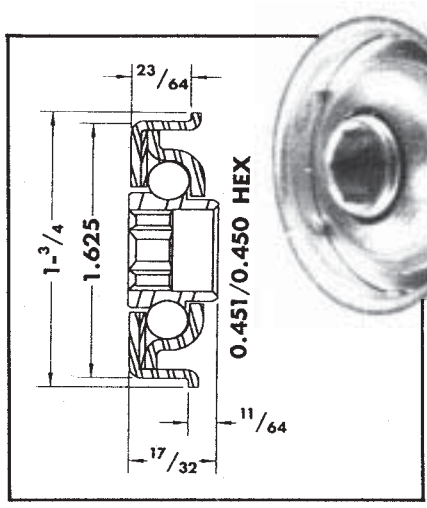
For Estimating Roller Weight Only



# 1.9" DIAMETER x #9 GA. ROLLER



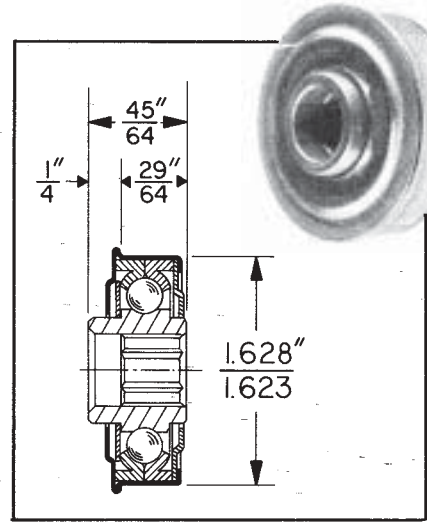
- ROLLER:** 1.9" O.D. x #9 Ga. Welded Steel Pipe, straight ends.  
Pipe reamed at ends to receive bearing.
- BEARING:** F-1625-7H, Standard Free-Running or Grease Packed.  
No. 1629, Optional - Free Running.  
No. 1639, Optional - Grease packed.  
Inner race and outer race rings heat treated, hardened and tempered.  
Inner race broached to fit on hexagon shaft, positively locking inner race against rotation.  
13 - 1/4" dia. Hardened Steel Balls.  
Pressed Steel Outer Casing.
- SHAFT:** 7/16" Hexagon Cold Rolled Steel, Spring loaded for instantaneous removal.  
Positively locked against rotation by hexagon holes in conveyor frame.



**STANDARD**  
F-1625-7H BEARING  
FREE RUNNING OR GREASE PACKED  
11 HARDENED STEEL BALLS  
1/4" DIA.

BF	WT.
7	2.3 #
9	2.8
11	3.3
13	3.9
15	4.4
17	5.0
19	5.5
21	6.1
23	6.6
25	7.2
27	7.7
31	8.8
37	10.4
43	12.1
49	13.7

For Estimating Roller Weight Only

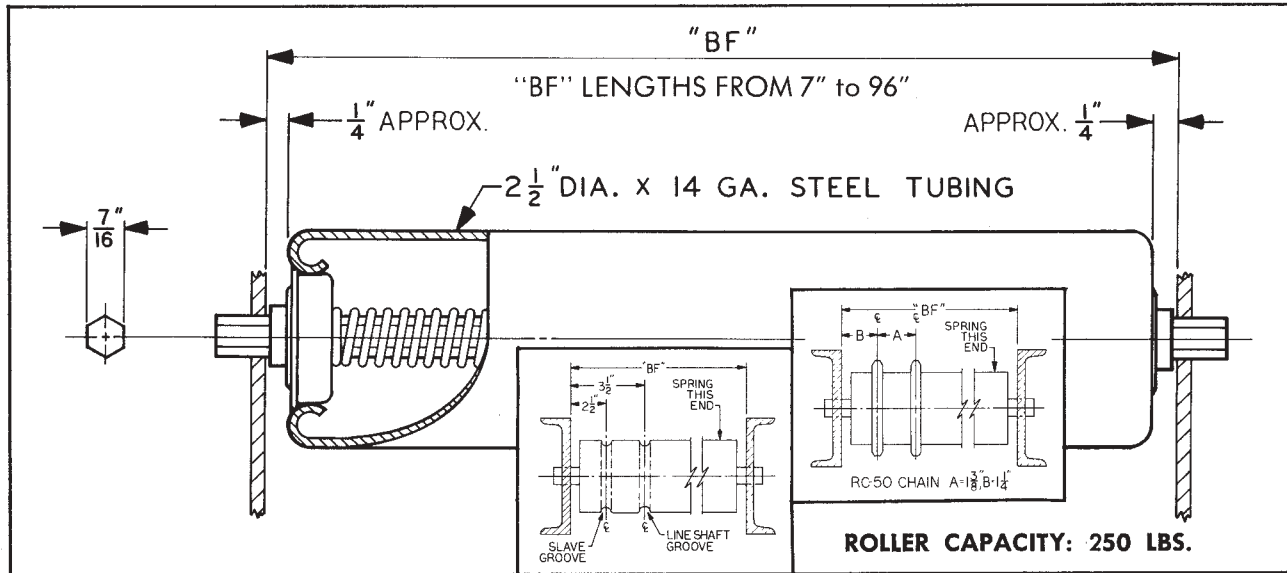


**OPTIONAL**  
#1629 BEARING - FREE RUNNING  
#1639 BEARING - GREASE PACKED  
13 HARDENED STEEL BALLS  
1/4" DIA.





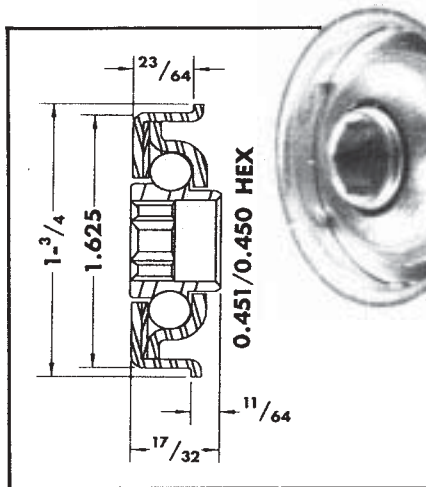
## 2 1/2" DIAMETER x #14 GA. ROLLER



**ROLLER:** 2 1/2" O.D. x #14 Ga. Welded Steel Tubing, rounded end.  
Tubing ends swaged to receive bearing.

**BEARING:** F-1625-7H, Standard Free Running or Grease Packed.  
No. 1639, Optional - Grease Packed.  
Inner race and outer race rings heat treated, hardened and tempered. Inner race broached to fit on hexagon shaft, positively locking inner race against rotation.  
11 - 1/4" dia. Hardened Steel Balls.  
Pressed Steel Outer Casing.

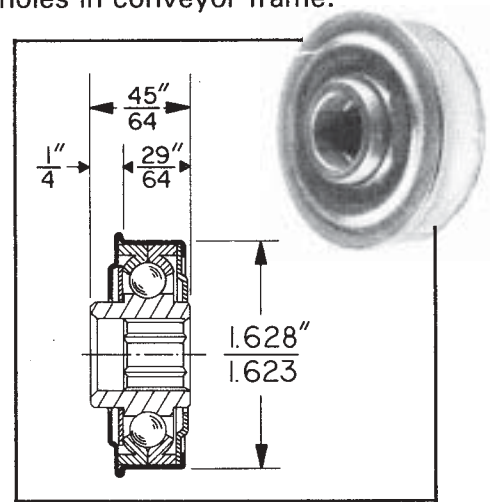
**SHAFT:** 7/16" Hexagon Cold Rolled Steel, Spring loaded for instantaneous removal.  
Positively locked against rotation by hexagon holes in conveyor frame.



**STANDARD**  
F-1625-7H BEARING  
FREE RUNNING OR GREASE PACKED  
11 HARDENED STEEL BALLS  
1/4" DIA.

BF	WT.
7	2.1 #
9	2.6
11	3.0
13	3.5
15	3.9
17	4.4
19	4.8
21	5.3
23	5.7
25	6.2
27	6.6
31	7.5
37	8.9
43	10.6
49	11.6

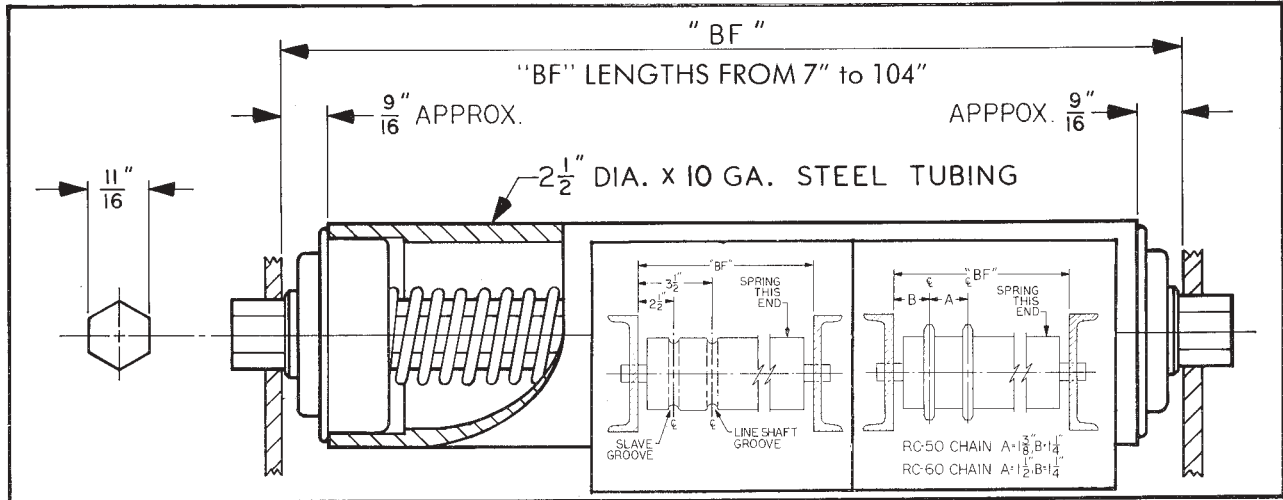
For Estimating Roller  
Weight Only



**OPTIONAL**  
#1629 BEARING - FREE RUNNING  
#1639 BEARING - GREASE PACKED  
13 HARDENED STEEL BALLS  
1/4" DIA.



## 2 1/2" DIAMETER x #10 GA. ROLLER



**ROLLER:** 2 1/2" O.D. x 10 Ga. Steel Tubing, straight ends.  
Tubing reamed at ends to receive bearing.

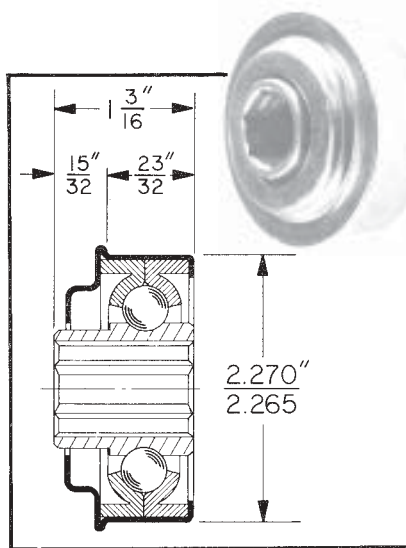
**BEARING:** No. 2500, Standard Free-Running Type.  
No. 2510, Standard, Grease Packed.  
Inner race and outer race rings heat treated, hardened and tempered.  
Inner race broached to fit on hexagon shaft, positively locking inner race against rotation.  
11 - 3/8" dia. Hardened Steel Balls.  
Pressed Steel Outer Casing.  
No. 0983110, Optional, Precision Bearing.  
Flanged face bearing, Hexagon bore.  
Inner race drilled for pressure lubrication, grease-packed.  
7 - .406" dia. Carbon Steel Balls, Steel Retainer.

**SHAFT:** Hexagon Cold Rolled Steel, Spring loaded for instantaneous removal.  
Positively locked against rotation by hexagon holes in conveyor frame.

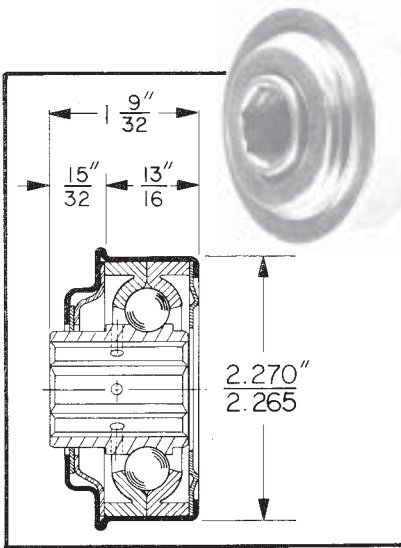
**ROLLER CAPACITY: 530 POUNDS  
WITH PRECISION  
BEARINGS: 3350 POUNDS**

BF	WT.
7	3.8 #
9	4.6
11	5.4
13	6.2
15	7.0
17	7.8
19	8.6
21	9.4
23	10.9
25	11.0
27	11.8
31	13.8
37	15.8
43	18.1
49	20.5

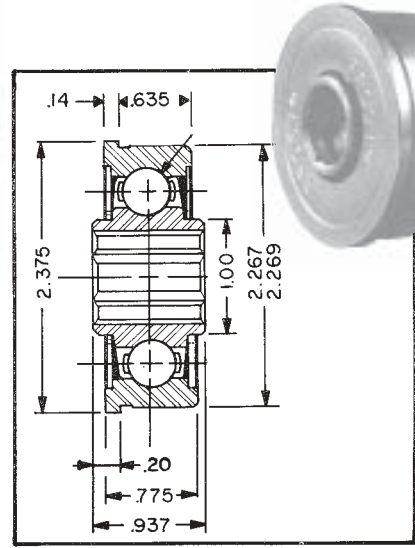
For Estimating Roller  
Weight Only



**STANDARD  
#2500 BEARING  
FREE RUNNING  
11 HARDENED STEEL BALLS  
3/8" DIA.**



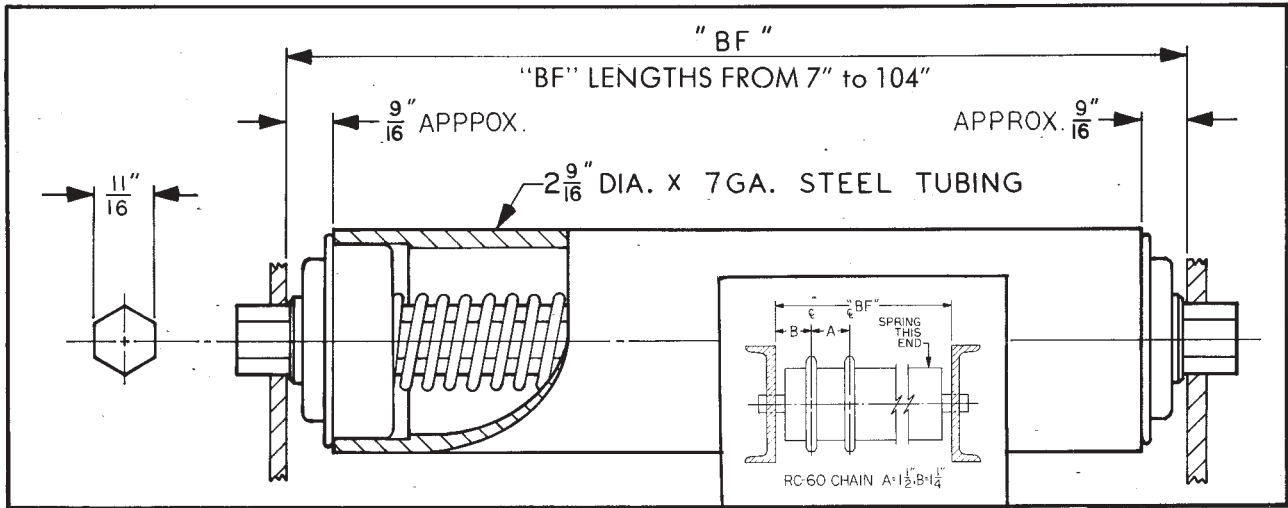
**STANDARD  
#2510 BEARING  
GREASE PACKED  
11 HARDENED STEEL BALLS  
3/8" DIA.**



**OPTIONAL  
#0983110 PRECISION BEARING  
GREASE PACKED  
7 .406" DIA. CARBON STEEL BALLS  
STEEL RETAINER**



## 2 9/16" DIAMETER x #7 GA. ROLLER



**ROLLER:** 2 9/16" O.D. x 7 Ga. Steel Tubing, straight ends.  
Tubing reamed at ends to receive bearing.

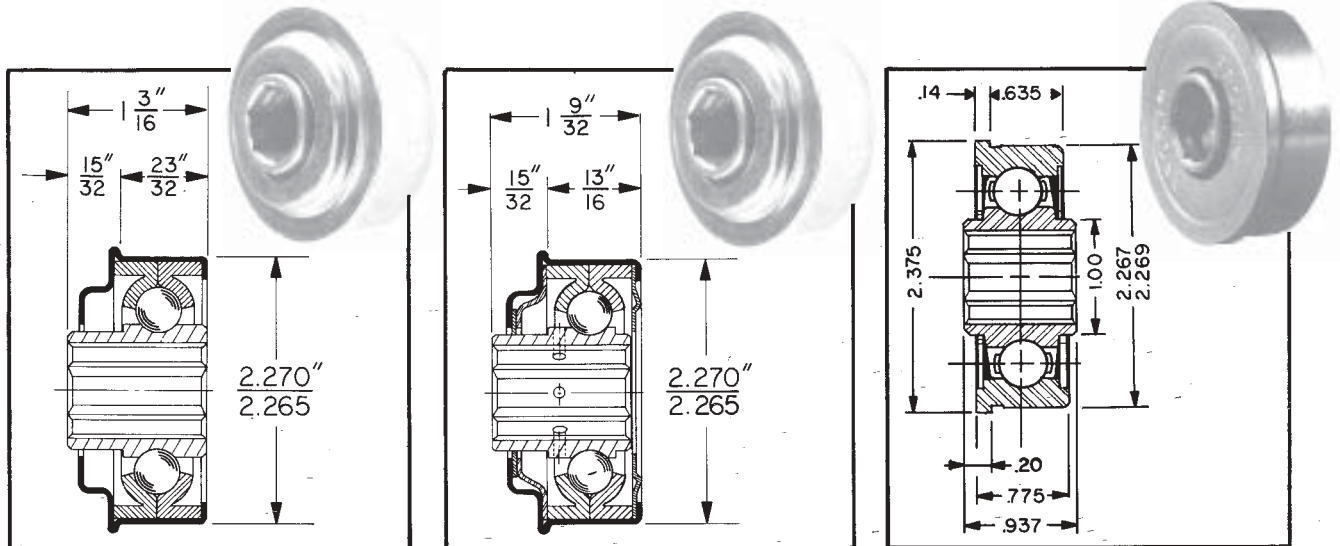
**ROLLER CAPACITY: 580 POUNDS  
WITH PRECISION  
BEARINGS: 3350 POUNDS**

**BEARING:** No. 2500, Standard Free-Running Type.  
No. 2510, Standard, Grease Packed.  
Inner race and outer race rings heat treated, hardened and tempered.  
Inner race broached to fit on hexagon shaft, positively locking inner race against rotation.  
11 - 3/8" dia. Hardened Steel Balls.  
Pressed Steel Outer Casing.  
No. 0983110, Optional, Precision Bearing.  
Flanged face bearing, Hexagon bore.  
Inner race drilled for pressure lubrication, grease-packed.  
7 - .406" dia. Carbon Steel Balls, Steel Retainer.

**SHAFT:** Hexagon Cold Rolled Steel, Spring loaded for instantaneous removal.  
Positively locked against rotation by hexagon holes in conveyor frame.

BF	WT.
7	4.5 #
9	5.5
11	6.6
13	7.6
15	8.6
17	9.6
19	10.7
21	12.0
23	12.7
25	13.7
27	14.8
31	16.8
37	20.0
43	23.0
49	26.1
51	27.1

For Estimating Roller Weight Only



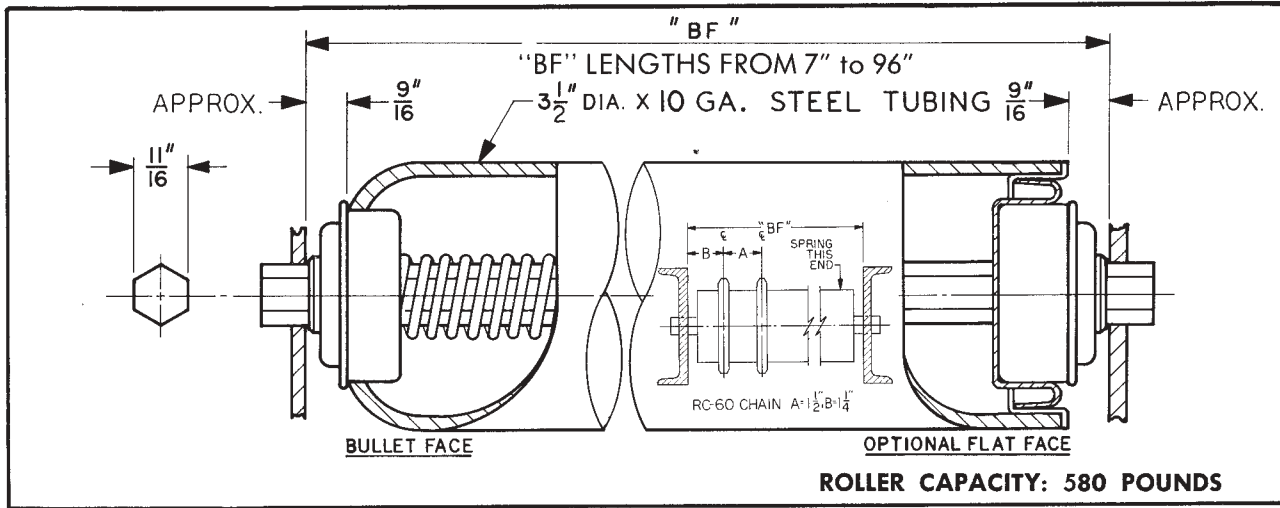
**STANDARD  
#2500 BEARING  
FREE RUNNING  
11 HARDENED STEEL BALLS  
3/8" DIA.**

**STANDARD  
#2510 BEARING  
GREASE PACKED  
11 HARDENED STEEL BALLS  
3/8" DIA.**

**OPTIONAL  
#0983110 PRECISION BEARING  
GREASE PACKED  
7 .406" DIA. CARBON STEEL BALLS  
STEEL RETAINER**



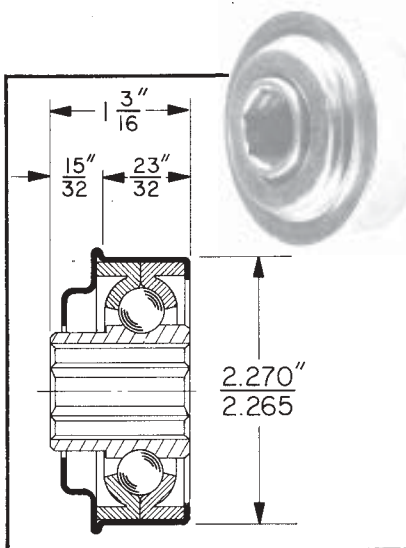
## 3 1/2" DIAMETER x #10 GA. ROLLER



**ROLLER:** 3 1/2" O.D. x 10 Ga. Steel Tubing, straight ends.  
Tubing reamed at ends to receive bearing.

**BEARING:** No. 2500, Standard Free-Running Type.  
No. 2510, Standard, Grease Packed.  
Inner race and outer race rings heat treated, hardened and tempered.  
Inner race broached to fit on hexagon shaft, positively locking inner race against rotation.  
11 - 3/8" dia. Hardened Steel Balls.  
Pressed Steel Outer Casing.

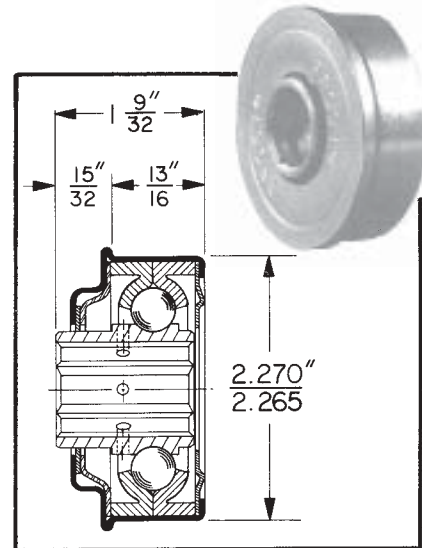
**SHAFT:** Hexagon Cold Rolled Steel, Spring loaded for instantaneous removal.  
Positively locked against rotation by hexagon holes in conveyor frame.



**STANDARD  
#2500 BEARING  
FREE RUNNING  
11 HARDENED STEEL BALLS  
3/8" DIA.**

BF	WT.
7	4.6#
9	5.6
11	6.7
13	7.7
15	8.7
17	9.8
19	10.8
21	12.8
23	12.9
25	14.0
27	15.9
31	17.0
37	20.1
43	23.2
49	26.3
51	27.4

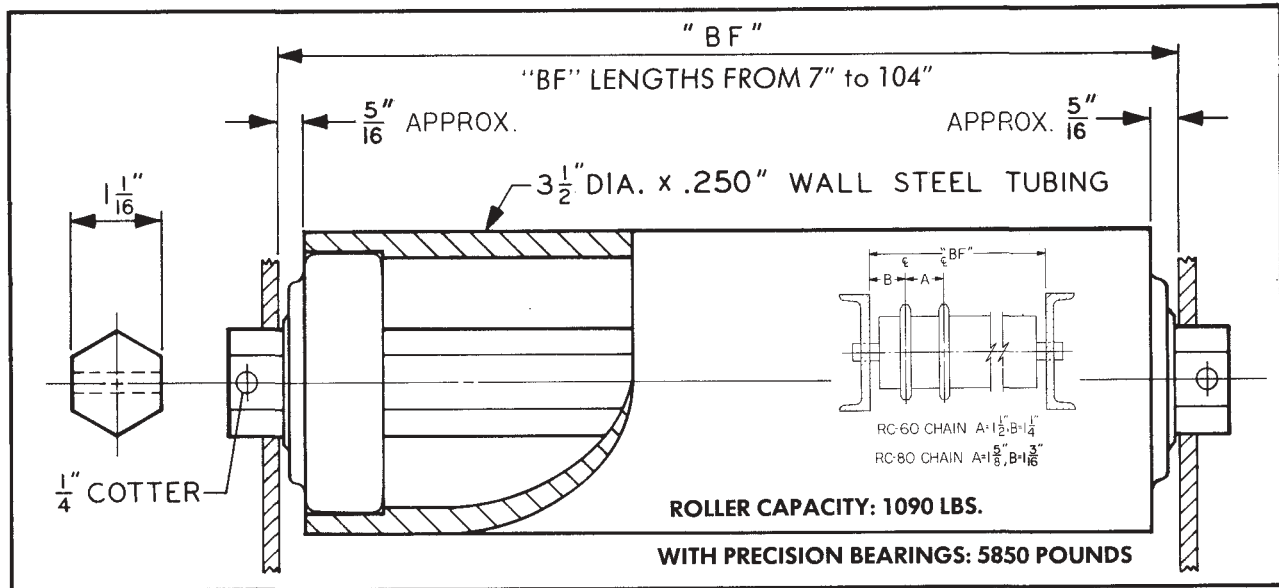
For Estimating Roller  
Weight Only



**STANDARD  
#2510 BEARING  
GREASE PACKED  
11 HARDENED STEEL BALLS  
3/8" DIA.**



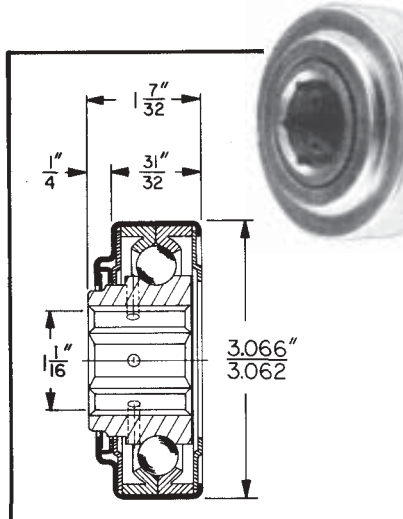
## 3 1/2" DIAMETER x .250" WALL ROLLER



**ROLLER:** 3 1/2" O.D. x .250" Wall Welded Steel Tubing, straight ends. Tubing reamed at ends to receive bearing.

**BEARING:** No. 3080, Standard Grease Packed  
 No. 2126360, Optional, Precision Bearing.  
 Straight face bearing. Hexagon bore.  
 Inner race drilled for pressure lubrication, Grease-Packed.  
 8 - .500" Dia. Steel Balls with Steel Retainer.

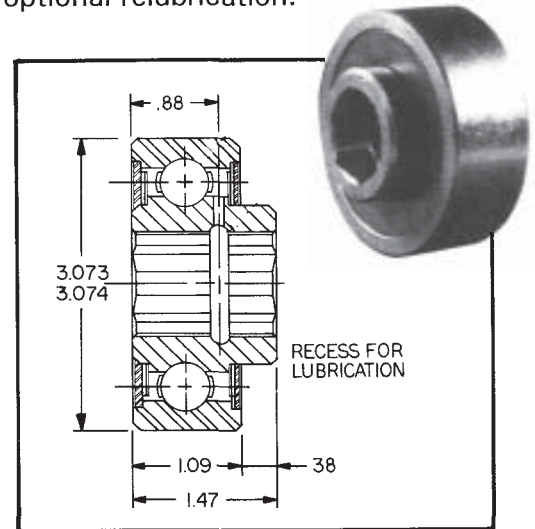
**SHAFT:** 1 1/16" Hexagon Cold Rolled Steel.  
 Positively locked against rotation by hexagon holes in conveyor frame.  
 Rolls held in position in conveyor frame by 1/4" cotter pins. Shaft can be drilled and grease fitting provided for optional relubrication.



**STANDARD  
 #3080 BEARING  
 GREASE PACKED  
 15 HARDENED STEEL BALLS  
 7/16" DIA.**

BF	WT.
7	9.8 #
9	11.8
11	13.8
13	15.8
15	17.8
17	19.8
19	21.8
21	23.8
23	25.8
25	27.8
27	29.8
31	33.8
37	39.8
43	45.8
49	51.8
51	53.8

For Estimating Roller Weight Only



**OPTIONAL  
 2126360 PRECISION BEARING  
 GREASE PACKED  
 8 - .500" STEEL BALLS  
 STEEL RETAINER**



# WEBB-STILES "HUSH-VEYOR" NEW STANDARDS IN SOUND SUPPRESSION FOR ALL TYPES OF ROLLER CONVEYORS

WEBB-STILES "HUSH-VEYOR" TECHNOLOGY IS AVAILABLE FOR . . .

- Webb-Stiles "Hush-Veyor" conveyor rolls.
- Webb-Stiles "Hush-Veyor" gravity roller conveyors.
- Webb-Stiles "Hush-Veyor" belt-driven roller conveyor.
- Webb-Stiles "Hush-Veyor" lineshaft conveyors.
- Webb-Stiles "Hush-Veyor" chain driven roller conveyors.

Webb-Stiles has taken a significant step in conveyor standards by developing a line of roller conveyors that reduce the level of conveyor noise up to two to three times!

This new breakthrough by Webb-Stiles will allow you not only to help comply with OSHA noise level standards but also offer a much more pleasant work environment in the work place.

Webb-Stiles exclusive sound reduction does not alter in any way the typical roller conveyor in physical or functional use. It does, however, reduce noise levels to a very significant extent.

What is also exciting about this new Webb-Stiles exclusive is the extra cost involved is generally insignificant to the gain achieved. It now makes practical sense to specify all roller conveyors with the new Webb-Stiles "Hush-Veyor." This unique sound reduction technology should be standard practice.

You can still design your roller conveyors the same as you've always done without any special alterations or formulas required. Our exclusive "Hush-Veyor" technology will deliver this dramatic level of noise reduction for you automatically without any change in conveyor performance.

## ACOUSTICAL TEST OF ROLLER CONVEYOR

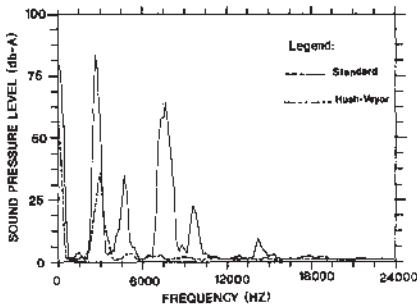


FIGURE 2 IMPACT NOISE

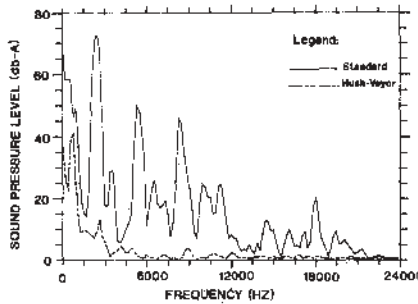


FIGURE 3 CONTINUOUS ROLLING NOISE

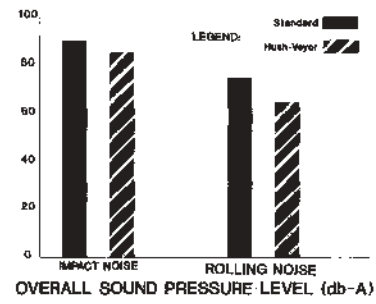


FIGURE 4

This report concerns the measurement and evaluation of the noise emission of two identical sized roller conveyors. One is standard and the other "Hush-Veyor."

Tests Conducted by Dr. Momerto Chu, University of Akron

Two roller conveyors of the same type were tested. The only difference between the two is that one features Hush-Veyor technology and the other is a standard roller conveyor. Both rollers were tested for acoustic emission using the same procedure as described below.

### Test Setup:

The rollers were tested using a condenser microphone at about 5" from the center of the roller being tested. The rollers were tested two ways, namely: (a) impact emission and (b) continuous rolling emission.

The sound picked up by the microphone is first weighted by a network "A" which simulates the sound response of the human ear as recommended by OSHA. The overall sound pressure level (db-A) is first measured, then the spectral components are computed using the Fast Fourier Transform technique through the Frequency Analyzer (HP 2034). And through a plotting routine in the HP personal computer the respective graphs are plotted (Figs. 3-4).

### Test Procedure:

(a) Impact Noise — The impact noise from both rollers are generated by continuously tapping (about one tap every three seconds) lightly with a steel tipped impact hammer, for about a one minute period.

(b) Continuously Rolling Noise — In this instance the rolling noise is generated by turning the rollers continuously at approximately 350 rpm. The noise is also averaged out in about a one-minute period.

### Discussion of Results:

It costs so little more and in many cases no more to have the "Hush-Veyor" technology incorporated into your conveyors.

Generally "Hush-Veyor" technology incorporated in your roller conveyors will only add only a few percent on a large project and less than 10% on a few sticks of gravity. You certainly will receive advantages that far outweigh any extra costs involved.

(a) Impact Noise — Figure 2 shows the two spectral curves for impact noise from both the Hush-Veyor and standard rollers. As shown the standard roller spectral curve has large peaks (resonance) at 500, 3000, 4500, 7500, 9000 and 15000 Hz. To human ear perception these are annoying high pitch noises. Compared to the Hush-Veyor roller spectral curve almost all the peaks are damped out except at 500 and 3000 Hz, which are drastically reduced.

(b) Continuous Rolling Noise — Figure 3 shows the superposition of the standard and Hush-Veyor spectral curves. As can be seen the standard curve has a prolific display of large amplitudes peaks. But the Hush-Veyor roller spectral curve is almost nil at high frequency range except at the lower end of the spectrum (0-3000 Hz).

(c) Overall Sound Pressure Level (db-A) — Figure 4 shows the overall sound pressure level in db-A for the standard and Hush-Veyor case, for both the "Impact" and "Continuous Rolling" noises. As can be seen the difference between the standard and Hush-Veyor case is around 5 db for the impact noise and around 10 db for the continuous rolling noise. However this differences in terms of db does not reflect the absolute measure of noisiness. In the absolute sense the standard roller noise is twice to three times as noisy compared to the Hush-Veyor roller for the impact and continuous rolling cases respectively.

### Conclusions:

It is shown without a shadow of a doubt by the above results that the Hush-Veyor roller conveyor is two to three times quieter than the standard roller conveyor. **Most importantly, the damping eliminated the high pitched more annoying resonances (peaks).**



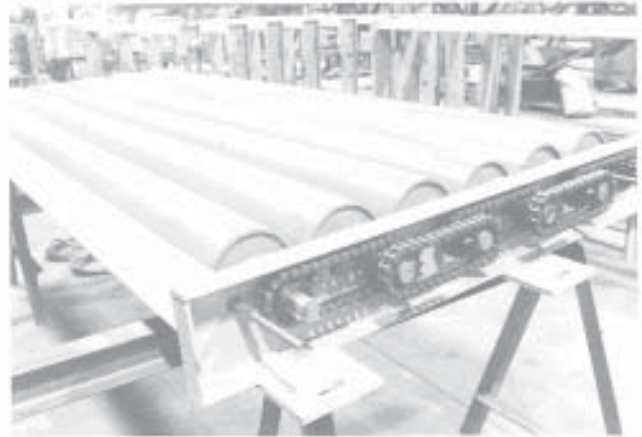
## WEBB-STILES SPECIALTY ROLLS

In addition to our standard line of conveyor rolls listed, Webb-Stiles can engineer and build many types of specialty rolls to meet our customer's material handling needs. Rolls can be built with special coverings, coatings and diameters, etc. Heavy-duty and large diameter rolls of all types can be engineered and built to handle extremely heavy loads.

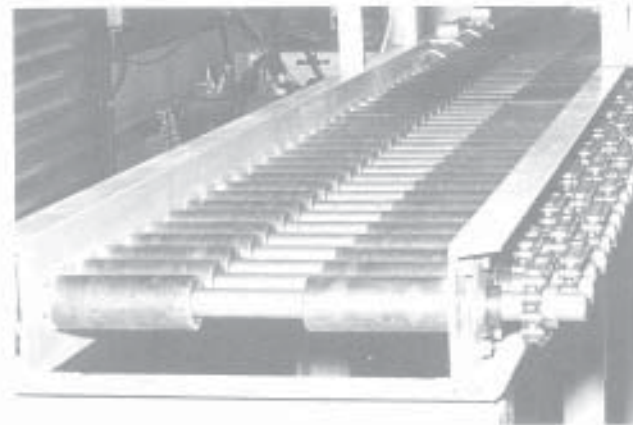
Consult with a Webb-Stiles Sales Engineer for your special requirements and needs.



These 6" diameter rolls are built to handle air cargo containers. The shaft is supported at three points on the roll for strength and rigidity.



The 6" diameter rolls shown on the left are being installed in the conveyor frame. The shafts are mounted on two bolt flanged precision bearings. The chain driven sprocket arrangement is clearly shown.



These special rolls feature two diameters that allow torque converters to be easily roller conveyed. Notice the three row chain drive arrangement due to the close roller centers.



These large diameter heavy-duty chain driven rollers are mounted on pillow block bearings. This is part of a system to handle 20,000 # stacks of steel blankings. The conveyor will interface with AGV's (Automatic Guided Vehicles) at receiving.