ROLLER INDEX

Omni Metalcraft corp.

Roller Index

A comprehensive list of Omni Metalcraft Corp.'s standard roller offering

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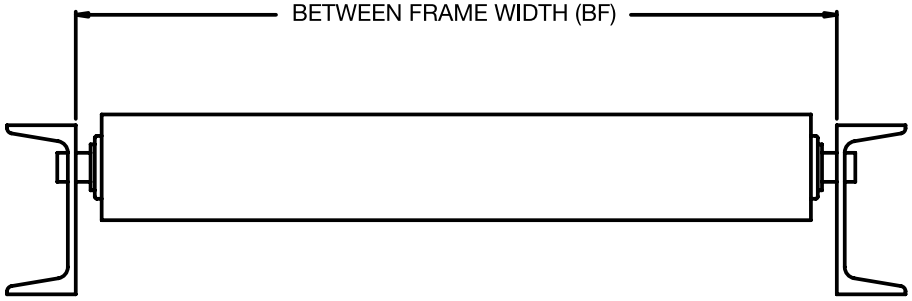
GENERAL INFORMATION

Roller Length

The distance between the side frames of a conveyor is the “Between Frame” dimension or “BF”. The BF dimension allows 1/16 in. clearance between the extension on the bearing and the side frame at each end. This is the primary method for specifying the length of a roller.



We are not limited to standard lengths and we can build fractional length rollers. Minimum BF is determined by the width of the bearings. Maximum standard lengths can be found in the chart below. Lengths beyond maximum standard BF may be available upon request.

Outside Diameter (OD)	Maximum Between Frame
1/4 dia. axle & PVC tubes	28
up to 1-3/8 OD	39
up to 1.9 OD	63
up to 2 9/16 OD	99
3.5 OD and larger	120*

**Longer between frames available for rollers above 3.5 OD if material is available at required length. Not all material sizes are available above 120".*

Axle retention and material options

- All axles up to 3/4 hex are available with spring or pin retention options
- Axles 3/4 dia. and larger are only available with pin retention options
- Springs and cotter pins are available in carbon steel and stainless steel
- Hog rings are only available in carbon steel
- All axles are available in carbon steel and stainless steel

Power rollers bearing recommendation

Only grease packed bearings are recommended for powered conveyor applications where there is continuous rotation of the bearing.

General Sprocket Information

- Sprockets available on 1-3/8 to 8 OD rollers
- Most common sizes 40, 50, 60 and 80 series
- Most common style is A-plate
- Other sizes and styles are available upon request
- Sprockets can be placed anywhere along the length of the tube provided they are clear of the bearing

General Groove Information

- Grooves available on 1 3/8, 1 5/8, 1.9 and 2 1/2 OD rollers
- 5/16" narrow grooves are made for 3/16" dia. belt
- 1/2" wide grooves are made for 1/4" dia. belt
- Grooves can be placed anywhere along the length of the tube provided they are clear of the bearing

Please refer to our Roller Manual or Roller Measurement Guide for more information about roller construction and available options.

HOW TO USE THE INDEXES

1. **Start by finding the column with the desired tube diameter**
2. **Then find the sub-column with the desired wall thickness and tube material**
3. **Next find the row with the desired axle size and shape**
4. **Then find the sub-row with the desired bearing style and features**
5. **If a bearing part number is listed where the sub-column and sub-row intersect then that particular tube/axle/bearing combination is available.**
6. **If an asterisk (*) is listed then that particular tube/axle combination is available with a special bearing. Contact your customer service representative for more information.**

Step 1 Step 2 Step 3 Step 4

			3-1/2	4		
Axle Size	**Bearing Type**	**Bearing Features**	**.300" Steel**	**10 ga. Steel**	**1/4" Steel**	**1/2" Steel**
1 H	press fit	shield	102314			102314
		seal, shield	102162			102162
1 1/16 H	press fit		102060			102060
		seal, shield	102061			102061
		seal, shield, regrease	102086			102086
	semi-prec.	seal	102101			102101
	ABEC	seal, shield, regrease	114249			114249
1 1/8 H	ABEC	spherical sleeve, seal, shield	27949	27956	27956	27949
1 3/16 Ø	press fit	1 labyrinth, regrease	102197			102197
	ABEC	spherical sleeve, seal, shield		27957	27957	
1 1/4 H	press fit				102205	102205
		shield			102200	102200
1 3/8 Ø	ABEC	spherical sleeve, seal, shield	27951		27955	27951
1 7/16 Ø	ABEC	spherical sleeve, seal, shield	24862		24864	24862
1 1/2 H	press fit	1 labyrinth				
		regrease				
	ABEC	spherical sleeve, seal, shield			27953	
1 11/16 Ø	ABEC	spherical sleeve, seal, shield			26838	

CHART KEY

Ø – round axle
H – hex axle
ABEC – ABEC–1 precision type bearing
Adpt/adapter – stamped metal adapter that allows bearings to fit into large tubes
Alum. – aluminum tube
Crimped – bearing crimped into the tube, not replaceable
Galv. – galvanized tube
Framesaver – cartridge containing two radial ABEC bearings and a stub shaft in a polypropylene housing
Labyrinth – a series of interlocking passageways in the bearing housing that creates a shield
Oversized flange – large diameter bearing flange to be used with thin walled tubes that are too thin to have welded flanges
Plastic – bearings that have molded plastic bodies and stainless steel balls
Poly housing – polypropylene housing assembly
Press fit – bearing pressed into the tube, replaceable
Regrease – bearings that can have their grease replaced without being removed from the roller
Sch – pipe schedule sizes
Seal – keeps contaminants out while helping retain grease within the bearing
Semi-prec. – semi-precision type bearing
Set-screws – locks the inner race onto the axle
Shield – keeps contaminants out, can be used in conjunction with a seal
Spherical sleeve – large insert bearings with spherical bodies that must be fit into machined sleeves to be installed in roller tubes
S.S. – stainless steel tube
Unflanged – bearings that have a cylindrical body that can be pressed completely into a tube

TUBE DIAMETER SPECS

Axle Size	Bearing Type	Bearing Features	1			1.05 (3/4 Pipe)	1-1/8	1-3/16
			16 ga. Steel, Galv. S.S.	14 ga. Steel	10 ga. Steel	Sch 40 PVC	5/32" Steel	3/16" Steel
1/4 Ø	press fit		102245	102245	102245	102245	102245	102245
1/4 H	press fit			102168	102168	102168	102168	102168
5/16 Ø	press fit		102272	102272	102272	102272	102272	102272
5/16 H	press fit		102152	102152	102152	102152	102152	102152
3/8 Ø	semi-prec.	seal		115137	115137	115137	115137	115137
3/8 H	press fit		102171	102171	102171	102171	102171	102171

TUBE DIAMETER SPECS

Axle Size	Bearing Type	Bearing Features	1-1/4			1-5/16		1.315 (1 Pipe)	
			16 ga. Steel	14 ga. Steel	1/4" Steel	11 ga. Steel	1/4" Steel	Sch 40 PVC	Sch 80 S.S.
1/4 Ø	press fit				102245		102245		
	semi-prec.	seal, shield		*	*	*	*	*	*
1/4 H	press fit				102168		102168		
5/16 Ø	press fit				102272		102272		
5/16 H	press fit		102043	102043	102043	102043	102043	102043	102043
		seal, regrease	102046	102046	102046	102046	102046	102046	102046
	semi-prec.	seal, shield		113365	113365	113365	113365	113365	113365
	plastic							114625	114625
3/8 Ø	press fit			102173	102173	102173	102173	102173	102173
3/8 H	press fit		102176	102176	102176	102176	102176	102176	102176
7/16 H	press fit		102126	102126	102126	102126	102126	102126	102126
		seal, regrease	102177	102177	102177	102177	102177	102177	102177
1/2 Ø	press fit			102172	102172	102172	102172	102172	102172

TUBE DIAMETER SPECS

Axle Size	Bearing Type	Bearing Features	1-3/8				1-7/16	1-1/2		1-5/8	1.66 (1-1/4 Pipe)		1-3/4
			18 ga. Galv. Alum.	16 ga. Steel Galv. Alum. S.S.	14 ga. Steel	3/16" Steel S.S.	3/16" Steel	5/32" Steel	1/4" Steel	14 ga. Steel	Sch 40 S.S.	Sch 80 PVC	10 ga. Steel
1/4 Ø	crimped		111856	111856	111856	111856							
	semi-prec.	seal, shield				111692	111692	111692	111692				
	ABEC	poly housing, shield	114234	114234	114234	114234							
1/4 H	crimped		102178	102178	102178	102178							
5/16 Ø	crimped		102241	102241	102241	102241							
	press fit					*	*		*				
5/16 H	crimped		102228	102228	102228	102228							
	press fit					102043	102043		102043	102145	102145	102145	102145
		seal, regrease				102046	102046		102046				
	semi-prec.	seal, shield		102274	102274	113365	113365	102274					
		seal, shield, stainless		113141	113141	113141	113141	113141					
	ABEC	poly housing, shield	114231	114231	114231	114231							
		poly housing, seal, 2 labyrinth	113499	113499	113499	113499							
3/8 Ø	press fit					102173	102173		102173				
3/8 H	press fit					102176	102176		102176	102180	102180	102180	102180
7/16 H	crimped			110528	110528	110528							
	press fit					102126	102126		102126	102052	102052	102052	102052
		seal								102053	102053	102053	102053
		seal, regrease				102177	102177		102177				
	semi-prec.	seal, shield								102251	102251	102251	110260
		seal, shield, stainless								113870	113870	113870	
	ABEC	poly housing, shield								114235			114235
		poly housing, seal								114236			114236
		poly housing, seal, 2 labyrinth		*	*	*				114092			114092
1/2 Ø	press fit					102172	102172	102172	102172	102181	102181	102181	102181
5/8 Ø	press fit				*	*	*	*	*	*			
	semi-prec.	seal								*			
	ABEC	set-screws, seal											111433

TUBE DIAMETER SPECS

Axle Size	Bearing Type	Bearing Features	1-7/8			1.9 (1-1/2 Pipe)							
			16 ga. Steel	13 ga. Steel	11 ga. Steel	16 ga. S.S.	16 ga. Steel Galv.	12 ga. Steel	11 ga. S.S.	.145 wall Steel Galv	Sch 40 Sch 80 PVC	Sch 40 Alum.	Sch 80 Pipe
1/4 Ø	crimped		102188	102188	102188		102188	102188	102188	102188		102188	
											115275	115275	
5/16 Ø	crimped		102259	102259	102259		102259	102259	102259	102259		102259	
	semi-prec.	seal, shield			*				*	*	*	*	*
5/16 H	crimped		102248	102248	102248		102248	102248	102248	102248		102248	
	semi-prec.	seal, shield			*				*	*	*	*	*
3/8 Ø	crimped		102293	102293	102293		102293	102293	102293	102293		102293	
	semi-prec.	seal, shield			*				*	*	*	*	*
3/8 H	crimped		102292	102292	102292		102292	102292	102292	102292		102292	
	semi-prec.	seal, shield			*				*	*	*	*	*
7/16 Ø	semi-prec.	seal, shield			*				*	*	*	*	*
7/16 H	crimped		102154	102154	102154		102154	102154	102154	102154		102154	
		seal	102279	102279	102279		102279	102279	102279	102279		102279	
		seal, regrease	113500	113500	113500		113500	113500	113500	113500		113500	
	press fit	unflanged, 1 labyrinth			102051				102051	102051	102051	102051	102051
		oversized flange					102131	102131	102131	102131	102131	102131	
		seal, regrease	113500	113500	113500		113500	113500	113500	113500		113500	
	semi-prec.	seal, shield			102155				102155	102155	102155	102155	102155
		seal, shield, stainless			110244				110244	110244	110244	110244	110244
	ABEC	poly housing, shield	114135	114135	114135	114135	114135	114135	114135	114135	114879	114135	
		poly housing, seal	114209	114209	114209	114209	114209	114209	114209	114209		114209	
		poly housing, seal, stainless	114210	114210	114210	114210	114210	114210	114210	114210		114210	
		seal, shield		114621	114621				114621	114621	114621	114621	114621
	plastic	stainless balls	115178	114633	114633	115178	115178	114633	114633	114624	114624	114624	
	Framesaver	tapered metal hex	114206	114206	114206	114206	114206	114206	114206	114206		114206	
		tapered urethane hex	115270	115270	115270	115270	115270	115270	115270	115270		115270	
		straight urethane hex	115271	115271	115271	115271	115271	115271	115271	115271		115271	
1/2 Ø	crimped		102255	102255	102255		102255	102255	102255	102255		102255	
	semi-prec.	seal, shield			113584				113584	113584	113584	113584	113584
	ABEC	set-screws, seal						114475	114475	114475	114475	114475	114475
5/8 Ø	press fit							*	*	*	*	*	*
	ABEC	set-screws, seal						102187	102187	102187	102187	102187	102187
5/8 H	press fit							*	*	*	*	*	*
3/4 Ø	press fit							*	*	*		*	*
	semi-prec.	seal						*	*	*		*	*
	ABEC	set-screws, seal						102186	102186	102186		102186	102186

			TUBE DIAMETER SPECS											
			2				2-1/8		2-3/16	2-1/4			2-3/8	
Axle Size	**Bearing Type**	**Bearing Features**	**16 ga. Steel**	**14 ga. Steel**	**11 ga. Steel**	**7 ga. Steel**	**5/32" Steel**	**1/4" Steel**	**3/16" Steel**	**13 ga. Steel**	**.145 wall Steel**	**1/4" Steel**	**3/16" Steel**	**9/32" Steel**
5/16 Ø	semi-prec.	seal, shield				*								
5/16 H	crimped	bearing w/ adapter								44832	44832			
	semi-prec.	seal, shield				*								
3/8 Ø	semi-prec.	seal, shield				*								
3/8 H	crimped	bearing w/ adapter								44834	44834			
	semi-prec.	seal, shield				*								
7/16 Ø	semi-prec.	seal, shield				*								
7/16 H	crimped		102160	102160	102160	102160								
		bearing w/ adapter								102311	102311			
		bearing w/ adapter, seal								102312	102312			
		seal	102304	102304	102304	102304								
		seal, regrease												
	press fit			102040	102040		102040	102040	102040					
		unflanged, 1 labyrinth				102051		102051						
		oversized flange			102131									
	semi-prec.	seal, shield				102155		102155						
		seal, shield, stainless				110245		110245						
	ABEC	poly housing, shield				114135								
		poly housing, seal				114209								
		poly housing, seal, stainless				114210								
		poly housing, seal, 2 labyrinth								114734	114734			
		seal, shield				114621		114621						
	plastic	stainless balls			115178	114633								
	Framesaver	tapered metal hex			114206	114206								
		tapered urethane hex			115270	115270								
		straight urethane hex			115271	115271								
1/2 Ø	crimped	bearing w/ adapter								44836	44836			
	press fit			*	*	*						*		*
	semi-prec.	seal, shield				113584		113584						
	ABEC	poly housing, seal, 2 labyrinth								114735	114735			
		set-screws, seal				114475		114475						
5/8 Ø	press fit					*								
	ABEC	set-screws, seal				102187		102187						
5/8 H	press fit					*								
		unflanged					102047		102047		102047	102047		102047
11/16 H	ABEC	unflanged, seal, shield			102191	102191	102191	102191	102191			102191		102191
		unflanged, shield			112798	112798	112798	112798	112798			112798		112798
3/4 Ø	press fit					*					*	*		*
	semi-prec.	seal				*								
	ABEC	set-screws, seal				102186	111434	102186	111434			111434		111434
20mm Ø	ABEC	set-screws, seal, shield				*	*	*	*			*		*
7/8 H	ABEC	unflanged, seal, shield									102193	102193	102193	

			TUBE DIAMETER SPECS									
			2-7/16	2-1/2						2-9/16	2-5/8	3-1/2
Axle Size	Bearing Type	Bearing Features	1/8" Steel	14 ga. Steel	11 ga. Steel	11 ga. S.S.	10 ga. Galv.	7 ga. Steel	1/4" Steel	7 ga. Steel	1/4" Steel	7 ga. Steel w/adpt
5/16 H	crimped	bearing w/ adapter		44833	44833	44833	44833					
3/8 H	crimped	bearing w/ adapter		44835	44835	44835	44835					
7/16 H	crimped	bearing w/ adapter		102309	102309	102309	102309					
		bearing w/ adapter, seal		102310	102310	102310	102310					
	press fit		102249		102249		102249	102249		102249	102249	102249
		seal, regrease			113500 w/boss	113500 w/boss		113500 w/boss		113500 w/boss	113500 w/boss	
	ABEC	poly housing, shield		114203	114200	114203	114200					
		poly housing, seal		114197	114193	114197	114193					
		poly housing, seal, stainless			114238	114238	114238					
		poly housing, seal, 2 labyrinth		114091	114091	114091	114091					
1/2 Ø	crimped	bearing w/adapter		44837	44837	44837	44837					
	press fit		102195		102195		102195	102195		102195	102195	102195
9/16 H	press fit		*		*		*	*		*	*	*
5/8 Ø	press fit		110658		110658		110658	110658		110658	110658	110658
5/8 H	press fit	seal	102130		102130		102130	102130		102130	102130	102130
	ABEC	poly housing, shield		114204	114201	114204	114201	114201				
		poly housing, seal		114198	114195	114198	114195	114195				
		poly housing, seal, 2 labyrinth			114090	114090	114090	114090				
11/16 H	press fit		102164		102164		102164	102164		102164	102164	102164
		seal	102041		102041		102041	102041		102041	102041	102041
		seal, regrease	102229		102229		102229	102229		102229	102229	102229
		unflanged			102054	102054	102054	102054		102054	102054	
		unflanged, 1 labyrinth			102055	102055	102055	102055		102055	102055	
		unflanged, 1 labyrinth, regrease			102056	102056	102056	102056		102056	102056	
		unflanged, seal	102084		102084		102084	102084		102084	102084	
		unflanged, seal, regrease	102318		102318		102318	102318		102318	102318	
	semi-prec.	seal	102139		102139		102139	102139		102139	102139	102139
		seal, shield	112896		112896		112896	112896		112896	112896	112896
		seal, shield, stainless	114416		114416	114416	114416	114416		114416	114416	114416
		seal, shield, stainless, regrease	112768		112768	112768	112768	112768		112768	112768	112768
	ABEC	poly housing, shield		114205	114202	114205	114202	114202				
		poly housing, seal		114199	114196	114199	114196	114196				
		poly housing, seal, stainless			114237	114237	114237	114237				
		poly housing, seal, 2 labyrinth			113498	113498	113498	113498				
		seal, shield	114128		114128		114128	114128		114128	114128	114128
3/4 Ø	press fit		102273		102273		102273	102273	102273	102273	102273	102273
		seal, regrease	102194		102194		102194	102194	102194	102194	102194	102194
3/4 H	press fit		102268		102268		102268	102268	102268	102268	102268	102268
7/8 H	ABEC	unflanged, seal, shield							102193			
1 Ø	ABEC	set-screws, seal, shield							113124			

TUBE DIAMETER SPECS

Axle Size	Bearing Type	Bearing Features	3-1/2	4			4-1/4		4-1/2	5
			.300" Steel	10 ga. Steel	1/4" Steel	1/2" Steel	1/4" Steel	7/16" Steel	1/2" Steel	3/4" Steel
1 H	press fit	shield	102314			102314				
		seal, shield	102162			102162				
1 1/16 H	press fit		102060			102060				
		seal, shield	102061			102061				
		seal, shield, regrease	102086			102086				
	semi-prec.	seal	102101			102101				
	ABEC	seal, shield, regrease	114249			114249				
1 1/8 H	ABEC	spherical sleeve, seal, shield	27949	27956	27956	27949	27956		27956	27956
1 3/16 Ø	press fit	1 labyrinth, regrease	102197			102197				
	ABEC	spherical sleeve, seal, shield		27957	27957		27957		27957	27957
1 1/4 H	press fit				102205	102205		102205	102205	102205
		shield			102200	102200		102200	102200	102200
1 3/8 Ø	ABEC	spherical sleeve, seal, shield	27951		27955	27951		27955	27955	27955
1 7/16 Ø	ABEC	spherical sleeve, seal, shield	24862		24864	24862		24864	24864	24864
1 1/2 H	press fit	1 labyrinth					102201		102201	102201
		regrease					102320		102320	102320
	ABEC	spherical sleeve, seal, shield			27953			27953	27953	27953
1 11/16 Ø	ABEC	spherical sleeve, seal, shield			26838			26838	26838	26838

TUBE DIAMETER SPECS

Axle Size	Bearing Type	Bearing Features	5-9/16	6	6-1/2	8
			3/4" Steel	3/4" Steel	1" Steel	1" Steel
1 1/2 H	ABEC	spherical sleeve, seal, shield	27958		27963	
1 5/8 H	press fit	1 labyrinth	102202			
1 11/16 Ø	ABEC	spherical sleeve, seal, shield	27959		27964	
1 15/16 Ø	ABEC	spherical sleeve, seal, shield	27960	27960	27960	
2 7/16 Ø	ABEC	spherical sleeve, seal, shield	27962	27962	27962	
2 15/16 Ø	ABEC	set screws, seal, shield		102203	102203	
		spherical sleeve, seal, shield				27965
3 7/16 Ø	ABEC	set screws, seal, shield				102204

ROLLER LOAD CHARTS

Omni Metalcraft corp.

Roller Load Charts

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ROLLER LOAD CHARTS

Roller Selection for a Given Load
Use only 2/3 of the rollers under the product when calculating the required roller capacity because the conveying surface of products is not typically perfectly flat.
Common sense tells us that it is not practical to use a 1 3/8 in. diameter roller on 1 1/2 in. centers for a 6000 lb. product (12 in. wide x 120 in. long), so in addition to the rule above use the following guidelines:

Roller Diameter & Axle	Max. Product Weight (lbs.)
1 in. O.D. - 5/16 hex	300
1-3/8 in. O.D. - 5/16 hex	600
1.9 in. O.D. - 7/16 hex	1,500
2-1/2 in. O.D. - 11/16 hex	3,500
3-1/2 in. O.D. - 1 1/16 hex	6,000
3-1/2 in. O.D. - 1 7/16 round	10,000
4 in. O.D. - 1 7/16 round	15,000
5 in. O.D. - 1 11/16 round	25,000

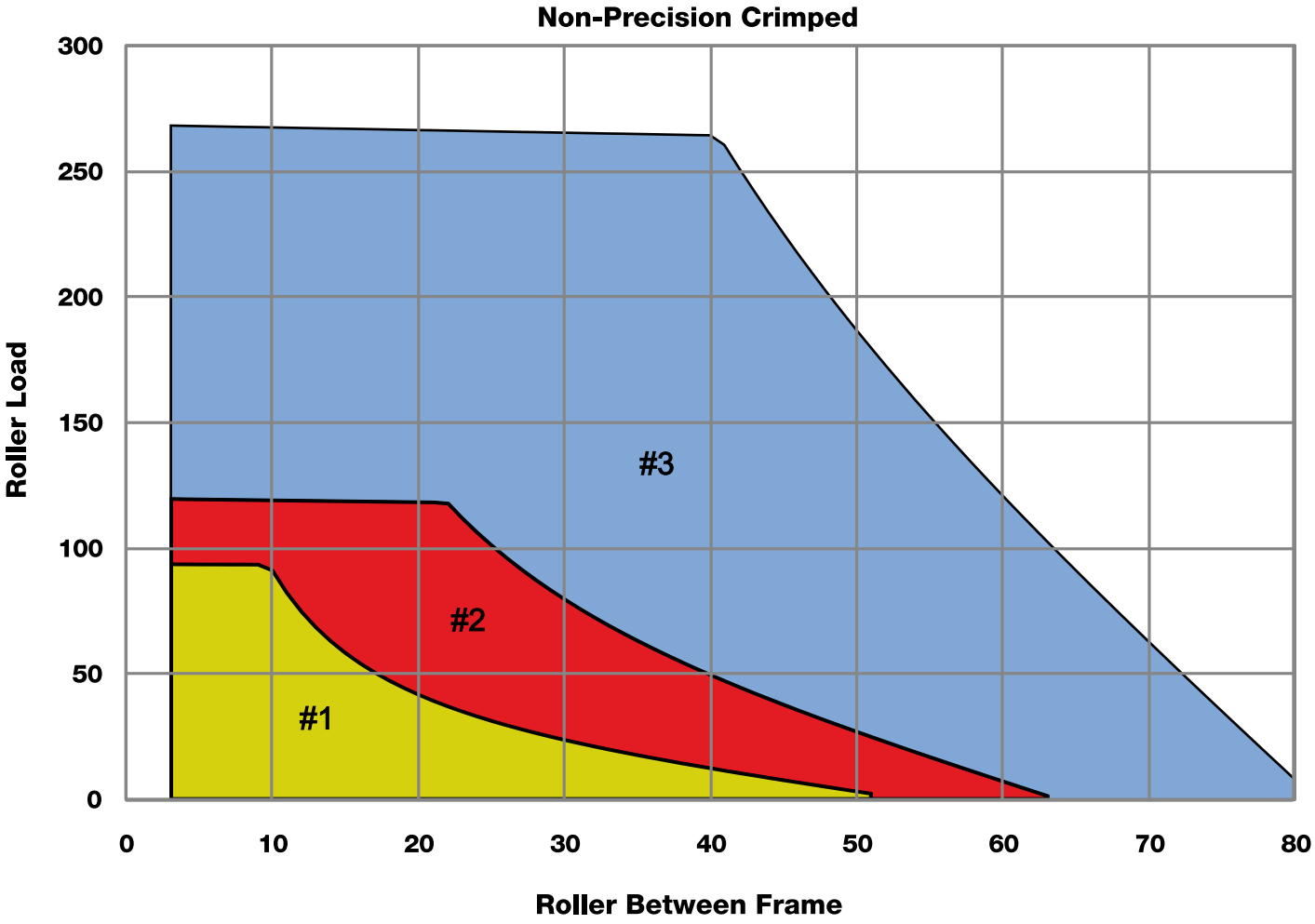
The above guidelines assume “0” shock load and are not applicable for 3 or more lanes. When calculating the required load capacity for rollers in fork lift loading areas Omni recommends tripling the roller capacity due to shock loading.

The following charts show load capacity ranges for some of Omni’s most common roller sizes and configurations. They are meant as reference guides to help determine the size of roller required for a given load and length (BF). Each region on the charts represents a different roller that is recommended for that range of loads and lengths. All of the rollers represented on each chart have similar bearings. The load capacities shown are based on the maximum bearing capacity, maximum tube deflection, and maximum axle deflection as it passes through the bearing. Each of these maximum values may vary based on the specific roller components. All tubes and axles represented are made from carbon steel. Load capacities outside of these ranges may be achievable with less common rollers.

NON-PRECISION CRIMPED BEARINGS—*Chart 1*

These rollers are light duty. They are built with non-precision crimped bearings which have stamped metal plate bodies, loose internal tolerances, and no ball retainer. Because of their loose tolerances they are the most cost effective option for lower load capacities as shown in the chart below. These rollers are recommended for small loads on short to medium between frames. This type of bearing is recommended for gravity conveyor and lineshaft conveyor.

ROLLER	TUBE	AXLE	BEARING
#1	1-3/8 OD x 18 ga.	1/4 dia. round	111856-O
#2	1-3/8 OD x 16 ga.	5/16 hex	102044-O
#3	1.9 x 16 ga.	7/16 hex	102154-GP

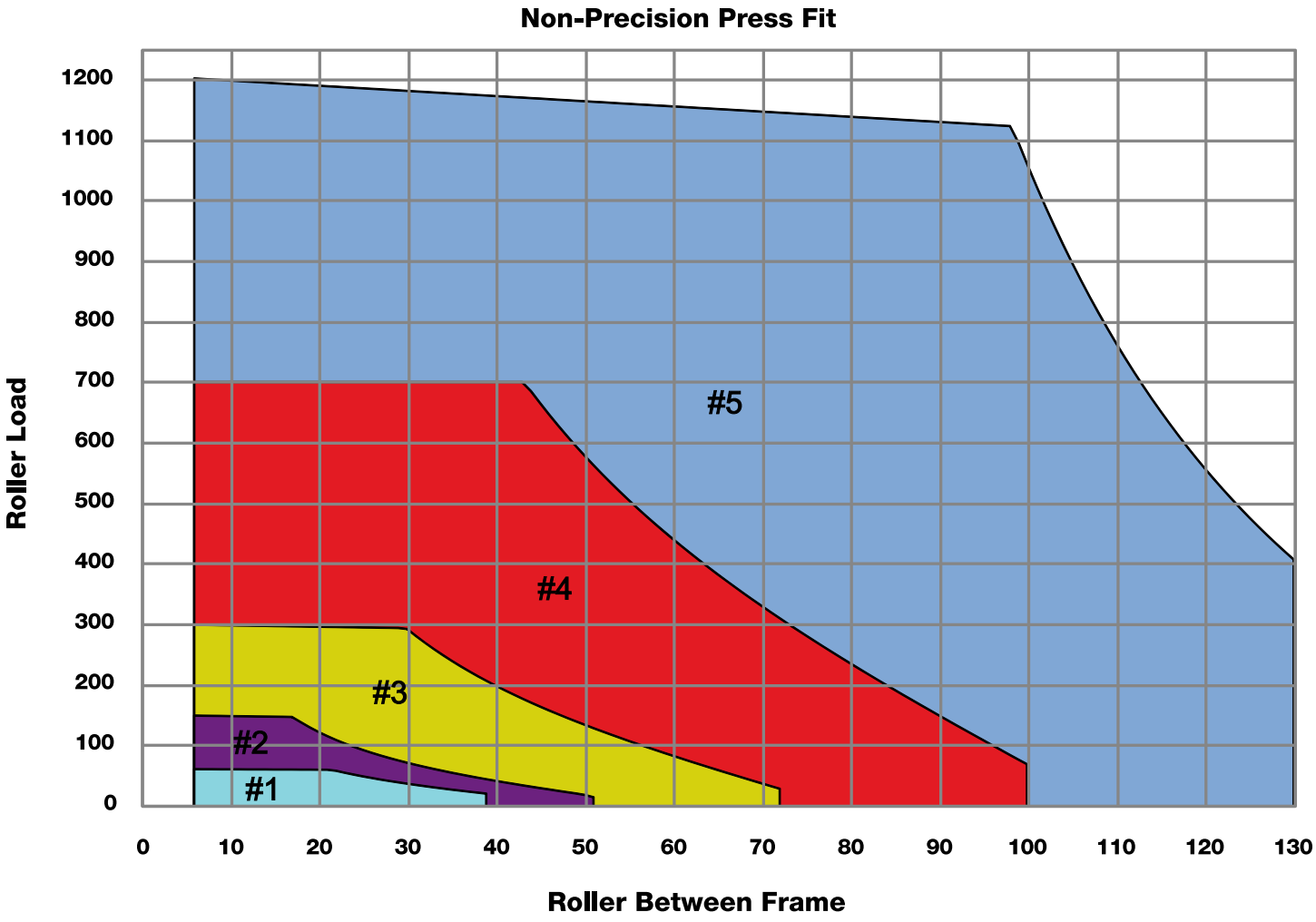


Omni recommends using only 2/3 (66%), adding a 33% buffer capacity, of the rollers under the product when calculating the required roller capacity because the conveying surface of products is not typically perfectly flat and roller are unevenly loaded.

NON-PRECISION PRESS FIT BEARINGS—*Chart 2*

These rollers are light duty. They are built with non-precision press fit bearings which have stamped metal plate bodies, loose internal tolerances, and no ball retainer. These bearings can provide a higher load capacity than the crimped bearing. Because of their loose tolerances they are a cost effective option for medium load capacities as shown in the chart below. These rollers are recommended for relatively light loads on short to medium between frames. This type of bearing is recommended for gravity and powered conveyor. Press fit bearings can also be replaced when they wear out which can double the life of the roller.

ROLLER	TUBE	AXLE	BEARING
#1	1 OD x 16 ga.	1/4 dia. round	102245-O
#2	1-3/8 OD x 3/16 wall	5/16 hex	102046-GP
#3	1.9 OD x .145 wall	7/16 hex	102051-GP
#4	2-1/2 OD x 11 ga.	11/16 hex	102041-GP
#5	3-1/2 OD x .300 wall	1-1/16 hex	102061-GP

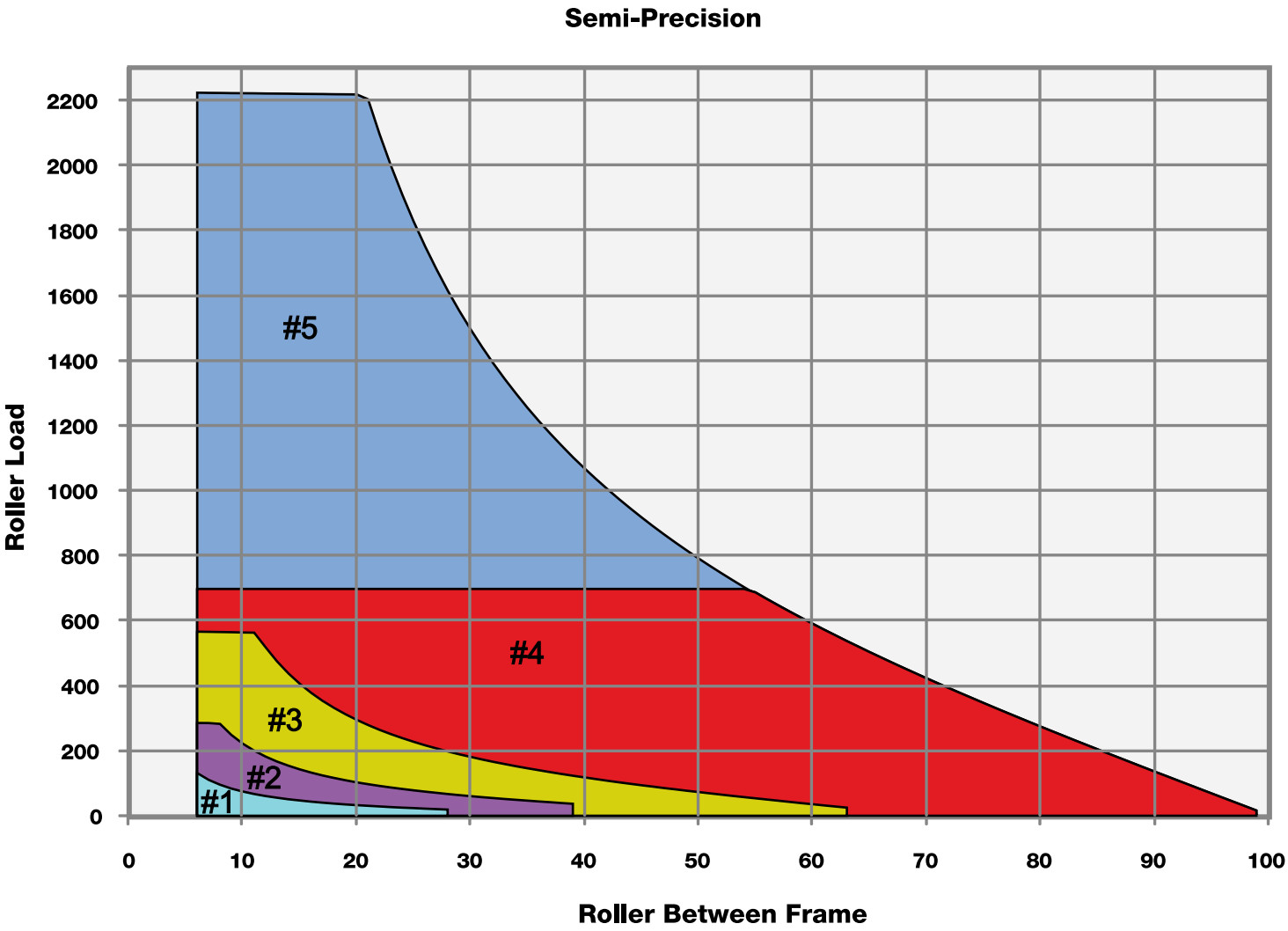


Omni recommends using only 2/3 (66%), adding a 33% buffer capacity, of the rollers under the product when calculating the required roller capacity because the conveying surface of products is not typically perfectly flat and roller are unevenly loaded.

SEMI-PRECISION BEARINGS—*Chart 3*

These rollers are medium to heavy duty. They are built with semi-precision bearings which have tighter tolerances than non-precision bearings and ball retainers evenly distribute the load. These features allow medium to heavy load capacities, higher speeds, and longer bearing life. These rollers are recommended for moderate loads on short lengths and smaller loads on medium lengths as shown in the chart below. This type of bearing is recommended for medium to heavy duty gravity and powered conveyor.

ROLLER	TUBE	AXLE	BEARING
#1	1-3/8 OD x 16 ga.	1/4 dia. round	111692-GP
#2	1-3/8 OD x 16 ga.	5/16 hex	102274-GP
#3	1.9 OD x .145 wall	7/16 hex	102155-GP
#4	2-1/2 OD x 11 ga.	11/16 hex	102139-GP
#5	2-9/16 OD x 7 ga.	11/16 hex	102139-GP

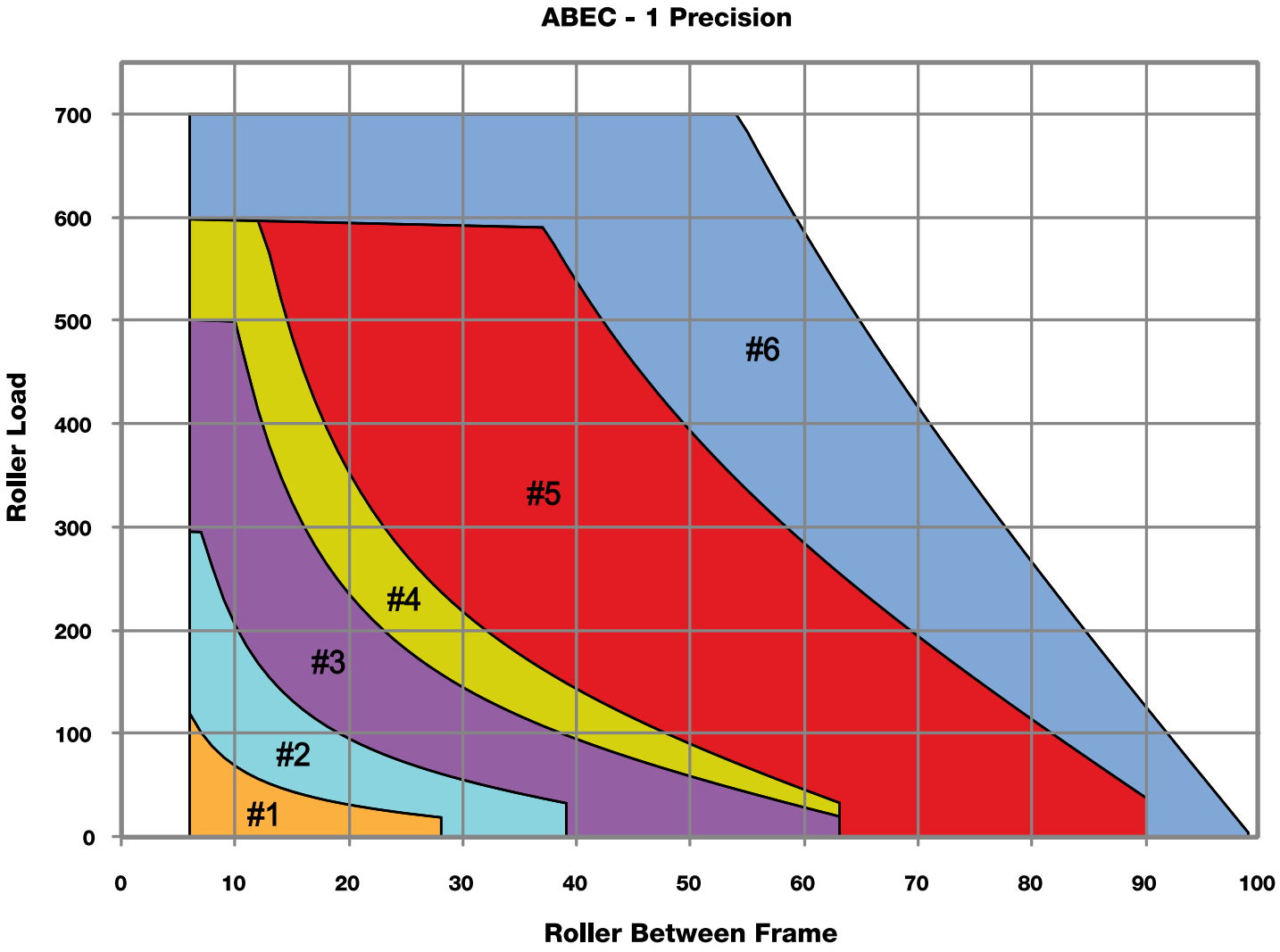


Omni recommends using only 2/3 (66%), adding a 33% buffer capacity, of the rollers under the product when calculating the required roller capacity because the conveying surface of products is not typically perfectly flat and roller are unevenly loaded.

ABEC-1 PRECISION BEARINGS—*Chart 4*

These rollers are medium duty. They are built with precision, ABEC-1 bearings, which have ground and polished raceways that allow for higher speeds and longer life. These rollers are recommended for moderate loads on short to medium between frames as shown in the chart below. They are most effective for high speed applications because their high tolerances make them incredibly smooth and virtually silent. This type of bearing is recommended for powered conveyor.

ROLLER	TUBE	AXLE	BEARING
#1	1-3/8 OD x 18 ga.	1/4 dia. round	114234-O
#2	1-3/8 OD x 16 ga.	5/16 hex	114231-GP
#3	1.9 OD x 16 ga.	7/16 hex	114135-GP
#4	1.9 OD x .145 wall	7/16 hex	114621-GP
#5	2-1/2 OD x 11 ga.	11/16 hex	114196-GP
#6	2-1/2 OD x 11 ga.	11/16 hex	114128-GP

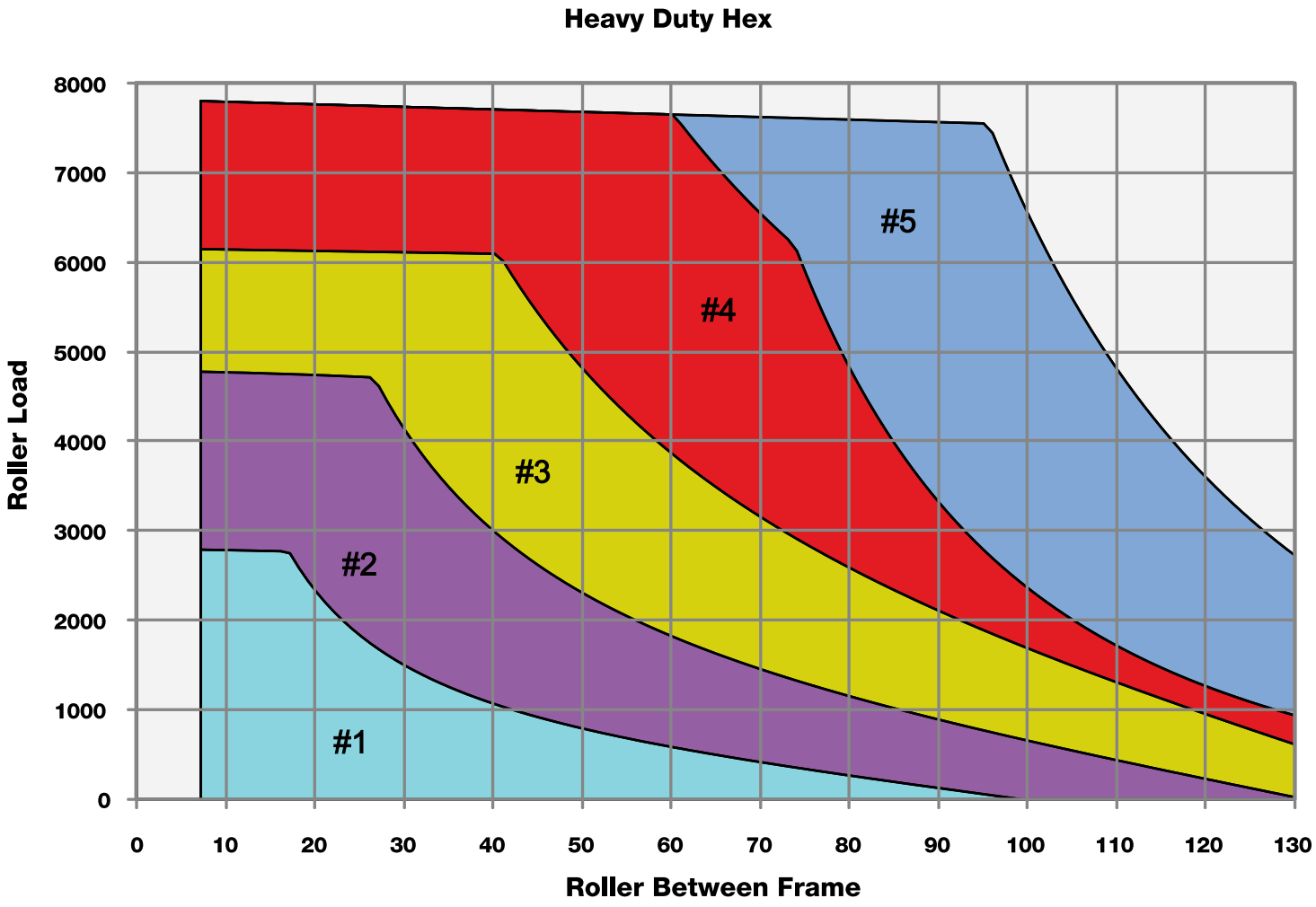


Omni recommends using only 2/3 (66%), adding a 33% buffer capacity, of the rollers under the product when calculating the required roller capacity because the conveying surface of products is not typically perfectly flat and roller are unevenly loaded.

HEAVY DUTY HEX—*Chart 5*

These rollers are heavy duty. They are built with all metal, ABEC-1 bearings, which have high internal tolerances because of precision ground and polished raceways. These features make them capable of high speeds, the highest load capacities and longer life. They are built with larger, thicker tubes and heavier duty axles providing solutions for larger loads at longer lengths. This type of roller is recommended for heavy duty powered conveyor.

ROLLER	TUBE	AXLE	BEARING
#1	2-9/16 OD x 7 ga.	11/16 hex	114128-GP
#2	3-1/2 OD x .300 wall	1-1/16 hex	114249-GP
#3	3-1/2 OD x .300 wall	1-1/8 hex	27949
#4	4 OD x 1/2 wall	1-1/2 hex	27953
#5	5 OD x 3/4 wall	1-1/2 hex	27953

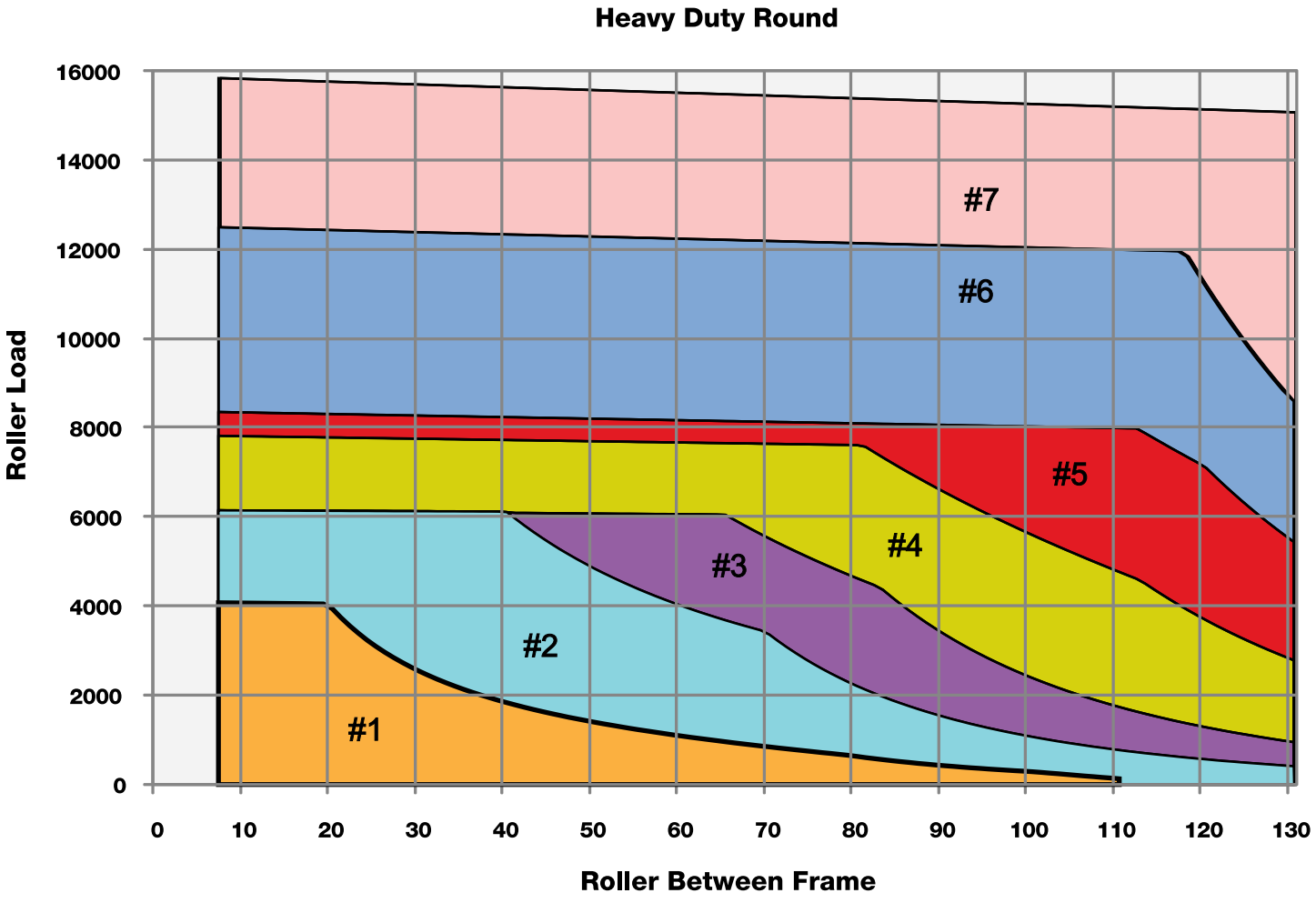


Omni recommends using only 2/3 (66%), adding a 33% buffer capacity, of the rollers under the product when calculating the required roller capacity because the conveying surface of products is not typically perfectly flat and roller are unevenly loaded.

HEAVY DUTY ROUND—*Chart 6*

These rollers are extremely heavy duty. They are built with all metal, insert style ABEC-1 bearings, which have high internal tolerances because of precision ground and polished raceways. These features make them capable of high speeds, the highest load capacities, and longer life. Most of these bearings have the set screw style bearing that locks the inner race onto the axle for added support. They are built with our largest and thickest tubes and largest axles providing solutions for extremely large loads for short to long lengths. This type of roller is recommended for heavy duty powered conveyor.

ROLLER	TUBE	AXLE	BEARING
#1	2-1/2 OD x 1/4 wall	1 dia. round	113124-GP
#2	3-1/2 OD x .300 wall	1-7/16 dia. round	24862
#3	4 OD x 1/2 wall	1-7/16 dia. round	24862
#4	5 OD x 3/4 wall	1-11/16 dia. round	26838
#5	6 OD x 3/4 wall	1-15/16 dia. round	27960
#6	6-1/2 OD x 1 wall	2-7/16 dia. round	27962
#7	8 OD x 1 wall	2-15/16 dia. round	27965



Omni recommends using only 2/3 (66%), adding a 33% buffer capacity, of the rollers under the product when calculating the required roller capacity because the conveying surface of products is not typically perfectly flat and roller are unevenly loaded.