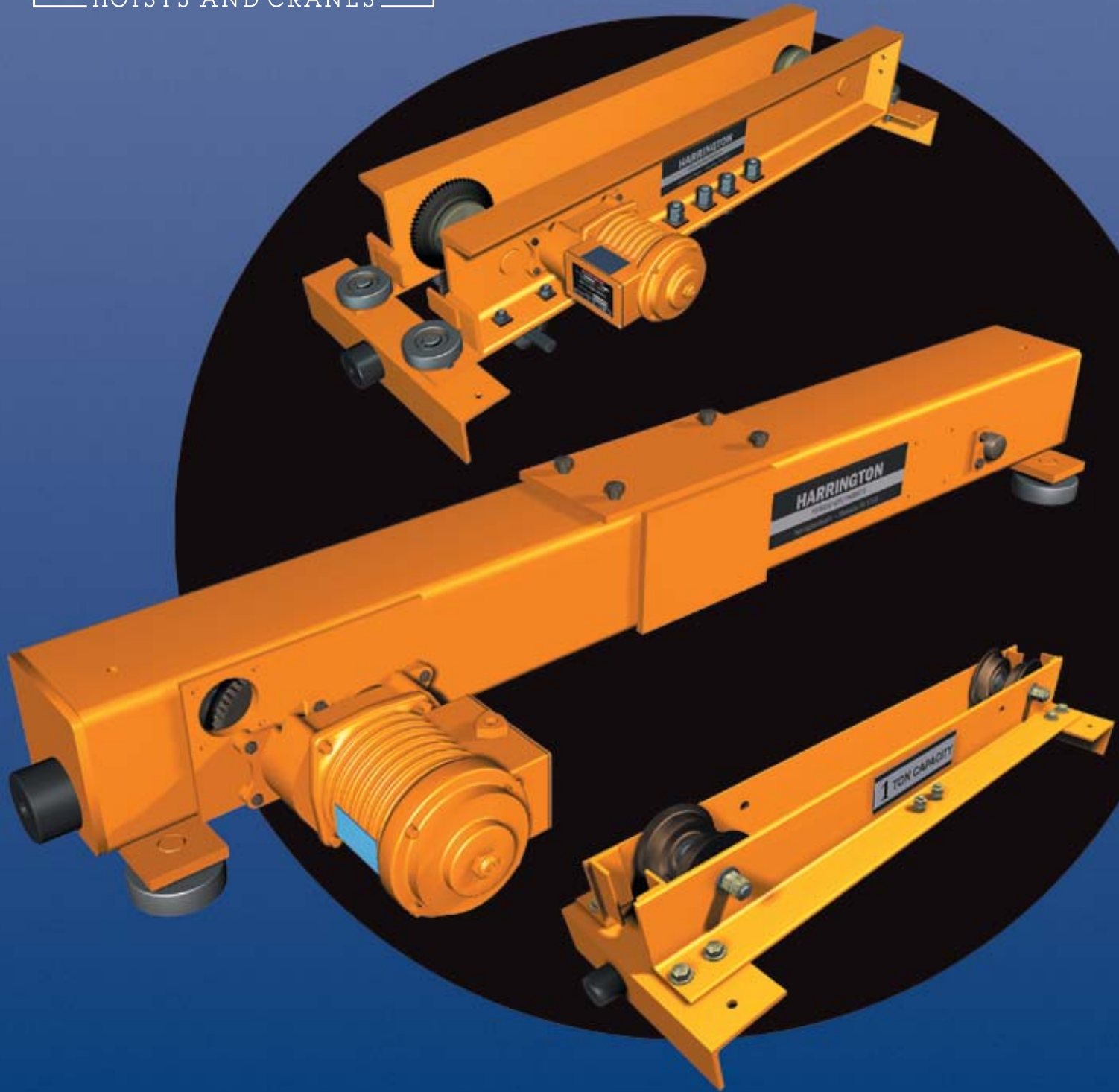


HARRINGTON
HOISTS AND CRANES



CRANE

COMPONENTS

The Capability To Do The Job You Want

Traditional values in design, engineering, and professional expertise are the hallmarks of Harrington people and products. That's because Harrington is built upon one of the richest heritages in the history of hoists and cranes. In 1876, Edwin Harrington dramatically improved the self-sustaining hoist by introducing the worm-gear design. Since then, the company he founded has constantly found ways to add value, introducing such developments as the spur gear hoist, anti-friction bearings, the electric chain hoist, and other **innovations**.

The hallmark of Harrington value is seen in our comprehensive offering, making us one of the few single-source, U.S.-based suppliers of crane systems. It's also seen in the responsiveness and technical expertise of our dedicated engineering staff, who take personal **pride** in solving your problems. Traditional value—it's what we build into all Harrington products, which are used by thousands of satisfied customers around the globe.

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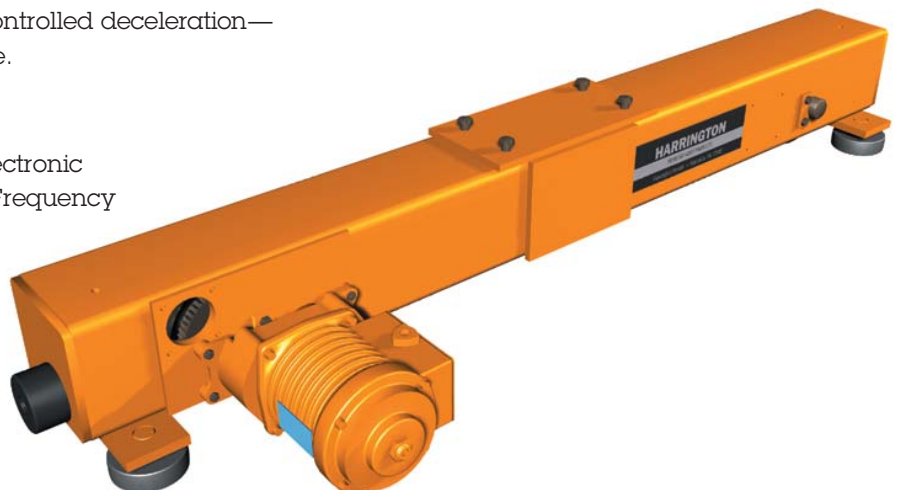
TM—Single Girder Top Running Motorized End Trucks

For heavy-duty class “C” single girder crane applications, nothing tops Harrington top running motorized end trucks.

Along with a full range of features, end truck kits include: two trucks; two sealed, totally enclosed, non-ventilated (TENV) motors with adjustable D.C. brakes; two helical gear reducers; rubber bumpers; and bridge beam fastener set. All trucks are fully painted. Bridge fabrication prints are also included. As a member of Crane Manufacturers Association of America (CMAA), Harrington builds TM trucks to meet current industry and regulatory codes.

Benefits to count on:

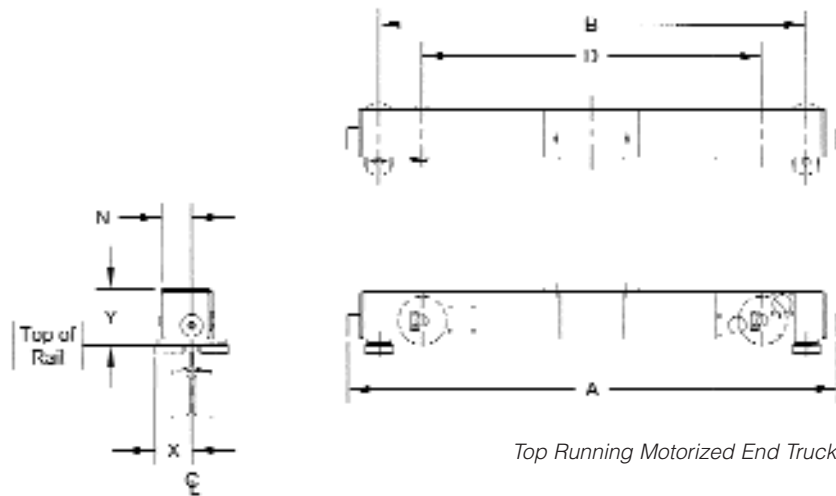
- Frame fabrication from ASTM A500 structural tube for superior strength, rigidity and compactness.
- Reduced wheel friction due to heavy-duty side guide rollers results in smooth crane travel—guide rollers are 3 1/2” O.D. (5” on 10 T) with fixed steel axles.
- Minimize assembly labor with fully machined frames—girder connection, bracing and collector mounting bracket holes are drilled and tapped for easy installation.
- Purchase the right component for the job—dedicated models for capacities of 1, 3, 5 and 10 Ton, with maximum span increments of 35’ or 60’.
- Suitable for use on ACSE crane rail or square bar—wheels are machined steel with flat tread and each has 2 deep groove ball bearings, meeting L10 bearing life criteria for class C cranes.
- Sealed TENV drives with quiet, smooth-operating helical gear reducers.
- Gear reducer is designed for easy field conversion between L and S speeds.
- Drives are designed for crane service, with 30 minute rating and feature cooling fins for efficient heat dissipation.
- Externally adjustable D.C. brakes allow controlled deceleration—adjustable up to 50% of rated motor torque.
- Thermal motor protection is standard.
- Drives and brakes are compatible with Electronic Acceleration Control (EAC) and Variable Frequency Drive (VFD).
- Drives are connectable for 230/460-3-60 (including dual speed models). Other voltages available.
- Rail sweeps and drop stops are standard.
- Longer or shorter end truck lengths are available—consult factory.



TM - Top Running Motorized End Truck Dimensions

Cap. (Tons)	Max. Span (ft)	End Truck Product Code	Wheel Dia. (in)	Sug. Min. Runway Rail (ACSE#)	A Overall Length (in)	B Roller Base (in)	D Wheel Base (in)	N Runway Ctr line to Outer Edge of ET tube (in)	X* Width Beyond Span (in)	Y Top of Rail to Top of End Truck (in)	G Motor (in)
1	35	TML/S/H/D-3-0135	3.74	30	61	53	43	2.1	4.6	7.1	12.7 (L/S)
	60	TML/S/H/D-3-0160			98	90	80				13.1 (H)
3	35	TML/S/H/D-3-0335	6.10	40	62	54	43	3.8	4.7	9.2	13.0 (L/S)
	60	TML/S/H/D-3-0360			99	91	80				13.4 (H)
5	35	TML/S/H/D-3-0535	8.27	60	62	54	43	3.5	6.3	11.3	14.3 (D)
	60	TML/S/H/D-3-0560			99	90	74				15.0 (L/S/D)
10	35	TML/S/H/D-3-1035	9.84	60	63	53	37	5.3	6.3	11.3	15.4 (H)
	60	TML/S/H/D-3-1060			100	90	74				17.4 (L/S/D)

*Based on suggested minimum runway rail.



Top Running Motorized End Truck

TM - Top Running Motorized End Truck Specifications

End Truck Product Code	Speed Codes L and S			Speed Code H			Speed Code D			End Truck Weight (lbs/pr)
	One Motor Per End Truck 3 Phase 60 Hz			One Motor Per End Truck 3 Phase 60 Hz			One Motor Per End Truck 3 Phase 60 Hz			
	Output (Hp)	Rated Current (amps ea.)		Output (Hp)	Rated Current (amps ea.)		Output (Hp)	Rated Current (amps ea.)		
	@230V	@460V		@230V	@460V		@230V	@460V		
TML/S/H/D-3-0135	0.33	1.6	1.0	0.5	2.1	1.3	0.33/0.1	1.6/1.1	0.9/0.8	288
TML/S/H/D-3-0160										384
TML/S/H/D-3-0335										462
TML/S/H/D-3-0360										579
TML/S/H/D-3-0535	0.5	2.1	1.3	1.0	3.3	2.0	0.5/0.1	2.0/1.5	1.2/0.9	542
TML/S/H/D-3-0560										712
TML/S/H/D-3-1035										906
TML/S/H/D-3-1060	1.0	3.3	2.0	2.0	5.8	3.1	1.0/0.6	3.7/2.1	2.3/1.4	1,086

Speed Code

- L - Designates 40 ft/min
- S - Designates 80 ft/min
- H - Designates 120 ft/min
- D - Designates dual speed 80/20 ft/min

Product Code Derivation - example: TML-3-0135

- T - Top Running
- M - Motorized
- L - Speed of 40 ft/min
- 3 - Series Number
- 01 - Max. Capacity - 1 Ton
- 35 - Maximum Span - 35 feet

TG—Single Girder Top Running Geared End Trucks

TG end trucks provide similar benefits to the TM truck, but with geared drive. Along with many important features, end truck kits include: two trucks; hand wheel drive; shaft couplers; appropriate drive shaft bearing supports based on span; rubber bumpers; and bridge beam fastener set. All trucks are fully painted. Bridge fabrication prints are also included. As a member of Crane Manufacturers Association of America (CMAA), Harrington builds TG trucks to meet current industry and regulatory codes.

Benefits to count on:

- Versatile design allows hand chain wheel placement anywhere on drive shaft based on application needs.
- Upgrade easily to TM top running motorized design by simply adding drives and reducers.
- Ideal for precision spotting requirements where motorized operation is not necessary.
- Longer or shorter end truck lengths are available—consult factory.



TP—Single Girder Top Running Push End Trucks

TP end trucks provide similar benefits to the top running motorized TM truck, but with push operation. Along with many important features, end truck kits include: two trucks; rubber bumpers; and bridge beam fastener set. All trucks are fully painted. Bridge fabrication prints are also included. As a member of CMAA, Harrington builds TP trucks to meet current industry and regulatory codes.

Benefits to count on:

- Compared to flanged wheel trucks, TP trucks with guide rollers operate easily, particularly in long span or long lift applications.
- Upgrade easily to top running geared TG or motorized TM model—frames are fully machined and prepared for conversion.
- Longer or shorter end truck lengths are available—consult factory.



TG - Top Running Geared End Truck Specifications and Dimensions

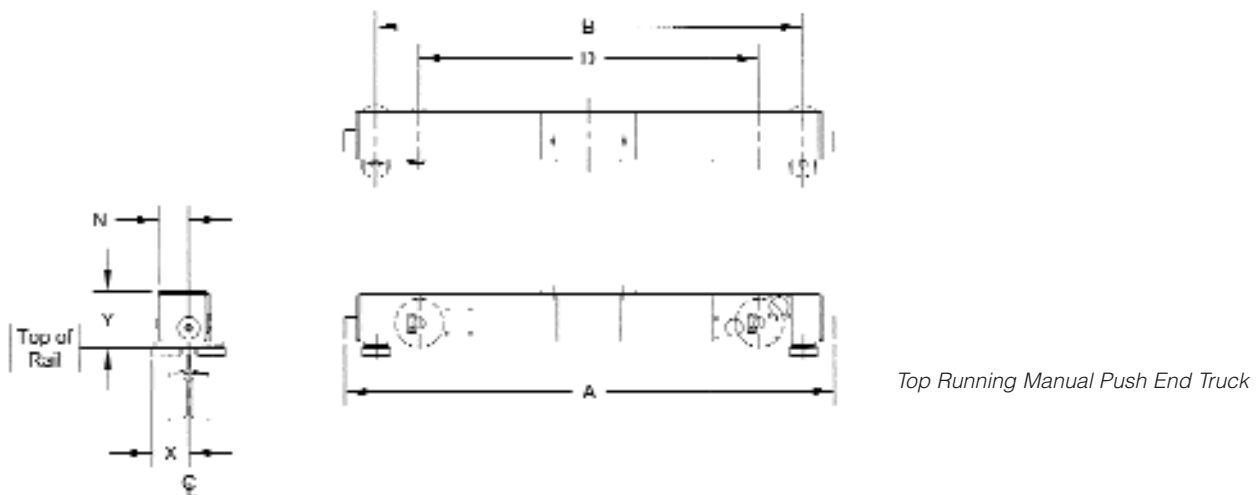
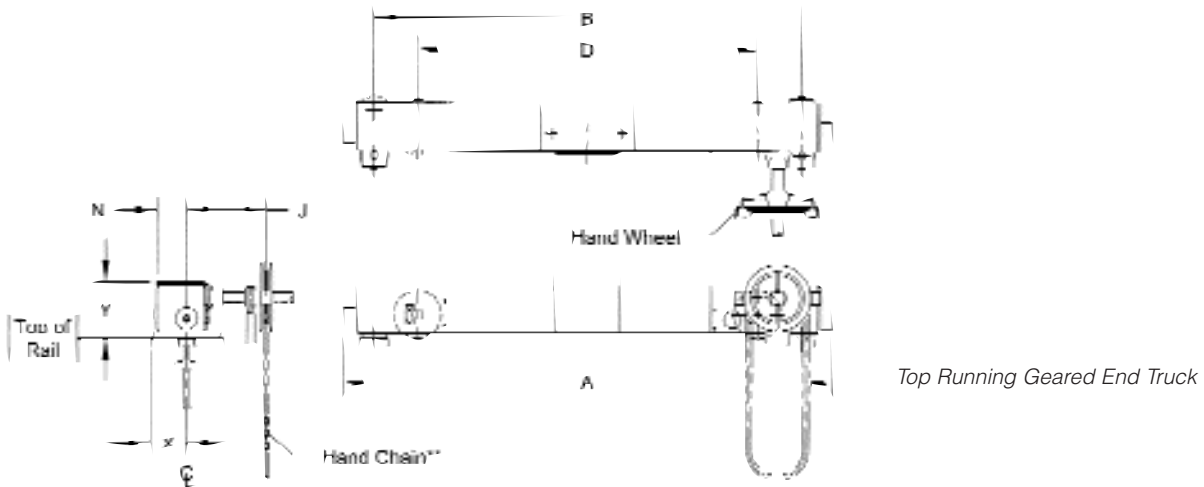
Cap. (Tons)	Max. Span (ft)	End Truck Product Code	Wheel Dia. (in)	Sug. Min. Runway Rail (ACSE#)	A Overall Length (in)	B Roller Base (in)	D Wheel Base (in)	J Hand Wheel Offset (in)	N Runway Ctr Line to Outer Edge of ET Tube (in)	X* Width Beyond Span (in)	Y Top of Rail to Top of End Truck (in)	End Truck Weight (lbs/pr)
1	35	TG-3-0135	3.74	30	61	53	43	9.7	2.1	4.6	7.1	258
	50	TG-3-0150			98	90	80					354
3	35	TG-3-0335	6.10	40	62	54	43	10.0	3.8	4.7	9.2	353
	50	TG-3-0350			99	91	80					470
5	35	TG-3-0535	8.27	40	62	54	43	10.3	3.5	4.7	9.3	433
	50	TG-3-0550			99	90	74					683

*Based on suggested minimum runway rail.
 **Standard hand chain drop is 8 ft. from top of runway rail.

TP - Top Running Push End Truck Specifications and Dimensions

Cap. (Tons)	Max. Span (ft)	End Truck Product Code	Wheel Dia. (in)	Sug. Min. Runway Rail (ACSE#)	A Overall Length (in)	B Roller Base (in)	D Wheel Base (in)	N Runway Ctr Line to Outer Edge of ET Tube (in)	X* Width Beyond Span (in)	Y Top of Rail to Top of End Truck (in)	End Truck Weight (lbs/pr)	
1	35	TP-3-0135	3.74	30	61	53	43	2.1	4.6	7.1	228	
	45	TP-3-0145			98	90	80				324	
2	45	TP-3-0245	6.10	40	99	91	43	3.8	4.7	9.2	323	
3	35	TP-3-0335			62	54					43	440
5	35	TP-3-0535	8.27	40	99	90	74	10.3	3.5	4.7	9.3	403

*Based on suggested minimum runway rail.



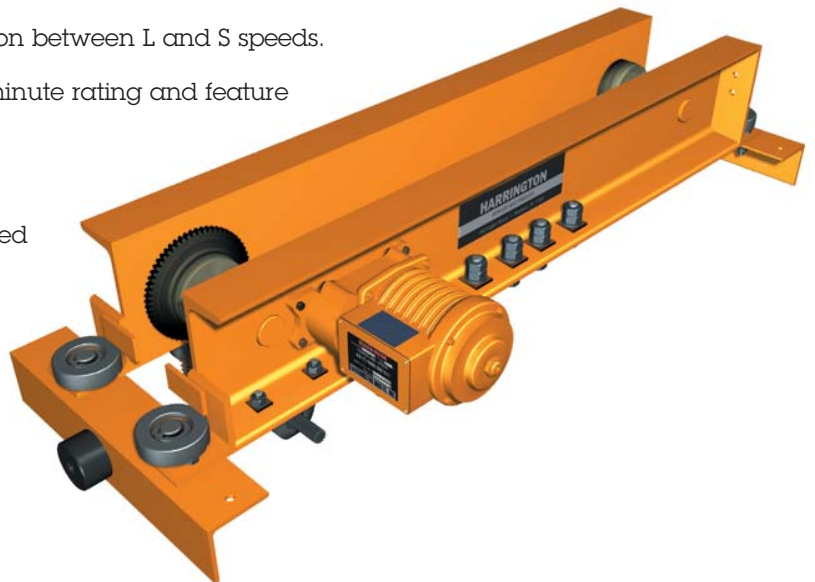
UM—Single Girder Underhung Motorized End Trucks

For heavy-duty class “C” single girder crane applications, Harrington underhung motorized end trucks combine superior performance with underhung space savings.

Along with a full range of features, end truck kits include: two trucks; two sealed, totally enclosed, non-ventilated (TENV) motors with adjustable D.C. brakes; two helical gear reducers; rubber bumpers; and bridge beam fastener set. All trucks are fully painted. Bridge fabrication prints are also included. As a member of the Crane Manufacturers Association of America (CMAA), Harrington builds UM trucks to meet current industry and regulatory codes.

Benefits to count on:

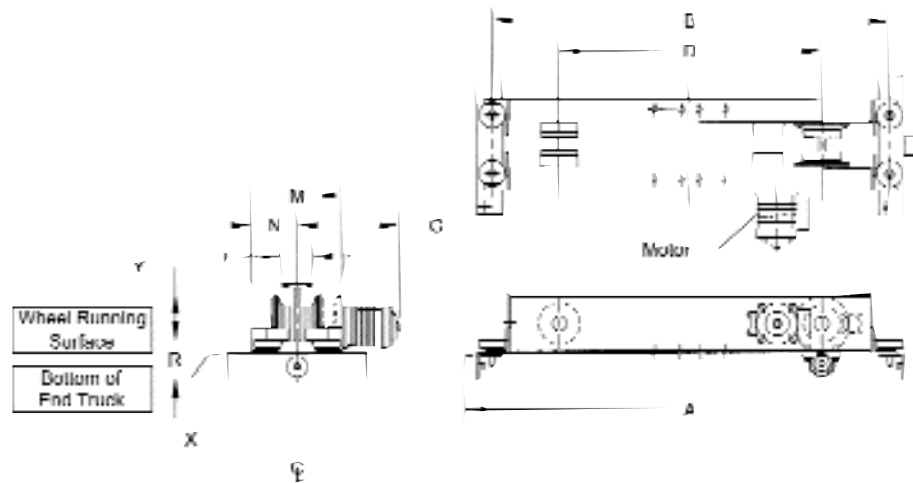
- Frames fabricated from M C channel provide superior strength, rigidity and structural integrity.
- Reduced wheel friction due to heavy-duty side guide rollers results in smooth crane travel—guide rollers are 3 1/2” O.D. with fixed steel axles.
- Dual tread wheels for use on S or W shaped runway beams—each wheel fitted with 2 deep groove ball bearings, meeting L10 bearing life criteria for class C cranes.
- Runway flange widths up to 6” standard, with wider ranges also available (trucks for patented track available).
- Minimize assembly labor with fully machined frames—girder connection, bracing and collector mounting bracket holes are pre-drilled for easy installation.
- Purchase the right component for the job—dedicated models for capacities of 2, 3, and 5 Ton, with maximum span increments of 35' or 50'.
- Sealed TENV drives with quiet, smooth-operating helical gear reducers.
- Gear reducer is designed for easy field conversion between L and S speeds.
- Drives are designed for crane service, with 30 minute rating and feature cooling fins for efficient heat dissipation.
- Thermal motor protection is standard.
- Externally adjustable D.C. brakes allow controlled deceleration—adjustable up to 50% of rated motor torque.
- Drives and brakes are compatible with Electronic Acceleration Control (EAC) and Variable Frequency Drive (VFD).
- Drives are connectable for 230/460-3-60 (including dual speed models). Other voltages available.
- Rail sweeps and drop stops are standard.
- Longer or shorter end truck lengths are available—consult factory.



UM - Underhung Motorized End Truck Dimensions

Cap. (Tons)	Max. Span (ft)	End Truck Product Code	Wheel Dia. (in)	T Flange Range Std. (in)	A Overall Length (in)	B Roller Base (in)	D Wheel Base (in)	M End Truck Frame Width (in)	N Runway Ctr Line to Outer Edge of ET (in)	R Wheel Running Surf. to Bottom of truck (in)	X* Width Beyond Span (in)	Y Wheel Running Surface to Upper Most Part of ET (in)	G Motor (in)
2	35	UML/S/H/D-3-0235	4.33	3 - 6	60	53	39	T+8.1	M/2	1.5	11.3 - T/2	6.5	T/2+ 11.9 (L/S) 12.3 (H) 13.3 (D)
	50	UML/S/H/D-3-0250			82	75	61						
3	35	UML/S/H/D-3-0335	4.92		60	53	35	T+8.2		1.6			
	50	UML/S/H/D-3-0350			82	75	57						
5	35	UML/S/H/D-3-0535	5.51		60	53	33	T+9.8		1.6			
	50	UML/S/H/D-3-0550			82	75	55						

*These formulas for Width Beyond Span do not apply for flanges greater than 6 inches. For flanges greater than 6 inches, consult factory.



Underhung Motorized End Truck

UM - Underhung Motorized End Truck Specifications

End Truck Product Code	Speed Codes L and S			Speed Code H			Speed Code D			End Truck Weight (lbs/pr)
	One Motor Per End Truck 3 Phase 60 Hz			One Motor Per End Truck 3 Phase 60 Hz			One Motor Per End Truck 3 Phase 60 Hz			
	Output (Hp)	Rated Current (amps ea.)		Output (Hp)	Rated Current (amps ea.)		Output (Hp)	Rated Current (amps ea.)		
@230V		@460V	@230V		@460V	@230V		@460V		
UML/S/H/D-3-0235	0.33	1.6	1.0	0.5	2.1	1.3	0.33/0.1	1.6/1.1	0.9/0.8	522
UML/S/H/D-3-0250										659
UML/S/H/D-3-0335										543
UML/S/H/D-3-0350										680
UML/S/H/D-3-0535	0.5	2.1	1.3	1.0	3.3	2.0	0.5/0.1	2.0/1.5	1.2/0.9	638
UML/S/H/D-3-0550										795

Speed Code

- L - Designates 40 ft/min
- S - Designates 80 ft/min
- H - Designates 120 ft/min
- D - Designates dual speed 80/20 ft/min

Product Code Derivation - example: UML-3-0235

- U - Underhung
- M - Motorized
- L - Speed of 40 ft/min
- 3 - Series number
- 02 - Max. Capacity - 2 Ton
- 35 - Maximum Span - 35 feet

UG—Single Girder Underhung Geared End Trucks

UG end trucks provide similar benefits to the UM truck, but with geared drive. Along with many important features, end truck kits include: two trucks; hand wheel drive; shaft couplers; appropriate drive shaft bearing supports based on span; rubber bumpers; and bridge beam fastener set. All trucks are fully painted. Bridge fabrication prints are also included. As a member of Crane Manufacturers Association of America (CMAA), Harrington builds UG trucks to meet current industry and regulatory codes.

Benefits to count on:

- Versatile design allows hand chain wheel placement anywhere on drive shaft based on application needs.
- Upgrade easily to UM series by simply adding drives and reducers.
- Ideal for precision spotting requirements where motorized operation is not necessary.
- Longer or shorter end truck lengths are available—consult factory.

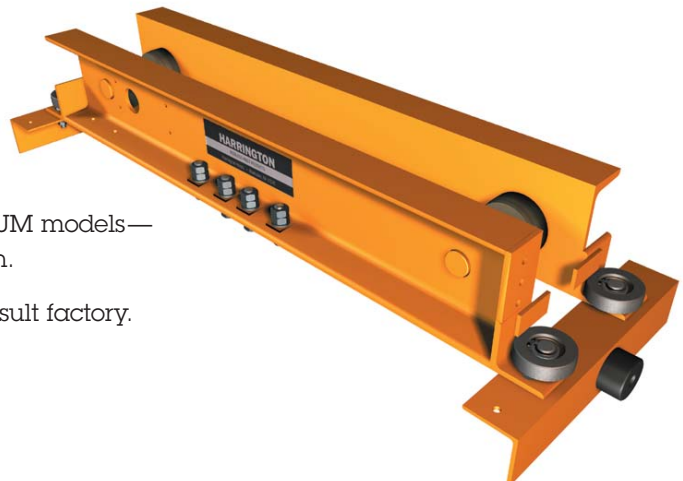


UP—Single Girder Underhung Push End Trucks

UP end trucks provide similar benefits to the UM underhung motorized truck, but for push operation. Along with many important features, end truck kits include: two trucks; rubber bumpers; and bridge beam fastener set. All trucks are fully painted. Bridge fabrication prints are also included. As a member of CMAA, Harrington builds UP trucks to meet current industry and regulatory codes.

Benefits to count on:

- Compared to flanged wheel trucks, UP trucks with guide rollers operate easily, particularly in long span or long lift applications.
- Upgrade easily to underhung geared UG or motorized UM models—frames are fully machined and prepared for conversion.
- Longer or shorter end truck lengths are available—consult factory.



UG - Underhung Geared End Truck Specifications and Dimensions

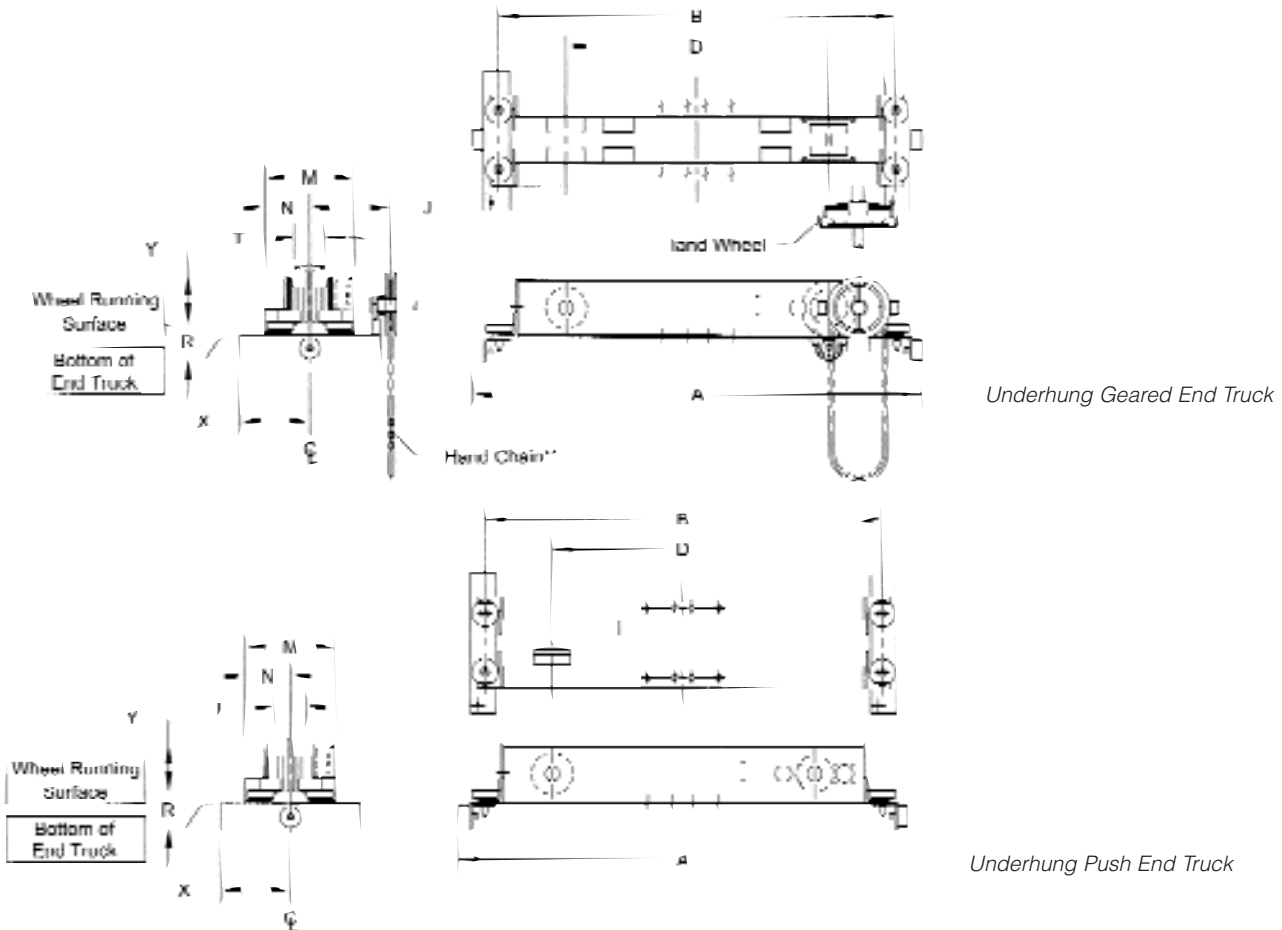
Cap. (Tons)	Max. Span (ft)	End Truck Product Code	Wheel Dia. (in)	T Flange Range Std. (in)	A Overall Length (in)	B Roller Base (in)	D Wheel Base (in)	J Hand Wheel Offset (in)	M End Truck Frame Width (in)	N Runway Ctr Line to Outer Edge of ET (in)	R Wheel Running Surf. to Bottom of truck (in)	X* Width Beyond Span (in)	Y Wheel Running Surface to Upper Most Part of	ET (in)
2	35	UG-3-0235	4.33	3 - 6	60	53	39	T/2+9.0	T+8.1	M/2	1.5	11.3 - T/2	6.5	503
	45	UG-3-0245			82	75	61							640
3	35	UG-3-0335	4.92		60	53	35	T/2+8.9	T+8.2					529
	45	UG-3-0245			82	75	57							666
5	35	UG-3-0535	5.51	4 - 6	60	53	33	T/2+9.0	T+9.8	1.6	6.8	611		
	45	UG-3-0545			82	75	55					768		

*These formulas for Width Beyond Span do not apply for flanges greater than 6 inches. For flanges greater than 6 inches, consult factory.
 ** Standard hand chain drop is 8 ft. from bottom of runway beam.

UP - Underhung Push End Truck Specifications and Dimensions

Cap. (Tons)	Max. Span (ft)	End Truck Product Code	Wheel Dia. (in)	T Flange Range Std. (in)	A Overall Length (in)	B Roller Base (in)	D Wheel Base (in)	M End Truck Frame Width (in)	N Runway Ctr Line to Outer Edge of ET (in)	R Wheel Running Surf. to Bottom of truck (in)	X* Width Beyond Span (in)	Y Wheel Running Surface to Upper Most Part of ET (in)	End Truck Weight (lbs/pr)
2	35	UP-3-0235	4.33	3 - 6	60	53	39	T+8.1	M/2	1.5	11.3 - T/2	6.5	448
	45	UP-3-0245			82	75	61						585
3	35	UP-3-0335	4.92		60	53	35	T+8.2					472
5	35	UP-3-0535	5.51		4 - 6	60	53	33					T+9.8

*These formulas for Width Beyond Span do not apply for flanges greater than 6 inches. For flanges greater than 6 inches, consult factory.

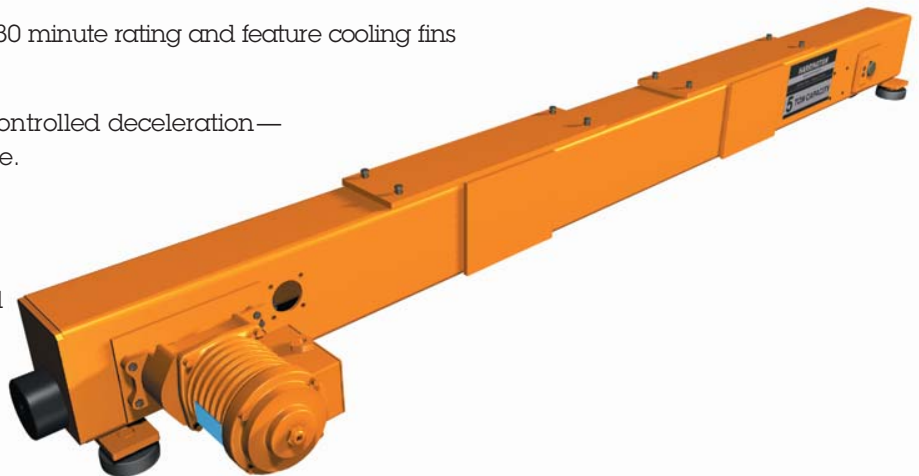


MTM—Double Girder Max-E-Lift Top Running Motorized End Trucks

For a compact, double girder configuration with all the benefits of the TM top running motorized single girder design, go with Harrington MTM end trucks. Along with a full range of features, end truck kits include: two trucks; two sealed, totally enclosed non-ventilated (TENV) motors with adjustable D.C. brakes; two helical gear reducers; rubber bumpers and bridge beam fastener set. Bridge fabrication prints are also included. As a member of Crane Manufacturers Association of America (CMAA), Harrington builds MTM trucks to meet current industry and regulatory codes.

Benefits to count on:

- Frame fabricated from ASTM A500 structural tube for superior strength, rigidity, and compactness.
- Crane end approach is significantly better than competitive models.
- Standard 36" gauge for 5 Ton and down, 48" on 10 Ton model—other gauges available.
- Purchase the right component for the job—dedicated models for capacities of 1, 3, 5 and 10 Ton models, with maximum span increments of 35' or 60'.
- Minimize assembly labor with fully machined frames—girder connection and collector mounting bracket holes are drilled and tapped for easy crane assembly.
- Ideal when new head room requirements in an existing application necessitate a new crane, or when head room allows lower building heights for new construction.
- Integrates with most top running, double girder trolley hoists.
- Use with the low profile Harrington Max-E-Lift trolley hoist for the ultimate low-crane profile.
- Sealed TENV drives with quiet, smooth-operating helical gear reducers.
- Gear reducer is designed for easy field conversion between L and S speeds.
- Drives are designed for crane service, with 30 minute rating and feature cooling fins for efficient heat dissipation.
- Externally adjustable D.C. brakes allow controlled deceleration—adjustable up to 50% of rated motor torque.
- Thermal motor protection is standard.
- Drives and brakes are compatible with Electronic Acceleration Control (EAC) and Variable Frequency Drive (VFD).
- Drives are connectable for 230/460-3-60 (including dual speed models). Other voltages available.
- Rail sweeps and drop stops are standard.
- Longer or shorter end truck lengths are available—consult factory.

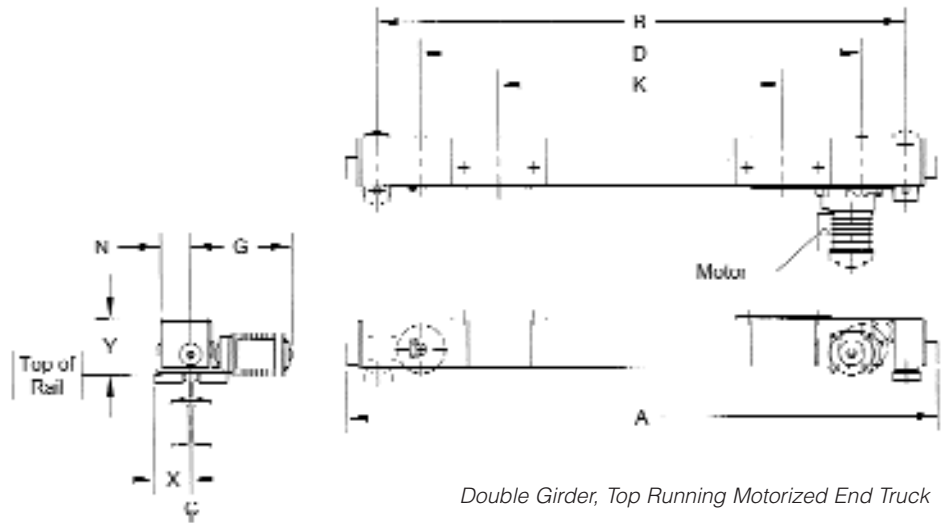


**Also available in geared models.
Consult factory for specs.**

MTM- Max-E-Lift Top Running Motorized End Truck Dimensions

Cap. (Tons)	Max. Span (ft)	End Truck Product Code	Wheel Dia. (in)	Sug. Min. Runway Rail (ACSE#)	A Overall Length (in)	B Roller Base (in)	D Wheel Base (in)	K Beam Gauge (in)	N Runway Ctr Line to Outer Edge of ET Tube (in)	X* Width Beyond Span (in)	Y Top of Rail to Top of End Truck (in)	G Motor (in)
1	35	MTML/S/H/D-3-0135	3.74	30	72	64	54	36	2.1	4.6	7.1	12.7 (L/S) 13.1 (H) 14.0 (D)
	60	MTML/S/H/D-3-0160			111	103	93					
3	35	MTML/S/H/D-3-0335	6.10	40	75	67	56	48	3.8	4.7	9.2	13.0 (L/S) 13.4 (H) 14.3 (D)
	60	MTML/S/H/D-3-0360			112	104	93					
5	35	MTML/S/H/D-3-0535	8.27	60	75	67	56	48	3.5	6.3	11.3	15.0 (L/S/D) 15.4 (H)
	60	MTML/S/H/D-3-0560			112	103	87					
10	35	MTML/S/H/D-3-1035	9.84	60	93	83	67	48	5.3	6.3	11.3	17.4 (L/S/D) 18.7 (H)
	60	MTML/S/H/D-3-1060			113	103	87					

*Based on suggested minimum runway rail.



Double Girder, Top Running Motorized End Truck

MTM- Max-E-Lift Top Running Motorized End Truck Specifications

End Truck Product Code	Speed Codes L and S			Speed Code H			Speed Code D			End Truck Weight (lbs/pr)
	One Motor Per End Truck 3 Phase 60 Hz			One Motor Per End Truck 3 Phase 60 Hz			One Motor Per End Truck 3 Phase 60 Hz			
	Output (Hp)	Rated Current (amps ea.)		Output (Hp)	Rated Current (amps ea.)		Output (Hp)	Rated Current (amps ea.)		
@230V		@460V	@230V		@460V	@230V		@460V		
MTML/S/H/D-3-0135	0.33	1.6	1.0	0.5	2.1	1.3	0.33/0.1	1.6/1.1	0.9/0.8	340
MTML/S/H/D-3-0160										441
MTML/S/H/D-3-0335										526
MTML/S/H/D-3-0360										647
MTML/S/H/D-3-0535	0.5	2.1	1.3	1.0	3.3	2.0	0.5/0.1	2.0/1.5	1.2/0.9	648
MTML/S/H/D-3-0560										818
MTML/S/H/D-3-1035	1.0	3.3	2.0	2.0	5.8	3.1	1.0/0.6	3.7/2.1	2.3/1.4	1,105
MTML/S/H/D-3-1060										1,202

Speed Code

- L - Designates 40 ft/min
- S - Designates 80 ft/min
- H - Designates 120 ft/min
- D - Designates dual speed 80/20 ft/min

Product Code Derivation - example: MTML-3-0135

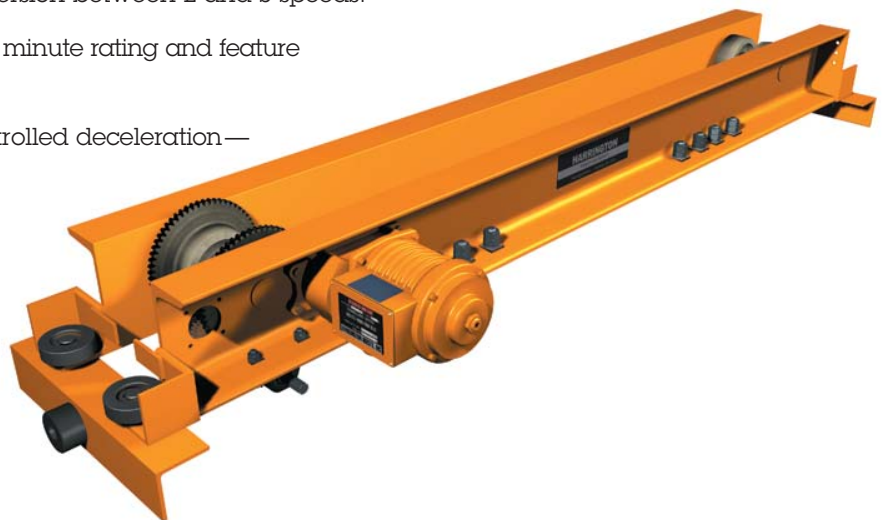
- 1st M - Max-E-Lift Style
- T - Top Running
- 2nd M - Motorized
- L - Speed of 40 ft/min
- 3 - Series Number
- 01 - Max. Capacity - 1 Ton
- 35 - Maximum span - 35 feet

MUM—Double Girder Max-E-Lift Underhung Motorized End Trucks

Harrington MUM end trucks offer the same benefits of the UM underhung motorized single girder series, but in a compact, double girder configuration. Unique for double girder cranes, these end trucks offer the dimensional advantage of an underhung crane combined with a top running trolley. Along with many important features, end truck kits include: two sealed, totally enclosed, non-ventilated (TENV) motors with adjustable electric brakes; two helical gear reducers; rubber bumpers; and bridge beam fastener set. Bridge fabrication prints are also included. As a member of Crane Manufacturers Association of America (CMAA), Harrington builds MUM trucks to meet current industry and regulatory codes.

Benefits to count on:

- Unique design combining double girder underhung crane with top running trolley hoist increases high hook and minimizes crane profile.
- Purchase the right component for the job—dedicated models for capacities of 2, 3, and 5 Ton, with maximum span increments of 35' or 50'.
- Offers significantly better crane end approach than most double girder cranes.
- Minimize assembly labor with fully machined frames—girder connection and collector mounting bracket holes are pre-drilled for easy crane assembly.
- Standard 36" gauge—other gauges available.
- Integrates with most top running, double girder trolley hoists.
- Specially designed to accept the Harrington Max-E-Lift low profile trolley hoist.
- Sealed TENV drives with quiet, smooth operating helical gear reducers.
- Gear reducer is designed for easy field conversion between L and S speeds.
- Drives are designed for crane service, with 30 minute rating and feature cooling fins for efficient heat dissipation.
- Externally adjustable D.C. brakes allow controlled deceleration—adjustable up to 50% of rated motor torque.
- Thermal motor protection is standard.
- Drives and brakes are compatible with Electronic Acceleration Control (EAC) and Variable Frequency Drive (VFD).
- Drives are connectable for 230/460-3-60 (including dual speed models). Other voltages available.
- Rail sweeps and drop stops are standard.
- Longer or shorter end truck lengths are available—consult factory.

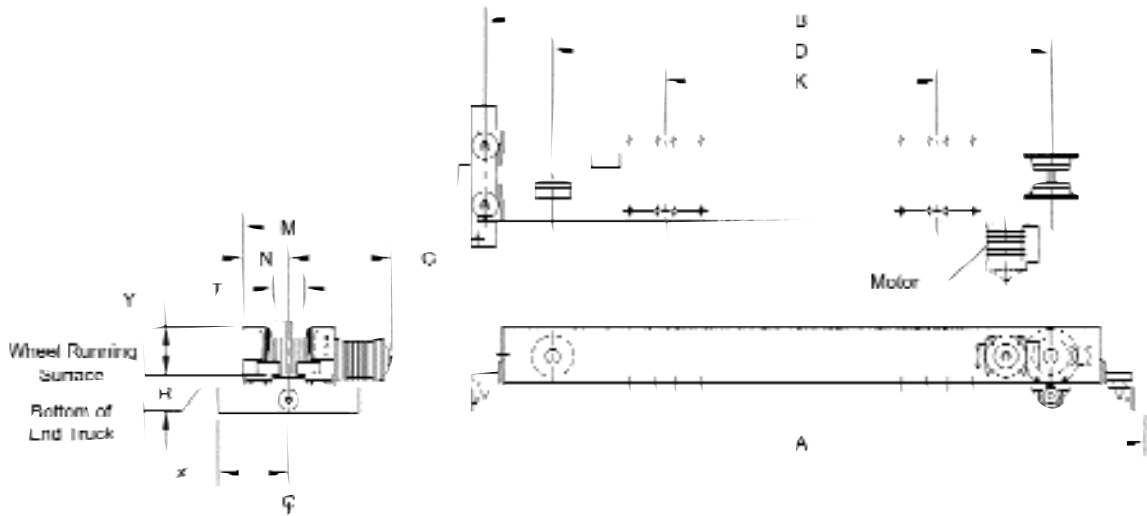


**Also available in geared models.
Consult factory for specs.**

MUM - Max-E-Lift Underhung Motorized End Truck Dimensions

Cap. (Tons)	Max. Span (ft)	End Truck Product Code	Wheel Dia. (in)	T Flange Range Std. (in)	A Overall Length (in)	B Roller Base (in)	D Wheel Base (in)	M End Truck Frame Width (in)	N Runway Ctr Line to Outer Edge of ET (in)	R Wheel Running Surf. to Bottom of Truck (in)	X* Width Beyond Span (in)	Y Wheel Running Surface to Upper Most Part of ET (in)	G Motor (in)
2	35	MUML/S/H/D-3-0235	4.33	3 - 6	87	80	66	T+8.1	M/2	1.5	11.3 - T/2	6.5	T/2+ 119(L/S) 12.3(t) 13.3(D)
	50	MUML/S/H/D-3-0250			99	92	78						
3	35	MUML/S/H/D-3-0335	4.92	3 - 6	91	84	66	T+8.2	M/2	1.5	11.3 - T/2	6.5	T/2+ 119(L/S) 12.3(t) 13.3(D)
	50	MUML/S/H/D-3-0350			103	96	78						
5	35	MUML/S/H/D-3-0535	5.51	4 - 6	95	88	68	T+9.8	M/2	1.6	11.3 - T/2	6.8	T/2+ 137(L/S/D) 14.2(t)
	50	MUML/S/H/D-3-0550			107	100	80						

* These formulas for Width Beyond Span do not apply for flanges greater than 6 inches. For flanges greater than 6 inches, consult factory.



Double Girder, Underhung Motorized End Truck

MUM - Max-E-Lift Underhung Motorized End Truck Specifications

End Truck Product Code	Speed Codes L and S			Speed Code H			Speed Code D			End Truck Weight (lbs/pr)
	One Motor Per End Truck 3 Phase 60 Hz			One Motor Per End Truck 3 Phase 60 Hz			One Motor Per End Truck 3 Phase 60 Hz			
	Output (Hp)	Rated Current (amps ea.)		Output (Hp)	Rated Current (amps ea.)		Output (Hp)	Rated Current (amps ea.)		
@230V		@460V	@230V		@460V	@230V		@460V		
MUML/S/H/D-3-0235	0.33	1.6	1.0	0.5	2.1	1.3	0.33/0.1	1.6/1.1	0.9/0.8	690
MUML/S/H/D-3-0250										765
MUML/S/H/D-3-0335										736
MUML/S/H/D-3-0350										811
MUML/S/H/D-3-0535	0.5	2.1	1.3	1.0	3.3	2.0	0.5/0.1	2.0/1.5	1.2/0.9	888
MUML/S/H/D-3-0550										973

Speed Code

- L - Designates 40 ft/min
- S - Designates 80 ft/min
- H - Designates 120 ft/min
- D - Designates dual speed 80/20 ft/min

Product Code Derivation - example: MUML-3-0235

- 1st M - Max-E-Lift Style
- U - Underhung
- 2nd M - Motorized
- L - Speed of 40 ft/min
- 3 - Series Number
- 02 - Max. Capacity - 2 Ton
- 35 - Maximum span - 35 feet

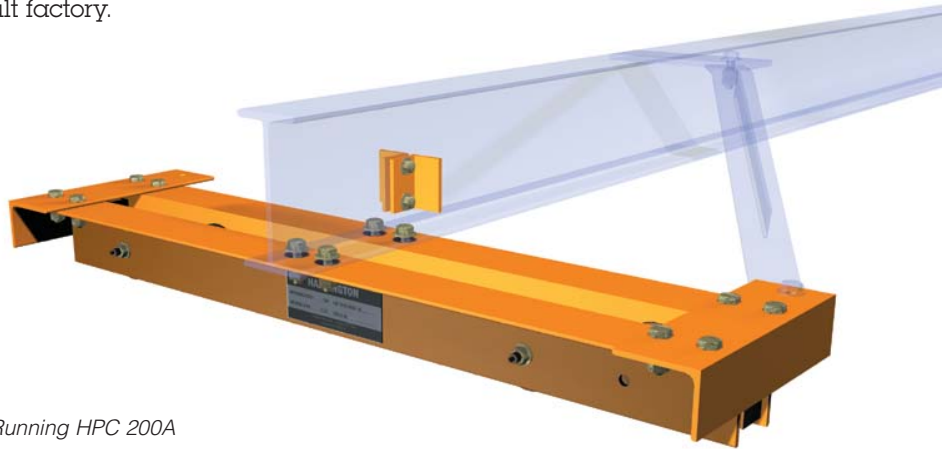
Convertible, Push End Trucks

HPC 200 Series

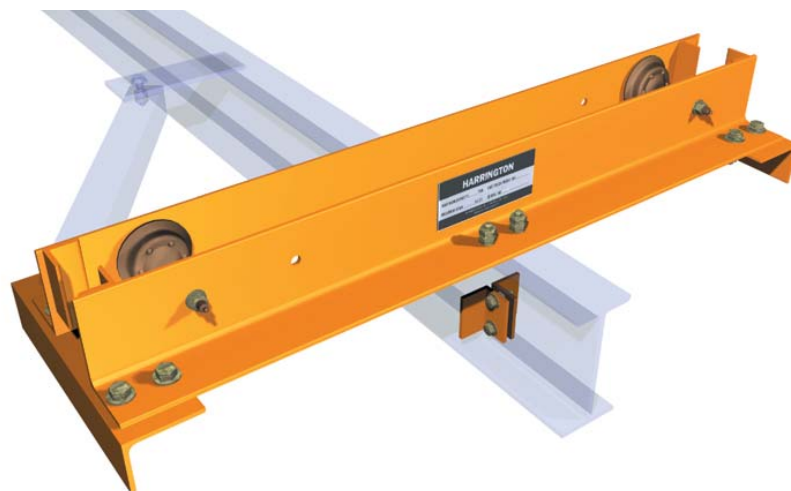
HPC 200 Series; For use in standby, maintenance or infrequent operations, HPC 200 series end truck kits offer a light duty, economical, push end truck design that can be assembled for either top running or underhung cranes. Kits include: two end trucks; bridge beam fastener set; trolley stops; beam fabrication instructions; and assembly and installation guide.

Benefits to count on:

- Fully machined frames are convertible for either top running or underhung use.
- Frames are fabricated from structural steel for optimal strength and rigidity.
- Features pressed steel wheels with ball bearings and grease fittings.
- All-bolted construction for ease of assembly.
- Drop stops and rail sweeps standard.
- Longer or shorter end truck lengths are available—consult factory.



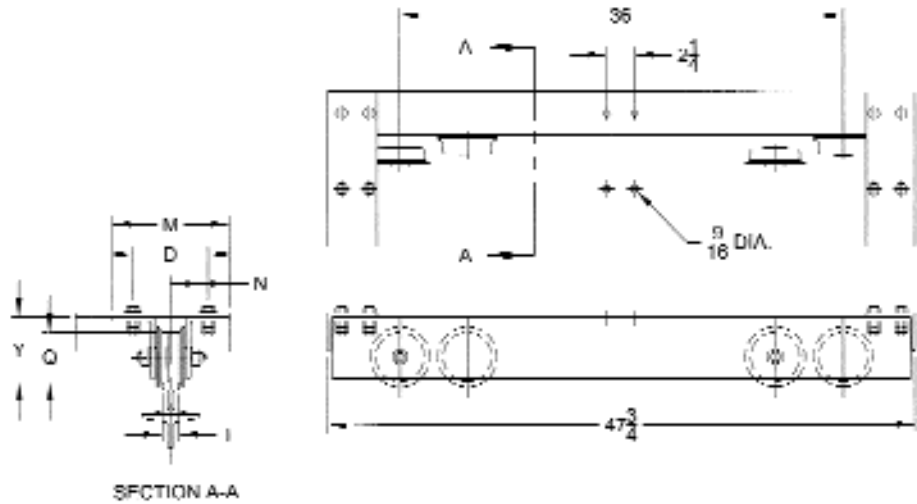
Top Running HPC 200A



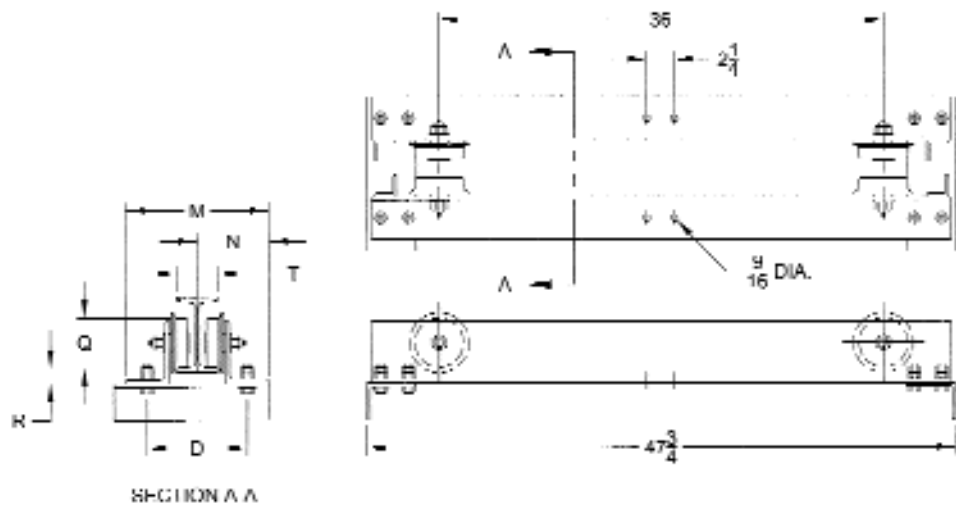
Underhung HPC 200A

HPC 200A Series Convertible End Truck Specifications and Dimensions

Cap. (Tons)	Max. Span (ft)	End Truck Product Code	T Flange or Rail Head Width (in)		D (in)	M End Truck Frame Width (in)	N Runway Ctr. Line to Outer Edge of ET (in)	Q Wheel Tread Dia. (in)	Y Wheel Running Surface to Bridge Beam (in)	R Wheel Running Surface to Bridge Beam (in)	End Truck Weight (lbs/pr)						
			Top Running	Underhung													
1/2	24	HPC-205A	1.5 - 5	3 - 5	T + 4 3/4	T + 7.3	M/2	3.12	4.3	1.2	135						
1		HPC-210A										3.3 - 5	T + 8.3	4.00	5.3	1.3	189
2		HPC-220A											T + 8.3	4.88	5.9	1.1	216



HPC 200A Series Top Running



HPC 200A Series Underhung

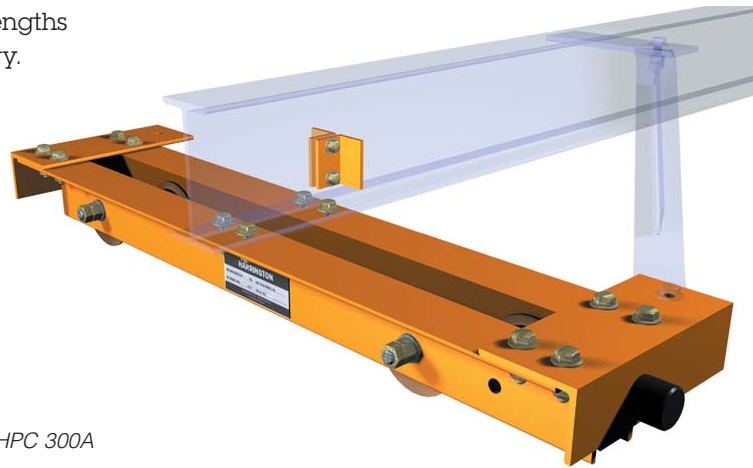
Convertible, Push End Trucks

HPC 300 Series

HPC 300 Series: For assembly, maintenance, machining or general industrial operations, HPC 300 series end truck kits offer a medium duty, push end truck design that can be assembled for either top running or underhung cranes. Kits include; two end trucks; rubber bumpers; bridge beam fastener set, trolley stops; beam fabrication instructions; and assembly and installation guide.

Benefits to count on:

- Fully machined frames are convertible for either top running or underhung use.
- Frames are fabricated from structural steel for optimal strength and rigidity.
- Wheels are ductile iron and precision machined to roll smoothly on either flat or tapered flanges. Each wheel features a shielded deep groove ball bearing.
- All-bolted for ease of assembly.
- Drop stops and rail sweeps standard.
- Longer or shorter end truck lengths are available—consult factory.



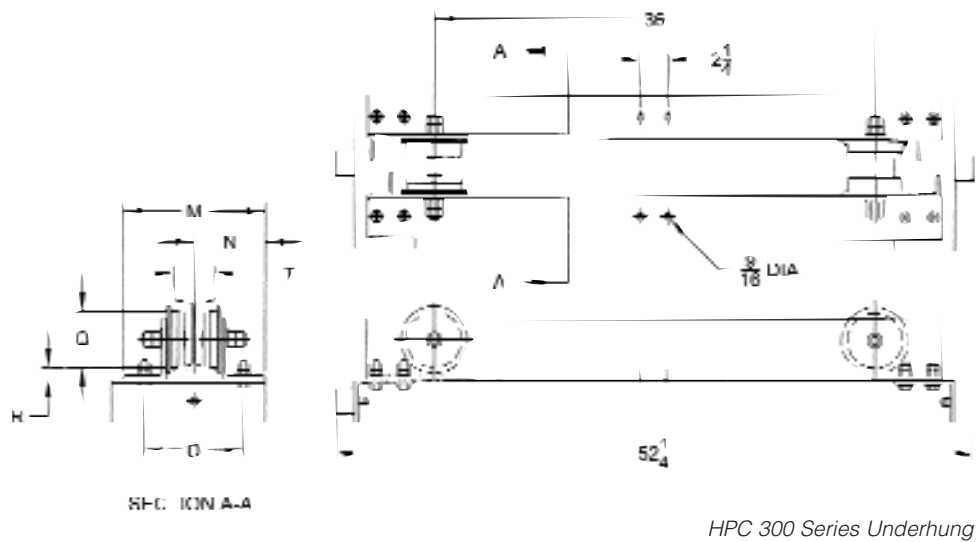
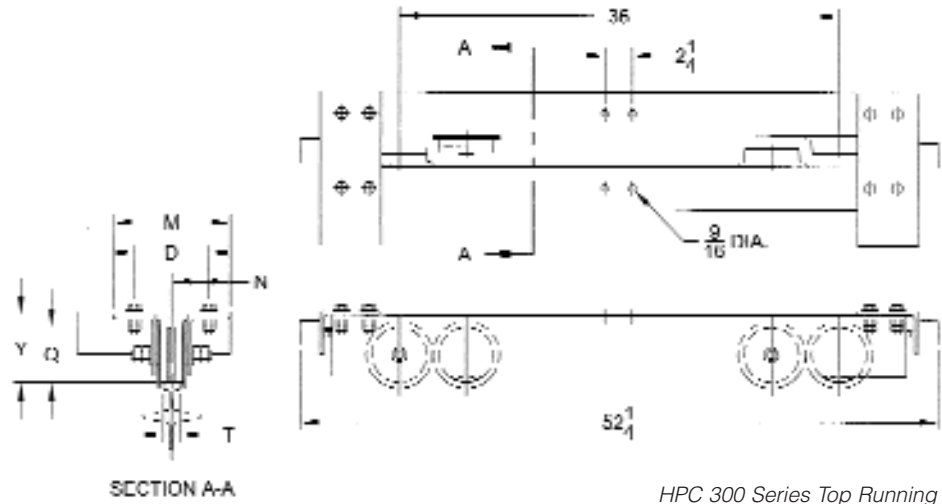
Top Running HPC 300A



Underhung HPC 300A

HPC 300 Series Convertible End Truck Specifications and Dimensions

Cap. (Tons)	Max. Span (ft)	End Truck Product Code	T Flange or Rail Head Width (in)		D (in)	M End Truck Frame Width (in)	N Runway Ctr. Line to Outer Edge of ET (in)	Q Wheel Tread Dia. (in)	Y Wheel Running Surface to Bridge Beam (in)	R Wheel Running Surface to Bridge Beam (in)	End Truck Weight (lbs/pr)
			Top Running	Bottom Running							
1	24	HPC-310	1.5 - 5	3.25 - 5	T + 4 3/4	T + 8.3	M/2	4.50	5.5	1.0	223
2		HPC-320						4.90	6.0		248



Harrington Beam Accessory Kits

Provides the convenience of pre-fabricated bracing and bridge beam accessories.

- For use with any Harrington end truck—specify end truck model when ordering.
- Kit includes: trolley stops, bridge beam to truck bracing, bridge beam mounting plates, angle festoon brackets and necessary hardware.
- Fits S and W shaped bridge beams—specify bridge beam size and crane span when ordering.

See illustrations, facing page.

Options and Accessories: Consult Factory

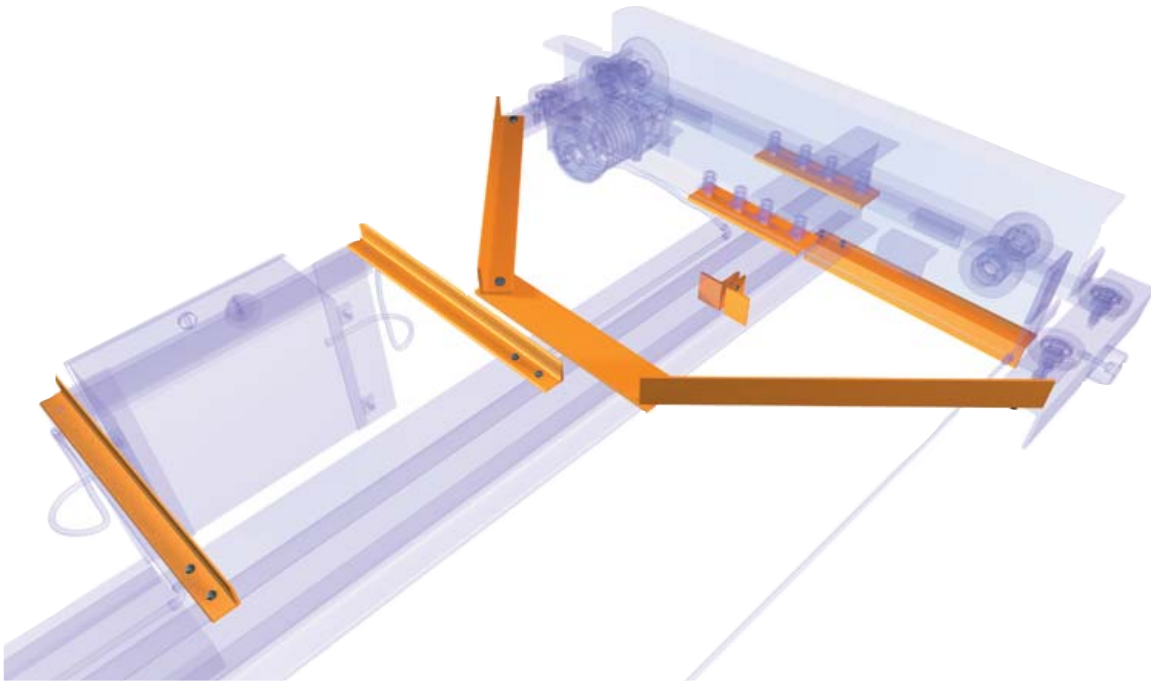
- Anti kick-up rollers for underhung bridge cranes with cantilevered end(s).
- Special dimensional requirements for end trucks.
- Collector mounting bracket with 1" square staff.
- Special control circuit voltages for control panels.
- Special voltages for end truck drives.

Compliance

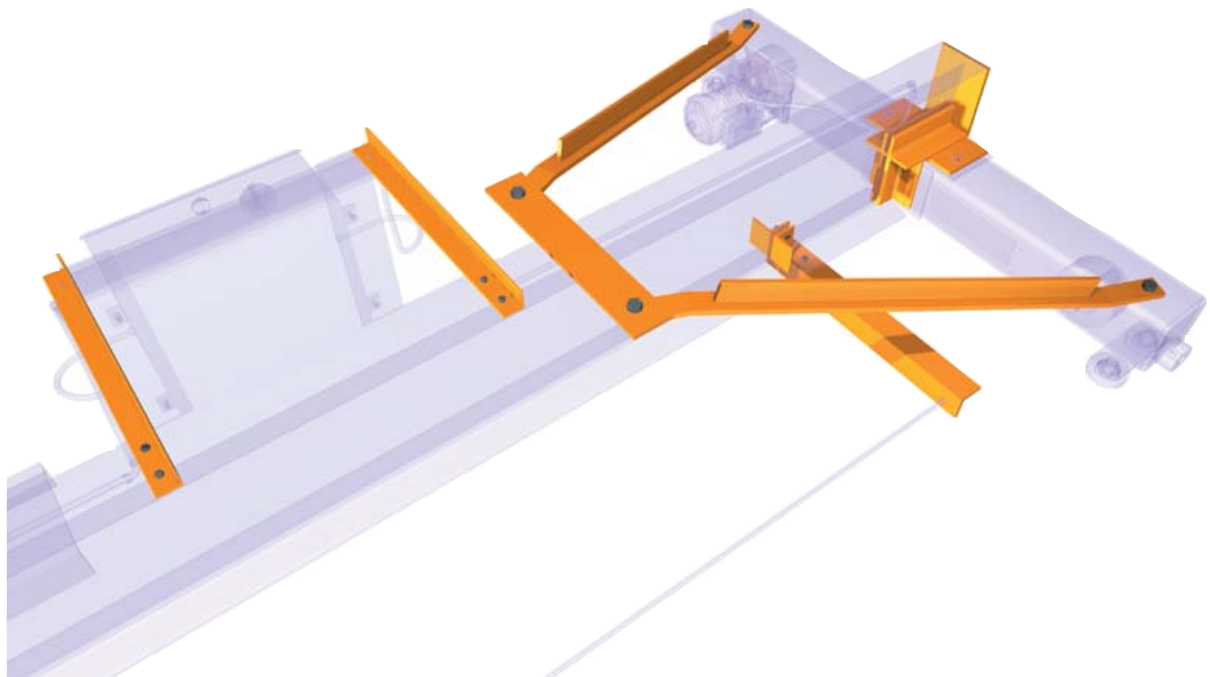
In order to meet requirements of the Crane Manufacturers Association of America (CMAA), the National Electric Code (NEC) and the American National Standards Institute (ANSI/ASME), Harrington components include:

- Thermal motor protection for all motors.
- Rubber bumpers for Series 3 and HPC 300 end trucks.
- Rubber bumpers and drop stops for motorized trolley hoists.
- Hoists load tested to 125% of rated capacity.
- Drop stops for all end trucks.
- Rail sweeps for all end trucks.
- Recommended bridge beams comply with CMAA.

Harrington beam accessory kits:



Underhung Beam Accessory Kit



Top Running Beam Accessory Kit

Bridge Beam Selection Charts

Series 3 - Single Girder Beam Sizes

Bridge beam sizing is based on Harrington products' weights and speeds

Maximum Allowable Span (ft.)	Capacity (Tons)						
	1/2	1	2	3	5	8	10
10	S8X18.4	S8X18.4	S8X18.4	S8X23	S12X31.8	—	—
15	S8X18.4	S8X18.4	S8X23	S10X25.4	S12X31.8	—	—
20	S8X18.4	S10X25.4	S12X31.8	S15X42.9	S12X31.8 C8X11.5	S15X50 C9X13.4	S20X66
25	S8X18.4	S10X25.4	S12X31.8 C8X11.5	S15X42.9 C8X11.5	S15X42.9 C10X15.3	S18X54.7 C9X13.4	S20X66 C10X15.3
30	S10X25.4	S12X31.8	S12X31.8 C8X11.5	S15X42.9 C10X15.3	S18X54.7 C9X13.4	S20X66 C10X15.3	S24X80 C10X15.3
35	S12X31.8	S15X42.9	S15X42.9 C8X11.5	S18X54.7 C9X13.4	S20X66 C10X15.3	S20X66 C10X15.3	S24X80 C15X33.9
40	S15X42.9	S15X42.9 C8X11.5	S18X54.7 C9X13.4	S20X66 C10X15.3	S20X66 C12X20.7	S24X80 C12X20.7	S24X106 C12X20.7
45	S15X42.9 C8X11.5	S18X54.7 C9X13.4	S20X66 C9X13.4	S24X80 C10X15.3	S24X80 C12X20.7	S24X80 C15X33.9	S24X106 C15X33.9
50	S18X54.7 C9X13.4	S18X54.7 C10X15.3	S24X80 C10X15.3	S24X80 C12X20.7	S24X80 C15X33.9	S24X106 C15X33.9	W27X114 C15X33.9
55	S18X54.7 C10X15.3	S18X54.7 C12X20.7	S24X80 C12X20.7	S24X80 C15X33.9	S24X80 C15X33.9	W27X114 C15X33.9	W30X124 C15X33.9
60	S18X54.7 C12X20.7	S24X80 C10X15.3	S24X106 C10X15.3	S24X106 C10X15.3	W30X116 C15X33.9	W30X124 MC18X42.7	W30X132 C15X33.9

Note: above caps are span less 10' 0" for overall length.

HPC Recommended Bridge Beams - Manual Hoist

Bridge beam sizing is based on Harrington products' weights and speeds

1. For use with Manual Hoist only. No allowance for Electric Hoist load factor.				
2. Based on Harrington's manual chain hoist product.				
Capacity (Tons)	Maximum Allowable Span (ft)			
	10	15	20	24
1/2	S6 x 12.5	S6 x 12.5	S7 x 15.3	S8 x 18.4
1	S6 x 12.5	S7 x 15.3	S8 x 23.0	S10 x 25.4
2	S8 x 18.4	S8 x 23.0	S10 x 25.4	S12 x 31.8

HPC Recommended Bridge Beams - Electric Hoist

Bridge beam sizing is based on Harrington products' weights and speeds

1. Includes 15% allowance for Electric Hoist load factor.				
2. Based on Harrington's electric chain hoist product.				
3. For spans greater than 10 ft, braces between end truck and bridge beam are recommended.				
Capacity (Tons)	Maximum Allowable Span (ft)			
	10	15	20	24
1	S8 x 18.4	S8 x 18.4	S10 x 25.4	S10 x 25.4
2	S8 x 18.4	S8 x 23.0	S12 x 31.8	S12 x 31.8 C8 x 11.5

Harrington Crane Control Panels

These panels are for use with all Harrington Series 3 motorized end trucks and are NEC compliant for overhead bridge cranes. All panels include bridge mounting bracket and wiring diagram. Specify voltage when ordering.

Single Speed and Dual Speed Models with EAC—700, 800, 900 Series

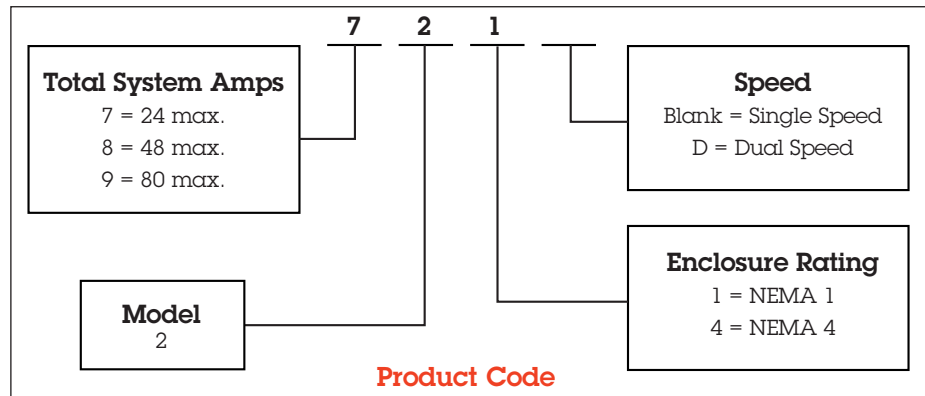
Standard features include:

Lock-out compatible through-the-door manual disconnect switch with system fusing, 110 volt control

circuit transformer with primary and secondary fusing, mainline contactor, mechanically interlocked reversing contactor, time and torque adjustable Electronic Acceleration Control

(EAC), branch circuit fusing for bridge, auto-reset thermal overload relay, and

bottom hinged door.



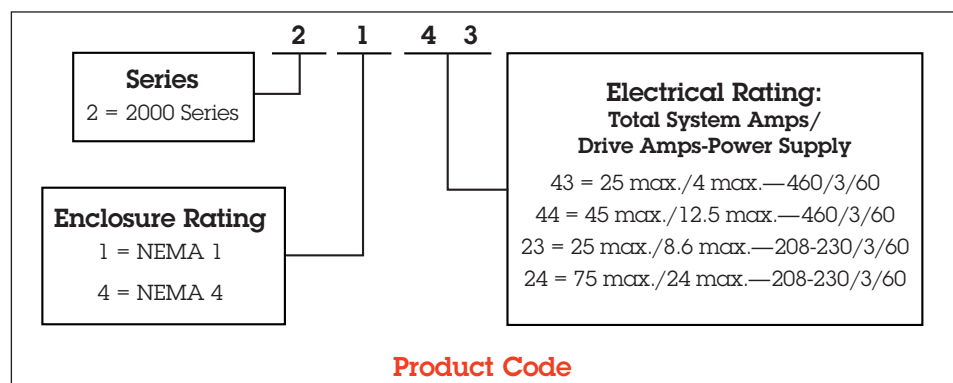
Variable Frequency Drive Models—2000 Series

Standard features include:

Lock-out compatible through-the-door manual disconnect switch with system fusing, 110 volt control circuit transformer with primary and secondary fusing, mainline contactor, Variable Frequency Drive (VFD), brake relay, branch circuit fusing for bridge, auto-reset thermal overload relay, and bottom hinged door.

These panels can be used for dual and multiple speed applications, infinitely variable speed applications and programmed acceleration/deceleration control.

VFD comes pre-loaded with many easy-to-select programs to fit virtually any crane control application, and includes fault-code trouble shooting.



NER/ER Electric Chain Hoist

Standard Specifications

Capacity Range:	Single speed 1/8T to 20T Dual speed 1/8T to 5T
Power Supply:	Cable Type; 208-230/460V-3-60 (Other voltages available)
Control Voltage:	110V (Other voltages available)
Duty Rating:	Intermittent rating* Single speed: 360 starts/hr Dual speed: 120/240 starts/hr Short time rating* Single speed: 60min Dual speed: 30/10min
Classification:	ASME H4, ISO-M5 or M4, FEM-2m or 1Am*

ER Style

- Friction Clutch
- Mechanical Load Brake
- CH Meter
- Pull Rotor Brake

NER Style

- Friction Clutch
- Pull Rotor Brake

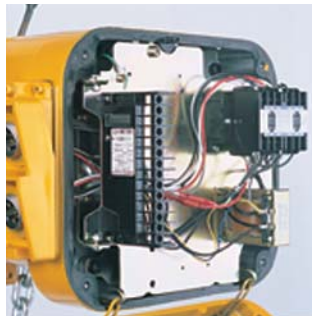


Mechanical Load Brake

Count/Hour meter

(C.H. Meter)

ER style is equipped with a quick-view counter for checking start frequency and running time. A quick glance lets you check frequency of use for easy maintenance scheduling.



Hoist operation is independent of C.H. operation.

The first in the industry to incorporate both readings in one indicator.





The NER and ER Electric Chain Hoists can improve efficiency in the most severe work environments. Packed with the latest technology, quality components, and superior design characteristics, these hoists will satisfy the most demanding customers.

Ideally suited for bridge crane applications, NER and ER hoists are available in a variety of suspension configurations (see table below), and feature low headroom dimensions, an extra-heavy duty cycle, and a compact profile that improves high hook and side approach.

All 3 Ton and below models are single chain (2 chains for 5 Ton) and feature some of the industry's most powerful motors. All units exceed ASME's H4 rating with fan-cooled motors rated for 60 minutes and 360 starts/hour.

Unique chain guides provide smooth guidance of the load chain, resulting in longer life. The NER/ER is ideal for demanding applications such as fabrication or mold handling that can prematurely wear other chain and wire rope hoists.

Models with motorized trolleys include electric trolley brake and side guide rollers, and provide excellent tracking and smooth operation on today's wider-flanged W shape beams.

For additional details and specifications consult Harrington's electric chain hoist brochures.

Lifting Speed (ft \ min)

Models	Lifting Speed	Capacity (Tons)													
		1/8	1/4	1/2	1	1 1/2	2	2 1/2	3	5	Large Capacity Type*				
		8	10	15	20										
NER/ER (Hook Suspension Style)	Single Speed	L (Low)	—	—	15	16	—	14	—	16	12	—	7	—	—
		S (Standard)	—	39	30	29	20	28	23	22	—	9**	14	9	7
		H (High)	57	60	—	—	—	—	—	—	—	—	—	—	—
NER/ERM (Motorized Trolley Type)	Dual Speed	L (Low)	—	—	14/5	14/5	—	15/5	—	17/6	12/4	—	—	—	—
		S (Standard)	—	29/10	30/10	29/10	20/7	29/10	23/8	23/8	—	—	—	—	—
		H (High)	58/19	60/20	—	—	—	—	—	—	—	—	—	—	—
NERG/ERP (Geared Trolley Type)	Dual Speed	L (Low)	—	—	14/5	14/5	—	15/5	—	17/6	12/4	—	—	—	—
		S (Standard)	—	29/10	30/10	29/10	20/7	29/10	23/8	23/8	—	—	—	—	—
		H (High)	58/19	60/20	—	—	—	—	—	—	—	—	—	—	—
NERP/ERP (Plain Trolley Type)	Dual Speed	L (Low)	—	—	14/5	14/5	—	15/5	—	17/6	12/4	—	—	—	—
		S (Standard)	—	29/10	30/10	29/10	20/7	29/10	23/8	23/8	—	—	—	—	—
		H (High)	58/19	60/20	—	—	—	—	—	—	—	—	—	—	—

* Available with ER model only.

** Available in lug mount only.

Hoist Products

Raise your Productivity with the Full Line of Harrington Hoists and Cranes*

Air Hoists



*Model TCR with pendant control
1/4 through 6 Tons*



*Model TCR with cord control
1/4 through 6 Tons*

Manual Hoists

Manual Hoist Products



Model NTH 1 through 5 Tons



Model LB 3/4 through 9 Tons

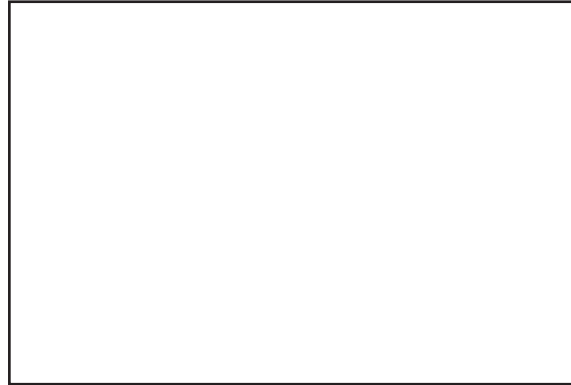


Model CB 1/2 through 100 Tons



Model CF 1/2 through 5 Tons

**CONTACT YOUR NEARBY
HARRINGTON DISTRIBUTOR**



Warranty

All products sold by Harrington Hoists, Inc. are warranted to be free from defects in material and workmanship from date of shipment by Harrington for the following periods:

Manual Hoists & Trolleys - 2 years

Electric Hoists, Air Hoists & Trolleys, Crane Components - 1 year

Spare / Replacement Parts - 1 year

The product must be used in accordance with manufacturer's recommendations and must not have been subject to abuse, lack of maintenance, misuse, negligence, or unauthorized repairs or alterations.

Should any defect in material or workmanship occur during the above time period in any product, as determined by Harrington Hoist's inspection of the product, Harrington Hoists, Inc. agrees, at its discretion, either to replace (not including installation) or repair the part or product free of charge and deliver said item F.O.B. Harrington Hoists, Inc. place of business to customer.

Customer must obtain a Return Goods Authorization as directed by Harrington or Harrington's published repair center prior to shipping product for warranty evaluation. An explanation of the complaint must accompany the product. Product must be returned freight prepaid. Upon repair, the product will be covered for the remainder of the original warranty period. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Harrington's warranty, the customer will be responsible for the costs of returning the product.

Harrington Hoists, Inc. disclaims any and all other warranties of any kind expressed or implied as to the product's merchantability or fitness for a particular application. Harrington will not be liable for death, injury to persons or property, or for incidental, contingent, special or consequential damages, loss or expense arising in connection with the use or inability whatever, regardless of whether damage, loss, or expense results from any act or failure to act by Harrington, whether negligent or willful, or from any other reason.



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