

# System Logistics



DIAMOND Horizontal Carousel



# Getting Your Orders Out the Door Fast



Integrating state-of-the-art hardware and software, our latest generation of high performance Diamond Horizontal Carousel picking systems is at the heart of advanced order fulfillment applications benefiting a broad spectrum of world-class clients.

Our Horizontal Carousels are crafted with the most durable materials, the highest quality construction, the most reliable components and state-of-the-art controls. Our systems are backed by one of the strongest warranties in the industry.

- Single frame size allowing multiple bin sizes and faster deliveries
- Dual bin configurations available, 36" to 48"
- "Uniframe" carousels can be double, triple or quad-tiered with no additional modification and limited cost
- Commercially available AC controllers that are highly reliable and fully featured
- Highly efficient direct drives that provide the fastest retrieval speeds in the industry
- State-of-the-art bin design - heavy gauge safety loops at bin front and efficient "fold out" installation
- The highest capacity standard shelves in the industry - 150# standard with optional capacities

Superior rugged construction, modular design and customizable features make our Horizontal Carousels ideal for a complete range of warehousing and manufacturing applications.

### Structural Steel Fabrication

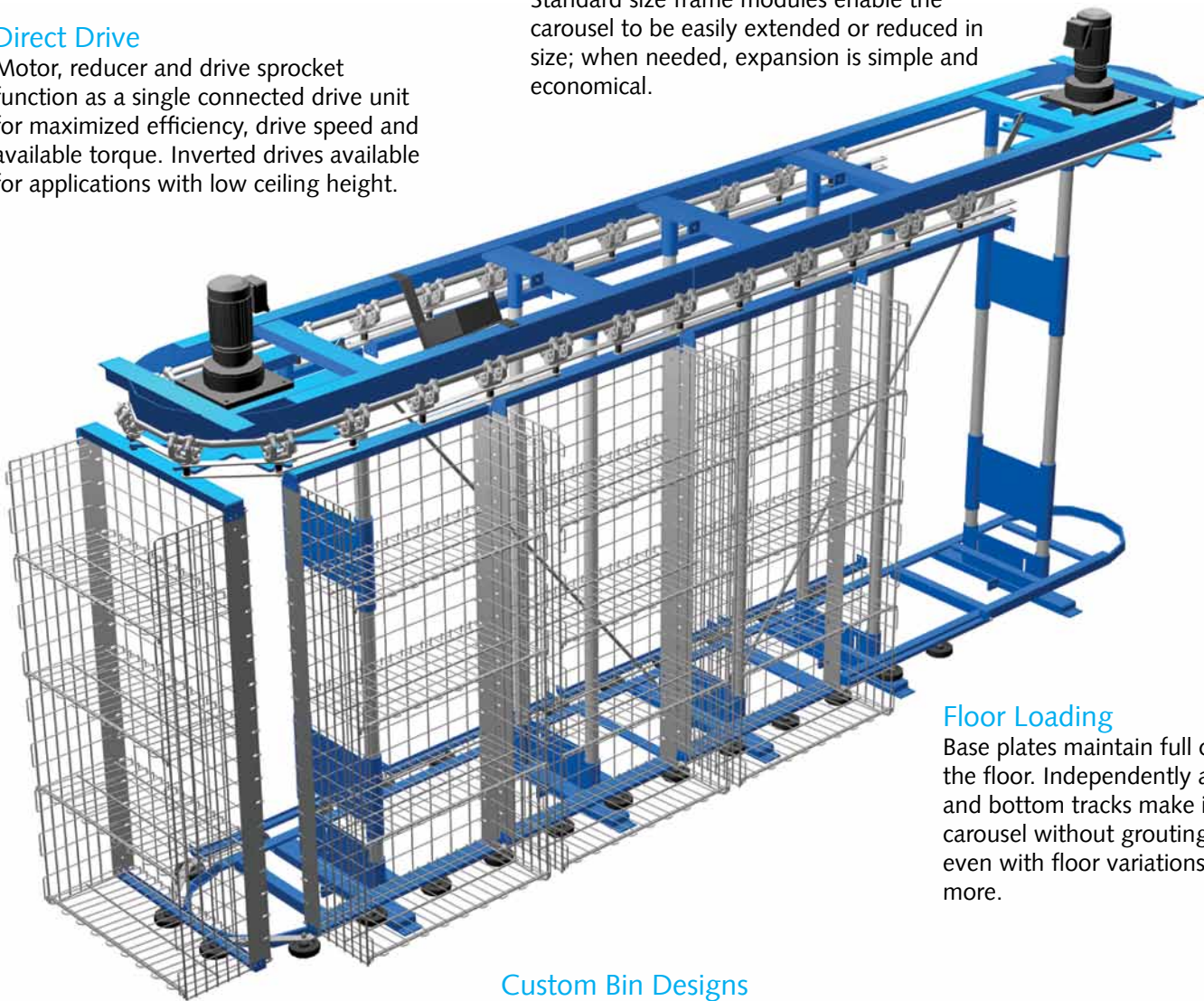
Made with rugged structural steel, DIAMOND Horizontal Carousels are the most durable in the industry, constructed for long-term reliability in even the heaviest applications and most severe duty cycles.

#### Direct Drive

Motor, reducer and drive sprocket function as a single connected drive unit for maximized efficiency, drive speed and available torque. Inverted drives available for applications with low ceiling height.

#### Modular Frame Design

Standard size frame modules enable the carousel to be easily extended or reduced in size; when needed, expansion is simple and economical.



#### Floor Loading

Base plates maintain full contact with the floor. Independently adjustable top and bottom tracks make it easy to level a carousel without grouting or floor shims, even with floor variations of up to 6" or more.

#### Fully Tested

All DIAMOND Horizontal Carousels are assembled at our factory and tested under power with complete links, yokes, load bars and drive units in place. This takes time, but assures a quality installation.

#### Custom Bin Designs

Because bins are fabricated in-house, we can make them for many different application-specific designs, including:

- Custom wire-spacing and configurations
- Solid steel construction
- Peg board
- Rack style
- Cantilever shelf
- Hopper and enclosed container
- Angle forward shelves for consolidation
- Dual-face configurations

## Advanced Controls

CCS series microprocessor controllers provide back-up manual control and a link that allows the computer to interface with the carousel. Single cable control networks make our carousel systems easy to install and diagnose. Error handling and diagnostics are fully integrated with our DiamondWare™ Software.



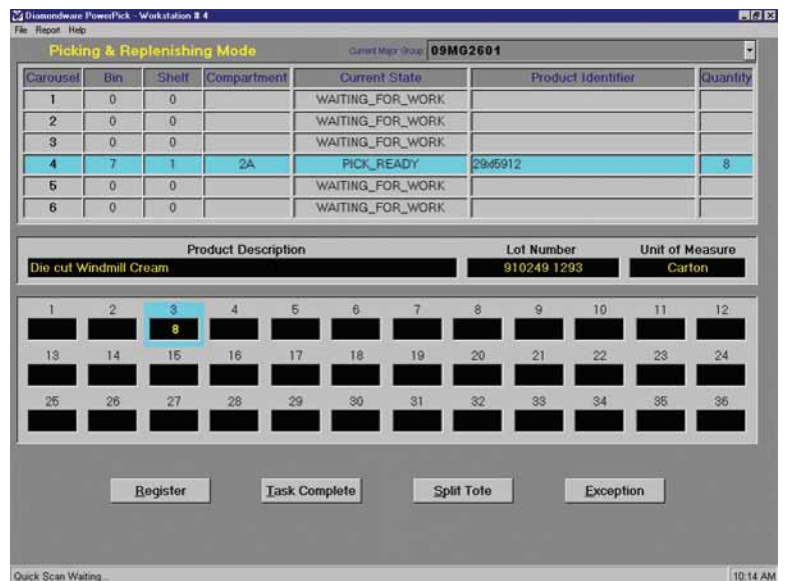
- Smarter, less expensive controls
- “Closed loop” control provides smoother rotation
- Manual or automatic modes - provides a back-up level of control
- Maintenance screen on a tether, allowing operator to plug in as required
- English diagnostics - easy-to-understand status messages and error codes operate as stand-alone or linked directly with DiamondWare™ Software
- Automatic self-test on power-up

## PowerPick™ Software

Developed by our in-house software engineering staff, our DiamondWare™ PowerPick™ software provides unmatched control, flexibility and customization.

PowerPick™ application software provides a highly efficient solution for picking, replenishing and cycle counting. Using a series of standard configuration modules, PowerPick™ can be customized to meet your unique requirements.

Finally, if you ever need assistance, 24/7 support is available to keep you up and running.



## Light Displays

DIAMOND Horizontal Carousel picking systems are easily configured with light displays and workstations to keep your operations running smoothly and efficiently.

Designed to communicate messages between computer and operator and assure operator productivity and accuracy, our light-directed picking modules offer unparalleled features and capabilities.

Our ergonomic workstations are constructed from rugged structural steel for long life and durability. Wiring, scanners, carousel controllers, adjustable light brackets, computers and other devices are seamlessly integrated to form a productive, organized workspace.



## Work Stations

An integral component in our horizontal carousel system design, the SpeedStation™ is a modular workstation engineered to efficiently organize the many tasks an operator must face in today's complex order processing environments.



With a broad choice of modular components and options, our cost effective workstation can be configured specifically for your operator's tasks - from high speed picking and putting to scanning, kitting, ticketing, bagging, labeling, weighing, logging, packing, inspecting and more. Easy to adjust or reconfigure as your needs change, it's the industry's most versatile, flexible workstation ever offered.

# State-of-the-Art Horizontal Carousels

## Rugged Frame Construction

- All models constructed with the same high capacity track and frame size, ensuring the fastest delivery in the industry
- Unmatched strength - heavy gauge stainless track is welded to 4" x 3" x 1/4" thick structural steel angle, with 4" x 2" x 1/4" thick steel tubing cross members
- No frame modifications necessary for double or triple stacking
- Structural mezzanines and multiple conveyor lines are easily supported on top of carousel frames
- Bottom track is adjustable, allowing bins to be raised to any required level



## Low Maintenance

- All components are accessible from outside the carousel
- No need for periodic adjustments of drive units
- Direct drives allow easy and inexpensive replacements
- Optional automatic lubricators



## Versatile Controls

- CCS keypad controller offers multi-level manual and automatic control
- CCS controllers display clear readable messages for mechanical, communication and diagnostic functions
- Footswitch provided for manual or back-up control
- Control panels are mountable in any location
- Optional control panels meet NEC and NEMA 1 standards; NEMA 12, UL and CE panels also available



## Bins & Shelves

- Custom sizes and configurations
- Optional bins up to 15 feet tall
- Shelves adjust down to 2-inch centers with no tools required
- Optional shelf adjustability: 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5 or 6 inches
- Bin capacity: 600, 1000, 1500 or 2000 lbs.
- Each bin supported by four heavy-duty cast aluminum yokes, load tested to 3,200 lbs. each
- Eight 1.5" diameter x 0.5" precision ground, lifetime lubricated bearings with hardened races distribute and carry the load for each bin
- Powder coated bins and shelves are standard
- Solid, wire and pass-through bin backs available

## Easily Replaced Components

- Commercially available AC drive motor, reducers, controls and all electrical components throughout the carousel simplify repairs and minimize downtime

## Simplified Installation

- All bins are factory pre-assembled with sides and backs connected for easy fold-out installation
- Factory match-marked frames are shipped with all chains, yokes and drive units in place for accurate, simple, rapid installation

## Safety

- Emergency stop controls can be located anywhere on the system including panels, workstations and light trees
- Vertical and horizontal photo-electric eyes available for added safety
- Optional safety floor mats
- CE configuration available

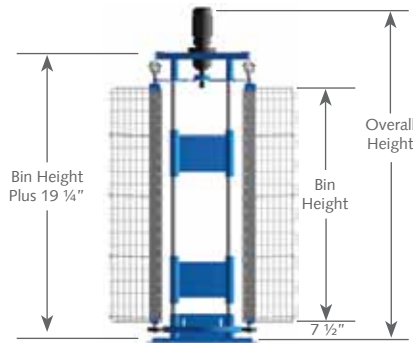
# Specifications

## Carousel Length

Model	20 Bin	22 Bin	24 Bin	26 Bin	28 Bin	30 Bin	32 Bin	34 Bin	36 Bin	38 Bin	40 Bin	42 Bin	44 Bin
A	14' 8"	16' 2"	17' 7"	19' 0"	20' 5"	21' 10"	23' 4"	24' 9"	26' 2"	27' 7"	29' 0"	30' 6"	31' 11"
B	17' 10"	19' 7"	21' 4"	23' 1"	24' 10"	26' 7"	28' 4"	30' 0"	31' 9"	33' 6"	35' 3"	37' 0"	38' 9"
C	20' 0"	21' 11"	23' 11"	25' 10"	27' 9"	29' 9"	31' 8"	33' 8"	35' 7"	38' 6"	39' 6"	41' 5"	43' 5"
D5	22' 6"	24' 9"	26' 11"	29' 2"	31' 4"	33' 7"	35' 9"	38' 0"	40' 2"	42' 5"	44' 7"	46' 10"	49' 0"
E	26' 9"	29' 4"	32' 0"	34' 7"	37' 2"	39' 10"	42' 5"	45' 0"	47' 8"	50' 3"	52' 10"	55' 6"	58' 1"
F	30' 0"	32' 11"	35' 10"	38' 10"	41' 9"	44' 8"	47' 7"	50' 6"	53' 5"	56' 4"	59' 3"	62' 2"	65' 1"
G	34' 1"	37' 5"	40' 9"	44' 1"	47' 4"	50' 8"	54' 0"	57' 4"	60' 8"	63' 11"	67' 3"	70' 7"	73' 11"
GG (DUAL)	38' 1"	41' 4"	44' 8"	48' 0"	51' 4"	54' 8"	57' 11"	61' 3"	64' 7"	67' 11"	71' 2"	74' 6"	77' 10"

## Carousel Overall Height

1 HP Drive	Bin Height + 37"
1 ½ - 2 HP Drive	Bin Height + 38 ½"
3 HP Drive	Bin Height + 39 ½"
Inverted Drive	Bin Height + 19 ¼"



## Standard Bin Height

\*Please consult factory for custom bins

61"	73"	85"	97"	109"	121"	133"	145"
-----	-----	-----	-----	------	------	------	------

## Carousel Width

\*Please consult factory for additional options

MODEL	BIN WIDTH (inside)	OVERALL WIDTH			SWING DIAMETER		
		12" Shelf	18" Shelf	22" Shelf	12" Shelf	18" Shelf	22" Shelf
A	14 ¾	50 ½	62 ½	70 ½	51 ½	63	70 7/8
B	18 ¾	50 ½	62 ½	70 ½	52 ¼	63 ½	71 ¼
C	21 ½	50 ½	62 ½	70 ½	52 7/8	64	71 ½
D5	25	50 ½	62 ½	70 ½	52	62 ¾	70 1/8
E	28	48 ½	60 ½	68 ½	52	66 ½	73 ½
F	32	48 ½	60 ½	68 ½	54 ½	65	72 ¾
G	36	48 ½	60 ½	68 ½	58	67 7/8	74 ¾
GG (Dual)	36"	---	102"	---	---	104"	---



\*Please consult factory for additional options

46 Bin	48 Bin	50 Bin	52 Bin	54 Bin	56 Bin	58 Bin	60 Bin	62 Bin	64 Bin	66 Bin	68 Bin	70 Bin
33' 4"	34' 9"	36' 3"	37' 8"	39' 1"	40' 6"	41' 11"	43' 5"	44' 10"	46' 3"	47' 8"	49' 2"	50' 7"
40' 6"	42' 3"	44' 0"	45' 9"	47' 6"	49' 2"	51' 10"	52' 8"	54' 0"	56' 2"	57' 11"	59' 8"	61' 5"
45' 4"	47' 3"	49' 3"	51' 2"	53' 2"	55' 1"	57' 0"	59' 0"	60' 11"	62' 10"	64' 10"	66' 9"	68' 9"
51' 3"	53' 5"	55' 8"	57' 10"	60' 1"	62' 4"	64' 6"	66' 9"	68' 11"	71' 2"	73' 4"	75' 7"	77' 9"
60' 9"	63' 4"	65' 11"	68' 7"	71' 2"	73' 9"	76' 5"	79' 0"	81' 7"	84' 3"	86' 10"	89' 5"	92' 1"
68' 0"	70' 11"	73' 11"	76' 10"	79' 9"	82' 8"	85' 7"	88' 6"	91' 5"	94' 4"	97' 3"	100' 2"	103' 1"
77' 2"	80' 6"	83' 10"	87' 2"	90' 6"	93' 9"	97' 1"	100' 5"	103' 9"	107' 0"	110' 4"	113' 8"	117' 0"
81' 2"	84' 6"	87' 9"	91' 1"	94' 5"	97' 9"	10' 0"	104' 4"	107' 8"	111' 0"	114' 4"	117' 7"	120' 11"

### Carousel Curent Ratings

\*Please consult factory for other voltages

Motor Horsepower	No. of Drives	VOLTAGE 230v		VOLTAGE 480v	
		System Current Req'd	No. of Phases	System Current Req'd	No. of Phases
1 HP	Single	10A	1	5A	3
1 ½ HP	Single	20A	1	7A	3
2 HP	Single	20A	1	7A	3
3 HP	Single	15A	3	8A	3
1 ½ HP	Dual	15A	3	8A	3
2 HP	Dual	25A	3	15A	3
3 HP	Dual	30A	3	20A	3





System Logistics Corp. 90 Alfred Plourde Parkway, Lewiston, ME 04241  
Tel:(207) 784-7081 Fax:(207) 786-0271 [www.systemlogistics.com](http://www.systemlogistics.com) [info@systemlogistics.com](mailto:info@systemlogistics.com)