

## CUT SHEET

# NBS®90

## Narrow Belt Sorter (NBS) 90°



### RELIABLE, ACCURATE 65 CPM SORTATION

NBS 90 conveyor employs a series of narrow belts, each with a patented individual take-up. High-friction rollers raise to grip and gently divert products at a 90-degree angle right or left, on-the-fly.

Continuous contact between belt and product provides maximum tracking accuracy, for optimum sort reliability.

The NBS 90 carries products at speeds up to 300 feet per minute and achieves a sort rate of up to 65 cases per minute (single side).

Diverts in the NBS 90 experience less product tipping and skewing, and overall superior diverting characteristics. Unstable products are successfully diverted with the exclusive limited slip-clutch design, that provides a small acceleration ramp for diverting.

Energy consumption of the MHS NBS is over 87% less than belt with pop-up wheel sorter with a conventional sorter construction. This energy savings translates into less noise, belt pull, and component wear. Energy usage is 60% less than for conventional sorters. In addition, installation time for NBS sorters is close to half of conventional sorters.

## STANDARD SPECIFICATIONS

### Bed Widths

- **Nominal widths of:** 18W, 24W and 32W.
- **OA W:** 18.25", 25.25", and 32.25". BF dimensions; 16.25", 23.25" and 30.25"

### Bed Lengths

1'-0" to 10'-0" in 1" increments

### Carry Belts

Red urethane belt; 1.25" wide x .203" thick, 90 Durometer, 150 lbs. / inch strength.

### Belt Quantity

18W = 4 belts, 25W = 6 belts, 32W = 8 belts.

### Carrying Rail

Low friction bearing rails mounted on 3.5" centers side to side. Pairs of wheels mounted internally on nominal 4" centers.

### Transfer Length

24" and 30" (nominal).

### Transfer Rollers

1.375" Diameter coated rollers with precision bearings and 5/16" hex axles on 3.5" centers. Mounted both between and on the outsides of the carrying belts. Quantity varies with unit width.

### Transfer Roller Length

22" and 28" long is standard. Coating covers 21" or 27" respectively but not in the grooves.

### Transfer Roller Quantity

18W = 5 rollers, 25W = 7 rollers, 32W = 9 rollers

### Return Rollers

1.9" diameter plated shell with ABEC-1 precision bearings and a 7/16" hex axle.

### Drives

There are two drive lengths; 5'-0" and 6'-0". The 5'-0" drive is capable of 500# belt pull or a maximum length of 45'-0". The 6'-0" drive has a much longer belt take up and so is capable of 500# belt pull or 200'-0" maximum length.

### Auxiliary Take-up

There is an auxiliary belt take-up available to be used with the 5'-0" drive if belt pull is low and unit length exceeds 45'-0". It is 5'-0" long and available in all widths.

### End Beds

End beds contain an end pulley and a snubber roller for belt return. They are 18" long and contain a pop-out gap roller on the discharge end.

### End Pulleys

5" diameter Flat Face, 1-7/16" shaft, eccentric lock collar.

### Speed

210 FPM minimum to 300 FPM maximum for cartons and 250 FPM with totes. Not all speeds are available with all HP's.

### Transfer Rate

Transfers are capable of rates up to 65 CPM in one direction and 55 CPM in both directions.

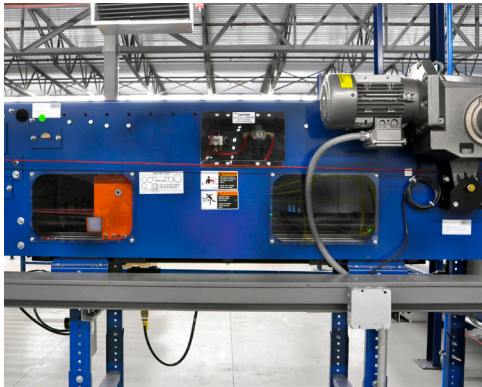
### Paint

Components located within the framework are painted black. All other components are painted job color. All MHS Conveyor paint is powder coated.

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NBS diverts are easily repositioned to suit the application or to reconfigure. Belt mistracking is eliminated with the total belt retention system. Maintenance requirements are minimal.

Features	Benefits
Divert modules mounted to continuous slide rail	Repositioning in the field is simple
Separate drive for divert modules	Divert right and left, saving space
High-friction rollers	Positive acceleration and divert rate
Picks up products “on-the-fly”	Maximize sort rate
Products are conveyed on belt until sorted	Increased accuracy of diverts
Compact design of divert module	Close center of divert point
Individual belt take-ups	Smooth product flow, long belt life
Exclusive limited slip-clutch design	Reliable, consistent diverting of unstable products
Low belt pull	Energy savings, longer life, less heat

U.S. Patent 7,581,632

## ABOUT MHS CONVEYOR

MHS Conveyor is a leading worldwide supplier of dynamic, high-quality automated conveyor and sortation technologies used to transport a wide variety of products. MHS Conveyor manufactures high-quality equipment, sold through a partner network of factory-authorized distributors as part of complete, integrated logistics solutions engineered to meet the needs of each customer.

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