

# TKF

## ZONED ACCUMULATION CONVEYORS

**Zone Controlled  
For Safe  
Non-Contact  
Accumulation**



*TKF zoned accumulation conveyor with roll-to-roll chain driven live roller, each zone powered by pneumatically-operated clutch (inset). Guard removed for illustration only.*

TKF zoned accumulation conveyors are typically applied on heavy unit loads for a variety of products. Capacities range from 20 lbs. to a maximum of 20,000 lbs. Conveyors are offered with 1.9 or 2.5" roller diameters in widths up to 60", depending on load and roller size.

A single assembly consists of a roll-to-roll chain driven live roller (CDLR) conveyor divided into individually powered zones of a pre-set length. The entire conveyor length is driven by a single power unit. Each zone is driven by an air-operated clutch, controlled by a pneumatic sensor roller located at the end of each zone.

Unlike most competitive designs, the TKF zoned accumulation conveyor offers a compact configuration and extremely low profile—as little as 6" from floor to top of roller—because the complete clutch assembly is positioned within the side frame instead of underneath. And because the TKF design is so clean and simple it is quiet running and requires minimum maintenance. Standard features, available options and specifications are shown on page 2.

**TKF**  
CONVEYORS

# TKF ZONED ACCUMULATION CONVEYORS

## Operation Without Load Impacting

When a load enters the TKF zoned accumulation conveyor, it is driven to the farthest unoccupied zone. The load depresses the sensor roller at the end of that zone, which disengages the zone's clutch and "arms" the succeeding zone. When the next load reaches the end of the succeeding zone, its clutch is de-energized, and the sequence repeats until all zones are filled. When a load is removed from the conveyor's exit end, its sensor roller is released, signalling the accumulated loads to move up one at a time, filling the next vacated zone.

As a result of this unique zone control system, these TKF conveyors handle even the heaviest, bulkiest loads without contact or impact.

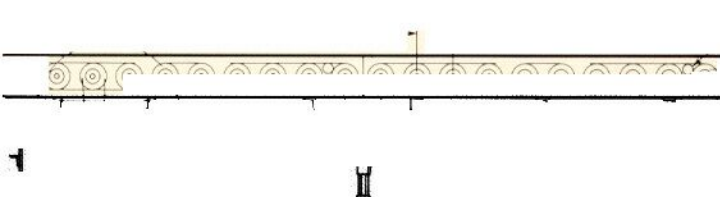
## Standard Features

- Compact, low profile design
- Pneumatically controlled load sensors
- Uses standard, plant quality compressed air
- Low air consumption
- Individual zone control eliminates back pressure

- Low maintenance; quiet operation
- Minimum HP requirements
- Three standard colors—safety blue, vista green, dunes tan

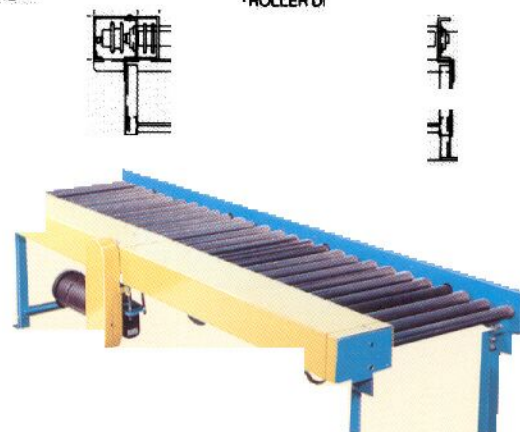
## Available Options

- Structural channel side frames
- Reversing operation
- Online work stations (allows stopping and releasing of loads along the conveyor's length)
- Special widths to 60"
- Special zone or section lengths
- 2½" dia. x #7 ga. or 3½" dia. x 5/16" wall rollers
- Solenoid operated zones
- Electric zone sensors (instead of pneumatic)
- Zone brakes
- "Batch Release" controls
- Special paint colors



SENSOR ROLLER  
ONE PER ZONE

ROLLER DIA



## Specifications

### MEDIUM DUTY 1.9" DIA. x #12 GA. x 7/16" HEX AXLE ROLLER

Frame	Roller Centers RC	Zone Length ZL	Section Length SL	Effective Width EW	Height H*	Speeds	Max. Allowable Load/Ft**	Max. Unit Load**
Formed Channel 6" x 1¼" 10 gauge	4 or 6"	2 ft.	2, 4, 6, 8, 10, 12 ft.	18" min. 48" max. (2 inch increments)	6" min.	15, 30, 45 or 60 FPM	300#	1000#
		3	3, 6, 9, 12					
		4	4, 8, 12					

### HEAVY DUTY 2.5" DIA. x #11 GA. x 1" HEX AXLE ROLLER

Frame	Roller Centers RC	Zone Length ZL	Section Length SL	Effective Width EW	Height H*	Speeds	Max. Allowable Load/Ft**	Max. Unit Load**
Formed Channel 6" x 1¼" 7 gauge	4 or 6"	3 ft.	3, 6, 12 ft.	24" min. 60" max. (2 inch increments)	6¼" min.	15, 30, 45 or 60 FPM	1000#	
		4	4, 8, 12					
		5	5, 10					
		6	6, 12					

\* Minimum height is without supports and with top mounted drive.

\*\* For greater capacities, consult TKF.

NOTE: Roll-to-roll chain drive is RC40; zone-to-zone chain drive is RC60.



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