



## The Next Generation of Turns

FLOW-TURN's **Flat-Turn** belt curves are engineered for applications that benefit from an obstruction-free belt curve surface or that do not allow use of a drive chain requiring lubrication.

Belt traction is achieved by a friction drive with lagged pulleys. The belt position is positively maintained by a dual ball bearing guide system; the ball bearing assemblies run in a fixed rail structure in both upper and lower track. The assemblies consist of two (2) sealed-for-life ball bearings mounted on a joint stud which is securely attached to the belt surface.

All common belt qualities can be applied. Flat-Turn curves can be supplied with laced belts or, as option, with seamless belts.

Key benefits of this design are:

- **Obstruction-Free Belt Surface**  
Flat-Turn curves can accommodate large and oversize items and do not require sideguards. This allows to integrate Flat-Turn curves into assembly workstations as take-away conveyors.
- **Chain-Free Operation**  
No chain is needed to drive or guide the belt. Therefore, no chain lubrication is needed. There is no chain cover protruding above the belt surface.
- **Simple and Safe Design**  
Flat-Turn curves are designed for minimum maintenance – no lubrication, no chain cover extending above the belt, and a smooth and simple friction drive.

### Flat-Turn Applications

- Package & Parcel
- Baggage Handling
- Warehousing & Distribution
- Wood and Furniture Production
- Packaging
- Industrial & Manufacturing
- Product Assembly

# Flat-Turn Power Belt Curves

Flat-Turn belt curves are available in various sizes, arcs, and design options. Please refer to the **Flat-Turn** Data Sheet.



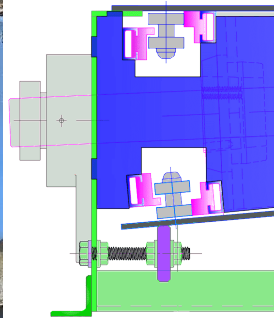
90-degree Flat-Turn Belt Curve with Partial Side Guards



90-deg. Flat-Turn used in wood furniture production



Flat-Turn Belt Tensioning Station



Flat-Turn Dual Ball Bearing Guide System with UHMW Tracks

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*Custom design is a FLOW-TURN specialty.  
We manufacture to rigid specifications and provide answers to unusual requirements.*

FTT Flat-Turn Rev04

## Standard Specifications

### FRAME CONSTRUCTION

- Load capacity 30 lbs per linear foot (standard)
- 12 Ga standard frame construction
- Safety Guarding per OSHA
- Finger Guards and Safety Covers
- Arcs from 15 degrees to 180 degrees
- Enamel paint or powder coating with color per RAL or paint chip request, or stainless steel

### DRIVE SYSTEM

- Shaft-mounted gearmotors or reducers with flange mounts for C-Face motors
- Normal mounting at discharge end
- Number 50 Flex Chain with Attachment links
- Hardened Steel Sprockets

### BELT

- Belt width up to 120 inches
- 2-ply PVC (standard) - oil, heat, grease resistant
- Others upon request

### ACCESSORIES

- Floor Supports, H-Style with welded constraint; +/- 2" adjustment; or ceiling hangers

## Options

### FRAME

- 10 Ga frame construction
- Stainless steel, suitable for food applications
- Low Friction DuraSurf slider bed covers for heavy loading
- Under Guards in Plastic or Steel Mesh or full Metal

### DRIVE

- Integrated Gear Motors, with or without VFD's
- Inside radius mount (vertical only)
- Slave Drive between curves and adjacent conveyor

### BELT

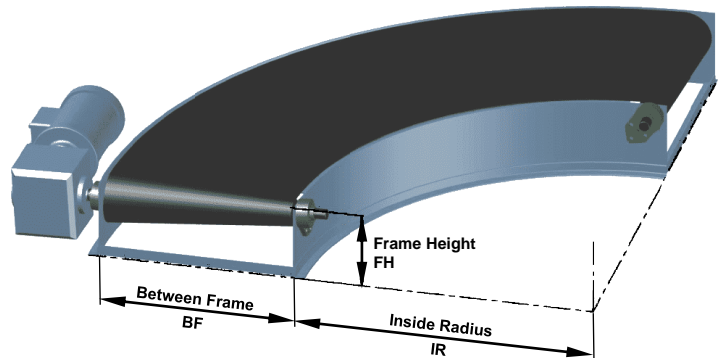
- Fire retardant belts available
- FDA & USDA approved belts available

### ACCESSORIES

- Side Guards 12 and 14 Ga Steel

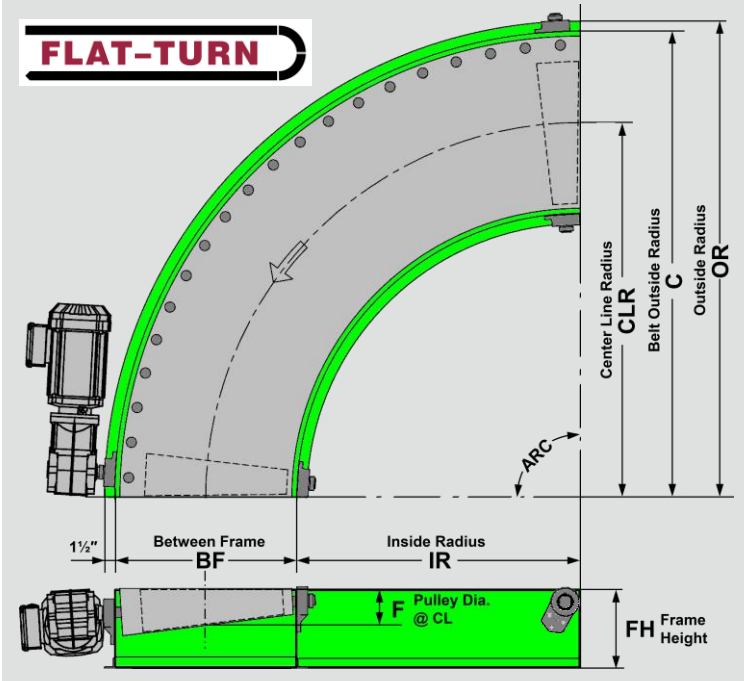
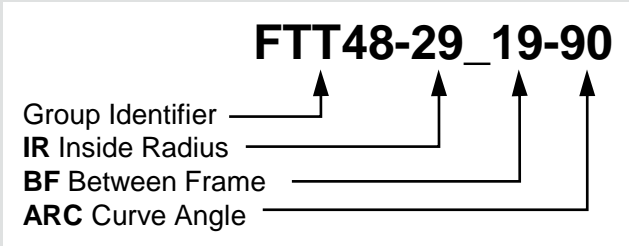


Two (2) S-curves in mirror-image design, each consisting of two (2) 45-degree Flat-Turn curves



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### Flat-Turn Model Code



### Common Dimensions and Specifications

Group Identifier	OR Outside Radius	C Belt Outside Radius	FH Frame Height	X Shaft Diameter	Maximum Load * (90 deg)	Maximum Speed * (90 deg)
FTT36	36.5"	36"	8.5"	1"	125 lbs	300 FPM
FTT48	48.5"	48"	8.5"	1"	175 lbs	400 FPM
FTT60	60.5"	60"	8.5"	1-3/16"	225 lbs	500 FPM
FTT84	84.5"	84"	8.5"	1-7/16"	250 lbs	600 FPM

\* Maximum Load data are based on 60 FPM; higher loads and speeds may be possible, please inquire

Sizes and options given are only a small example of the power belt curves made by Flow-Turn.

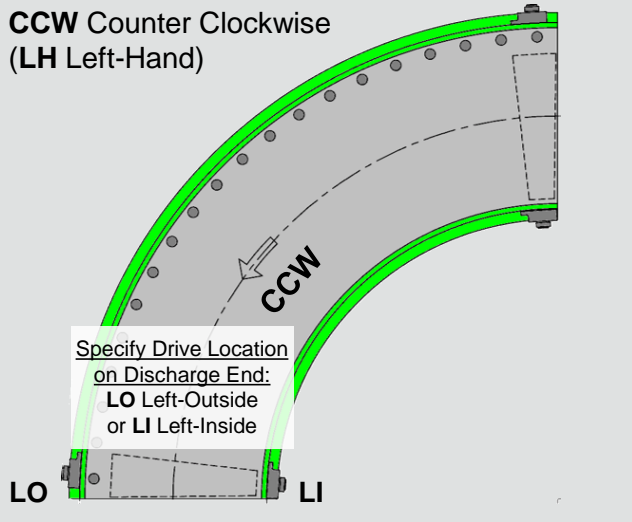
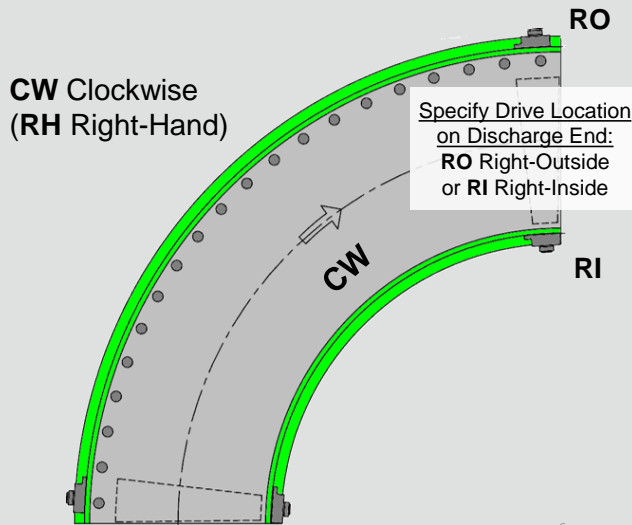
Please inquire if your project requires other sizes or has special requirements.

Group Identifier	Model No.	C Belt Outside Radius	IR Inside Radius	BF Between Frame	CLR Centerline Radius	F Pulley Dia. @ CL
FTT36	29_7	36"	29"	7"	32.5"	4.30"
	27_9		27"	9"	31.5"	4.18"
	25_11		25"	11"	30.5"	4.06"
	23_13		23"	13"	29.5"	3.93"
	21_15		21"	15"	28.5"	3.81" **
	19_17		19"	17"	27.5"	3.68" **
FTT48	17_19	48"	17"	19"	26.5"	3.56" **
	41_7		41"	7"	44.5"	4.12"
	39_9		39"	9"	43.5"	4.03"
	37_11		37"	11"	42.5"	3.95"
	35_13		35"	13"	41.5"	3.86"
	33_15		33"	15"	40.5"	3.77"
	31_17		31"	17"	39.5"	3.68"
	29_19		29"	19"	38.5"	3.30"
	27_21		27"	21"	37.5"	3.51" **
	25_23		25"	23"	36.5"	3.42" **
FTT60	23_25	60"	23"	25"	35.5"	3.34" **
	47_13		47"	13"	53.5"	4.90"
	45_15		45"	15"	52.5"	4.82"
	43_17		43"	17"	51.5"	4.73"
	41_19		41"	19"	50.5"	4.64"
	39_21		39"	21"	49.5"	4.55"
	37_23		37"	23"	48.5"	4.47"
	35_25		35"	25"	47.5"	4.38"
	33_27		33"	27"	46.5"	4.29"
	31_29		31"	29"	45.5"	4.21"
	29_31		29"	31"	44.5"	4.12" **
	27_33		27"	33"	43.5"	4.03" **
	25_35		25"	35"	42.5"	3.95" **
	23_37		23"	37"	41.5"	3.86" **
FTT84	65_19	84"	65"	19"	74.5"	4.70"
	63_21		63"	21"	73.5"	4.64"
	61_23		61"	23"	72.5"	4.58"
	59_25		59"	25"	71.5"	4.52"
	57_27		57"	27"	70.5"	4.46"
	55_29		55"	29"	69.5"	4.40"
	53_31		53"	31"	68.5"	4.34" **
	51_33		51"	33"	67.5"	4.28" **
	49_35		49"	35"	66.5"	4.22" **
	47_37		47"	37"	65.5"	4.16" **
	45_39		45"	39"	64.5"	4.10" **
	43_41		43"	41"	63.5"	4.04" **
	41_43		41"	43"	62.5"	3.98" **
	39_45		39"	45"	61.5"	3.92" **
	37_47		37"	47"	60.5"	3.86" **
	35_49		35"	49"	59.5"	3.80" **
FTT-X	Special Curve Sizes Upon Request					

\*\* Slight bearing protrusion @ IR. Please consult factory for use with oversize products

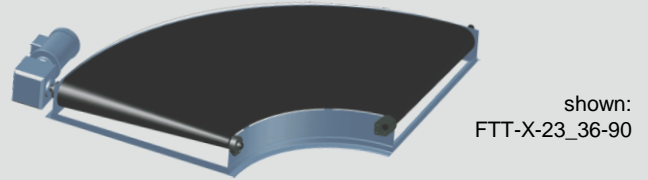
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### Direction of Flow & Drive Placement

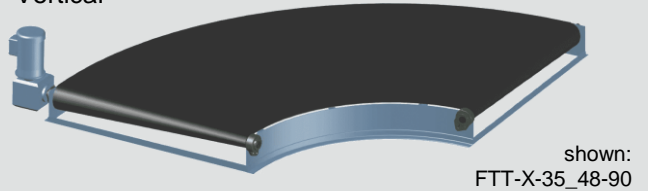


### Drive Mounting Options

- Horizontal (not suitable for inside locations)



- Vertical



- Drum Motor



- Underslung
- Slaved



Airport Baggage Handling (Model FTT60-23\_37-90)



Small Package and Parcel Sortation Facility (Model FTT-X-27.125\_17.5-45)

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FTT Flat-Turn Rev04