

THE MOST ADAPTABLE BELT FOR SPIRAL CAGE SYSTEMS

SUPERIOR STRENGTH • STRAIGHT & SPIRAL APPLICATIONS • EASY TO CLEAN

Cam-Grid belts are our most application-adaptable product for spiral systems.

MAX. TENSION RATING*

UP TO 250 LBS. CAM-GRID	UP TO 300 LBS. CAM-GRID EXTRA	UP TO 450 LBS. LEADING EDGE PERFORMANCE GRID
----------------------------	----------------------------------	---

*Cam-Grid belts are also available for straight running applications.

ALL CAM-GRID BELTS PROVIDE INDUSTRY-LEADING BENEFITS:



NORMAL STAINLESS STEEL

Mesh overlays are constructed with spring temper stainless steel, which aids in fatigue and damage resistance



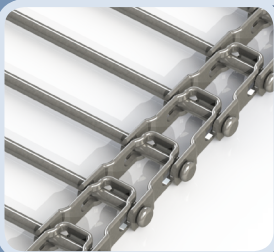
SPRING TEMPER STAINLESS STEEL

OBLONG SLOT IN CAM-GRID



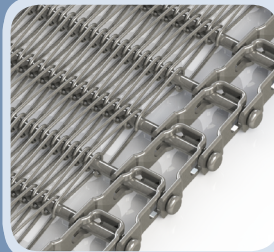
Fully collapsible construction for easy cleaning: each outer link has an oblong slot that holds the rod, which allows better access for sanitation and reduced area for bacteria build-up

RODS ONLY CONSTRUCTION



- Provides maximum air circulation
- Ideal for larger products and products carried in trays
- Reduced overall belt weight for greater energy efficiency

MESH OVERLAY CONSTRUCTION



- Ideal when product support or smaller openings are needed
- Recommended for extremely delicate products like soft dough, beef patties, fish products, etc.

APPLICATIONS

BAKING
COOKING
COOLING
FREEZING
GLAZING
ICING
PROOFING

PROVEN RESULTS



A meat processor was using another company's belting for their spiral freezer, and they experienced broken links and bent rods within just one month of installation. They upgraded the belting to Leading Edge Performance Grid and it continues to run perfectly after one year.



CAM-GRID SPECIFICATIONS

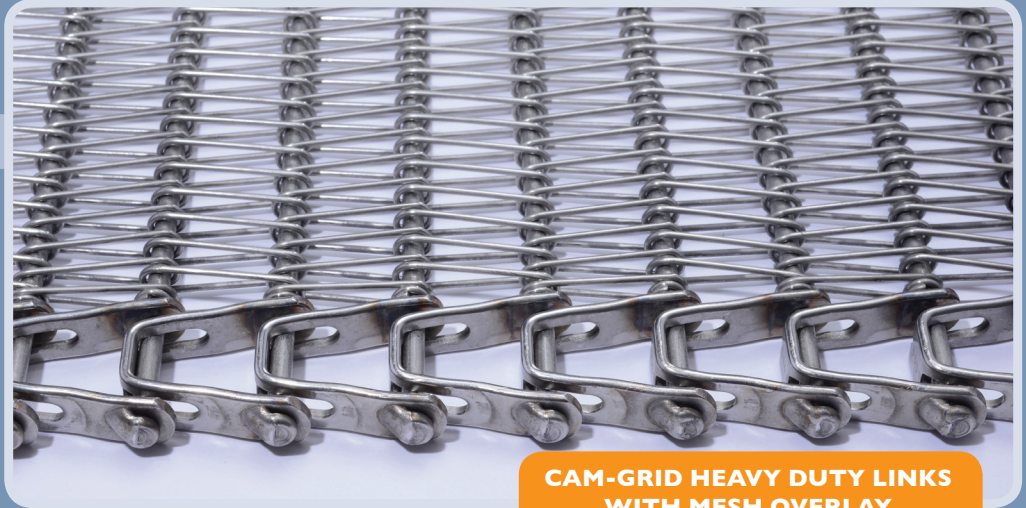
STANDARD RADIUS BELTS



CAM-GRID RODS ONLY



CAM-GRID STANDARD DUTY WITH MESH OVERLAY



CAM-GRID HEAVY DUTY LINKS WITH MESH OVERLAY

CAM-GRID SPECIFICATIONS: STANDARD RADIUS BELTS

BELT PITCH	3/4" or 1" (19.1 mm or 25.4 mm)		
LINKS	3/4" pitch standard duty: 7/16" x .080" (11.1 mm x 2.0 mm) 3/4" pitch heavy duty non-collapsing*: 7/16" x .105" (11.1 mm x 2.7 mm) 1" pitch standard duty: 7/16" x .080" (11.1 mm x 2.0 mm) nominal 1" pitch heavy duty: 1/2" x .105" (12.7 mm x 2.7 mm) nominal *Heavy duty non-collapsing links may be used only on outer edge in spiral applications		
RODS	6 gauge – 0.192" (4.9 mm) diameter – high tensile rods with upset button head welds		
MESH OVERLAY	Standard mesh overlays available in 14 – 18 gauge wire Custom mesh specifications available for unique applications		
BELT TURNING RADIUS	Nominal inside turning radius is 2.2 x belt width Special links available for oversized (>2.2) radii		
EFFECTIVE BELT CARRYING SURFACE	Standard duty links: 2.3" (58.4 mm) less than overall belt width Heavy duty links: 2.9" (73.7 mm) less than the overall belt width		
BELT WIDTH RANGE	12" to 48" (305 mm to 1,219 mm) standard Custom widths available		
MATERIALS	T304 stainless steel throughout Rods and mesh also available in T316 stainless steel or high carbon steel (HCS) All mesh overlays are constructed with spring temper stainless steel		
WELDING	Welds join inside of links to rods and outside of links to rods and button heads		
SPECIAL CONSTRUCTIONS	Side plates available for 1" and 3/4" pitches Integral side plates/links available for 1" pitch Other special constructions and attachments are available for unique applications		
SPROCKETS	See page 3 for standard sprockets for 3/4" and 1" pitch Cam-Grid belts		
TENSION LIMITS	3/4" or 1" Pitch Standard Duty	200 lbs. (90.7 kg) straight run	100 lbs. (45.4 kg) turn or spiral
	3/4" Pitch Heavy Duty*	200 lbs. (90.7 kg) straight run	150 lbs. (68.0 kg) turn or spiral
	1" Pitch Heavy Duty	300 lbs. (136 kg) straight run	150 lbs. (68.0 kg) turn or spiral
*3/4" Heavy Duty link is non-collapsing. It is used only on outside edge in turn or spiral applications.			

CAM-GRID SPECIFICATIONS

REDUCED RADIUS BELTS

REDUCED (1.7) RADIUS BELTING

- Saves valuable floor space
- Provides greater throughput because a wider belt can be used in the same amount of floor space
- Reduces energy costs due to greater load capacity in smaller systems
- Operates as a traditional low-tension system with tension on the outside edge
- Allows product loading from link to link

CAM-GRID SPECIFICATIONS: REDUCED RADIUS BELTS

Specifications for Cam-Grid Reduced Radius belts are the same as Cam-Grid Standard Radius belts, except as noted below:

BELT PITCH	1" (25.4 mm) nominal		
LINKS	1" pitch standard duty: 7/16" x .080" (11.1 mm x 2.0 mm) 1" pitch heavy duty: 1/2" x .105" (12.7 mm x 2.7 mm)		
BELT TURNING RADIUS	Nominal inside turning radius is 1.7 x belt width		
EFFECTIVE BELT CARRYING SURFACE	Approximately 2.4" (61.0 mm) less than the overall belt width		
SPECIAL CONSTRUCTION	Integral side plates/links available for product retention		
SPROCKETS	Uses standard sprockets for 1" pitch Cam-Grid belts		
TENSION LIMITS	1" Pitch Standard Duty	200 lbs. (90.7 kg) straight run	100 lbs. (45.4 kg) turn or spiral
	1" Pitch Heavy Duty	300 lbs. (136 kg) straight run	150 lbs. (68.0 kg) turn or spiral

CAM-GRID SPROCKETS



CAM-GRID SPROCKETS

NO. OF TEETH/ DESIGNATION	PITCH DIAMETER		HUB DIA. (BOTTOM DIA.)		BORE SIZE		SPROCKET THICKNESS		APPROX. WEIGHT	
	IN	MM	IN	MM	IN	MM	IN	MM	LBS	KG
For 3/4" pitch belts										
12T	2.898	73.6	2.430	61.7	3/4 or 1	1.9 or 25.4	1.0	25.4	1.3	0.60
25T	5.938	150.8	5.500	139.7	1 to 4	25.4 to 101.6	1.5	38.1	2.0	0.91
For 1" pitch belts										
9T	3.128	79.5	2.625	66.7	3/4 or 1	1.9 or 25.4	1.0	25.4	1.3	0.60
13E	4.350	110.5	3.850	97.8	1 to 3	25.4 to 76.2	2.0	50.8	0.7	0.32
18E	6.117	155.4	5.617	142.7	1 to 4	25.4 to 101.6	2.0	50.8	1.6	0.73
23E	7.868	199.8	7.368	187.1	1 to 4	25.4 to 101.6	2.0	50.8	2.9	1.32

Materials: Stainless Steel, Steel, UHMW

CAM-GRID SPECIFICATIONS

TIGHT RADIUS BELTS

TIGHT (1.1) RADIUS BELTING

- Available in Standard Duty and Heavy Duty Constructions
- Provides maximum throughput with a minimal footprint
- Rated up to 250 lbs. (113.4 kg) for turn or spiral applications

CAM-GRID SPECIFICATIONS: STANDARD DUTY TIGHT RADIUS BELTS

Specifications for Cam-Grid Tight Radius belts are the same as Cam-Grid Standard Radius belts, except as noted below:

BELT PITCH	3/4" (19.1 mm)
LINKS	Inner: standard collapsible 3/4" pitch – 7/16" x .080" (11.1 mm x 2.0 mm) Center: heavy duty non-collapsing 3/4" pitch – 7/16" x .105" (11.1 mm x 2.7 mm) Outer: standard collapsible 1" pitch – 7/16" x .080" (11.1 mm x 2.0 mm)
BELT TURNING RADIUS	Nominal inside turning radius is 1.0 – 1.5 x belt width
EFFECTIVE BELT CARRYING SURFACE	3.0" (76.2 mm) less than the overall belt width
SPECIAL CONSTRUCTION	Integral side plates/links are available for outer belt edge only
SPROCKETS	Uses standard sprockets for 3/4" Cam-Grid belts Drive sprockets are located only on the inner and center links of this belt
TENSION LIMITS	Heavy Duty Link* 200 lbs. (90.7 kg) straight run 150 lbs. (68.0 kg) turn or spiral *Heavy duty links are located in the center load-bearing section of the belt, not on the outer edge

CAM-GRID SPECIFICATIONS: HEAVY DUTY TIGHT RADIUS BELTS

Specifications for Cam-Grid Tight Radius belts are the same as Cam-Grid Standard Radius belts, except as noted below:

BELT PITCH	1" (25.4 mm) nominal
LINKS	Inner: standard collapsible 1" pitch – 1/2" x .105" (12.7 mm x 2.7 mm) Center: heavy duty non-collapsing 1" pitch – 7/16" x .105" (11.1 mm x 2.7 mm) Outer: standard collapsible 1.33" pitch – 1/2" x .105" (12.7 mm x 2.7 mm)
BELT TURNING RADIUS	Nominal inside turning radius is 1.1 x belt width
EFFECTIVE BELT CARRYING SURFACE	4.0" (101.6 mm) less than the overall belt width
SPECIAL CONSTRUCTION	Only standard construction currently available
SPROCKETS	Uses standard sprockets for 1" pitch Cam-Grid belts (18E and 23E only) Drive sprockets are located only on the inner and center links of this belt
TENSION LIMITS	Heavy Duty Link* 500 lbs. (226.8 kg) straight run 250 lbs. (113.4 kg) turn or spiral *Heavy duty links are located in the center load-bearing section of the belt and on the outer edge

CAM-GRID EXTRA

CAM-GRID EXTRA

- Tougher, stronger, and faster than traditional Cam-Grid belts
- Able to carry heavier loads for increased throughput without extra belt weight
- Outlasted a competitor's 300 lb. rated tangential tension belt 10 to 1 under identical test conditions in our life cycle lab
- Lasts up to 10 years without failure
- Also available with rods only construction

CAM-GRID EXTRA SPECIFICATIONS

Specifications for Cam-Grid Extra belts are the same as Cam-Grid Standard belts, except as noted below:

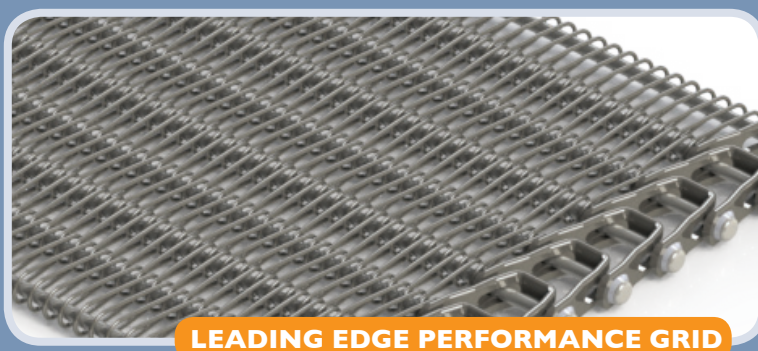
BELT PITCH	1.5" (38.1 mm)
LINKS	Super Heavy Duty: .625" x .125" (15.9 mm x 3.2 mm)
RODS	4 gauge - 0.225" (5.7 mm) diameter – high tensile rods with upset button head welds
MESH OVERLAY	16 or 17 gauge spring temper wire
BELT TURNING RADIUS	Standard Radius: 2.0 – 2.4 : 1 Reduced Radius: 1.6 – 2.0 : 1 Note: Cam-Grid Extra can be flipped – even at 1.6:1 turn radius
BELT WIDTH RANGE	Standard Duty: 18" – 42" (457 mm – 1,067 mm) Heavy Duty: 18" – 54" (457 mm – 1,372 mm)
EFFECTIVE BELT CARRYING SURFACE	3.3" (83.8 mm) less than the overall belt width
WELDING	Standard Duty: plasma arc Heavy Duty: double compression
STRENGTH RATINGS	Standard Duty: 200 lbs. in turn (91 kg); 400 lbs. straight (181 kg) Heavy Duty: 300 lbs. in turn (136 kg); 600 lbs. straight (272 kg)
TENSION LIMITS	Super Heavy Duty Link 600 lbs. (272 kg) straight run 300 lbs. (136 kg) turn or spiral

CAM-GRID EXTRA SPROCKETS

NO. OF TEETH/ DESIGNATION	PITCH DIAMETER		HUB DIA. (BOTTOM DIA.)		BORE SIZE		SPROCKET THICKNESS		APPROX. WEIGHT	
	IN	MM	IN	MM	IN	MM	IN	MM	LBS	KG
13T	6.443	163.7	5.521	140.2	1 to 4	25.4 to 101.6	2.0	50.8	1.6	0.73
18T	8.880	225.6	8.130	206.5	1 to 4	25.4 to 101.6	2.0	50.8	2.9	1.32

Materials: Stainless Steel, Steel, UHMW

LEADING EDGE PERFORMANCE GRID



LEADING EDGE PERFORMANCE GRID

- Designed for systems with high tangential tension ratings of 450 lbs. or more (204+ kg)
- Operates at sustained speeds up to 150 feet per minute (45.7 meters per minute)
- Pilot wear mark (see diagram, left) assures proper alignment and resists “racking” of the belt
- Double compression welds increase strength and reduce premature belt failure from weld fatigue

LEADING EDGE PERFORMANCE GRID SPECIFICATIONS

Specifications for Leading Edge Performance Grid belts are the same as Cam-Grid Standard belts, except as noted below:

BELT PITCH	1" (25.4 mm) nominal
LINKS	1" pitch heavy duty: 1/2" x .105 (12.7 mm x 2.7 mm)
RODS	T304 stainless steel flattened oblong (.192" x .226" – 4.9mm x 5.7 mm), high tensile cross rods with upset button head welds
MESH OVERLAY	15 – 17 gauge spring temper stainless steel Mesh life can be maximized by supporting the belt with wear strips of 1" (25.4 mm) minimum width
BELT TURNING RADIUS	2.2 x belt width nominal inside turning radius
BELT WIDTH RANGE	30" – 52" (762 mm – 1,321 mm) overall Custom widths available
EFFECTIVE BELT CARRYING SURFACE	2.9" (73.7 mm) less than the overall belt width
WELDING	Double compression welds of link to the rod
SPROCKETS	Uses standard sprockets for 1" pitch Cam-Grid belts
TANGENTIAL TENSION	450 lbs. (204 kg) or more

Maine Industrial Plastics and Rubber Corporation
 21 Teague Street - PO Box 381 - Newcastle, ME 04553
 Phone: (207) 563-5532 Email: HGL@TIDEWATER.NET FAX: (207) 563-8457