# **CONVEYER BELTS** for the Recycling Industry

MATERIAL	MATERIAL FEED	LIGHTWEIGHT after ballistic separator or wind classifier	HEAVY CARGO	GRAIN SIZE < 80	HOPPER BELTS	COMPACTOR BELTS
PLASTICS/ LIGHTWEIGHT PACKAGING	Chain belt conveyor in the pit; Sliding belt conveyor	Sliding belt conveyor	Sliding belt conveyor	Sliding belt conveyor	Sliding belt conveyor with rollers	Chain belt conveyor
GLASS	Troughed belt conveyor	Troughed belt conveyor	Troughed belt conveyor			
PAPER, CARDBOARD	Chain belt conveyor in the pit; Sliding belt conveyor	Sliding belt conveyor	Sliding belt conveyor	Sliding belt conveyor	Sliding belt conveyor with rollers	Chain belt conveyor
RESIDUAL WASTE, INDUSTRIAL WASTE	Chain belt conveyor, Steel plate belt	Sliding belt conveyor	Troughed belt conveyor	Troughed belt conveyor	Sliding belt conveyor with rollers	Chain belt conveyor
СОМРОЅТ	Troughed belt conveyor	Troughed belt conveyor	Troughed belt conveyor	Troughed belt conveyor		
METAL	Chain belt conveyor	Troughed belt conveyor	Troughed belt conveyor	Troughed belt conveyor	Sliding belt conveyor with rollers	Chain belt conveyor





LOCATIONS





REDWAVE, a Competence Center of BT-Systems GmbH, Wolfgang Binder Str. 4, 8200 Eggersdorf bei Graz, Austria Tel.: +43 3117 25152 2200, E-Mail: office@redwave.com, www.redwave.com

REDWAVE



### **CONVEYER** BELTS FOR THE RECYCLING INDUSTRY

## REDWAVE







REDWAVE Solutions US LLC office-us@redwave.com

www.redwave.com

र्भुक्र

### **TROUGHED BELT CONVEYOR**

**REDWAVE** Troughed Belt Conveyors (MGF) are generally used to transport household waste, materials similar to household waste, industrial waste, glass or organic waste. The belt body consists of a dimensionally stable sheet metal construction. To allow for retrofitting of accessory parts at a later time, the drill holes required for this are already provided in the belt body. The complete belt body is manufactured in segment construction. The specific length is realized by appropriate fit joints.

Basically, the design of the troughed belt conveyor is a rolling removal of the top belt. The safety equipment is designed to facilitate maintenance

work so that they can be removed quickly and easily for cleaning and service purposes. One example of this is the removable bottom belt cover, which can be manufactured in galvanized sheet steel.

#### Chutes, funnels, and support structure of the conveyor are designed according to the corresponding requirements.

Due to the very compact construction, this type of conveyor belt can be used optimally in limited space.



### **TECHNICAL** SPECIFICATIONS

Туре	MGF
Framework	Galvanized sheet metal
Center distance	from 2.988 – 53.120 mm, Center distance is to be extended or shortened by the system dimension of 332 mm
Tensioning drum	Ø 220 mm and Ø 320 mm without rubber coating
Drive drum	Ø 240 mm and Ø 340 mm with rubber coating
Carrying idlers	Ø 89 mm
Return idlers	Ø 63,5 mm smooth or with support rings

idebar Infeed	Default length 2.000 mm with cover, optional over entire length possible
ottom belt cover	Upon need/customer request, floor plate is swivelling
Distance Detween pillars	Up to max. 6.000 mm possible
ype of belt	of choice, e.g. EP 400/3, 4+2 mm top layer; with or without cleats
Belt speed	Up to approx. 2,5m/s; selection as required
ower unit / gear	Slip-on gear motor; Power on demand
ateral guide / ide skirt	Sheet steel with clamped rubber sealing strip

### VERSIONS

- Moveable
- Reversible
- Buckled Conveyor
- Stainless steel segment
- Belt with cleats

REDUAVE

### **ATTACHMENTS**

- Speed Monitor
- Emergency stop rip cord Belt scraper outside
- Belt scraper inside
- Bottom belt cover in galvanized sheet steel - easily removeable/ swivelling

### **OPTIONS**

- Lateral belt removal in the upper run
- On request: other angles of inclination of the outer rollers
- Head scrapers
- Buffer rings for carrying idlers
- Central lubrication lines
- Side bar increase 200 mm, 400 mm
- Damping Infeed Area
- Transfer chute and funnel with required maintenance openings
- Belt scales / load cells
- Belt alignment switch

### **SLIDING BELT CONVEYOR**

**REDWAVE** Sliding Belt Conveyors (GGF) are usually used to convey light materials. Examples of this are various plastics in LVP sorting systems, paper and cardboard. Most of the time it is especially important to have an even material distribution in such systems. In terms of construction, the conveyor a polyester fabric. The conveyor belt can also be designed with T-studs on belt consists of a torsional rigid sheet metal construction with screwed in cross

### **TECHNICAL** SPECIFICATIONS

Туре	GGF
Framework	Galvanized sheet metal
Center distance	from 2.988 – 53.120 mm, Center distance is to be extended or shortened by the system dimension of 332 mm
Tensioning drum	Ø 220 mm and Ø 320 mm without rubber coating
Drive drum	Ø 240 mm and Ø 340 mm with rubber coating
Sliding table	Sliding table made of sheet steel, reinforcement possible in the infeed area
Sidebar (X)	200 mm. 400 mm. 600 mm





### VERSIONS

- Moveable
- Reversible
- Buckled conveyor
- Stainless Steel segment Belt with cleats

### ATTACHMENTS

- Speed Monitor
- Emergency Stop rip cord
- Belt scraper outside
- Belt scraper inside
- Conveyor belt covers - easily removable / swivelling

### CHAIN BELT CONVEYOR

sections. The belt running surface is also made screwable and can be made of other materials, e.g. stainless steel. The removal of the top belt is done by sliding it off, this means that the underside of the conveyor belt is made as inclinations > 20°. It is also suitable as a moveable and reversible conveyor.

Bottom belt cover	Upon need/customer request, floor plate is swivelling
Distance between pillars	Up to max. 6.000 mm possible
Type of belt	of choice, e.g. EP 250/2, 2+0 mm top layer; sliding
Belt speed	Max. 1 m/s
Power unit / gear	Slip-on gear motor; Power on demand
Lateral guide / side skirt	Sheet steel with clamped rubber sealing



### **OPTIONS**

- Head scrapers
- Central lubrication lines
- Side bar increase 200 mm, 400 mm
- Stainless steel sliding table exchangeable Transfer chute and funnel with required maintenance openings
- Belt scales / load cells
- Stainless steel sliding table
- Belt alignment switch

**REDWAVE** Chain Belt Conveyors (KGF) are usually used for the transport of a wide variety of materials to feed into a waste treatment plant or to a baler. As material is usually loaded by wheel loaders, the chain belt conveyors are embedded in the hall floor for feeding material at ground level. It is also frequently used as a discharge belt automatically feeded by bunker conveyor belts in sorting plants. The robust chain belt conveyors are characterised by high reliability and a long service life. The conveyor belt frame is made of steel profiles with screwed-in cross profiles. In combination with the rest of the sheet steel structure, this creates a very stable and torsion-resistant overall construction. The cladding panels are screwed to the belt frame, which enables quick and uncomplicated maintenance service. Because the chain conveyor is manufactured in a modular construction, it can be extended or shortened without much effort. A solid pin conveyor chain of type FV112 is used. Lubrication is carried out as standard by automatic drip oilers, which switch off automatically when the chain belt conveyor stops.



### VERSIONS

- Buckled conveyor bend down / bend up
- gooseneck design

#### **TECHNICAL** SPECIFICATIONS

Туре	KGF
Framework	Galvanized sheet metal
Center distance	Of choice
Belt speed	up to approx. 0,32 m/s; Selection as required
Power unit / gear	Slip-on gear motor; Power on demand
Lateral guide / side skirt	Sheet steel
Sidebar height	400 mm
Drip lubricator	Electrical version
Belt guidance	Solid pin conveyor chain FV112 with split sprockets; Ø roller 55 mm; slide rails for rollers can be changed; lateral slide guide made of PE500 screwed to the link plates of the conveyor chain
Cleats	Angle steel 60x60 mm
Distance between cleats/ cross beams	500 mm
Contact protection / bottom belt cover	Sheet metal construction 1,5 mm, screwed acc. machinery directive
Type of belt	of choice, e.g. EP 400/3, 4+2 mm top layer

### ATTACHMENTS

- Speed Monitor
- Emergency Stop rip cord
- Further belt widths on request Partially reversible (jog mode)

Type of belt e.g. EP 500/4, 5+2 mm

**OPTIONS** 

- Sidebar increase 200, 400 mm; cleats 80mm high
- Cleats/cross beam distance 250 mm 750 mm on request
- Transfer chute and funnel with required maintenance openings
- Spillage chute; electrically operated scraper brush
- Pit edge profiles; Pit cover
- Z-100 including reinforcement for installation in concrete