

paddletrak

spill-free paddle conveyors
a **concept solutions** product



concept
solutions
think create innovate

www.conceptsolutions.co.nz

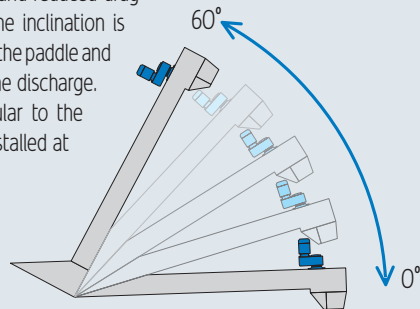
PaddleTrak Spill-free Paddle Conveyors

As the name suggests PaddleTrak consists of a series of paddles, linked by a chain, running within a racetrack shaped stainless steel trough. As the paddles traverse within the trough they convey or elevate loose product. The design is completely spill-free therefore once entering the conveyor product is captured within the trough and has no potential to escape other than at the main discharge outlet or at designated trapdoor positions.

The unique PaddleTrak chain design features integral paddles and double-sided outrigger rollers to support and guide the chain in specially designed chain tracks. The outrigger roller design maintains accurate clearance between the paddle and trough.

The PaddleTrak system also incorporates a mid-link roller to achieve a rolling action between the chain and chain tracks rather than a sliding action. This reduces wear and friction on all models and is an essential feature on bi-planer models. The mid-link roller width is the same dimension as the diameter of the outrigger rollers therefore enabling both roller types to occupy the same chain track profile.

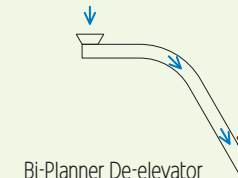
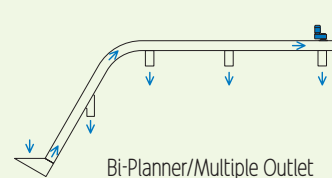
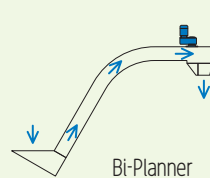
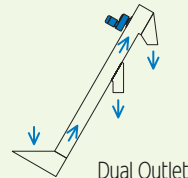
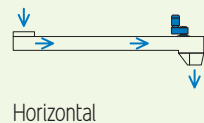
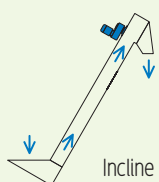
PaddleTrak can be installed at any angle between 0° and 60° and unlike other conveyor types, in many regards, PaddleTrak performance improves as inclination increases due to a greater product cradling effect and reduced drag between the product and trough. The inclination is limited to 60° because of the angle of the paddle and its ability to release the product at the discharge. The paddle is orientated perpendicular to the trough therefore if the conveyor is installed at 60° the paddle will be 30°.



Typical PaddleTrak Applications

- Frozen vegetables whole, diced, sliced
- Frozen fish, chicken & red meat products
- Berry fruit
- Potato products crisps, french fries, wedges, hash browns
- Snack foods
- Nuts, grains and cereals
- Mushrooms

Configurations



PaddleTrak Features

Impact resistant one-piece paddles

- Injection moulded with integral chain links

Outrigger rollers

- Fully support and guide the chain and paddle

Mid-link rollers

- Reduce friction and wear on chain guides
- Allow bi-planer operation

Detachable Components

- Removable Chain Guide Tracks
- Quick release Drive and Tail Sprockets

Modular construction

- Standard drive, tail, & intermediate modules
- Allows ease of modification if process or layout changes

PaddleTrak Advantages

Spill-free conveying

- Totally enclosed design eliminates spillage to floor
- Integral receiving hopper

Gentle product handling

- Paddles cradle the product

Small footprint

- Up to 60° operating angle

Ease of cleaning

- Integral cleanout hatch
- Easily removable covers

PaddleTrak System Components

Diverter gates

- Pneumatic, electric or manual
- Complete with position sensors for automated operation

Trapdoors

- Pneumatic, electric or manual
- Bulk filling, bypass/dump gate metal detector applications
- Complete with position sensors for automated operation

Dewatering paddles & trough sections

- Perforated paddles
- Perforated cleanout hatch and trough sections

De-icing elements

- Heat trace elements to eliminate ice build up on casings

Emergency stops

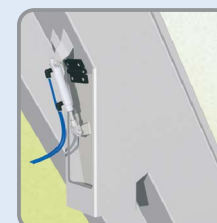
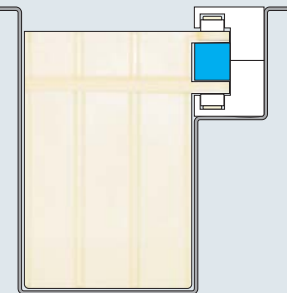
- Pull cord on one or both sides of the conveyor
- Micro switch cut out systems for access panels and lids

Electrical control cabinets

- Basic on/off control to fully automated and programmable systems
- Variable speed drives (VSD) and PLC options

Clean-In-Place systems (CIP)

- Complete self contained water systems
- Integral cleaning sparges

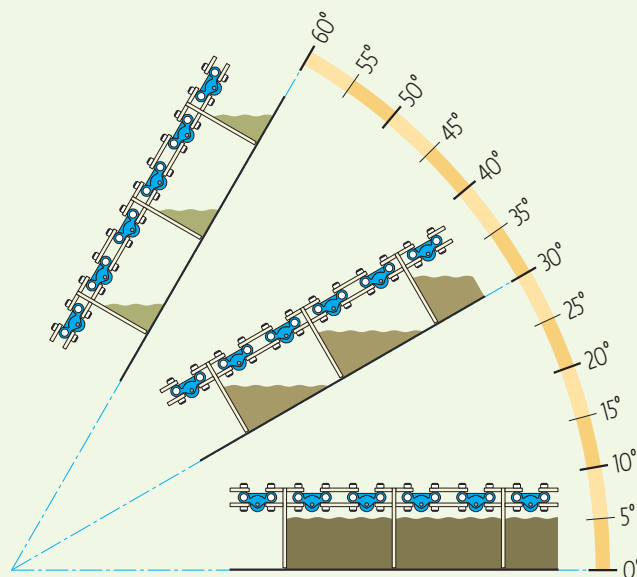
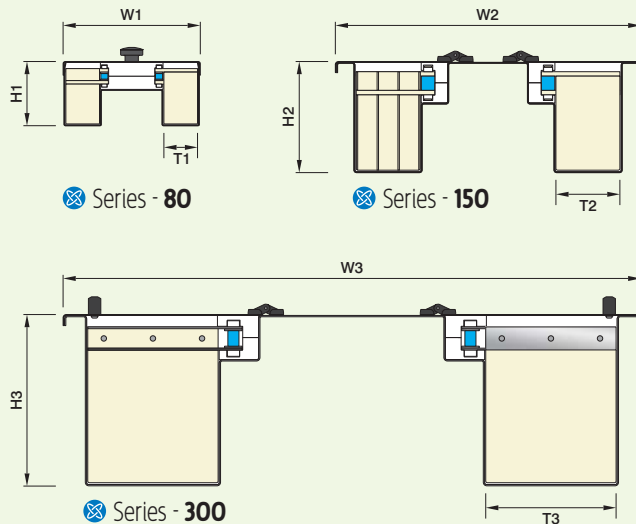


Series Options

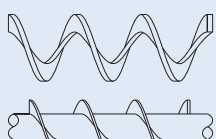
Paddletrak Dimensions (mm)			
	SERIES 80	SERIES 150	SERIES 300
W1	310		
H1	145		
T1	80		
W2		690	
H2		251	
T2		150	
W3			1305
H3			387
T3			300

Paddletrak Volumetric Capacities			
	SERIES 80 @152.4mm Pitch Standard	SERIES 150 @304.8mm Pitch Standard	SERIES 300 @457.2mm Pitch Standard
Angle	m ³ /hr/rev	m ³ /hr/rev	m ³ /hr/rev
60°	0.034	0.202	1.622
55°	0.040	0.246	1.926
50°	0.049	0.294	2.353
45°	0.058	0.350	2.815
40°	0.069	0.417	3.345
35°	0.082	0.500	4.014
30°	0.096	0.606	4.769
25°	0.114	0.734	5.652
20°	0.130	0.853	6.391
15°	0.143	0.965	7.083
10°	0.156	1.072	7.752
5°	0.168	1.176	8.375
0°	0.180	1.278	9.021

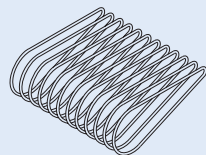
Note: Volumetric capacities are based on a zero angle of repose
Actual volumetric capacities will increase in accordance with product characteristics



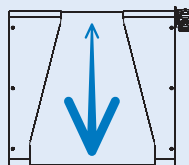
Additional Concept Solutions Products



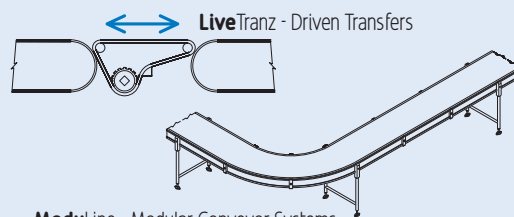
ScrewTech - Screw Conveyors



PolyBand - Cord Conveyors



VergeAll - Converger/Divergers



ModuLine - Modular Conveyor Systems



Concept Solutions Limited
37 Mersey Street, P O Box 1628, Invercargill, New Zealand 9810
Tel: **+64-3-214 1172** Fax: **+64-3-214 1173**
Email: **info@conceptsolutions.co.nz**
Site: **www.conceptsolutions.co.nz**

Your Local Representative

Email: **info@conceptsolutions.co.nz**
for contact details of the **paddletrak**
representative in your area