

Material Handling Automation (MATHAND)

for Unit Material Handling



MATHAND
Material Handling
Automation
www.mathand-auto.com



Complete turnkey Solution

By

Mathand Automation

A division of AltSF Process Pvt. Ltd.





Group Companies of AltSF Process Pvt. Ltd.



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AltSF
Process
www.altsfpro.com



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Landline No. : 9021407695
E-mail : amaneengineers@gmail.com
Website : www.amaneengineers.com



SAI SOUND
CONTROL SYSTEMS PVT. LTD

UNIT-1, Chikhali, Pune
Amane Engineers / AltSF Process
Mathand Automation
Factory Area: 1,500 m²
Open Area: 8,000 m²
Office area: 240 m²



UNIT-2, Waki, Chakan, Pune
Amane Engineers
Factory Area: 9,180 m²
Office area: 580 m²



UNIT-3, Pisoli, Pune
Amane Engineers/Sai sounds
Factory Area: 900 m²
Office area: 180 m²

In house Capability

- ❖ In house Laser cutting, CNC Bending machines
- ❖ In house CO2 welding machines with qualified welders
- ❖ More than 100 skilled workers & 10 supervisors
- ❖ ISO 9001:2015 certified factory Certificate ID: IS/2202AN/4135
- ❖ Bridge crane as well as mobile cranes: providing material handling flexibility in workshop
- ❖ In house Sand blasting, painting & powder coating facilities





Your 'ONE STOP' conveyor parts supplier

Mathand Automation provides innovative engineering, equipment & services in the field of unit material handling. Backed up by Team of experts having more than two decades experience in unit material handling automation.

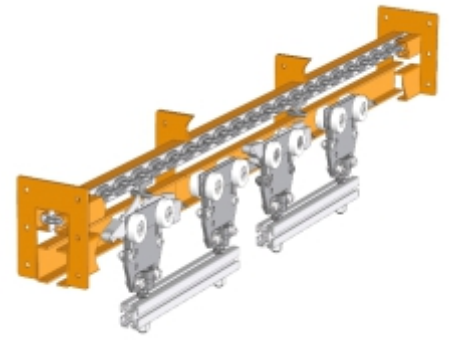
We at Mathand Automation Are committed for innovative, high quality & robust equipment manufacturing with full or semi automation, which fits for the purpose. Sturdy designs in Unit material handling is the key skills of our offerings. Our equipment can accept all kind of Parts / assemblies and are flexibly to handle unit material in Aluminum, Automobile, Logistics, Textile and many more industries.

We are proud to have worked with esteemed companies like Hindalco - Aluminium Business, Dangote Cement, Sharjah Cement, JSW Cement, UltraTech Cements Limited, Adani-Group, Dalmia Cement Ltd, J K Cement Ltd, Nepra resource management and many more.



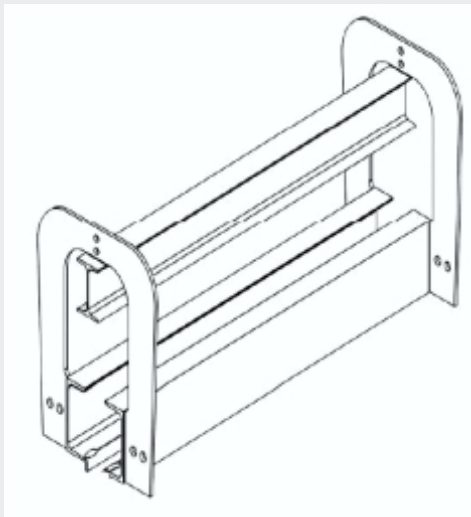
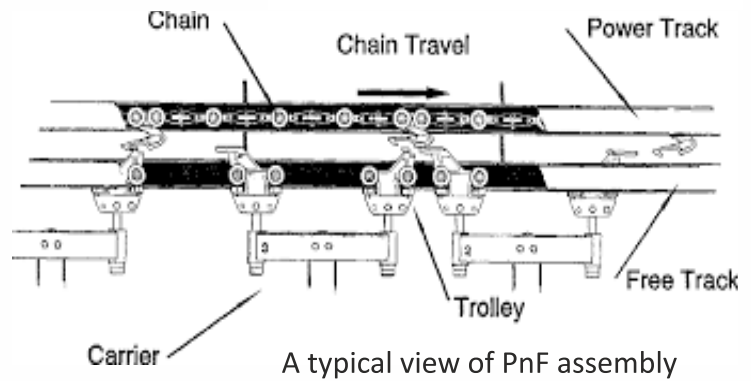
Wide wing power & free conveyors are designed specifically to cater the typical industrial conveying requirement, for which conventional conveyors cannot be used.

In the modern times, all the mass scale manufacturing is focused on flexible manufacturing system & cost effective solution, exactly the same is offered with Variable chain speeds, high speed indexing, recirculation of products, balancing of operations & surge-stripping capabilities. These features make our conveyors the most useful & successful manufacturing tool for the user.



Features of Mathand P&F Conveyors:

- ❖ High-quality Components
- ❖ Rugged Design
- ❖ Load Centre or Speed Variations
- ❖ Elevation Changes
- ❖ High Density Accumulation
- ❖ On-Line Storage and Segregation



PnF Track Assembly

The carbon content steel makes it 50% harder than conventional carbon steel. The process used while forming the free track enables tight dimensional tolerances to be held and provides uniformity of track sections for smooth joints and noise free conveyor operations.

Our carbon steel, has a greater abrasion resistance and better load carrying capability, and provides longer life to the conveyors. Our conveyor solutions, are cost effective and provides trouble free production for users.

Monorail Conveyor System:

A single rail is used in Monorail Systems to move components and materials along a predefined route. An overhead monorail system is an excellent choice when moving parts between stations in an assembly line, staging parts in a paint booth or other similar application, or storing or awaiting parts overhead to save floor space.

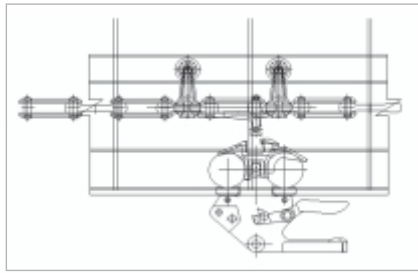
A typical photograph of Monorail Conveyor as below:





Drop forged from High strength steel our conveyor chain has an increased resistance to wear, abrasive action and greater ability to withstand shock loads, providing long-lasting conveyor chain performance.

A typical view of Rivet less Conveyor Chain as below:



Over-Head PnF front trolleys

This trolley features a retractable assembly that improves carrier transfer from one conveyor to another. It is made out of a special grade steel casting & abrasion resistant bearing, it helps smoother conveyor operation & reduced maintenance cost.

This is typical wide wing trolley. We provide push across PnF conveyor also.

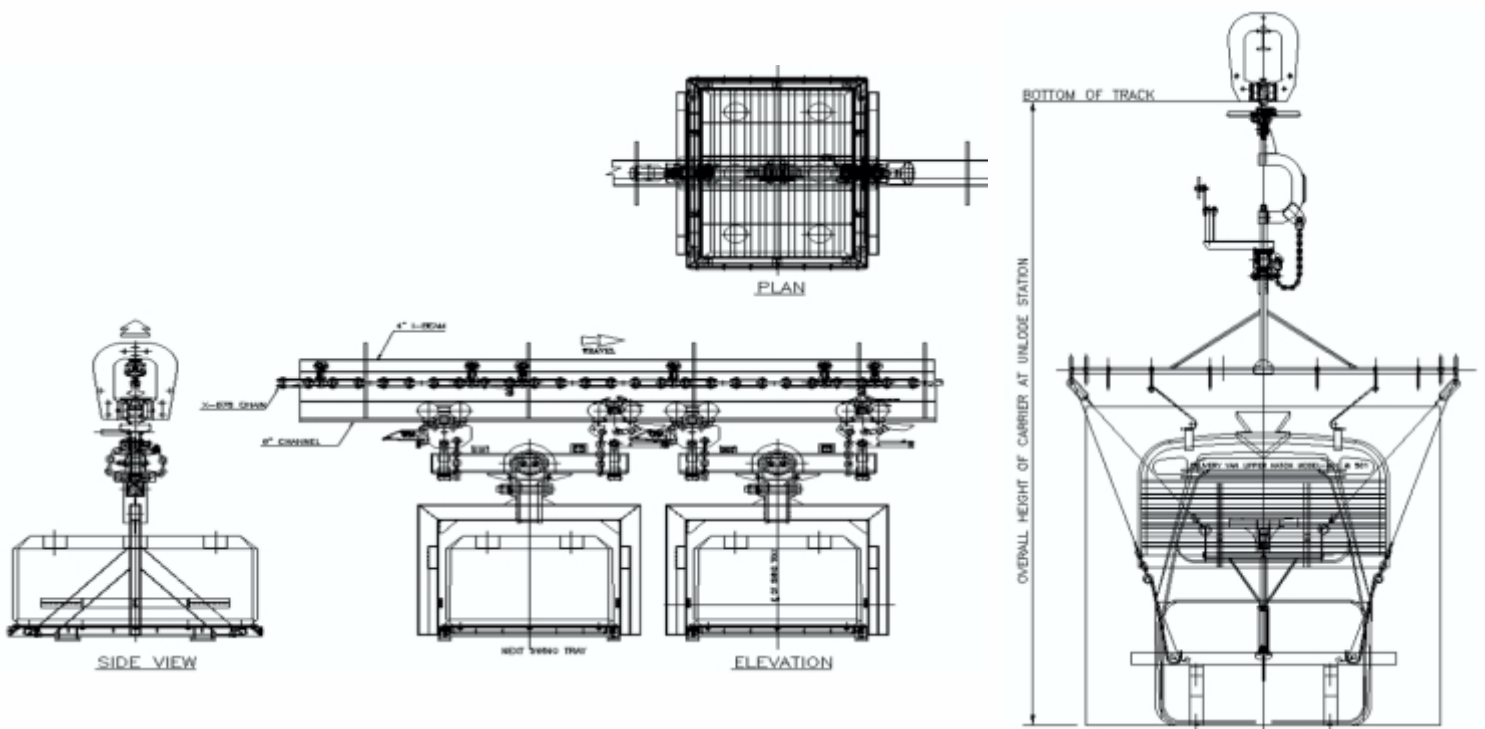
This is available in 3", 4" and 6" sizes as per the load capacity.

Schematic carrier arrangement with trolley

Load bar arrangement uses power and free trolley in the front and a rear trolley with a cam attachment. The carrier is either hung from the load bar between the trolleys or from the trolleys directly. In ordered to have long members the number of trolleys are increased to accommodate full length of the product.

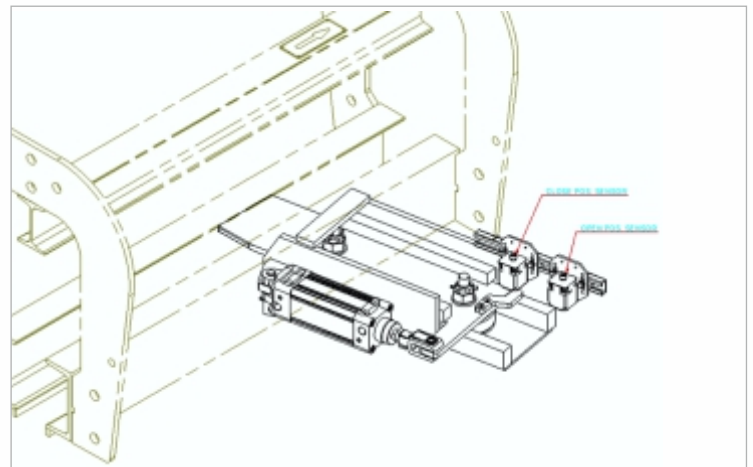
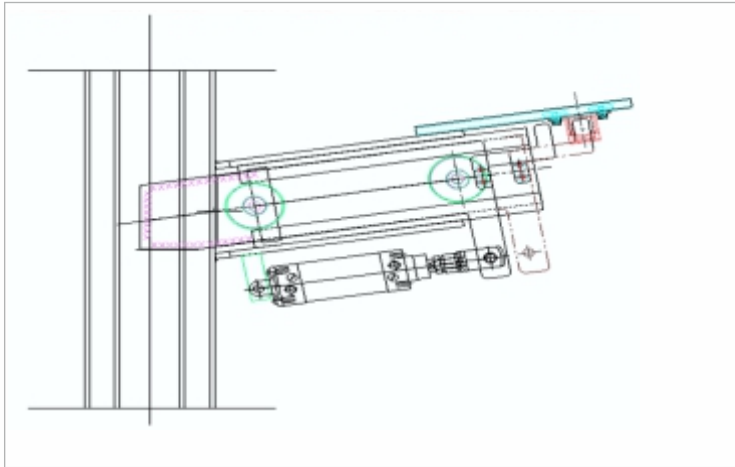
The load ranges that Mathand propose is from 50 to 6400 kg with 1, 2, 3 & 4 sets of trolley.

A typical view of carrier arrangement elaborated below:



A trolley stop is an air operated device that places a blade in the path of a free trolley to stop the carrier. Subsequent carriers approaching a carrier in a stop are accumulated by the normal power & free action of one carrier backing against another. When the stop blade is removed, retractable dog rises to be engaged by the next power chain pusher.

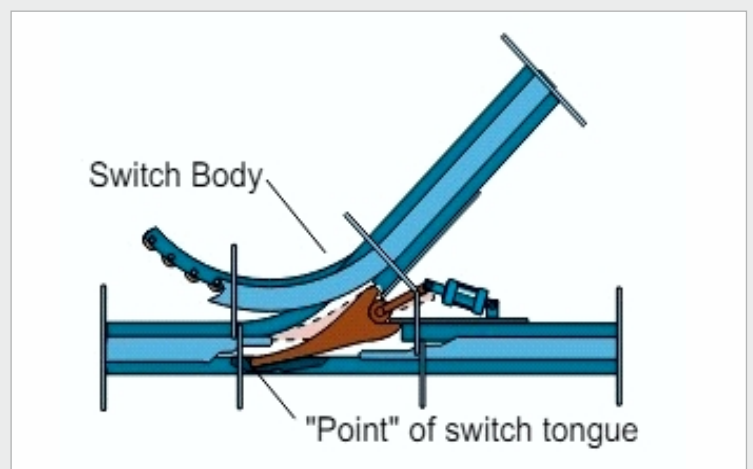
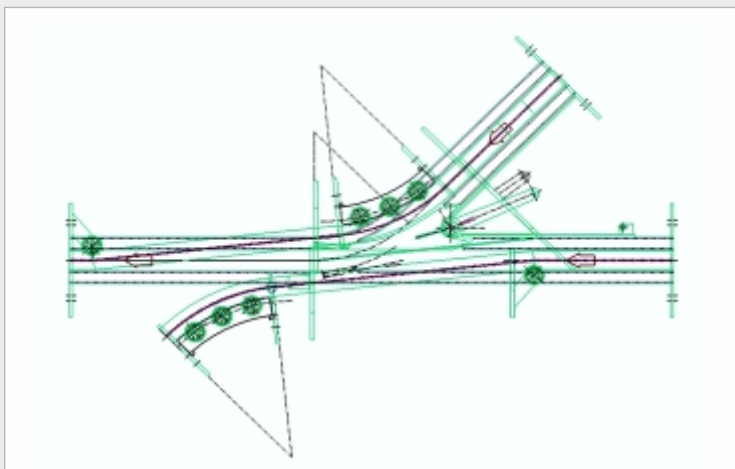
A typical cross section elaborated below:



PnF Track Switch :

Track switches are used in diverting the component or converging the component. This is operated by pneumatically as well the load switch operates automatically.

A typical cross section elaborated below:



PnF Roller Turn Assembly:

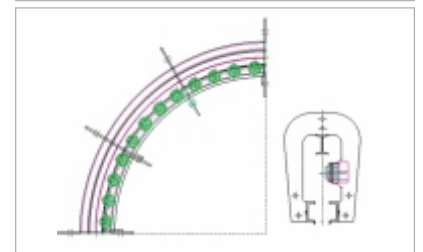
Roller turn rollers are required to maintain the power chain & trolleys in proper alignment during horizontal turns.

They are available in 30°, 45°, 90° and 180° segments. Also, as per requirement of customer will be manufactured with different radius and angle.

The roller turn assembly includes a frame, I-beam rail, bar assembly, and Perma Pack rollers. The frame is constructed from welded steel to reduce deflection from chain pull.

The bar assembly for the roller segment is attached to the frame using bolts, allowing for easy replacement of either the entire roller assembly or individual rollers.

The rollers come with either ball or tapered roller bearings. When choosing roller turns for conveyor systems, consider the load to load clearances on turns. Larger radius roller turns reduce friction and wear, making them ideal for systems with heavy chain pull.

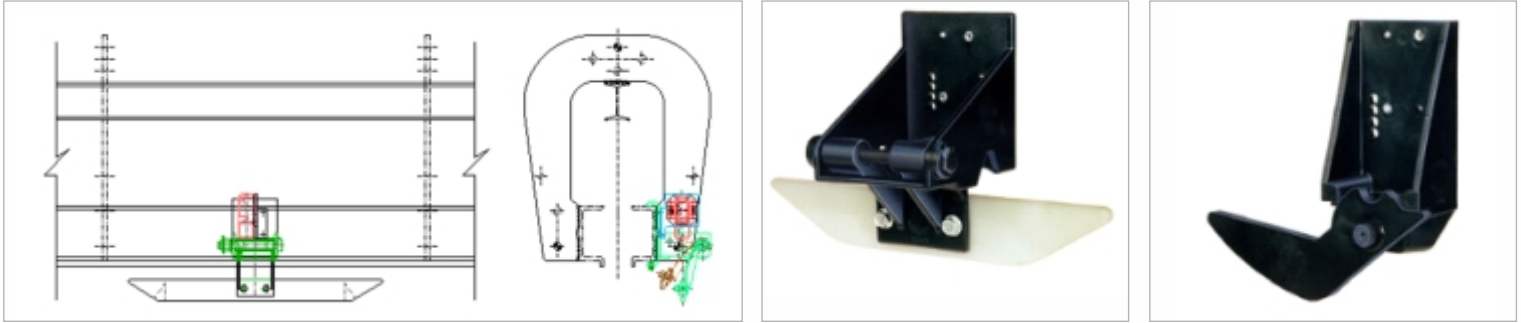


A limit switch actuator is a control device that helps maintain the smooth flow of production by signaling on-line activity to the main system controls.

Mathand actuators are constructed of lightweight, durable nylon for easy attachment and repositioning. For high heat applications, steel actuators are available upon request. Like anti-backups, these devices hang slightly below the free track to allow contact with passing trolley assemblies. Two basic types of actuator are available as follows:

- ❖ Momentary Limit Switch Actuator
- ❖ Maintained Limit Switch Actuator

A typical cross section of limit switch actuator elaborated below:



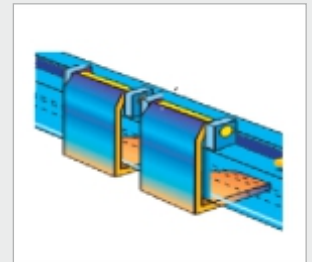
Anti-Backup Devices:

An anti-backup is a safety device that automatically prevents the reversal of the free trolley.

The unit, which mounts securely on the free track, features a specially designed blade with a beveled front and flat back.

In its “closed” position, this blade hangs slightly beneath the track into the conveyor path. When a moving trolley assembly makes contact with the beveled front surface, the anti-backup blade pivots up and out, allowing continued travel. Once the trolley assembly passes, however, the blade pivots back into its closed position - preventing trolley reversal during accumulation or other on-line operations.

Mathand standard steel anti-backups can also be fitted with noise reducing nylon blades.

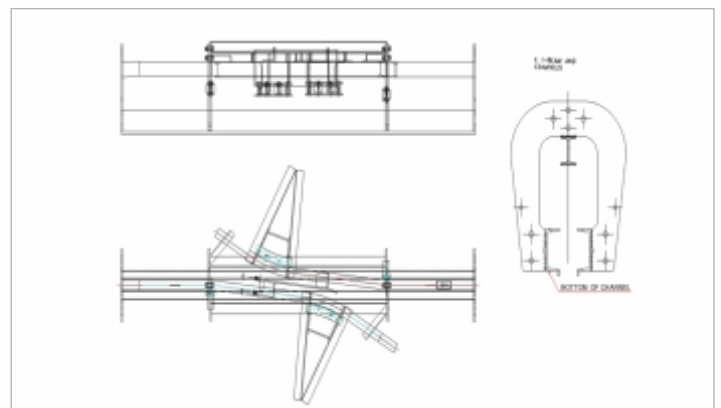
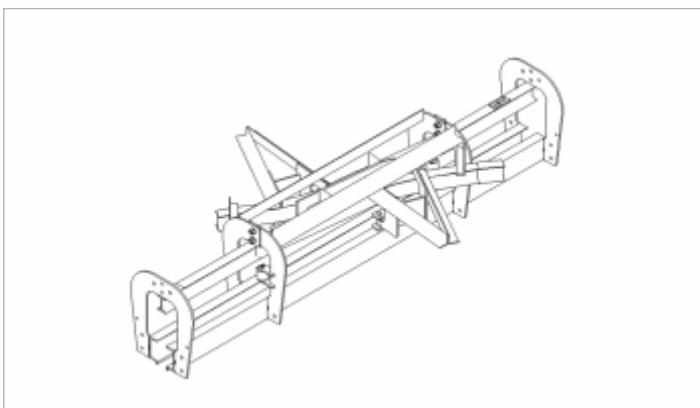


PnF Chain to Chain Transfer :

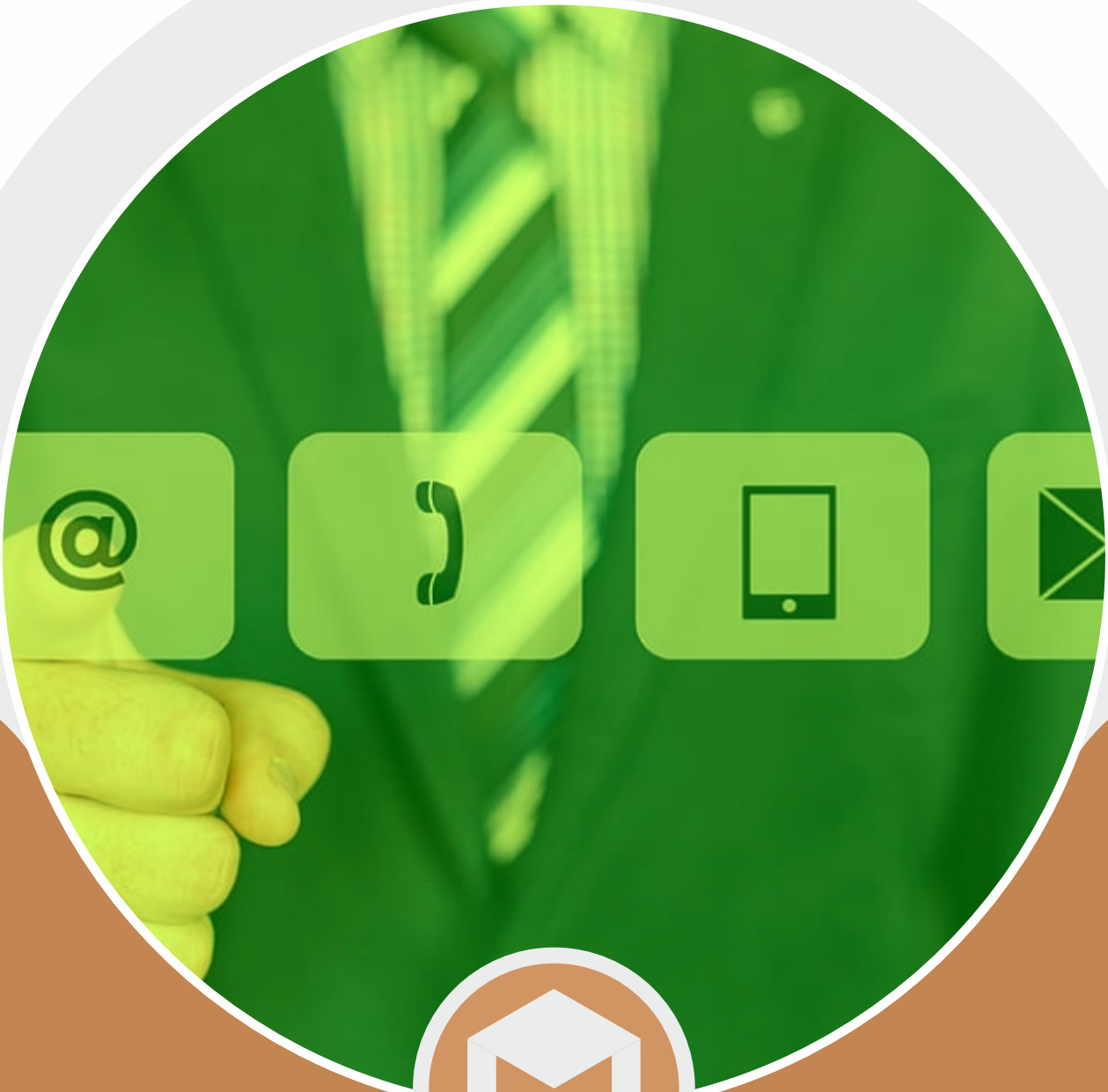
The chain to chain transfer designed to move the carrier from one chain to another chain.

Also, chain to chain transfers are used to change the speed of conveyor from one location to another location in power and free conveyor system.

A typical cross section elaborated below:



Thank You!



Reach Us:

Mathand Automation

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