

ELIMINATOR

MODULAR MATERIAL HANDLING SYSTEM FOR STRUCTURAL STEEL PROFILES



Ocean Machinery, Inc.

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ELIMINATE UNNECESSARY COSTS OF MOVING MATERIALS IN YOUR SHOP

On average fabricators handle each beam 17-20 times from the time the raw material arrives at his shop to the time he has it on the truck ready to be shipped to site.

This multiple handling of steel adds absolutely no value to the final fabricated steel product; not only is it a tiring activity; it is also a potentially dangerous activity.

To help fabricators overcome the effort and expense of handling beams and columns, Ocean Machinery offers a simple-to-configure modular material handling system comprising several different standardized components, that when added together, provide an exceptionally affordable and customizable material handling system for structural steel profiles.







Typical control pedestal

The Ocean Eliminator System is ideal for saws, beam drilling or punching lines, beam coping lines, shot blast machines, paint lines, etc, and will help you significantly reduce your labor and fabrication costs, as well as improve the safety of your workplace.

The Ocean Eliminator Systems are used in structural steel fabricators, steel service centers, sawing services, steel cleaning & painting services, etc.

Unlike other competitive brands, the entire Ocean Eliminator Material Handling System is supplied as a complete, easy-to-install system with the variable speed drives, operating control pedestal and all hoses and fittings included in the price.

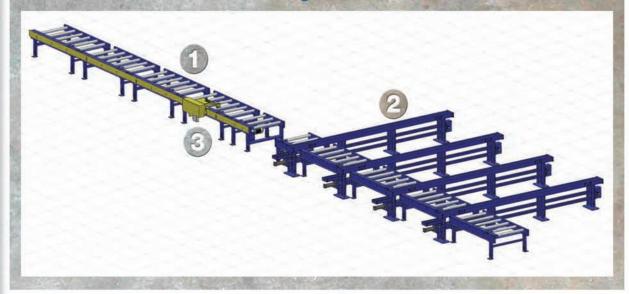
How the Ocean Eliminator System Works

The Ocean Eliminator System comprises 3 components:

- 1. Powered roller conveyors (available in two lengths)
- 2. Cross transfer conveyors for moving material on and off the roller conveyors, on either side of the roller conveyor (available in two lengths)
- 3. Measuring system for cutting applications

The various modular components can be purchased individually or can be combined to create a fully integrated system.

Ocean Eliminator Components



Electrically Driven 44"Wide Roller Conveyors

The powered roller conveyors are available in 4ft and 9ft lengths making it easy to set up any configuration of in-feed and out-feed conveyors. Note that there is always a 1ft gap between adjacent roller sections. This allows the insertion of optional cross transfer table arms at any time. With the gap the roller sections are effectively 5ft and 10ft lengths.

The conveyors feature 3½" OD rolls on 18" centers, driven by an electric inverter drive with variable speed control and #60 chain over covered chain sprockets. Each system requires one master drive control unit plus a slave drive and control unit for each additional powered sector.

Hydraulically Powered Cross Transfer Conveyors

Cross transfers are used for easy loading and offloading from your roller conveyors, and to create buffer zones between two machines. Buffer zones are critical for efficient operation especially when each machine has a different processing time.

For example; having a cross transfer between the out-feed from a band saw and the in-feed of a drill line allows the fabricator to stockpile pre-cut beams waiting drilling, since one machine is normally faster than the other one. Without this buffer zone one of the machines would always be idle waiting for the other machine to complete its task before it could start its next process, significantly reducing efficiency.

Cross transfers are available in 20ft or 40ft lengths. The 20ft length is used when you only require the material to be moved off to one side of the

conveyor line. If you want the option of moving the material off either side of the conveyor, then the 40ft cross transfer is used to straddle the conveyor. The Eliminator transfer can raise the material over the roller conveyor datum line to get the material to either side of the conveyor.

Cross transfer systems are usually configured with 4 or 5 arms, depending on whether you want to move 40ft or 60ft long profiles, and feature hydraulically powered chain driven transports using 100# chain. These lift-and-carry units move at 20ft per minute in either forward or reverse directions.

Remote Controlled Measuring Stop

The Ocean Eliminator Remote Controlled Measuring system features a go-to stop that is sent out on the out-feed conveyor of the machine (typically a saw or coping machine) to the length required for the part. The operator observes the position of the stop using a CCTV monitor that accurately displays the length to be cut.

When the stop is at the correct length, the stop is hydraulically clamped to the roller conveyor table. Now the operator jogs the material to be cut to the stop at full speed. When the material passes under the optical sensor, the conveyor automatically slows to the creep speed. When the profile contacts the stop, the conveyor automatically stops and signals the operator that the material is in position, allowing the operator to process the part. The powered stop swings out of the way and the operator is able to pre-position it for the next cut. Measuring length is available up to 65'.

The measuring system is designed so that it can be added to just about any existing conveyor system.

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POWERED ROLLER CONVEYORS FOR STRUCTURAL STEEL - SPECIFICATIONS



Cross transfer feeding to roller conveyor to band saw

Modular section lengths	4' and 9' (1220mm and 2740mm) Effective Length is 5' and 10' (1524mm and 3048mm) with 12" (300mm) gap between sections
Roller spacing	18" (457mm) on centers
Roller diameter	3-1/2" (89mm)
Usable roller width	44" (1120mm)
Conveyer chain	#60
Capacity	700 pounds per foot (1000kg/m)
Drives	Electric Inverter Drive – variable speed control
Transport speed	20 FPM (6m/min) forward and reverse
Controls	In-feed, Out-feed, Both, Forward, Reverse, Variable speed, E-stop

Note: All Powered Roller Conveyor Systems are complete and include all hoses, hardware and fittings.

CROSS TRANSFER SYSTEMS FOR STRUCTURAL STEEL - SPECIFICATIONS



Cross transfer feeding to roller conveyors

Transfer system	4-arm or 5-arm systems
Transfer lengths	20' or 40' (6m or 12m)
Lifting capacity per arm	2,500 pounds (1000kg)
Conveyor chain	#100
Transfer speed	20 FPM (6m/min) forward and reverse
Drive	Hydraulic Drive
Controls	In-feed, Out-feed, Left, Right, E-stop

Note: All Cross Transfer Systems are complete and include all hoses, hardware and fittings as well as the cross-under chain drive kit for your roller conveyor sections to allow for the cross transfer arm.

MEASURING STOP FOR STRUCTURAL STEEL - SPECIFICATIONS



Measurement method	Steel tape with CCTV display
Contact arm lift	Hydraulic
Contact arm clamping	Hydraulic
Positioning accuracy	Initial ±1/8"; Repeatability ±1/16" (1.5mm)
Maximum measuring length	65' (19.8m)
Controls	Fast, Slow, Forward, Reverse, Raise Lower, Clamp, E-stop

Note: All Measuring Devices are complete and include rails, hoses, cables, festoon system, hardware and fittings.

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Dealer: