

UL – Automatic Pallet Handling System	Definitions
Rack	Fabricated steel structure designed to store pallets with green product to be transported into kilns for curing. Rack capacity terms: # of Bays = rack width Bay depth = # of pallets deep Tiers = # of shelves high
Rack Transfer Conveyor	A conveyor assembly that transports loaded racks of cured product to the unloader and moves empty racks to the loader.
Loader	A hydraulic actuated assembly consisting of; (a tower with index tree, fork assembly, a carriage assembly), that moves pallets with green block from the green product conveyor into the rack.
Loader Forks	A hydraulic actuated fork assembly that raises and lowers to a selected height determined by the index tree (shelf height).
Loader Carriage	A hydraulic actuated carriage assembly that moves the fork assembly into and out of the rack.
Conveyor Elevator	A hydraulic actuated assembly consisting of elevator assembly, green block conveyor and de-burring brush. Moves green product and pallet from block machine to loader.
Elevator	A hydraulic actuated assembly that lowers the pallet from pallet table height on block machine to green product conveyor height.
Green Conveyor	A hydraulic operated transfer chain that moves pallet to loader.
De-Burring Brush	A electric motor-driven brush assembly, adjustable in height, designed to remove excess debris from the top of the green block
Slump Block Attachment	Lifts pallet and green block, and presses block to height to form slump products, consists of heated top plate and lift assembly.
Block Reject	A lifting device designed to remove defective green product; two styles a) One to remove both pallet and defective green block from conveyor. b) One to remove defective green product without dumping the pallet.
Indexing Tree	A adjustable vertical stop arrangement consisting of a stop cam and adjustable level stops mounted on a

	rotatable slide tube attached at each end to the vertical guide frame indexed by a ratchet mechanism
Unloader	A hydraulic actuated assembly consisting of; (a tower with index tree, fork assembly, a carriage assembly), that moves pallet with cured block from the rack to block and pallet return conveyor.
Unloader Forks	A hydraulic actuated fork assembly that raises and lowers to a selected height determined by the index tree (shelf height).
Unloader Carriage	A hydraulic actuated carriage assembly that moves the fork assembly into and out of the rack.
Block & Pallet Return Conveyor	A hydraulic motor-driven chain conveyor that transfers the pallet with cured block from under the unloader tower to the block pushoff (non-liftblade type). When a lift-blade pushoff is used, that block and pallet return transfers to pallet with cured block to the block transfer conveyor.
Block Transfer Conveyor	A hydraulic motor-driven chain conveyor that transfers the pallet with cured block from the block and pallet return conveyor to the lift-blade pushoff.
Pushoff	A hydraulic operated assembly designed to transfer the cured product from the pallet to the cubing line.
Pushoff - w/Liftblade	A hydraulic operated assembly designed to transfer the cured product from the pallet to the cubing line. The lift-blade feature is used when more production speed is required. The lift-blade allows the next pallet with block to start entering the pushoff area as soon as the lift-blade assembly reaches the forward position.
Pallet Return Conveyor	A hydraulic motor-driven chain conveyor that transfers the pallet from the pushoff to the cross-over conveyor.
Pallet Scraper	A hydraulic operated assembly consisting of; Scraper head, and carriage. Designed to scrap any concrete build-up on the pallet. Usually located in the pallet return conveyor section.
Pallet Scraper Head	A mechanical assembly with scraper blades.
Pallet Turnover	A hydraulic operated assembly designed to flip the pallet over. Usually located in the pallet return conveyor section.
Pallet Thumper	A clamp assembly that attaches to the block and pallet return conveyor shaft that is designed to bump the bottom of the pallet causing the slump block to break free of the pallet.

Crossover Conveyor	A hydraulic motor-driven belt conveyor that transfers the pallet from the pallet return conveyor to the block machine pallet hopper.
Oiler Dispenser	A mechanical assembly designed to dispense a thin film of oil on to the pallet surface.
Cleaner & Oiler	A hydraulic operated assembly consisting of a pallet lifting device, a pallet pusher carriage, and an oiler. Designed to transfer the pallet from the pallet return conveyor to the block machine pallet hopper.





