



Biomass and Chip Tech Review

Cozad Corp.

Alloy has served the vocational market by designing and manufacturing the highest quality trailers in the chip industry. In addition, Alloy has earned a reputation for producing quality products that outlast the competition and for delivering personalized customer service. Using state-of-the-art manufacturing technology and patented innovative designs our chip trailers, as well as the rest of our products are — and will continue to be — developed to meet the specific requirements of our customers.

Since the acquisition of Alloy earlier this year by the Cozad Corporation, the Cozad design team in cooperation with existing users has made significant improvements to the Alloy chip trailer product line. All the new Alloy chip trailers feature a new and improved perimeter frame, reinforced and strengthened top rail, cross member system and a steel rear doorframe, as well as many other upgrades. All of these upgrades have been accomplished without any increase in tare weight because of our use of the most advanced materials available throughout to make the trailer light weight. The trailers will be produced principally in a 53-foot, quad axle configuration with running gear tailored to the customer's requirements. Tri and tandem axle configurations will also be available. www.cozad.net

General Trailer Parts, LLC

General Trailer purchased Peerless West in 1995. These two companies were started in 1955-56 in the Northwest. Today the company is headquartered in Springfield, Ore., with branch stores in Oregon City, Milton, Wash., and Redding, Calif.

Peerless Trailer manufactures the chip and live floor trailers, with General building the lowboys, transfers, loggers, boosters, and specialty trailers. Special trailer design and manufacture is the company's forte. It builds to your special needs for on-highway or in-woods. New designs are field-tested.

Chip trailer and live floor design continue to evolve as technology in material and design become available. One of the highly valued suppliers for Peerless Trailers is Hallco Manufacturing. Hallco was one of the inventors of the live floors we know today.

General–Peerless demand high standards from its suppliers to meet the dependability and longevity its chip and live floor trailers have come to be known for. The wood fiber transport customer requires higher volume and lighter trailer weights. General is very aware of the fine line between light weight and dependable trailers.

The General Bear and Peerless Roadrunner continue to work hard to build and maintain a reputation of honesty and customer loyalty. www.generaltrailerparts.com

Innovative Trailers

Innovative Trailers was started in 1994. Employees have kept their commitment to quality, and customers keep coming back.

The Tipper trailer design and construction is extremely versatile. Whether you are hauling lightweight materials on drop centers or heavyweight products on straight decks, Innovative can build the trailer that fits your application.

Innovative's self-unloading trailers are also designed to fit your needs. X-Post and Smooth Side construction are used throughout the shuttle floor trailers and the company's Hi-Cube 165 Yd. drop-deck shuttle floor utilizes one drive to help keep weight and maintenance issues low.

Innovative's own Elevated Rear Discharge trailer is perfect for unloading materials into low-sided spreader and blower trucks to get material closer to the job in bulk. www.ititrailers.com



Pitts Trailers

Pitts Trailers has been a leading forestry trailer manufacturer since 1976, and entered the chip van market about three years ago.

The company's chip vans are available in open and closed top models that include an aluminum bottom rail design, aluminum rear gate, and a full width fifth wheel plate. Pitts builds to the customer's needs with popular options such as custom lengths, live floors, specialty doors, custom suspensions and axle configurations. Pitts made its name as a custom trailer manufacturer and the Pitts Chip Van is no exception to this.

Pitts' experienced workforce, combined with some of the most proven and innovative computer aided designs in the industry, ensures that a Pitts' customer receives the "finest forestry trailer on the market", says the company. Pitts Trailers manufactures a complete line of lowboy trailers, lowboy components, flatbeds, drop deck flatbeds, extendable flatbeds, extendable drop deck flatbeds, oilfield lowboys, oilfield floats and tag-a-long trailers. www.pittstrailers.com

Strick

Strick's all-new 2011 Evans Closed-Top Chip Van was designed to maximize aerodynamics and strength. In order to accomplish this, hat-shaped galvanized steel posts provide the side support. These posts are sandwiched between a .063" thick aluminum interior lining and a .048" pre-painted white aluminum exterior lining.

The 1.375" deep aluminum floor is supported by 4" deep steel I-beam cross-members located on 12" centers. The cross members are pre-undercoated in order to prevent corrosion. The cross members are attached to the side wall along a 10.25" deep bottom rail with stainless steel bolts.

The .040" thick aluminum roof is supported by galvanized steel roof bows on 24" centers. A .063" thick aluminum full-length and full-width ceiling lining provides a secondary layer of protection from blown-in chips. Attached to this lining is a full-length, 48" wide 20 gauge stainless steel chip deflector.

With standard features, the Chip Van weighs about 12,500 lbs. Additional weight saving options include a roof with exterior aluminum roof bows and 16" cross member spacing in the bay of the trailer.

Next year, an open-top version of this trailer will be offered with a sliding tarp roof system. Future models will also incorporate an exterior-post design. www.stricktrailers.com

Titan Trailers

Renowned for the high strength and extra capacity of its patented THINWALL® body construction, Titan Trailers® custom builds trailers to suit customer requirements in a complete range of forestry and biomass applications.

Double-welded, double-wall, extruded aluminum THINWALL trailers increase cubic capacity up to 10% while reducing fuel consumption by as much as 15%. Titan's distinctive end-to-end horizontal body panels, 100% machine welded inside and out, provide Titan smoothside trailers with increased flexing strength to absorb the stresses of traversing rough roads and off-road work sites.

Titan THINWALL tippers, live floors, and possum-belly chip trailers have been proven in the most demanding applications and environments since 1996. Live floors featuring KEITH® WALKING FLOOR® systems include optional aluminum or



steel V-Floor “extreme duty” self-unloaders designed to withstand heavy impacts such as top-loaded stumps and demolition materials. This can increase the flexibility of the trailer’s usage.

The unique Titan Kicker Plate™ allows faster, safer offloading of non-flowing or compressed material by “kicking” bulk materials away from the front wall of the trailer. Insulating sidewalls with plywood liners are offered to help keep chips and sawdust from freezing up in winter while front access doors allow easier servicing and viewing of the trailer interior while unloading. www.titantrailers.com

Trinity Trailer

Trinity Trailer Mfg. developed the “High Capacity” Eagle Bridge self-unloading belt trailer for the customer who hauls lighter materials and needs a higher volume trailer. The High Capacity trailer incorporates the inherent toughness and flexibility of the lightweight steel bridge design, as well as the tapered body with a lower suspension height, that significantly increases hauling capacity.

The 53’ long, 2-axle trailer is 13’6” high and will hold 141 cubic yards of light material, such as chips and sawdust. Trailers are available in carbon or stainless steel and Trinity Trailer Mfg. can build almost any length or axle configuration to meet their customers’ applications.

Like all Eagle Bridge trailers, this lightweight trailer can unload cleaner and much faster than a conventional live floor or shuffle floor trailer. Because drivers are hired to drive — not shovel and sweep — the High Capacity Eagle Bridge trailer is a superb choice when it comes to productivity. trinitytrailer.com

Tycrop

Tycrop’s Smooth Flow End Dump is a rugged trailer and currently being used across the Northwest and northwest Canada. Customers are running it in mountainous roads hauling sawdust, woodchips and hog fuel from sawmills. The Smooth Flow is ideal choice when end-dump trailers are the most efficient way to unload.

The perfectly smooth walls, combined with the wedged and tapered-to-the-rear design, create less friction and ensures your entire load leaves the trailer effectively and efficiently. The tapered Smooth Flow design enables each movement rearward of the floor to ease the load away from the walls and the upper cross-members. Wedging and tapering of the trailer box makes for easier unloading, lower hydraulic floor pressure, and lower stress on trailer walls. This maximizes unloading efficiency and speed.

The company’s industry-leading specifications, design, inventory, and production control systems ensure that every trailer ordered is delivered on time and exactly as specified.

Many of the Smooth Flow’s parts are custom engineered and produced in-house by Tycrop’s skilled professionals. In addition, the company’s flexible manufacturing system allows superior productivity on large and small batch sizes, as well as real-time design changes should they be required. This flexibility, combined with its parts and repairs divisions, means that your trailer will be on the road for many years to come. www.tycrop.ca

Western Trailer

Western Trailers has been providing custom hauling solutions for the transportation industry since 1959 and offers two different options available for hauling biomass from the woods to the cogeneration facilities.

The first is the ForceSteer Chip® Drop Center Van, which has a 148 cubic yard capacity. This trailer has wireless remote electric over hydraulic steering axles; the axles allow the trailer to work efficiently in the woods with maximum maneuverability



minimizing trailer damage, while still moving large payloads without having to reload for the highway. This trailer requires a tipper for unloading.

The second configuration Western Trailers offers is the Stinger Steer® Walking Floor® truck body. This body will convert any logging truck into an efficient Biomass hauler in about two hours after the initial set up. This configuration will move 128.3 cubic yards from the woods to the cogeneration facility. Both of these configurations offer a one-touch chipper to cogeneration facility, saving you time and money. www.westerntailer.com