

Portable Modular Conveyor Material Placer

DESCRIPTION: The Portable Modular Conveyor-Material Placer (PMC) is a quick, easy, dependable and cost effective way to place materials in the limits of the confined grade or work area.

WHAT HAS THE PORTABLE MODULAR CONVEYOR CHANGED OR REPLACED: This specialized piece of equipment was developed to place concrete in front of a concrete slip form paving machine. The typical method of placing concrete requires a self-propelled belt placer which is very expensive to purchase and mobilize to the jobsite. There is a significant cost savings in labor and equipment with the PMC. It is a direct replacement for conventional material placing equipment such as a Gomaco RTP, a CMI MTP, and all in grade belt placing machines. As well as placing concrete, it is capable of placing asphalt, aggregate, sand, topsoil, or any flowable materials.

ORIGIN AND PROGRESSION: The PORTABLE MODULAR CONVEYOR was conceived in the summer of 2007 to minimize mobilization expense, increase portability, and enhanced productivity. It is a unique solution to material placement, and has a patent award from the United States Patent Office. It was first used on the reconstruction of Carpenter Road in Ann Arbor, Michigan, in the fall of 2007. In August of 2008 the second Prototype was used on an I-75 reconstruction project near Saginaw, Michigan, on a concrete overlay project at the Cobb County Airport in Kennesaw, Georgia, at Detroit Metropolitan Airport North Terminal Project and various other paving projects in Michigan. Since sales and marketing efforts began in November of 2009, the PMC has been either sold or rented to contractors around the country including The J.B. James Construction, LLC, Baton Rouge, Louisiana, Kiewit of Dallas, TX, Kiewit Infrastructure, Chicago, Illinois, Angelo Lafrate Construction Company, Warren, Michigan, Shipley Contracting, Burlington, Iowa, Bocco Construction Company, Iron Mountain, Michigan, Sherwood Construction Company, Wichita, Kansas, Hawkins Construction, Inc, Omaha, Nebraska, Graham Construction, Inc, Spoken, Washington, Security Paving, Inc, Sun Valley California, Smith Paving , Inc. in Norwalk, Ohio, and Flatiron Corporation in San Marcos, California.

WHY IS THE PORTABLE MODULAR CONVEYOR INNOVATIVE: The Portable Modular Conveyor is designed to attach to any front-end wheel loader of a 3 cubic yard capacity, such as a Caterpillar 930, or larger, that is equipped to accept attachments, and is equipped with a third valve control. It may be adapted to other types of equipment such as excavators or Skylifts. The conveyor is operated from inside the loader cab using the hydraulic controls and power of the wheel loader to propel the hydraulic motor. The low torque high speed hydraulic motor on the belt conveyor requires a pump feed of 40 gals per minute and 3000 psi. The unit is compact and lightweight at just 10,000 pounds. It has a proven record of placing over 300 cubic yards of concrete per hour to the road grade using dump trucks hauling 11 cubic yards per load. It has outperformed the conventional material transfer placer systems by two to one and the initial cost is less than one forth of the traditional machines used in this application. The operation, reliability, and maintenance expense are also much more cost-effective than conventional placers and is simple to operate. It replaces a very expensive dedicated piece of equipment that would be parked idle when there is no material to place. With the Portable Modular Conveyor, the loader can perform other productive tasks and minimizing parked investment. It will enhance productivity and material placement quality. It will better maintain the integrity of materials being placed.

The PMC is very dynamic and portable. When loaded on a standard lowboy trailer for transportation, it is 8.5' wide and 21' long, making it a non-permit load for moving. When attached to the loader, the belt can be folded to a 10' length to travel in a single lane of traffic. The conveyor frame can be shifted two feet left or right from center to adapt to dumping needs or conditions.

FUTURE USE OF THE PORTABLE MODULAR CONVEYOR: Although it was designed for placing concrete, the PMC has a broad application across the construction industry which includes spreading topsoil, placing soil cement, sand, gravel, asphalt, or aggregates in road beds, backfilling sewer trenches, dams, retaining walls, agricultural goods or refuse, or anything that can be conveyed or transferred. By varying the size and style of the conveyor the unit can also serve as a shoulder spreader. The applications are endless. Construction Equipment Magazine has recognized the Portable Modular Conveyor as one of its "Top 100 New Products of 2009." Sales have produced utilization across the United States. The goal for the Portable Modular Conveyor-Material Placer is to have contractors in every state across the country and throughout the construction industry using PMC Material Placer in their operation. An 11' long conveyor option is currently available and a unit is being developed to attach to compact wheel loaders and skid steers.

Conveyor ready to work



E2 SYSTEMS, LLC Portable Modular Conveyor

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