



Fontaine's Revolution trailer

Flatbed fever

FLATBEDS ARE LIGHTER THAN EVER. THEY'RE STRONGER, TOO - AS ARE THE EARNINGS OF THOSE WHO PULL THEM.

Despite the stagnant home construction market, flatbedding remains one of the most lucrative trucking modes. Owner-operator financial services firm ATBS consistently tracks flatbed haulers as higher earners than reefer and dry van haulers.

Profit isn't the only bright spot in this sector. The trailers also have greatly improved in recent years. Today's flatbeds are more productive, more versatile, easier to maintain, tougher and lighter than ever.

Strength and weight

Many of these changes come on the heels of the new engines, some of which weigh

more than their predecessors. The extra weight up front has driven trailer makers to build products that are lighter, though still strong and safe.

"This has caused most trailer manufacturers to look at better designs to meet today's load requirements," says Lenny Miller, director of dealer development for Benson International of Cadiz, Ky.

Benson's 524 aluminum drop deck trailer features a steel neck transition that allows a concentrated load capacity of 52,000 pounds in a 4-foot span, as well as 80,000 pounds evenly distributed. Other features include a standard winch track on the driver side, a 40-inch-high rear deck, 255/70R22.5 tires, reinforced wheel cut-

outs for proper tire clearance, fully welded construction and LED lighting.

Transcraft, based in Anna, Ill., and bought by Wabash National in early 2007, increased the legal payload capacity of its standard-duty flatbeds by about 8,000 pounds (or 12 percent). Transcraft's standard-duty flatbeds, previously designated as "normal" duty with a 65,000-pound gross vehicle weight rating, are rated for 73,000 pounds as of the 2008 model year, the capacity added through new engineering and stronger materials.

Trailer manufacturers benefit from more durable aluminum alloys made of high tensile-strength steel at less than half the weight, says Charlie Wells, direc-

DRY VAN	2Q '05	2Q '06	2Q '07	FLATBED	2Q '05	2Q '06	2Q '07
MILES	10,622	10,046	10,026	MILES	9,721	9,386	9,020
REVENUE	\$11,418	\$11,980	\$12,093	REVENUE	\$11,984	\$12,940	\$12,952
NET INCOME	\$4,163	\$4,079	\$4,251	NET INCOME	\$4,611	\$5,048	\$5,136
NET INCOME CPM	39	41	42	NET INCOME CPM	47	54	57

During the past three second quarters, flatbed haulers have seen their per-mile net income increase from 47 cents in 2005 to 54 cents in 2006 to 57 cents in 2007. During the same period, dry van haulers saw per-mile net income increase much more slowly, from 39 to 41 to 42 cents.

tor of dump trailer products and dealer development for East Manufacturing, based in Randolph, Ohio. Much of the industrywide flatbed design innovation has focused on the main beam, the primary load-bearing part.

Despite these advances, truckers still must pay careful attention when placing or removing weight. "Trailers don't usually break from being overloaded," says Hank Prochazka, vice president of sales for Fontaine Trailer. "They break from being racked side to side. With our Phantom design, we've developed a thicker, 12-inch-wide bottom flange – which is extruded in one piece with the main beam, eliminating the flange-to-beam weld – that provides five times the side-to-side strength of previous designs."

Fontaine introduced in 2007 an aluminum flatbed weighing less than 7,800 pounds and handling 60,000 pounds in just 4 feet. The Revolution's aerodynamic features give it a premium drag coefficient. Friction-stir welding strengthens the floor while reducing weight. The Revolution's one-piece extruded aluminum side rail withstands impacts better than conventional trailers. Its securement system makes loading and unloading quicker.

Fontaine describes its new Infinity TX Twist Lock as two trailers in one: a drop deck to handle a wide variety of loads, and a twist-lock trailer to haul intermodal containers. The trailer is equipped with two twist locks at the front, four in the middle and two at the rear, so users can haul two 20-foot containers or one 40-foot container. Its front and rear skirts, side rails and floor are made of aluminum for added corrosion resistance and lighter weight.

Corrosion

Trailer manufacturers now offer many features to protect areas of the trailer susceptible to damage from harsh road chemicals or repeated exposure to the elements: hot-dipped, galvanized rear frames, impact guards and other rear components that tend to have paint scraped away by docks, causing rust; hot-dipped, galvanized understructures, landing gear bracing and front components that are hit when coupling and uncoupling; and crossmembers coated with materials such as self-healing wax.

"Chemicals like liquid magnesium chloride used to fight snow and ice on the roadways are so corrosive that they can even put a stain on stainless steel," says East's Wells.

Although aluminum is not as likely to corrode as steel, aluminum trailer manufacturers still are improving their products' resistance to harm. Hollow-core side rails, for example, provide fully enclosed conduits for wiring, and manufacturers are using sealed lamps and wiring harnesses to keep out the elements.

Some manufacturers, such as East, are developing rust-free aluminum designs to replace traditional steel components on areas such as suspension hangers. Steel bolts now are being coated with anti-corrosives, and shimlike isolator devices now buffer steel parts with stainless steel.

Other improvements

The underside of trailers, including the running gear, also has improved in recent years, manufacturers say. "From a manufacturer's viewpoint, we like the way trailer suspensions are being supplied," says Fontaine's Prochazka. "They come all buttoned-up."

OWNER-OPERATOR VIEW

HARVEY MORANT Beverly Hills, Calif.



Well aware that flatbedders have been earning more than dry van or reefer haulers, Harvey Morant decided to get out of the dry van segment.

His decision was not made lightly. Even though he had not officially made the switch as of press time, Morant already was seeking loads. He diligently researched routes, freight and equipment.

"I do a tremendous amount of research before I make a decision," he says. "I don't fail."

Morant debated buying a drop deck versus a flatbed. A drop deck not only has the obvious advantage of being able to haul large, high loads, Morant says, but also can accommodate a flatbed load with the addition of an aluminum step-deck filler to even out the floor. Ultimately, because of a drop deck's heavier weight, Morant chose a steel-aluminum combo flatbed trailer.

With that trailer and connections from his background in the U.S. Air Force, Morant reckons he'll be able to haul military freight and hazmat.

Among the improvements are better wheel seals and bearings, lighter wheel-end components, better wiring harnesses and LED lighting, says Charles Cole, manager of technical sales and product training for Utility Trailer Manufacturing, based in City of Industry, Calif.

Utility includes plug-in connectors and a higher-quality paint process in its 2000A high-strength, low-weight flatbed, 2000S steel center frame, drop deck and doubles. All but the drop deck incorporate plasma-cut one-piece main beams.

TRAILER SPECS. The trailers included in the spec listings represent the products from each manufacturer that are most popular with owner-operators. Consult a dealer for information on other models; contact information begins on Page 6.