

Top Purchasing Considerations for Attachments and other Ancillary Systems and Components for Construction Equipment

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Contractors are always looking for ways to increase their revenue while utilizing their current fleet. Investing in attachments and other ancillary components is one of the best ways to expand a contractor's capabilities, and are often a smart financial decision as they generally cost very little compared to the revenue streams that can be opened up for a contractor with the increased versatility that they can offer.

While the decision to purchase a new attachment may be an easy one, there are several important considerations that go into buying—or renting—the right ancillary components for your machine.

Understanding operating capacity and hydraulic flow specifications

First and foremost, it is absolutely critical that the attachment is properly matched to the operating capacity and hydraulic flow capabilities of the carrier. As an example, overloading an excavator's operating capacity with an oversized bucket can cause serious damage to the machine and its internal components, as well as cause unnecessary safety risks on a jobsite. Conversely, a bucket attachment that is too small for a machine can be easily damaged or destroyed by the power of a tool carrier that runs at an operating capacity that exceeds that of the bucket. Always be sure to right-size the attachment or other ancillary system to the carrier.

It is also critical that the hydraulic flow capacity of an attachment not be exceeded. This will damage components of the attachment, cause unnecessary downtime and possibly ruin a machine, so be sure to match the hydraulic flow specifications to the machine.

Consulting the operator's manual—of both the carrier and the attachment—is the first place to start, but asking your dealer for help is a sure bet. In fact, sourcing attachments and other ancillary systems and components from the same dealer that a carrier was purchased from is a great way to ensure that contractors and fleet managers don't run into these types of problems on a jobsite.

Machine versatility

The skid steer is the Swiss Army Knife of the equipment world. With a nearly endless variety of attachments for applications in construction, landscaping, snow removal, agriculture and utility work, the reliable skid steer is often the right tool carrier for most jobs. Skid steers typically have higher hydraulic flow capacities than other machines and are generally a better choice for high-flow attachments; however, more and more contractors are realizing that today's compact wheel loaders (CWLs) are able to utilize most of the same attachments as skid steers.

There are several reasons why a contractor may choose a CWL over a skid steer—higher speeds for increased productivity, reduced trailering on site, improved visibility, the articulated turning capabilities make it more versatile in some applications—but it will always come down to the specific requirements of a jobsite. If a contractor is uncertain as to what type of tool carrier is best suited for a specific attachment and/or jobsite application, they should consult with their equipment dealer.

On-board scales and weighing systems

On-board scales and weighing systems are important when working in feed lot, nursery and landscaping applications where an operator is loading high-value materials. These systems are an excellent cost-management tool and can maximize profits by providing consistent, proper loading of trucks, fewer visits to the weigh scale, improved safety as well as accurate recordkeeping — resulting from the ability of the systems to generate operational logs.

Look for an on-board weighing system that is easy to use, with an accurate monitor that is mountable in the cab. Contractors should also talk to their equipment dealer about other features such as wireless transmitting and data management to see what works best for their specific work cycles and applications.

Couplers

On some job sites, the ability to move easily from task to task while using multiple attachments is the key to maximizing profitability. Not only does a quick-attach coupler save on man-hours detaching and reattaching buckets, forks, brooms and augers; it also reduces operator fatigue and improves safety.

By investing in a quick-coupling system, contractors can transform their hydraulic machines into multi-tool carriers capable of carrying out a number of tasks all while staying in the comfort of the cab.

Some machines available today come standard with a quick-attach coupler, but if a contractor is interested in retrofitting a coupler onto an existing piece of equipment, they should look for one that is light-weight and made of durable, high-tensile strength materials.

It is also important to look for built-in safety features. The CASE S Series Multi-fit Coupler features a twin-locking system, which is equipped with two independent mechanical locks that prevent the accidental release of an attachment. This type of system also secures both the front and rear attachments in the event of a hydraulic failure or power loss for added operator safety.

Ground-engaging tools

All buckets are not created equal. When purchasing a new bucket for a machine, there are several things to look for that can help ensure that contractors are getting the highest return on their investment, as well as enhancing the productivity of their operation.

In addition to right-sizing the bucket to the carrier's rated operating capacity and hydraulic flow specifications, contractors should look for buckets with features designed for easy serviceability. Leaving worn cutting edges or teeth on ground-engaging tools for too long can have negative effects on machine wear and performance, so equipment owners should look for features like reversible cutting edges, bolt-on cutting edges and quick-change teeth. As an example, the CASE Smart Fit Tooth System provides long-life, robust bucket teeth that are easily replaceable using only a 12mm socket wrench, and can reduce servicing time by up to 80%.

Also, business owners should talk to their equipment dealers about different ways to monitor wear components on ground-engaging equipment. These components are often

replaced on an hourly schedule, regardless of how that machine is used. Using telematics data can provide a unique opportunity to differentiate between different working conditions for a given machine. For instance, looking at collected RPM data a fleet manager may see that out of 500 hours of use, maybe only 425 hours are actually spent in ground engagement. This may allow the equipment owner to extend replacement out further and reduce the purchase/maintenance costs throughout the machine's life – all because they have a better understanding of how that machine is being utilized.

Controls

Some modern equipment features electronic controls—like CASE's EZ-EH control system—that allow an operator to adjust hydraulic flow and pressure settings from the cab, so they are able to fine-tune the carrier's hydraulic flow to the specifications of a certain attachment. Flow pressures, sensitivity and speed can be set and monitored to ensure optimal productivity across multiple attachments with the same carrier. Not only does this allow the operator to customize the machine to a specific application, it also increases productivity and uptime by reducing unnecessary wear on the attachment.

Telematics and machine control

One of the best ways to manage total cost of ownership, as well as improve productivity and simplify maintenance procedures is through telematics. Telematics systems can give equipment owners unprecedented amounts of data on how a machine is being utilized in the field, and can offer insights that can help lower ownership costs over time.

It is important for contractors and other equipment owners to review the different types of data available through telematics with their equipment dealer, and understand how monitoring items such as fuel consumption and idle time can have an impact on operating costs.

Machine control systems are another great way to invest in the long-term productivity of an operation. Machine control improves productivity and reduces the amount of re-work on a job site. Over time, intelligent equipment utilization through machine control can reduce the wear and tear on machine components and ground-engaging tools, lower maintenance costs and fuel consumption, and extend the life of equipment. Most equipment dealers offer a full range of 2D and 3D machine control systems, so be sure to ask about what type of system is best suited for specific applications.

Buy vs. rent

It is important to understand attachment utilization and long-term business plans when making the decision to buy or rent a specific ancillary component. If a project is outside of an equipment owner's usual scope and is considered a one-time job, then renting an attachment or other component for that specific job can save time and money. However, if an attachment can expand a contractor's business and provide growth opportunities, it makes more sense to make the investment.

The bottom line is this: any type of fleet-expansion decision requires careful consideration and planning, and investing in attachments or other ancillary components is no different. If selected properly, attachments can provide more versatility and profitability compared to other equipment acquisitions. When evaluating attachments and other ancillary systems that can meet project needs or help grow and expand a business, equipment owners should

focus on tools that will provide the best return on their investment, and enhance the productivity of their operation.