A Seven-Point Value Proposition for Sand Transporter Capital Expenditures

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ARTICLE TAKEAWAYS:

- Sand transporter evaluation justification
- High costs associated with transporter downtime

Every year foundries are faced with the daunting task of making decisions on their yearly CapEx budget and struggle with how to evaluate their options and needs. The CapEx budget has limits by design and there are always more dollars required for process improvement than have been budgeted.

Where does the sand transporter or any other piece of equipment fit into this equation? This decision process can be simplified by using this seven-point value proposition for capital expenditures.

The first evaluation point is the usage of the item in question. Is this an item or piece of equipment that is used or will be used every day in your production? Is it or will it be used 24/7, a few times a day or weekly? Obviously, equipment such as sand transporters that are used the most or are critical to production will automatically move to the top of your list.

Your second evaluation point should be: does this product/piece of equipment provide the company with additional opportunities or a competitive advantage? Will this investment in new equipment or technology enable your company to create a product or deliver a service that it couldn't previously? Will it improve quality or reduce scrap? Will it improve plant safety and avoid worker injuries or OHSA violations? Will this equipment lower operational and production costs?

The next point of appraisal is the equipment reliability, or the possibility of breakdowns and downtime. Reliability and quality or "robustness" should be the critical factors to choosing the correct process equipment. Equipment that is used daily means that the quality and reliability should be much more important than the price. The value of the performance and reliability should increase with the frequency of use. Check references with other companies using the equipment to verify reliability and the frequency or severity of breakdowns. Factor in the costs that are inevitable on the day the machine either breaks down or when an inexperienced employee accidently crashes the machine. Evaluate the cost of downtime, the time needed to get parts and repair the machine and the damage to your customer relationships when your finished product deliveries are certain to be delayed. Since sand supply is vital to foundry production, the reliability of the transporter is critical.

After appraising the reliability of the equipment, it is necessary to evaluate the warranty on the product to be purchased. How long is the warranty period? When does the warranty begin, at time of purchase or after receipt? What is included in the warranty and what voids the warranty? What is the warranty claim process? Is there an extended warranty option? A longer warranty period is an indication of the supplier's confidence in his product's performance capabilities.

The fifth evaluation point are the maintenance costs. You will need to factor in depreciation as well as the ongoing maintenance. This is another area where it is probably a good idea to speak to other companies that are using the equipment. A good example of maintenance costs with reference to sand transporters is pipe wear. How often and how much does it cost to repair or replace sections of piping? What is the cost associated with having to shutdown the plant because you have blown a hole in the pipe and filled the area with silica dust? If you experience a maintenance issue, how long will it take to repair and get back into production? When times get tight or staffing is low, many operations try to skip or stretch out service times and schedules, but that is a slippery slope. Make sure you have included all the maintenance costs in your calculations, including consumables (pipes and seals/gaskets, etc.), and where you can source the spare parts. If the maintenance team doesn't need to spend time working on the transporter or patching/replacing pipe, they can focus their time and the company's resources on other more critical maintenance tasks.

This brings you to the next point of evaluation which is after sales support/service. Ask the supplier about the after sales support they provide. Does the equipment require routine maintenance that can be performed by internal maintenance personnel, or does it require a more specialized technician? Does the supplier stock spare parts? Where can you get spare parts, local, domestic, or foreign? Do they provide on-site service from a trained technician or is a preventative maintenance program available? If something was to go wrong or you need assistance with the equipment, it is good to know that the necessary resources are available to receive prompt support by just picking up the phone. How fast can I get my sand transporter operational again?

Finally, while many would argue that price should be at the top of the list of your decision-making process, it is good to remember that the initial price doesn't include the Total Cost of Ownership (TCO). There are many things that add to the TCO over the lifetime of the product. These could include installation costs, operating costs, maintenance costs, production interruption costs, and user efficiency.

Using this evaluation process will increase the likelihood of developing an accurate as well as achieving the desired ROI. These seven criteria will streamline the decision-making process, add to the bottom line, and reduce the buying cycle. This process will maximize the positive impact of the CapEx budget on production, quality, safety, and profitability.

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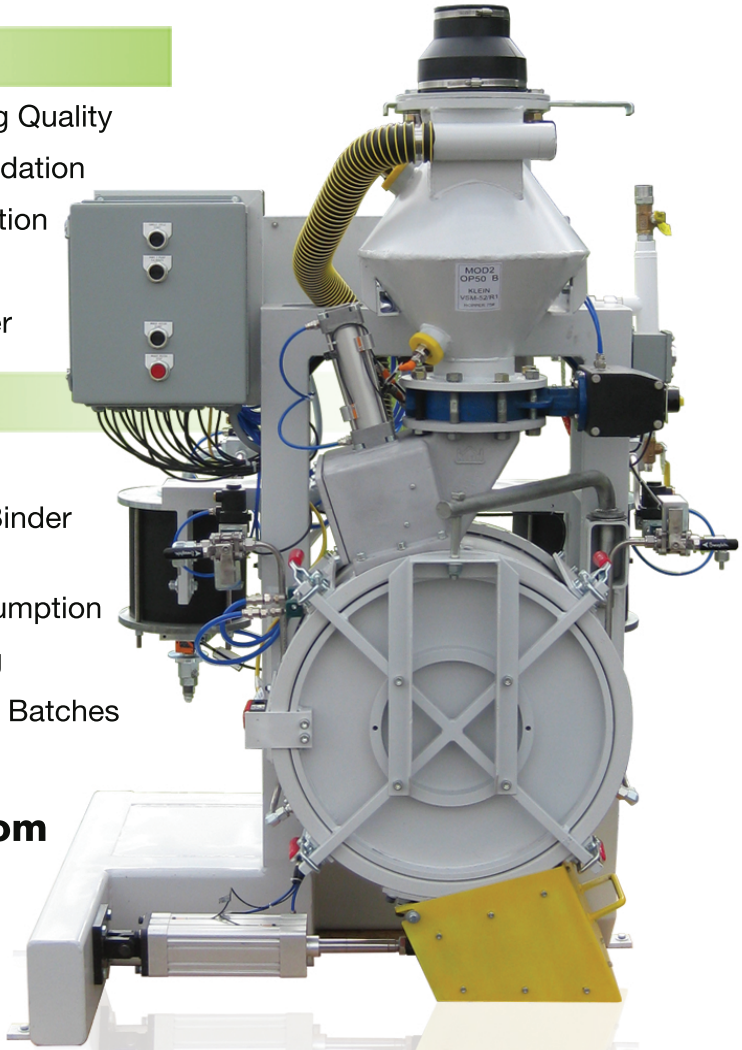

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