Rapistak Corporation

How to save up to 75% of your current storage floor space

White Paper

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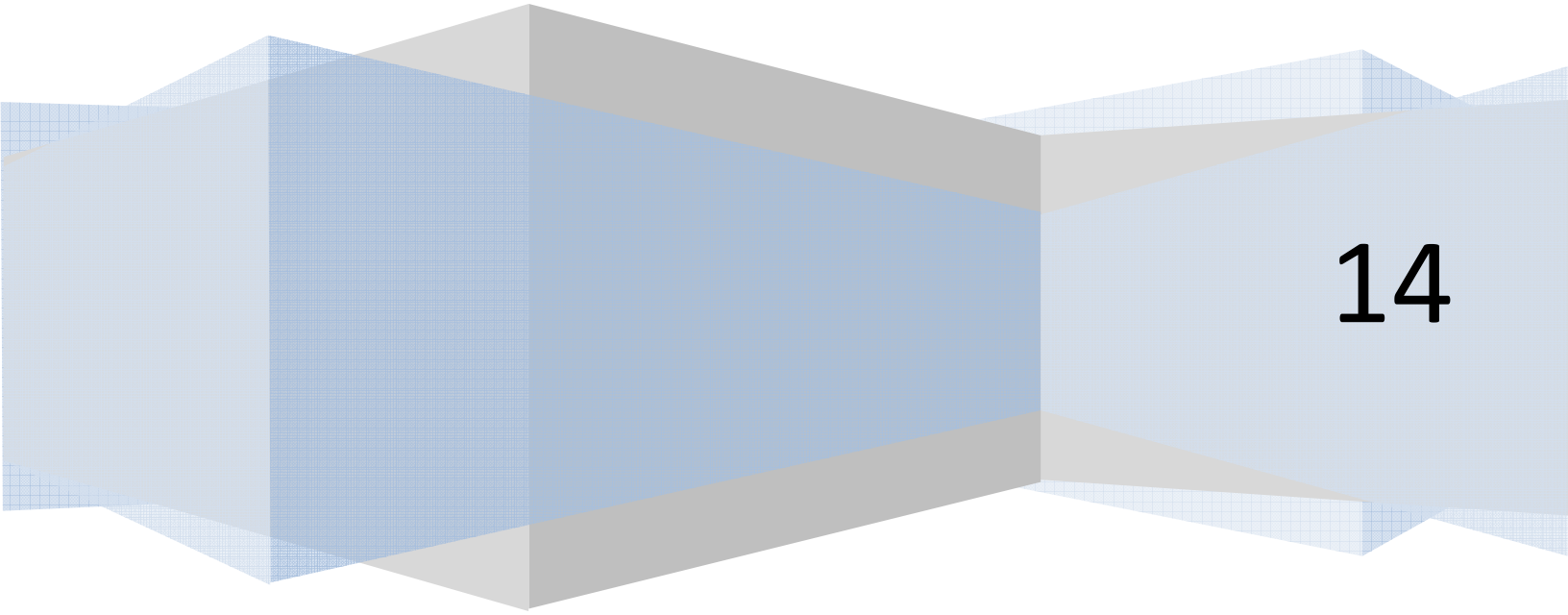

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RAPISTAK CORPORATION

White Paper On How To Save Up To 75% Of Your Current Storage Floor Space

Many injection mold or die casting companies never plan for the storage of a large number of injection molds or dies when planning to go into business. Very often companies start their businesses with one or two injection mold machines and operate with one or two major accounts. As time progresses sales pick up and word of mouth helps move the business forward. The need for more molds and dies begins to grow and before you know it, you are stuck with one hundred to eight hundred molds or dies. This is great for business but not for organization.

So the tooling managers task is to keep track of the molds or dies, how many there are, whether they have been serviced or not and which molds or dies require repairs for damage received by fork-lift operators. But depending on the number of molds or dies you have, this could be a daunting task. Even finding the right mold or die for the next run can become a task all by itself. Many companies try to organize by buying standard pallet racking and placing the molds or dies on the shelving only to find that the amount of space they need, for a standard fork-lift to access the components, is quite large. Production schedules also play a role in the amount of time an employee has to locate, retrieve and store the molds or dies. So as the business grows the amount of space needed to store the molds or dies begins to shrink, and soon the molds or dies that only make money when mounted inside a production machine, begin to eat up valuable floor space.

With floor space being at a premium many small business owners as well as large corporations begin to look at how to expand the business and at what cost. Larger corporations start thinking about expanding their buildings or moving to a new location, while the smaller business owners stop taking on work all together. Some business owners even consider renting buildings in their local area to store some of the molds or dies. By storing the molds or dies in a separate building more floor space is available for production but a drop in productivity can occur because of the time it takes to get the molds or dies from storage. This offsite storage can also result in a higher risk of damage to these very expensive molds or dies.

There are some solutions to these problems that can help a company expand production without expanding the existing building or storing the molds or dies offsite. One such solution is to purchase industrial pull-out shelf racks. These racks can be located close to the production machines allowing the operator to access the molds or dies in close proximity to the work area. Because the shelves can be pulled-out, the molds or dies are fully accessible using an overhead crane. Many of these industrial pull-out shelf racks can handle loads up to 2,000 pounds. Some higher capacity crank-out shelves can handle loads up to 5,000 pounds. The difference with the crank-out

shelves is that they can only extend 75% with these larger capacities, while the 2,000 pound capacity shelves will extend 100%. By installing these pull-out shelves a company can save on floor space up to a certain degree. These racks can be as tall as ten feet but generally are ordered no taller than six or seven feet. The reason for this is accessibility, the taller the rack the harder to access the upper shelves. Since a fork-lift cannot access the racking an operator must climb a ladder to access the upper shelves. This can put the operator in an awkward unsafe position while reaching from the ladder to the mold or die on the shelf. Although there will be a space savings these rack systems are generally short in height and short in length. Since they are located near the injection mold machines they tend to be spotted all over the plant floor. They may reduce the number of pallets spread out on the production floor, decreasing the amount of floor space needed to store the molds or dies, but they save only 10% to 20% of the space currently used for storage. Although there is a savings in space it may not be enough of a savings to add one or two production machines.

Another solution to organizing mold or die storage is the stacker storage system. These systems are specifically made to help with the organization of mold or die storage. They not only provide the racking required to store the molds or dies but they provide a means to store and retrieve the molds or dies. Because the molds or dies are no longer handled by fork-lift operators damage to the molds or dies is considerably reduced. Some systems come with accessories to transfer the molds or dies to the production machines. These accessories can improve productivity by reducing the number of personnel to retrieve the mold or die. With the use of pallet transfer carts or transfer stations there is no need for a fork-lift operator to be involved in the process.

Stacker storage systems can be as short as 10 feet and as tall as 25 feet. These systems can be configured as single aisle, double aisle and even triple aisle systems. For rack mounted stacker storage systems mold or die capacity can go up to 8,000 pounds. When higher capacities up to 25,000 pounds are required free standing support systems or existing runway systems are used in conjunction with the rack systems to provide a complete storage system.

Organization is the key, each mold or die is given a number and a specific storage location within the stacker storage system. Than the tool room operator keeps track of the mold or die by noting its location, whether it is in the storage system, on a machine or is scheduled for maintenance. Because the stacker storage system is equipped with a stacker lift system, the tool room operator is able to locate and retrieve a mold or die within minutes of receiving a pull order. Than having that mold or die ready for installation even before the machine operator is ready to install it.

The biggest and most important reason to purchase a stacker storage system is its ability to save floor space. By utilizing your overhead space you can open up your existing floor space leaving you more room for production equipment. Stacker storage systems can utilize this over head space because they make it easy to access molds or dies stored in the upper levels of the rack system. Smaller aisle space is required

to access the rack system than a conventional fork-lift would need; and your personnel will not have to access the upper molds from a ladder. Stacker storage systems can save, on average, 30% to 75% of space currently used for storage. This becomes important when compared to the costs of relocation or expanding your facility. There are many hidden costs associated with these solutions such as increased property taxes and higher air conditioning bills.

To summarize, storing a large number of molds or dies in conventional racking and on pallets strewn through-out the plant floor takes up a large amount of space. Trying to organize your molds or dies becomes a problem due to the lack of space. Logging and maintaining a record of locations is impossible, and retrieving molds or dies when needed can become time consuming depending upon how many molds or dies are blocking the one you are looking for.

By purchasing industrial pull-out shelves some floor space can be saved as well as a sense of organization can be obtained. Machine operators can access most of the molds or dies within reach but must use a ladder to gain access to upper shelves. Industrial pull-out shelves are limited in capacity and therefore limited in what can be stored at the machine work area.

By purchasing a stacker storage system you would regain up to 75% of the space you currently use for storage. You would be able to better organize your molds or dies and you would know where each mold or die is stored in your system. Because the molds or dies are no longer handled by fork-lift operators damage to the components is considerably reduced. With the accessories that are available the molds or dies can be transferred from the stacker storage system to the production machine, eliminating the need for a fork-lift and operator. Stacker storage systems utilize overhead space and can handle loads up to 25,000 pounds. Smaller aisle space is required to access the rack system and one tool room operator can retrieve any mold or die within minutes of receiving a pull order.

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