

More productive. More accurate. More visual.

Get Visual Logistics.



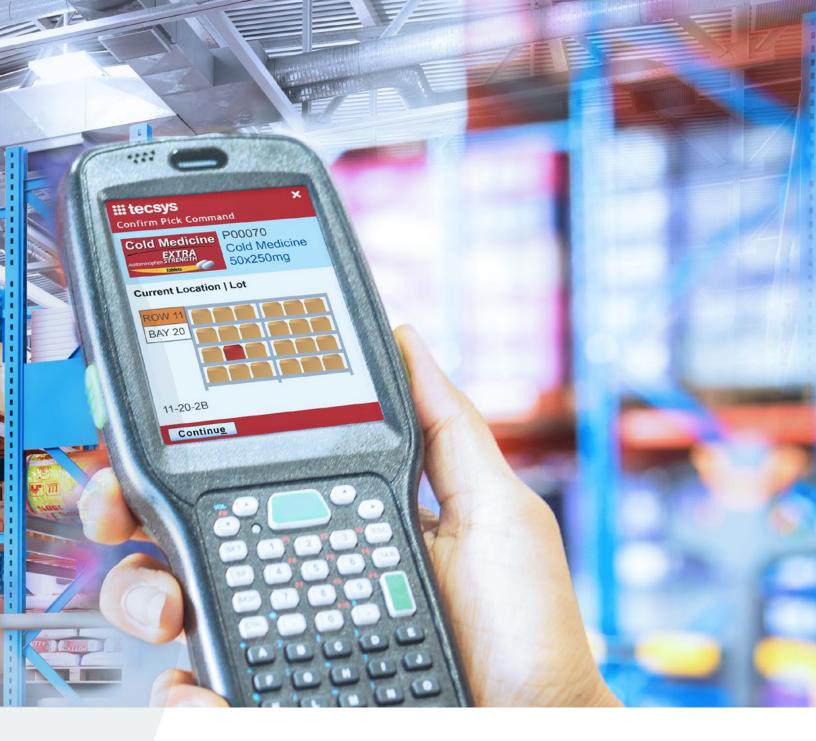


Your warehouse workers think better visually. They don't think in terms of item TS-19045-M3 or aisle/bin location A9B42. They shouldn't have to.

Why perform the error prone and tiring work of reading and entering alphanumeric codes into tiny text boxes when workers should be concentrating more on identifying and verifying that they are in the right place at the right time?

That's why Tecsys developed Visual Logistics.

Visual Logistics guides workers to accurately perform the tasks of receiving, putting away, picking, packing and shipping the right goods in the right quantities.







Visual Logistics makes workers of any age and skill level more productive and more accurate for longer periods of time, reducing the mental fatigue and miscommunication that legacy, text-only screens create.

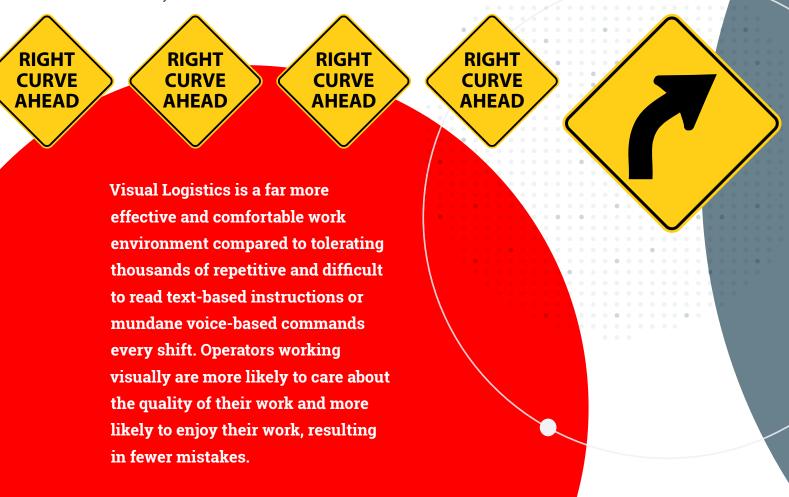
If you were picking items, which of the screens would you rather use all shift long, day after day?

Dealing with a More Complex, Ever-changing, Faster-response Environment

Your warehouse workers face an environment that demands a fast response while presenting them with greater levels of change and complexity. Text-only screens are a formula for reduced productivity with less accuracy.

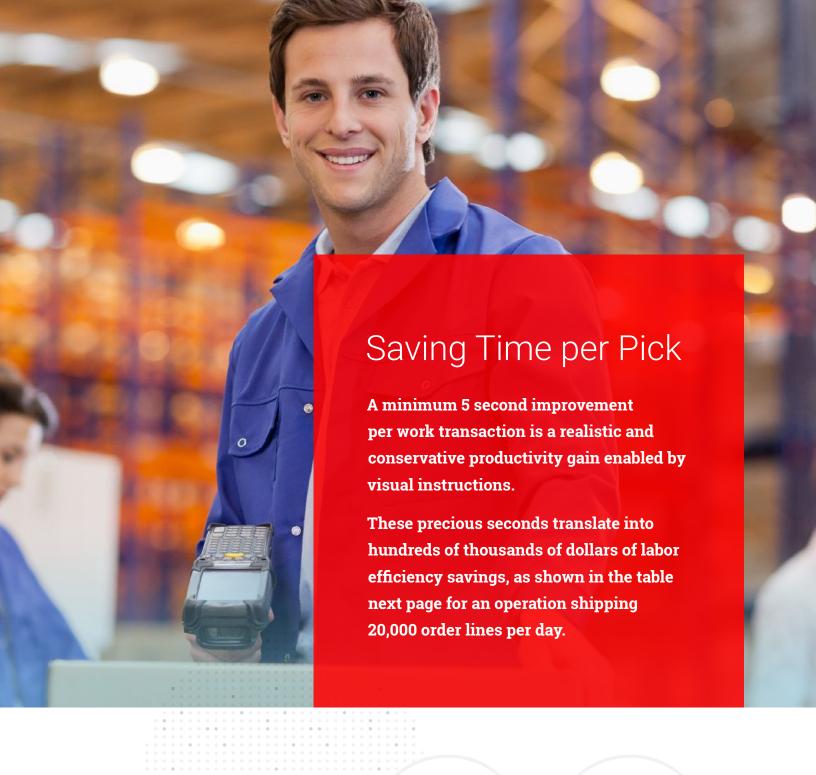
Industry experts recognize that language-independent visual information enables people to interpret and validate work instructions faster and more accurately than text-based information. This is the main reason that traffic signs around the world are increasingly based on standards that incorporate visual information rather than text.

Visual images stimulate the mind and create a heightened awareness, helping workers take more interest in their tasks. Visual Logistics significantly simplifies training because pictures are language-independent. Warehouse location maps help associates easily navigate warehouses and product-specific images help associates become confident in their tasks, even when handling items they have never seen before.





Visual Logistics combines visual information with barcode scanning precision to confirm the accuracy of all work tasks.



Time improvement per transaction

5 seconds

 \uparrow

Annual labor savings

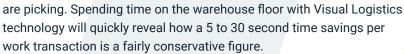
\$564,500



Traditional and Visual RF Comparison

Assumption	Traditional Text-based RF	Visual Warehouse (5 Seconds/Line Savings)	Visual Warehouse (30 Seconds/Line Savings)
Elapsed time (seconds) to pick one order line	72	67	42
Split case pick rate in shelving/flow rack zones in order lines/hour	50	54	86
Daily man-hours required to select 20,000 order lines	400	370	233
Annual labor cost for order picking if operators are paid \$13.00/hour fully loaded	\$1,352,000	\$1,250,600	\$787,500
Annual labor savings from Visual Logistics	-	\$101,400	\$564,500

This example is not theoretical — the figures are typical order picking efficiencies that can be expected in a split case shelving/flow rack operating environment. Visual location mapping helps to reduce a sizeable and wasteful component of travel and search time when operators



Productivity gains from visual location mapping go well beyond order picking and also apply to receiving, putaway, replenishment, and cycle counting. Visual location maps provide all operators, regardless of job function, with immediate guidance to locate items.



More Containers and Greater Complexity. More Need to be Visual.

Companies that have carefully studied the sources of picking inaccuracy have learned that the more containers in the cluster, the more mistakes are made.

Receiving

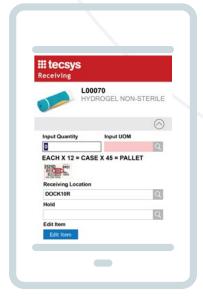
Visual Logistics in receiving provides the operator with visual instructions indicating which barcode the operator is required to scan in order to capture mandatory product-specific or compliance information. This is often needed within the inbound receiving process to capture information of interest like lot number, serial number, catch-weight, or expiration date. The image depicts the exact location of the barcode to be scanned so the operator doesn't waste time determining which code to scan or worse, scan the incorrect code on the package. Configurable capabilities make it easier to temporarily focus on QA concerns as needed, guiding workers to inspect inbound units for damage, appearance, integrity, completeness, freshness, etc. The visual display of a productspecific image(s) will ensure that the operator accurately executes quality inspection requirements

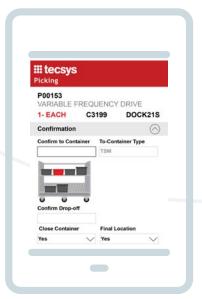
Cluster picking

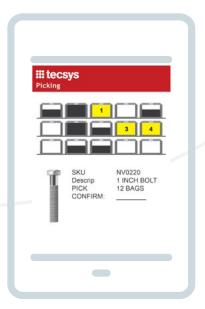
Cluster picking supports picks to containers for multiple orders during a single pass through pick areas. Cluster picking is used when the total cube of multiple orders can be manually transported such as with a cart, pallet, or gravity conveyor line. After supporting the correct pick of an item, Visual Logistics then provides the picture of the cart or other mobile platform, highlighting the appropriate location for quick and accurate placement.

Batch picking

Batch picking supports the combining of a group of orders into a larger, grouped parent order to get the entire needed quantity out of a location during a single pass through a pick area. Batch picks are then sorted out to their individual orders in a downstream operation.







For example, a pick accuracy error rate of 1.4% with a cluster of two containers may be closer to 2.0% with a cluster of three containers and this error rate climbs higher as the number of containers is increased. The more containers in the cluster, the better the labor productivity because of the travel time reduction, but this has to be weighed against possible reduced picking accuracy. Visual Logistics makes this type of picking much more accurate.

Packing

Visual Logistics provides the operator with visual information for customerspecific or product-specific packing requirements. Visual packing helps ensure that all shipping labels are placed correctly on shipping cartons. It also instructs operators about how temperature-sensitive products may need to be packed into designated container types, such as in the pharmaceuticals or food industries. High-value products may need to be specially packaged to either protect the product or to covertly conceal the identity of the product. Hazardous products may require specific handling, labelling and packaging requirements. Visual Logistics reduces operator oversight and compliance charges.

Value-added Processing

Visual Logistics provides the operator with visual information such as special material handling, storage or value-added service requirements that are specific to a product or to an inbound order. Value-added services or product-specific complexities need to be visually highlighted because they create opportunities for human error. Operations with any type of kitting or work order requirements are the most applicable types of operations that benefit from this feature. Visual value-added processing guides the operator through kit assembly and work order production. This may involve presenting images of kit components or depictions of special instructions relating to assembly.



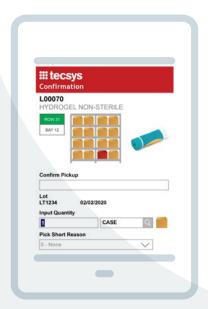


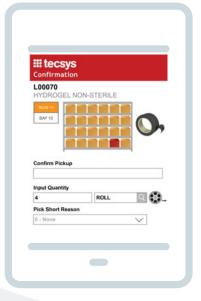
No More Errors

Visual Logistics Reduces the Two Most Common Errors: Unit of Measure and Adjacent Pick Location.

Two of the most common pick errors are: 1) a unit of measure error (picking individual items vs. boxes/cartons/bags containing multiple items) and 2) adjacency errors (picking one location to left/right or down/up from the desired location). Both types of errors are greatly reduced when Visual Logistics displays are presented to workers.

See how the visual representation of the product to be selected leaves no doubt as to which stock keeping unit of measure or quantity is being requested. Also see how the visual representation of location provides a significantly faster and more accurate interpretation of physical locations as compared to text-based information or voice direction alone.







Better at Training and Better at Retaining

Many companies are challenged by high labor turnover rates. The expense of hiring and training new employees can be significant. Decreased productivity and reduced accuracy issues are possible when new hires are continuously introduced to new operations and processes.

Visual Logistics reduces these costs by providing the backbone for a rapid training program, enabling operators to receive visual information throughout the day in terms of location mapping, value-added services (e.g. kitting) and product validation. This is particularly important to companies that have seasonal product lines or constant changes in product mixes.

Visual images also provide more job satisfaction for workers of any age, but particularly for the generations of associates that have been raised on devices such as smartphones and tablets. For those companies extensively utilizing voice-driven systems, people who are forced to listen to thousands of daily computer-generated voice-directed picking commands are much less likely to enjoy their work due to voice fatigue factors. People working with pick to light systems are more likely to turn off their minds as they perform endlessly repetitive pick tasks.

By contrast, Visual Logistics provides a far more humanistic work environment where the well-being of the operator is not sacrificed to obtain the critically important twin objectives of achieving the highest levels of productivity and accuracy. This translates into a higher level of employee satisfaction, resulting in reduced employee turnover.



About **Tecsys**

Since our founding in 1983, so much has changed in supply chain technology. But one thing has remained consistent across industries, geographies and decades — by transforming their supply chains, good organizations can become great.

Our solutions and services create clarity from operational complexity with end-to-end supply chain visibility. Our customers reduce operating costs, improve customer service and uncover optimization opportunities.

We believe that visionary organizations should have the opportunity to thrive. And they should not have to sacrifice their core values and principles as they grow. Our approach to supply chain transformation enables growing organizations to realize their aspirations.

