Workplace Color Coding Standards

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Workplace Color Coding Standards

Why do we use color to communicate? How much information in our daily life is actually displayed using color? In transportation alone, highways, traffic signals, pedestrian crossings and airports use color to organize information. Communicating this information using color standards keeps us safe and helps us make decisions quickly and more efficiently.

Look even further at our daily work. Inboxes, storage cabinets, tools, inventory, homework, project management and file folders are a few examples of where color coding is used to communicate and organize information efficiently.

Imagine a world without color. Color has meaning everywhere. It is meant to direct our behavior and assist in our decision making. Without color, our world becomes transparent and we lose the ability to emphasize importance and communicate effectively. Color standards become especially important in a multi-cultural environment in which not all people understand the same language. Communication is simplified and globalized with the use of color.

The purpose of color coding is to communicate without speaking. These types of visual communications help us convey a message clearly and without misunderstanding. Verbal communications leave a lot of room for interpretation, whereas visual communications remove the emotion and interpretation that commonly result in errors.

Ultimately, color code standards eliminate time spent searching for information, and increase productivity in any workplace. **Three distinct types of color code standards exist in most workplaces: safety, process, 5S and workplace organization**. Your workplace may or may not have standards for each category; it will depend upon your environment and the work that happens there. You must first recognize what types of standards exist in your workplace, determine if all of these standards are necessary, and how they can all work together.

Safety Color Code Standards

Safety standards for many industries including manufacturing, warehouse/distribution, hospitals and transportation are created by regulatory agencies. These standards increase safety by standardizing the visual communication for hazards, cautions, directing behavior in emergencies and many other necessary situations. Color is an important part of these standards and is designed to be commonly recognized. The good news is that these safety standards already exist for your workplace and can be obtained easily from the agencies that regulate them.

Example: The American National Standards Institute (ANSI) has developed standards for color and meaning (ANSI Z535.1-6. Color Codes). These standards have also been promoted by the Occupational Safety and Health Administration (OSHA).

Process Color Code Standards

Process color standards are primarily used to organize data and communicate status and priority with efficiency, without words and without questions. They complement existing work instructions and assist in communicating at a glance. Their underlying goal is to define normal and abnormal situations. They are the foundation of all the mini visual systems that populate our daily work. Without these standards, time is spent searching for what is needed. The value we strive to give our customers is eroded by non-value activity resulting from abnormalities that go unnoticed and create waste.

Example: This visual system was created to communicate at any moment the status of work orders in the maintenance department. Here color was used to emphasize priority. A work order placed on the board in the red zone receives higher priority than one in the green zone. Most importantly, if the priority changes, it visible immediately! Due dates have also been integrated to establish priority and create balanced work loads. This system includes a work instruction for its use and identifies the owner of the board. If a question arises, no time is wasted searching for the right person to answer the question.

Example: This visual aid was designed to communicate to a technician what each color hose is used for , at the point of use, not in a binder far removed from where the work is done. By communicating the standard, errors are reduced.

Process Color Code Standards *(Continued)*

Example: Color was used here to organize performance information in a similar way throughout the facility. When information is needed, it can be quickly located with color association. Information is displayed with a standard function and organized for quick retrieval.

Example: Using color, the system pictured below was designed to reduce the time spent searching for and filing documents. Originally the documents were placed in a single file folder. If a document needed to be referenced, the entire stack had to be sorted. At the end of the day when the documents were to be filed, again the entire stack had to be sorted. The new color coding system allows the documents to be sorted throughout the day, which reduced motion and simplified document recall.

Hundreds, even thousands of processes exist in our workplace that utilize color to create visual mini-systems. It is crucial to recognize their presence and acknowledge how these process color coding standards can complement the other types of color coding standards we use daily. Documenting these standards is typically unnecessary. When training associates about the visual workplace, emphasis should be placed on trying to use color for organizing data and incorporating it into creating systems for standardized work.

5S & Workplace Organization Color Code Standards

In addition to safety and process color code standards, color can be used to communicate how our workplace is organized. Why do we need these types of standards? In nearly every workplace, tools, work instructions, data, equipment, inventory and work-in-process are all required. Our work typically consists of many moving parts. What happens when parts of our job get moved and don't end up where we need them most? It results in WASTE. Waste has been classified into seven deadly categories: 1. Transportation, 2. Excess inventory, 3. Motion, 4. Waiting, 5. Over-processing, 6. Over-production and 7. Defects. Waste adds cost—cost that our customers are not willing to pay for—and therefore, must be eliminated. How do we eliminate waste? By creating standards for organizing our workplace.

How often have we cleaned and sorted an area only to find that within a short amount of time it is right back to where we started? Unneeded items have crept back into our workplace, making the items we need difficult to find until we finally throw our hands up in frustration. Why didn't the changes and improvements stick? The answer is a lack of standards. Standards help us to sustain processes, present opportunities for improvements, and keep us safe.

The companies that have succeeded to maintain an organized workplace have established standards. Standards are most effectively used with color in order to create discipline and adherence. These standards have evolved from a process called 5S. The 5S methodology helps create and keep an organized workplace.

The first step in the 5S process is Sort. Non-value items must be identified and removed from a work area and placed into a designated disposition area. This process is commonly called red tagging.

5S Red Tags

Clearly mark your designated area for disposition.

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5S & Workplace Organization Color Code Standards *(Continued)*

The next step in the 5S precess is Set In Order. Establish a place for everything and everything in its place. All moving objects require an identification label or a border around them. This is where color coding becomes a useful tool.

BEFORE. Machine parts are all stored in an unorganized stack. Two pieces needed for a particular job are almost never found together.

AFTER. Tool shadows are used to organize all the parts so it's impossible to make mistakes during setups.

Borders help keep everything in its place.

When an object is not there you know what is missing.

BEFORE. An unorganized board with no direction can lead to confusion and mistakes.

AFTER. Color-coded, custom visuals on magnetic strips give direction and eliminate confusion.

5S & Workplace Organization Color Code Standards *(Continued)*

Color, ID labels, and borders work together to give us at- a-glance notice when our areas begin to drift from order. At this point, we can quickly and easily regain order before disorder prevails.

How do you create 5S color coding standards? Where do you start? It is recommended to begin with the basics. Start by asking yourself what happens in your workplace. What processes exist where organization is critical? What hassles seem to reoccur that should be eliminated? What aspects of your work require that things belong in a designated location to get the job done? Try to establish standards that incorporate all of your processes. It might be necessary for different standards to be established for manufacturing/ processing and for office/administrative processes. Either way, they can reduce waste.

Additional categories that you might consider include:

- Returnables
- Cardboard
- Trash, Scrap
- Training
- WIP

- Finished Goods
- Tools/Gauges
- Recycling Area
- Non-Conforming Materials

VISUAL WORKPLACE COLOR STANDARDS

- RAW MATERIALS
- AISLE
- ENGINEERING SAMPLES
- QUALITY HOLD
- WORK INSTRUCTIONS
- STATIONARY ITEMS
- PACKAGING
- REWORK
- PURCHASED PARTS

We have described three types of color coding standards and illustrated their importance. These standards can work together, but it is not necessary to try to find one color code standard to fit all of these needs. It is nearly impossible to execute and manage. The key to creating a thriving visual workplace is to establish standards for safety, processes and workplace organization and instill the discipline to follow them.