

We have three sets of worksite images as shown in the table below

Folder Name	Description	Predominant Colors at the worksite	Optimal Safety Color
01-lifting (15 images)	The worksite is a barge fitted with winches and a lifting tower.	Blue (sky) Red (barge and equipment) Grey/black (barge deck)	Green
02-fabrication (15 images)	The worksite is a fabrication hall for heavy-steel construction.	Brown (steel plates) Grey/blue (walls and roof)	Green
03-wind (15 images)	Transport and installation of offshore structures. Structures are mainly offshore towers to support wind turbines	Yellow (offshore structures) Blues (Sky and sea)	Green

Each of the three images sets was analyzed using the algorithm we developed for determining the optimal safety color. Sensitivity to the following parameters was checked:

- windowing size
- Color space (RGB, RGB weighted, CIE Lab, HSV)
- weight factors for ranking the safety colors.

For the three worksites, the optimal safety color derived was GREEN. Example of an edited image for the validation tests is shown below. We varied the lightness of the pure green color (BGR: 0,255,0) to better fit on the conditions of the image because we do not want to have the Optimal Safety color stand out disproportionately to the color of the original cloths.

