Manufacturing Intelligence

Accur8vision is shedding a new light on the security and safety world for its ability to now track an intruder or object the entire time.

Challenge

- Protecting employees from moving parts (ex: conveyer belts)?

- Is it possible to see which routes in factory area are overloaded? Or to see routes with low traffic?

- Can Accur8vision prevents from blocked corridors and passageways?

- Some areas of a factory are limited to personnel that are authorized to be there. Can Accur8vision handle that?
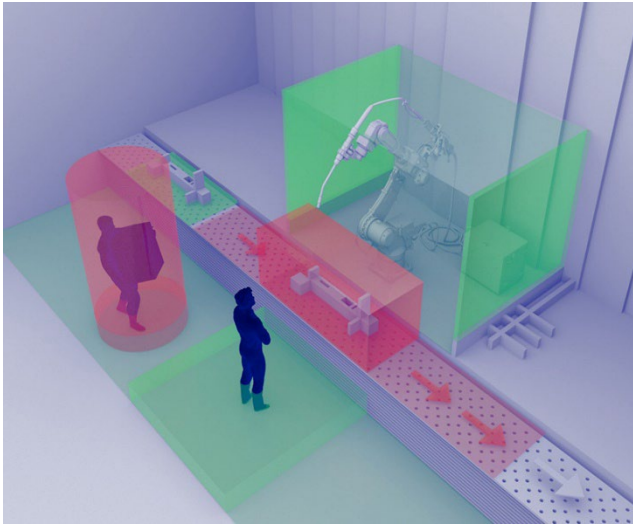
Solution

- Accur8vision consists of security zones which can be actively placed around the heavy machinery. The worker can power on the machine, but the machine will not start until the worker is safely out of the zone.

- The heat map is a better way to tell where the equipment and workers are moving at a specified moment in time. It helps to see which way things are completed, things could possibly be improved saving everyone time and money and yet at the same time keeping safety.

- Setting up zones inside Accur8vision in the hallways and corridors can reduce the risk of clutter and items being left in inconvenient places. Accur8vision will always let you know there Is an obstacle in the way.

- Accur8vision has many different types of zones that do different types of things. The delay zone f.e. If a person enters this zone and uses a pin or their key card before the allotted time, an alarm will not be activated.

Accur8vision's sole purpose was to be used in the security sector but why keep something as robust to only one sector when it can be used in many.

Safety standards inside factories and warehouses are a key factor in everyday work life. Employees need to work in a safe environment so that production and such can continue. When dangerous machinery is on wouldn't it be better to be able to stop the machinery if a worker gets to close? Or. What happens when a conveyer belt breaks and causes errors or someone is not paying attention and their shirt gets stuck? These are all human errors that could lead to a tragic ending. Being prepared and having a great system in line to keep workers safe is the best way to continue with the workday.
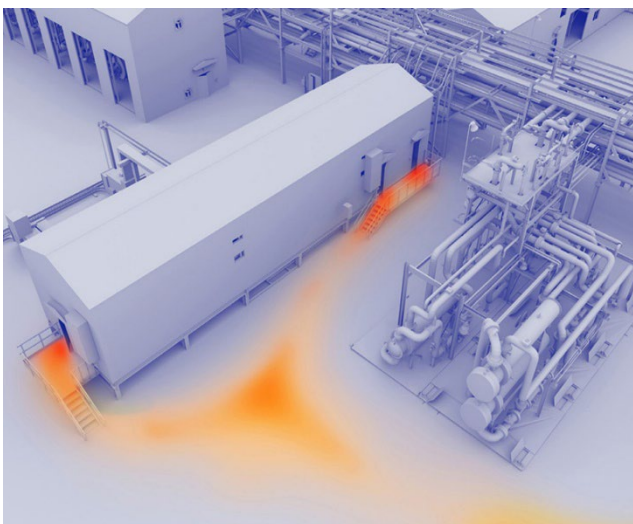
Using Accur8vision to ensure employees safety is just as important as it is in the security sector.
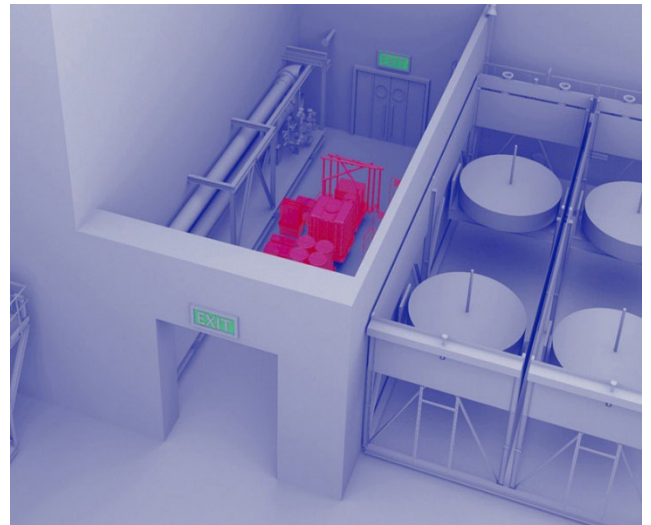
1 | Machine Safety

Safety is a big concern for all aspects of life especially in companies where it can affect the daily workflow. Working with heavy machinery can pose a problematic situation if the machinery is not handled correctly. What if there was a way to successfully handle the heavy machinery that can eliminate any safety hazards that can be brought on by the worker or the machine. Accur8vision consists of security zones. These zones can be actively placed around the heavy machinery. The worker can power on the machine, but the machine will not start until the worker is safely out of the zone. During the operation of the machinery the zone can be activated. If this zone is breached in anyway and alarm can be activated, and the machinery can automatically switch off. All machinery in the factory can have its own zone. There is no limit to how many zones Accur8vision can handle. This way the worker will always remain at a safe distance from the machine and injuries will be at an all-time low. This is only one example. There are many different things that Accur8vision can do. For example, even safety regarding line work with conveyer belts could be a way that Accur8vision can be used.

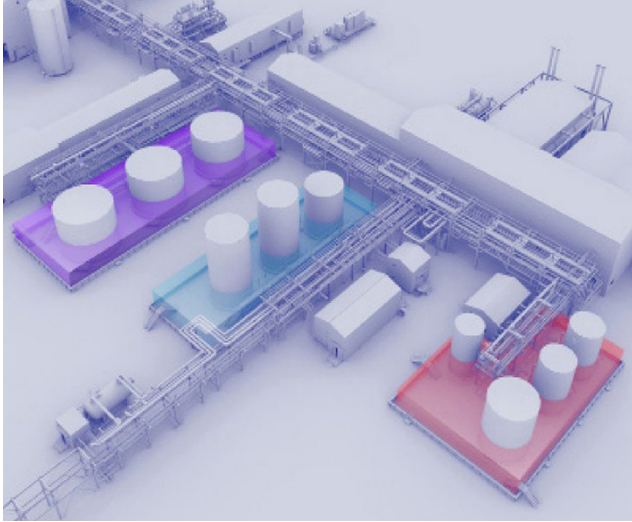# 2 | Heat Maps and Passage Direction

Logistics are another operational way that Accur8vision can be of use. Due to the trajectory measures inside Accur8vision it is possible to recognize in which direction the operator or goods are moving and respond to it. This information is stored in an SQL database, which can be accessible to other systems. Along with the trajectories, Accur8vision is also equipped with a heat map. This provides data based on the moving lidar points. The heat map is a better way to tell where the equipment and workers are moving at a specified moment in time. This can help companies in seeing which way things are completed and which way things could possibly be improved saving everyone time and money and yet at the same time keeping safety and production regulations.
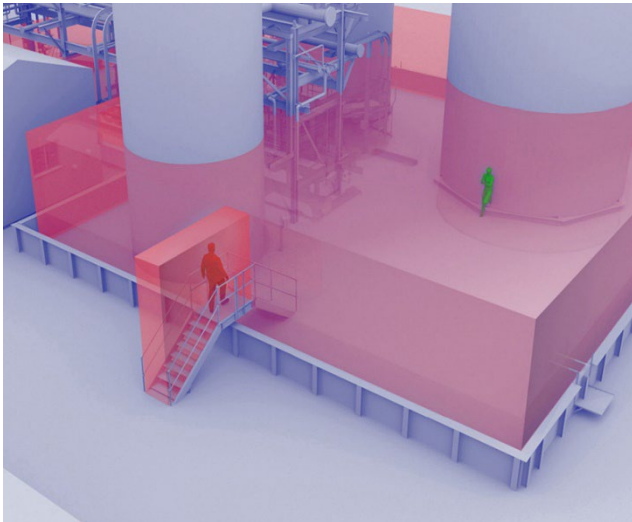
3 | Blocked Corridors

In factories, it is very important to have all corridors empty and free of clutter. This can potentially be a safety hazard in case of fires or catastrophes on the factory floor. Setting up zones inside Accur8vision in the hallways and corridors can reduce the risk of clutter and items being left in inconvenient places. A snapshot is first taken which will remember a type of picture of the area. Anything that is added to that area after the snapshot, if the zone is armed, an alarm will be activated if it's been there for a certain amount of time. This will let the operator know that this area is blocked and needs to be cleared. This is another preventive measure that Accur8vision can be used for.

4 | Unauthorized Personnel vs. Authorized Personnel

Some areas of a factory are limited to personnel that are authorized to be there. Accur8vision can help in monitoring these areas. Accur8vision has many different types of zones that do different types of things. The delay zone would be a very great tool to use in his situation. Delayed zones allow a delay in alarm activation until a certain set time. If a person enters this zone and uses a pin or their key card before the allotted time, an alarm will not be activated. This means that this person is authorized to be inside this area. If a person enters this zone and doesn't provide the pin or have a key card in the allotted time, an alarm will be activated. This means that this person is not authorized to be inside this area. Delayed zones can also be used in different types of scenarios.

Another example could be that there is an 'authorization' zone when first entering an area. When the worker places the card on the reader and they become an authorized person, the bounding box surrounding them then becomes green and they are free to walk around. This is another way to differentiate between authorized and unauthorized personnel. A non-authorized person will not be aware that they have a red bounding box surrounding them and are setting off alarms. This allows guards to secretly pursue the unauthorized person without their knowledge which in return could save lives of the guards or personnel if this unauthorized person becomes hostile.

When it comes to protecting employees and their surroundings in the working environment, Accur8vision proves itself as being just as useful in the safety sector as it does in the security sector. With the help of zones and lidar, Accur8vision was able to protect employees and warn of any potential dangers before an accident could occur.