


TYPES OF COLLABORATION WITH ROBOTS

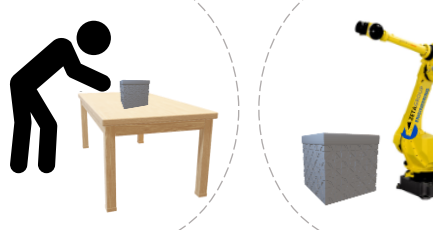
Intrinsic Safety of Robot

Fenced Robot



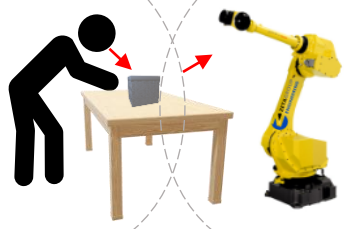
Robot has perimeter fencing separating workspaces between robot and worker

Coexistence



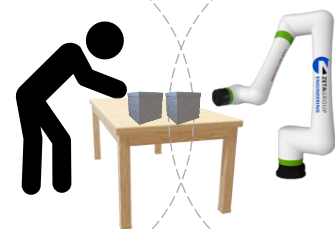
Robot has no fencing, utilizes safety rated electrical sensors and scanners, and has its own workspace

Sequential Collaboration



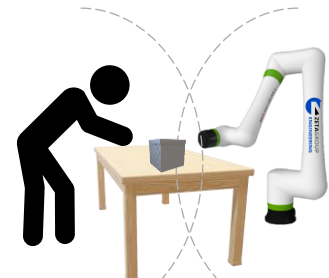
Robot utilizes safety rated electrical sensors and scanners, uses safety rated robot controls, and utilizes a shared workspace with worker at separate times

Cooperation



Force monitoring robot shares workspace with worker while both work on their own products

Responsive Collaboration



Force monitoring robot shares workspace with worker and both simultaneously work on the same product

Level of Collaboration