ARIAC NIST
Agile Robotics for Industrial
Automation Competition

Trial Description

- **Task**: Build **1** single shipment from 1 single order. In this scenario there is one person moving in aisle #2. Products required to complete the shipment are not located in the aisle where the person is moving and should be accessible from the other unoccupied aisles (aisles #1 and #3). Colliding with the moving person will set the score to 0 for this trial.
  - The conveyor belt is not used.
  - There are faulty products in the environment.

- **Orders**: 1 order. order_0 consists of 1 single shipment (order_0::shipment_0).
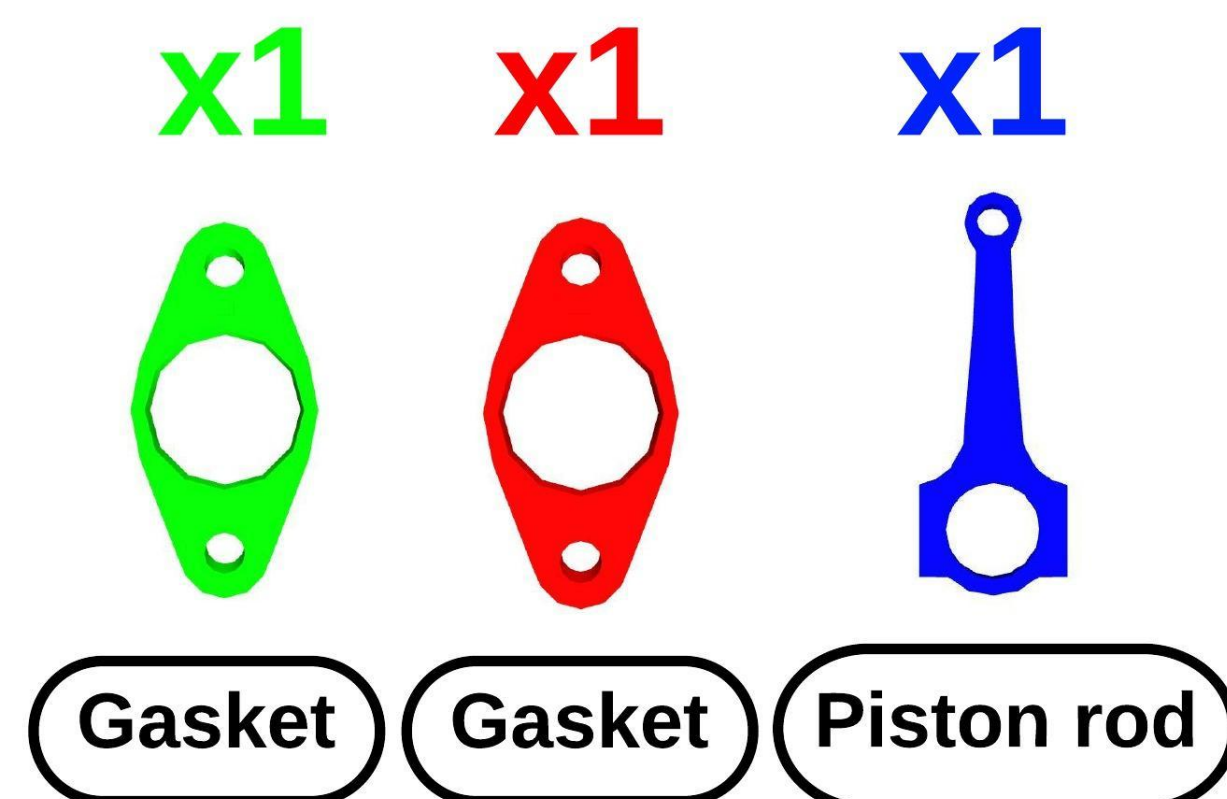 - The shipment in order_0 consists of 3 products in total:

Fig. 1: Products used in shipment for order_0.

- **Maximum completion score**: 12 pts.
- **Agility challenges**:
  - Faulty products.
- **Product vessels**: bin $\times$ 0, shelf $\times$ 3, conveyor belt is not used.
  - **Shipment deliveries**:
    * order_0::shipment_0: AGV1.
  - **Time limit**: 500 sim seconds.

Initial Product Placement

Fig. 2: Initial product placements.

Agility Challenges

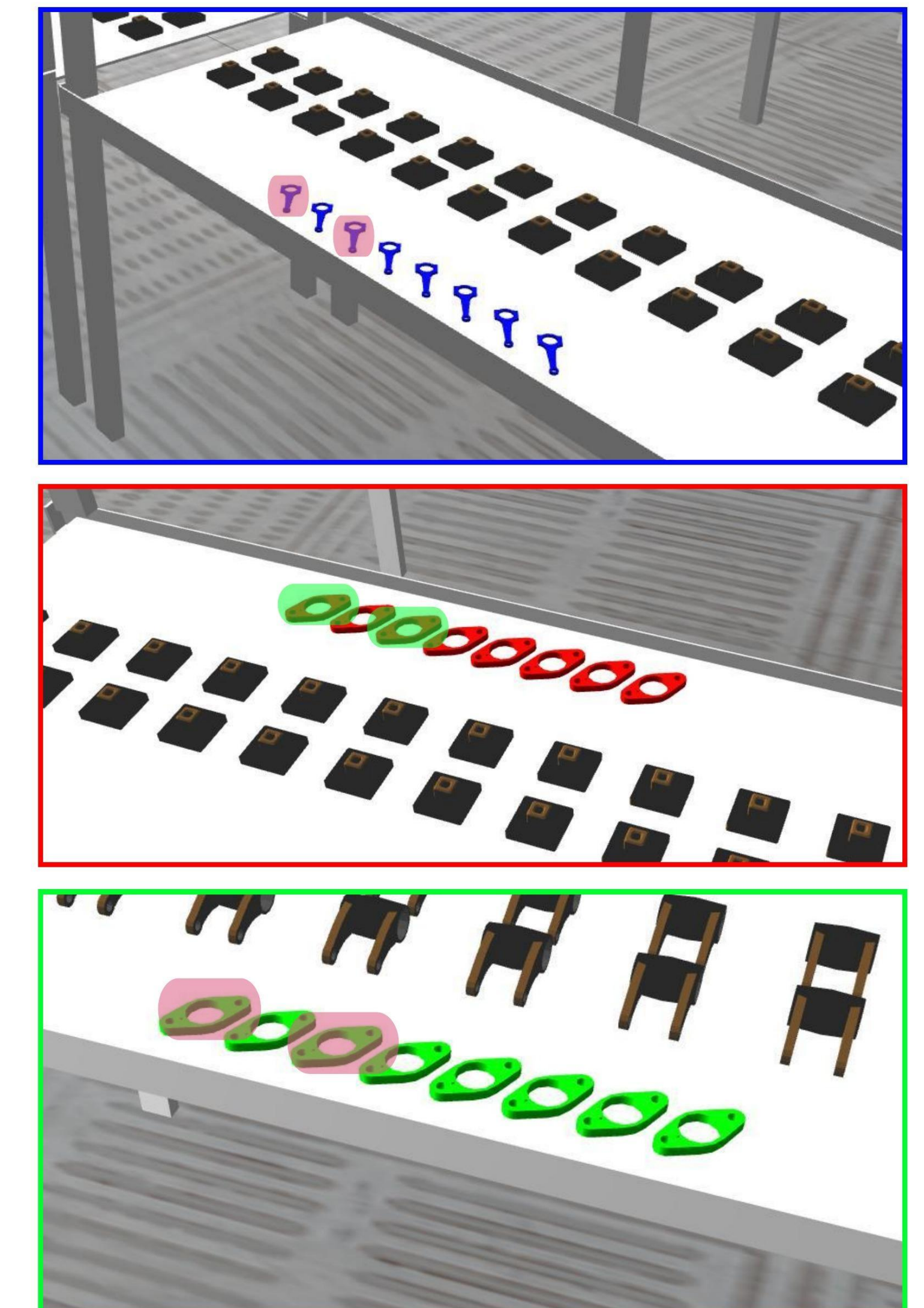- Faulty products: There are 6 faulty products in the environment.
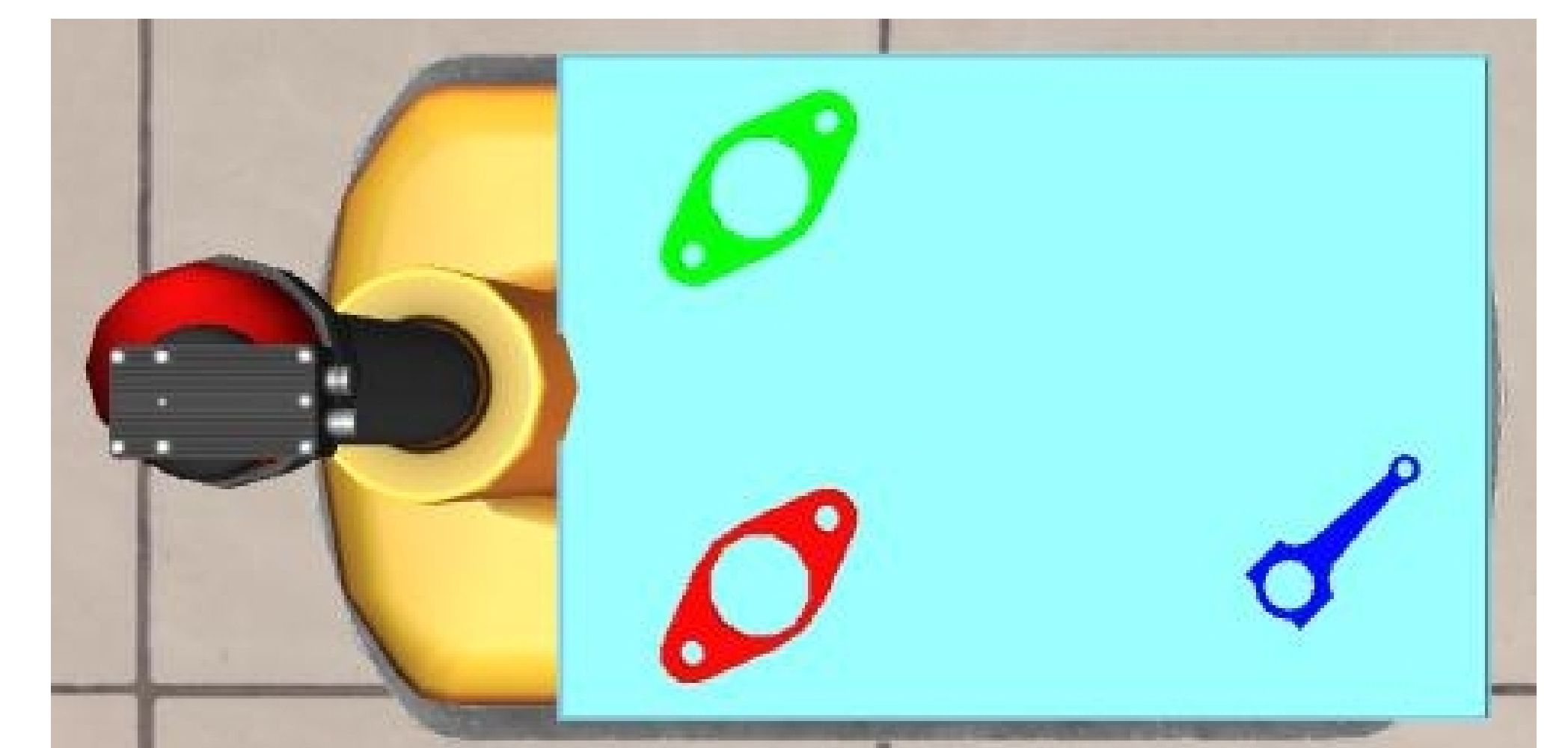

Fig. 3: Faulty products in the environment.

Orders

Fig. 4: order_0 shipment configuration on AGV1.