"Equipment needs to be made compact even with large pallets."

Before

User:

We want to satisfy the user's demand for "compact equipment" and receive the order in every way possible!

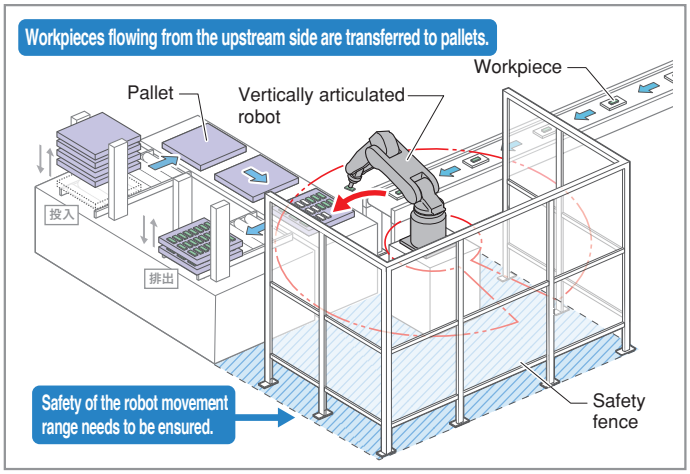
With a conventional system…

Vertically articulated robot that is relatively easy to design is arranged.

- Robot base needs to be provided and installed separately from the equipment.
- Safety fences that cover the movement range are needed and take up a large space.

Subject supplement

- User's demand for downsizing of equipment is severe.
- Robot with a large pallet size and a long arm length needs to be selected.
- When a large vertically articulated robot is arranged, safety fences are also needed and the user's demand cannot be satisfied.

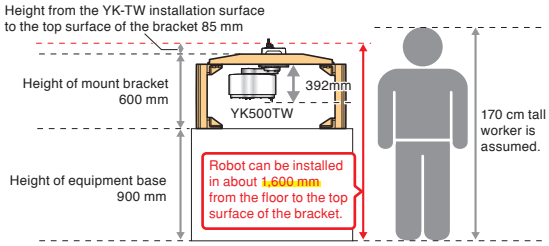


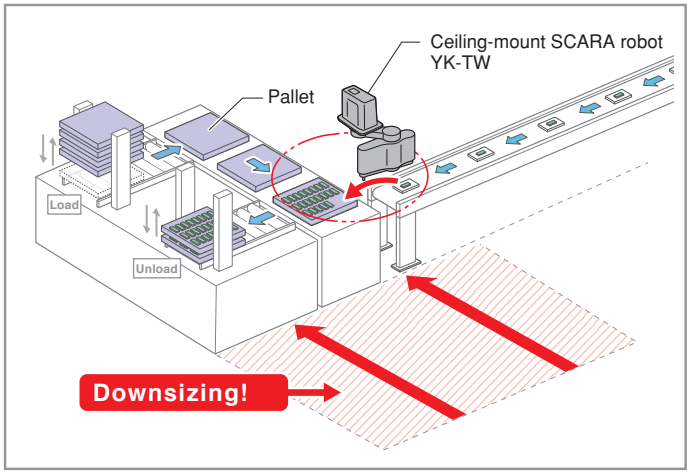
After

Yamaha's answer to the user's needs.

Ceiling-mount SCARA robot YK-TW can be stored inside the equipment and downsizing is achieved.

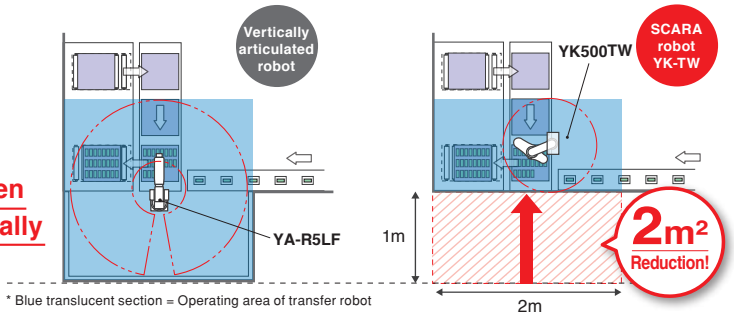
- As the YK-TW is low in height and lightweight, it can be installed inside the equipment.
- Since the YK-TW can be stored inside the equipment, there is no need to install separate safety fences.





Results:

Equipment footprint is reduced significantly when compared to using vertically articulated robot.



* Blue translucent section = Operating area of transfer robot

Pleasant Point!

YAMAHA prepares an installation base dedicated for the YK-TW. So, there is no troublesome strength calculation and man-hours can be reduced.

Mount bracket

Order is received by proposing downsizing!

User testimonial

equipment SIer

People in charge of equipment design

Downsizing is achieved. Order for equipment No. 2 was also received because we responded to customer's severe requirements!

Our company is an equipment SIer that individually designs and manufactures unique equipment to meet the requirements of our customer.

The reason why we decided to consider Yamaha Motor's ceiling-mount SCARA robot YK-TW was that we needed to make the equipment more compact due to customer's strong demand.

In the past, a vertically articulated robot that was easy to design was used to accommodate large pallets, but a vertically articulated robot required safety fences and took up a large space.

Yamaha Motor's YK-TW has a payload of 5 kg and a large movement range of φ1,000, so we thought this robot would be easy to lay out even when large pallets are used. So, we began considering the YK-TW.
When we began to study the YK-TW, we found that it was extremely low in height (392 mm) and lightweight (27 kg) and that it could meet the size of the equipment requested by the customer.

After that, the equipment was successfully completed, and then the customer was pleased with the results after installation.

After asking the person in charge later, we were the only company among several equipment SIers that submitted proposals which met the required equipment size and we were also evaluated on this point.

In the future, we would like to make proposals for making equipment more compact using the YK-TW in other projects.

Functional description and merit of YK-TW

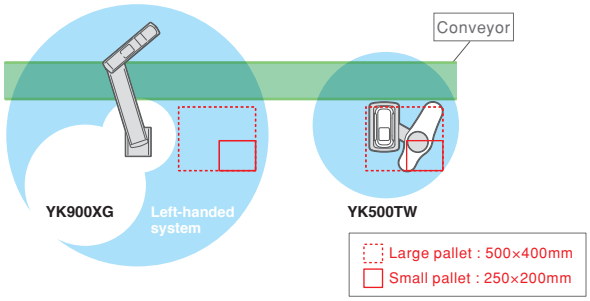
YK-TW: Orbit type

Features of YK-TW

- As this robot is accessible in all directions, the operating area is wide and the degree of layout freedom is high.
- This robot is ideal for unloading workpieces from multiple pallets, aligning them to pallets, and combining with conveyor.

Equipment can be made compact.

To meet large pallets, a large robot needs to be selected.
The TW has a free layout, so downsizing is possible.



Orbit type SCARA robot "YK-TW"
YK500TW

Scan the QR code for details.

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