

# SMART WAREHOUSE AUTOMATION & RETRIEVAL SYSTEMS

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# 2 Way Radio Shuttle

Loading capacity: 1500kg - 2000kg

Product details  
Click Here



- Economic Type
- Standard Type
- Heavy Load Type



- Advanced Type
- WIFI Type
- Stacker Type

Product details  
Click Here



Shuttle Rack



# Smart Warehouse Automation Systems



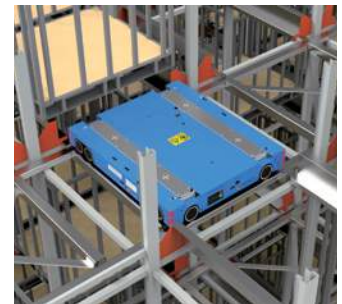
## 4 Way Radio Shuttle



Standard (PTR-HS)



Heavy (PTR-HW)



- Horizontal pallet transport robot
- Vertical pallet transport robot
- Convey pallet transport robot

### Software

- WMS (Warehouse Management System)
- WCS (Warehouse Control System)

# Automated Guided Vehicle (AGV)



Integration Option



# Mobile Robot

Q3 series

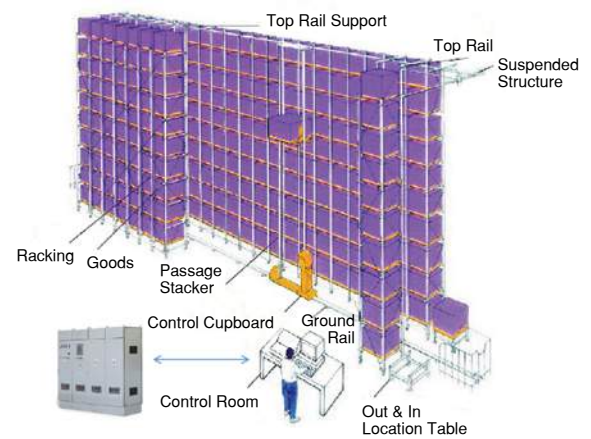


Q7 series





# Automated Storage & Retrieval System (ASRS)



**TTF AS/RS System** consists of assembly racking and welding racking. Complimented by passage stackers, conveyor system and computer control system, it guarantees the fullest space utilization, handling mechanization and storage management modernization.





### Planning Stage

Custom design for warehouse layout and spacing optimization blueprint by site visits and technical discussions.

### Designing Stage

ASRS components technical selection by engineers in engineering division to meet customer requirements.

### Manufacturing Stage

Manufacturing of selected components according to configured mode and design drawings.

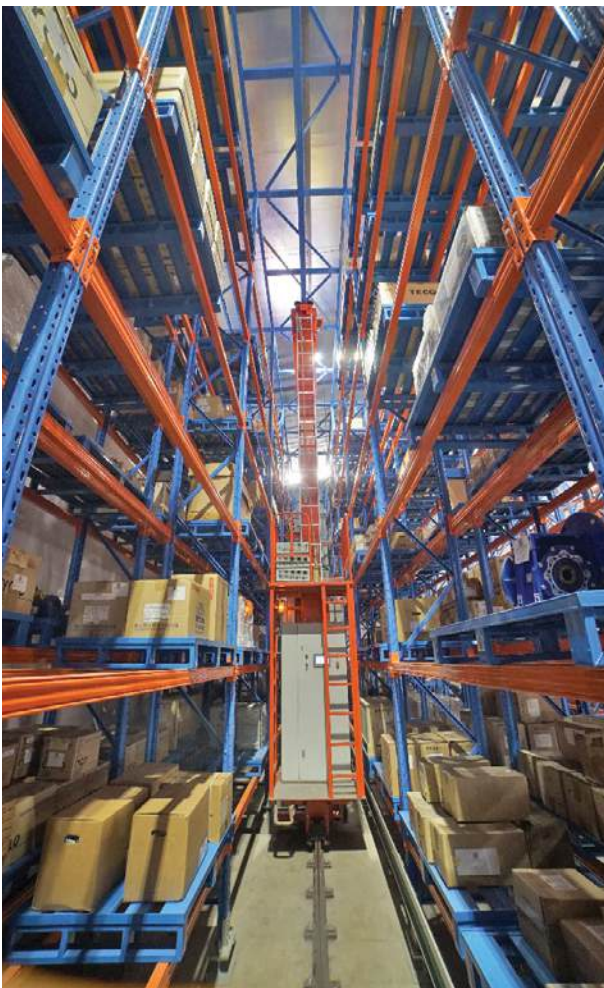
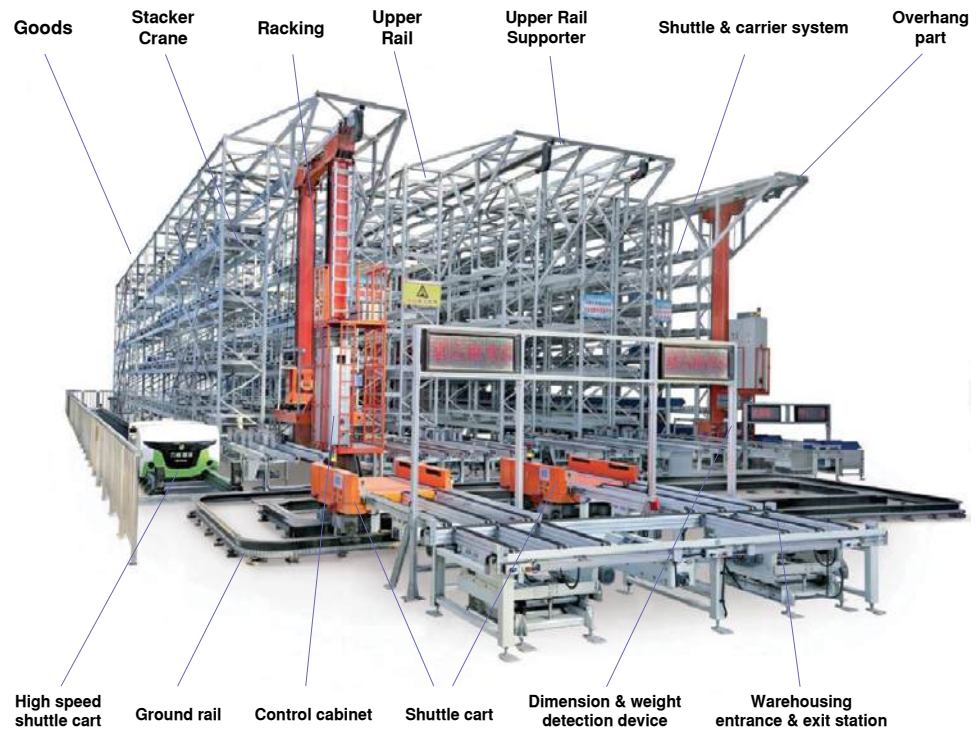
### Installation Stage

Assemble, install & debug of mechanical structure and electrical control system at customer site.

### After Sales Stage

Technical support / services at site and remote online maintenance by professional engineers at your requests.

## Custom Design System



### ASRS Concept Structure

- Beams/ Bracket type racking with high steel quality for whole assembly structure.
- Steel pallet to load goods with strong loading capacity and better rigidity.
- Main components of racking being manufactured in high precision production.
- Installation done by certified engineers and technicians at site.

### ASRS Benefit Highlights

- ✓ High storage density degree vs space.
- ✓ Increased variety of goods stored.
- ✓ Micro warehouse cells stock check.
- ✓ Maximum store space utilization.
- ✓ High rise warehouse structure.
- ✓ Minimum land space utilization.
- ✓ High automatic operational speed.
- ✓ Minimum manual stock handling tasks.
- ✓ Minimum stock damages and losses.
- ✓ Application for Industry 4.0 implementation.
- ✓ Interface syncing with mainframe ERP / SAP.
- ✓ Auto database logs and ISO reporting formats.
- ✓ Real time inventory management.
- ✓ Increased inventory stock accuracy.
- ✓ Increased warehouse overall efficiency.
- ✓ Short ROI period of approximately 2 to 3 years.
- ✓ High rate of increased operation efficiency.
- ✓ Skilled workers development via technology.