

## 1210150 Introduction of solid racking plastic pallet

### 1. Design renderings :



### 2. Basic parameters of pallets:

Product Name	1210150 Introduction of solid racking plastic pallet		
External dimensions (length x width x height)	1200×1000×150mm		
Rated load	Static load: 6 tons	Dynamic load: 1.5 tons	Shelf load: 1.2 tons
Deformation	Maximum load average load strength deformation ≤10mm		
gross weight	26kg (including 9 steel pipes, wall thickness 1.5mm)		
Main raw materials	Polypropylene (PP)		
Operating temperature	-25℃ ~ +50℃		
Product color	Recommended blue/red/green/gray (other colors need to be determined by negotiation between the two parties)		
Fork size	Closed direction: fork width 315mm, middle leg width 190mm, fork height 77mm; Opening direction: Fork width 275mm, three legs width 150mm, fork height 110mm.		
Marking process	Mould engraving, screen printing		
Anti-slip design	Leather anti-skid and two-color anti-skid mat		
Structure and process	Panel structure	Flat plate (surface welding)	
	Bottom Type	Three legs	
	Pallet Enhancements	Built-in 9 steel pipes	
	Production process	Injection welding molding	
Implementation Standards	GB/T 15234-1994 Plastic flat pallet		
Recommended Use	Single and double extension automated warehouse, shuttle warehouse, four-way garage		

### 3. Pallet size:



### 4. Performance and characteristics:

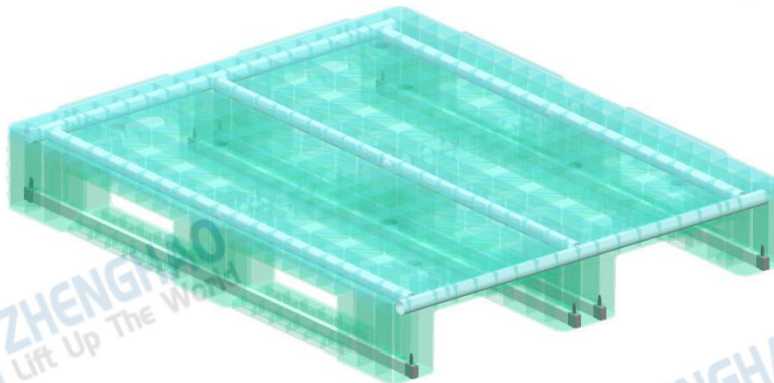
- Designed according to the size recommended by the national standard, the fork structure is in the shape of a cross, forked on four sides, and can be used on one side. The pallet is not hollowed out as a whole (flat surface, horizontal surface, bottom), easy to clean, and non-slip. It can prevent the goods (including empty pallets) from shifting or collapsing when the pallet is moving or changing lanes; it ensures that there will be no light leakage during photoelectric scanning. The fork hole size is reasonably designed, and it is suitable for forklifts, manual hydraulic pallet trucks, stackers, and stackers; it uses co-polypropylene raw materials, which are non-toxic, odorless, environmentally friendly and hygienic;

### 5. Material and technical requirements

- Material: Use high-quality, environmentally friendly, low-temperature resistant, durable, high-impact strength new low-pressure high-density polyethylene (HDPE) or copolymer polypropylene (PP) raw materials. It is strictly prohibited to use recycled materials and recycled plastics. Environmental protection requirements must meet the current national standards.
- The surface is smooth, without burrs, and without cracks and deformations that affect use. There should be no obvious color difference between the upper and lower parts of a single pallet, and the color of the same batch of products is basically consistent.
- Appearance requirements for pallets: The length and width of the upper and lower sides of the pallet are consistent, the whole is flat, without cracks, deformation and obvious welding marks. The manufacturing error of the length and width of the plastic pallet is  $+3$  to  $-6$ mm; the manufacturing error of the height is  $1\%$ ; the deformation rate of the side wall is  $\leq 1\%$ ; the shape and position deviation of the upper and lower pieces of the side wall welding part is  $\leq 5$ mm; the deformation of the pallet plane is  $\leq 3$ mm; the length error of the two diagonals of the pallet plane is  $\leq \pm 3$ mm; there is no flash, burrs, or burning.
- Maximum deformation: When fully loaded and placed on the beam, the deflection in both directions  $f \leq 10$ mm, and the residual deflection after unloading for 2 hours is  $\leq 4$ mm. When the pallet is placed on the fork for testing, the deflection is  $\leq 10$ mm, and the residual deflection after unloading for 2 hours is  $\leq 4$ mm. When the pallet is placed on the chain conveyor for testing, the deflection is  $\leq 10$ mm, and the residual deflection after unloading for 2 hours is  $\leq 4$ mm.
- The pallet is injection molded and welded. The product is corrosion-resistant and has a firm connection to ensure that it will not fall off during transportation.
- Pallets allow for flat stacking up to 10 layers when stored.
- Anti-slip during transportation: The contact surface of the fork and the upper and lower sides of the pallet should all have anti-slip designs. It should be ensured that the materials (empty pallets, full pallets, and groups of empty pallets) do not slip when being transported on the conveying equipment and stacker; when

starting and stopping, the materials do not slip against the supporting pallets; when the pallets are stacked in groups, the pallets will not slip or misalign; in particular, the contact surface between the pallet and the conveyor should use continuous anti-slip strips, rather than intermittent anti-slip blocks, to avoid up and down bumps when running on the roller conveyor .

- In order to ensure the accuracy of the photoelectric detection of the conveyor control system, a closed plane is required at least 100MM at both ends of the bottom of the pallet legs.
- There are 9 steel pipes built in vertically and horizontally , and the four-way fork position is supported by steel pipes to meet the dynamic load and shelf load requirements. The steel pipes are fully enclosed and not exposed to avoid corrosion and rust. The steel pipe material is: Q235-B type, wall thickness  $\geq 1.5\text{mm}$ ; galvanized layer thickness  $\geq 9 \mu\text{m}$  ; Steel pipe layout diagram:



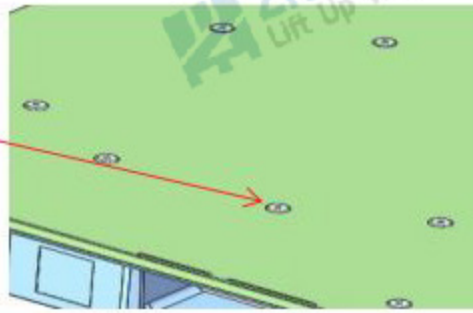
## 6. Product structure requirements

- 6.1 Anti-slip requirements:
- The anti-skid material (such as anti-skid pad) used is required to be a TPU double-layer anti-skid pad. The material must be new and must not have any odor. The surface of the anti-skid pad is white, soft, and wear-resistant TPU material, and the bottom is hard plastic that can be stuck on the tray and not easily fall off. It is prohibited to use black anti-skid pads such as PVC and recycled rubber;

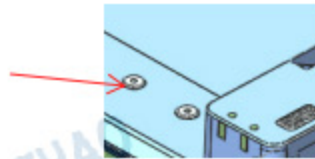
The use of black anti-slip mat is prohibited	Double layer anti-slip reinforcement pad
Anti-slip mat material: hard PVC	Anti-slip pad material: white particle soft TPU, anti-slip coefficient is increased
Odor: Has a distinct pungent rubber odor	Odor: no obvious odor
The anti-slip pad falls off easily	The anti-slip pad and reinforcement pad are fixed and is not easy to fall off

- 6.1.1 Anti-slip panel
- There are ridges on the upper part of the pallet panel to fix the goods on the pallet panel, improve the stability of the product during transportation, and ensure safe use.





- 6.1.2 Anti-slip contact surface of fork claws
- An anti-sliding block is provided on the contact surface of the fork grip to improve the stability of the pallet during the movement of the forklift and ensure safe use.



- 6.1.3 Anti-slip pad on bottom
- The bottom of the pallet legs are equipped with anti-skid pads to ensure stable stacking of empty pallets.



- 6.2 Informationization requirements
- 6.2.1 There are barcode pasting, screen printing and template plate making concave platforms in the middle of the four sides of the product to play a protective role. The depth of the concave  $\geq 1\text{mm}$  plays a protective role.



A barcode can be pasted in the middle of the design or a logo containing a barcode of the design body.

- 6.2.2 The middle of the three legs can be used to place the RFID chip slot, and is equipped with a chip cover that is not easy to fall off.

