

MAKISUTEE



Warehouse Storage Systems



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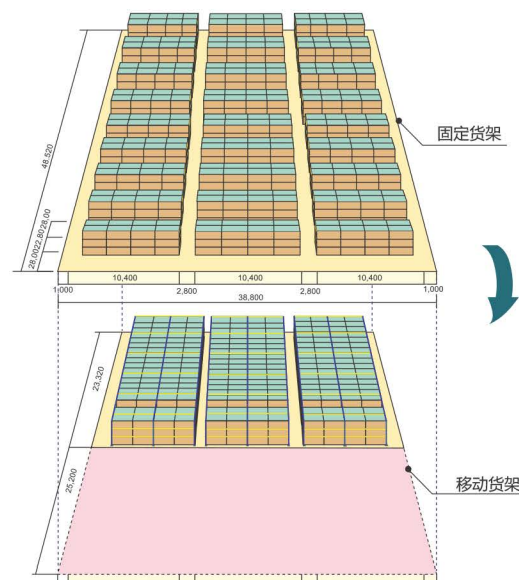
大幅度提高空间存储效率的重量级移动货架 Aisle saver pallet rack with most utilization of space



- 各移动列可以独立移动，只需要一条作业通道，与固定货架相比，增加1倍的存储量。
Each rack can be moved independently, only one working aisle is required
- 结构简单，驱动少，性价比高
Space utilization is doubled comparing with fixed rack

移动货架的7大特点

- ① 一条作业通道，高存储率
Only one working aisle is required
- ② 低价格的仓储系统
Good quality and low price
- ③ 作业面最大的仓储系统，可以从任何一个地方
Maximum working area
- ④ 构造简单，驱动少
Stocking equipment holds easy structure
- ⑤ 稳定性好，货架紧靠一起，避免货物落下
Good stability, avoid goods fall
- ⑥ 操作简单，一键式操作
Easy operate th bouton, assurant the safety
- ⑦ 多式样可选择：无轨与有轨，常温、冷冻、防爆环境
Cold store type and Blast-resistance



仕样 / Specification

- 空间利用率、保管效率、作业效率都大幅提高。

适用于各个行业多品种，100%拣选场合
Suitable for few variety of goods, non-standard specification of goods can also be deposited, one button can complete this task



■ 冷冻仕样 / Freezing

可以适用到-25度冷冻环境，充分利用冷库空间，均等散开也利于冷气的循环流通，广泛适用于食品、医药等行业

Using special equipment in the cold store can reduce working time; cold air can be circled in the fittable space, which can guarantee the quality of goods.



■ 防爆仕样 / Blast-resistance

将电控箱等放置在防爆仓库之外，集中控制。适用于化工等行业危险品的仓库。

Place controlling box on the non-dangerous situation. Blast-resistant grade and quantity of goods should be checked by fire department.



有轨仕様 (Rail type)

■ 有轨方式对地面要求相对较低，载重大，有3种载重等级可选：

Loading of corresponding rail

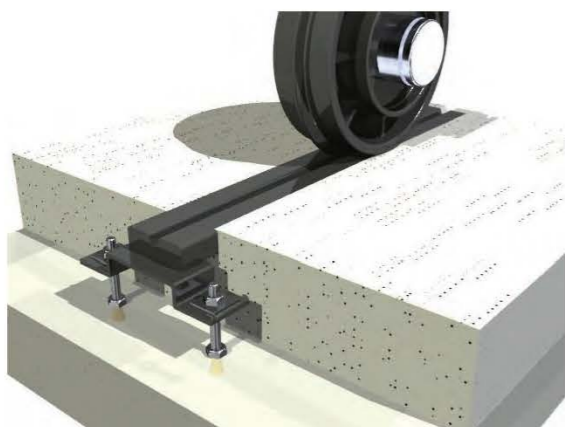
2轮台车 = MAX 12TON/间口

4轮台车 = MAX 24TON/间口

4轮台车 = MAX 32TON/间口



轨道铺设断面效果

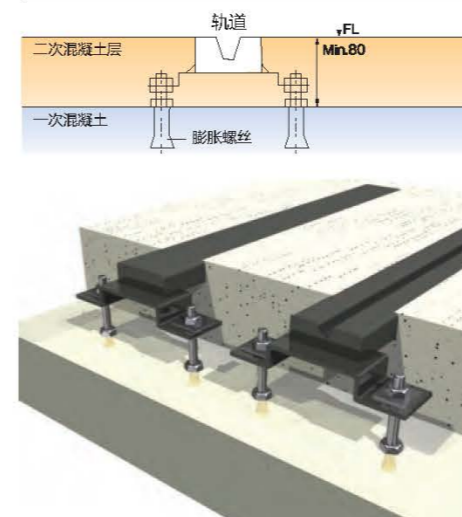


轨道埋在混凝土地面内，与地面平齐，只有导向轨道的小凹槽。保持地面的整体性，也方便清洁。

The rail be embedded in concrete, flush with the ground, keep the integrity of the ground, also easy to clean.

轨道施工方法 / Rail method

新地面二次浇筑法



浇筑到差100mm深混凝土层后，铺设轨道。再二次浇筑到水平面。

The first concrete layer to the 100mm position, setting rail, then the second placement in the horizontal plane.

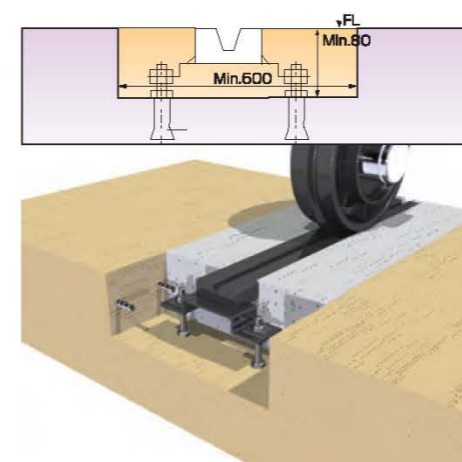
在现有地面垫高



在现有混凝土地面上铺设轨道，调整水平，再浇筑一层混凝土。

Setting the rail, adjust the level in the existing on the ground, and then pouring a concrete

在现有地面切槽施工



在现有地面上铺设轨道的位置，切割500mm宽100mm深的槽，铺设轨道，再把混凝土浇筑回去。

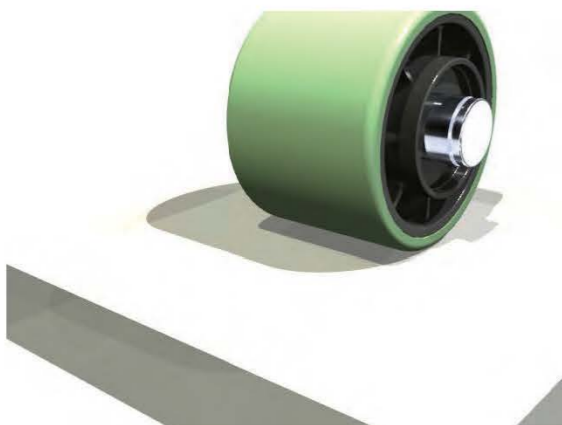
In the existing floor cutting 500mm wide, 100mm deep groove, and then setting rail.

无轨仕様 (Railless type)

- 不需要进行地面施工，适用于现有仓库、租赁仓库和楼层仓库。
Do not need to be ground construction, is suitable for the existing warehouse, warehouse leasing and 2 floors above



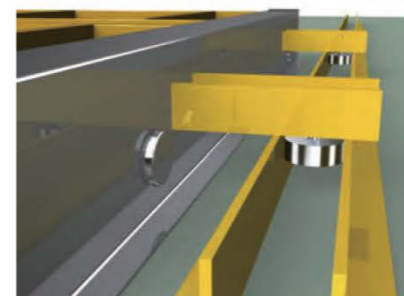
简单设置



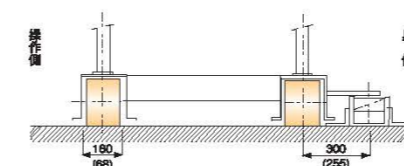
- 高性能聚氨酯车轮
行走噪音小，对地面无破坏。
High performance polyurethane wheel. The noise is small, and no damage to the ground.
- 施工周期短
没有混凝土施工和凝固时间
The construction period is short, no concrete construction and solidification time.
- 载重
2轮台车：8TON/间口 / 2 wheel trolley: 8T
4轮台车：16TON/间口 / 4 wheel trolley: 16T

导向方式 / Type of guide

导向轨道方式 / Guide rail mode



单面操作时，在背面安装导向轨道，不妨碍通行。
Single operation, in the back of the installation guide rail, does not obstruct the traffic.

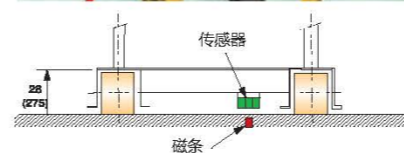


磁条导向方式 / Magnetic guiding mode



可以使用在双面操作情况下，在地面铺设磁条。
Setting magnetic on the ground, Don't interfere with two-way traffic.

Using special equipment in the cold store can reduce working time; cold air can be circled in the fittable space, which can guarantee the quality of goods.



案例



基本仕様 / The Basic specifications

■ 一键操作，简单安全 / Easy operate the button,assurant the safety

按下操作按钮，货架自动移动直到通道完全打开，自动停止，同时打开通道自动锁定。在打开的通道锁定解除前，所有列都不能移动，可以安心进行作业。

Press the operate button, the rack automatic moving, until the aisle is completely open, the rack automatic stop, at the same time aisle be locked. all the racks are unable to move until release lock.



■ 操作面板 / Operation panel



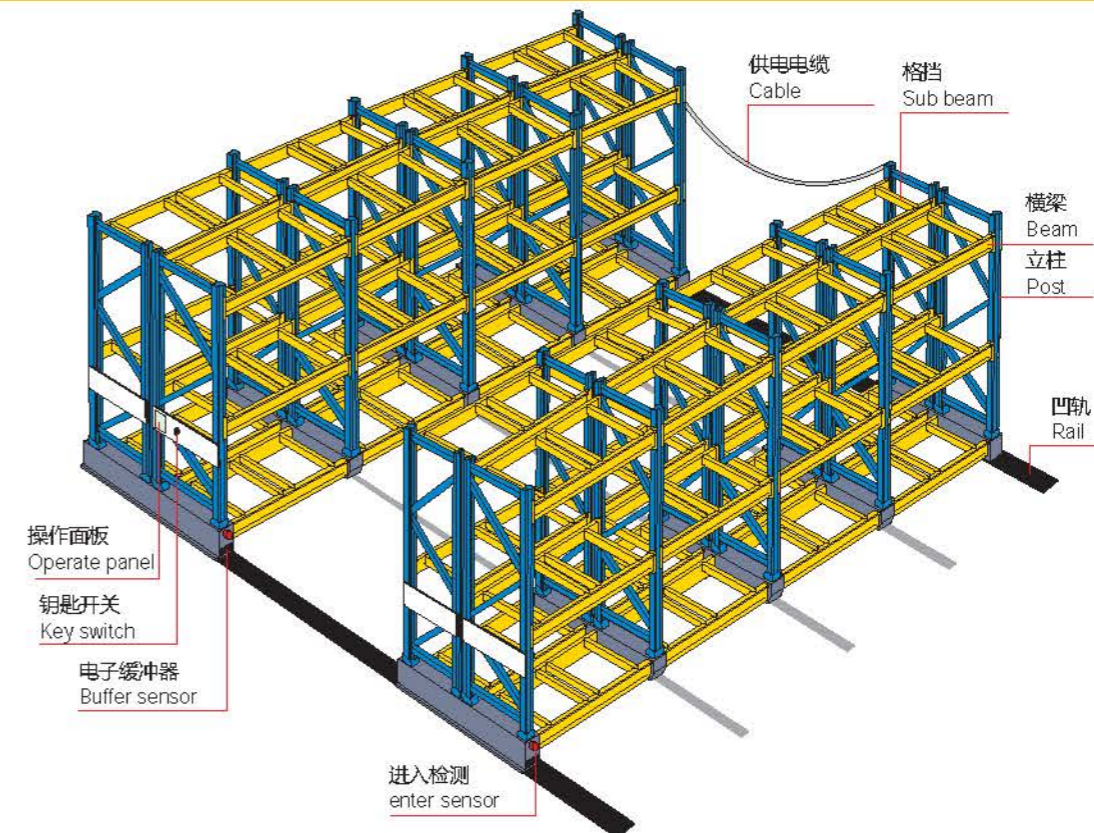
■ 台车方式 / Trolley mode

根据载重要求，台车可以是2轮台车，也可以分割为4轮台车

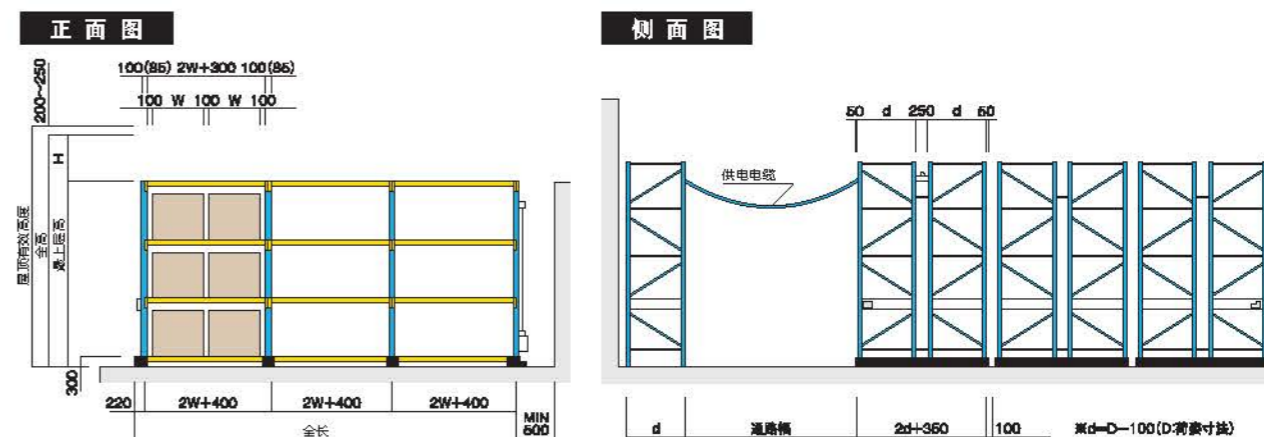
According to the load requirements, the trolley can be 2 wheel car, can also be divided into the 4 wheel car



主要结构部件 / Main structure



标准尺寸图 / Standard size



形式 Mode	负荷能力 loading	速度 Speed	马达 Motor (kW)	电 源 power (V)	控制方式 Controlling	安全装置 Secure equipment
有轨方式 Rail mode	12T(2轮)	MAX 10m/min	MAX 1.5kW	220V	PLC 控制方式	<ul style="list-style-type: none"> ● 打开通道锁定/Automatic locking of aisle ● 进入检测/Enter checking and lock ● 行走指示灯/Light indicator lamp ● 过载保护/Over loading protection ● 行走超时报警/Time out protection ● 电子缓冲器/Buffer sensor ● 行走蜂鸣警示 ● 电源打开自动锁定
	24T(4轮)					
	32T(4轮)					
无轨方式 Railless mode	8T(2轮)					
	16T(4轮)					

安全装置 / Safety Equipment

■ 进入检测通道锁定 / Enter Into checking and aisle lock

通道锁定解除后，移动货架移动，关闭该通道的时候，如果有叉车、人员进入，传感器感应到，自动停止，该通道锁定。直至人工确认安全后，再次解除锁定。

The rack in the moving process, if the forklift or personnel enter the closing aisle, the rack immediately to stop and lock the aisle, until confirm safety and release the lock.



■ 电子缓冲器 / Buffer sensor

货架移动关闭通道过程中，如果通道内有货物或者人的时候，最底部横梁的电子缓冲器感应到，货架停止，防止发生夹人和物品事故。

The rack in the moving process, if there is a drop in the aisle, the rack immediately stop and lock the rack, until the manual removal and restart the system.



■ 打开状态的通道，自动处于锁定状态

The opening aisle, automatically locked

■ 打开电源启动设备时，之前处于打开状态的通道自动被锁住

Turn on the power, the opening aisle is automatically locked

■ 过载保护

Over loading protection

■ 超时保护。如果移动时间超过预定时间，则停止报警，防止超距离行走

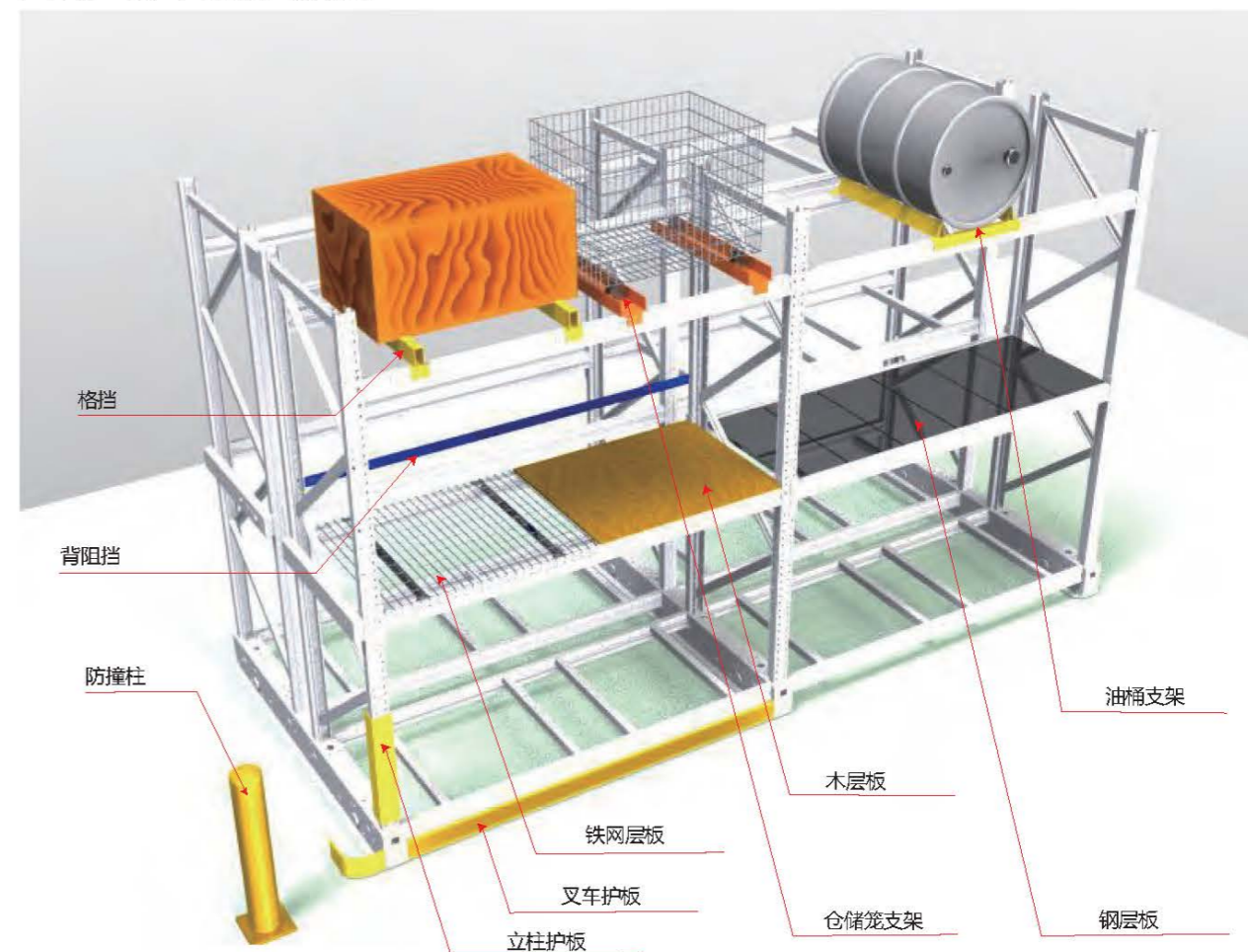
Time out protection

■ 行走时有灯光和声音警示

Light indicator lamp

多种配置配件 / A variety of configuration

■ 配置标准横梁式货架



■ 配置悬臂货架

台车上面安装标准悬臂货架，可以存放条状货物

■ 配置平整台面

台车上面铺设平整钢板，台面上可能根据实际情况，直接放置托盘，也可以堆叠巧固架等货物

图像识别、集中控制!!

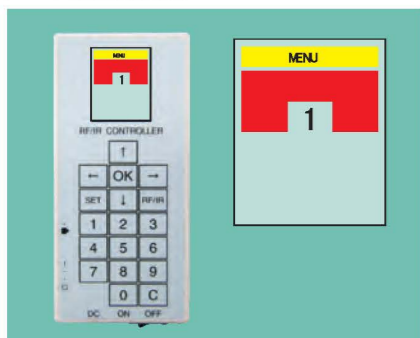
Image recognition, centralized control

在仓库内每条通道上方设置摄像头，将图像传送到仓库外集中控制区，在进入仓库操作前，即可通过图像来判别通道是否安全。确认安全后即可解除锁定，打开其他通道。适用于冷库、化工的危化仓库，节省操作时间。

Camera be set in each aisle and transmit the image to the central control room. Before entering the warehouse, operator can confirm the safety Through the, and the release the lock, open the other aisle. Saving operation time

操作方法

- 1 选择要打开的通道
Select aisle



- 2 监视器显示出当前处于打开状态通道的图像
Display the image of opening aisle



- 3 确认通道内安全，按下“OK”按钮
Confirm the safety and press



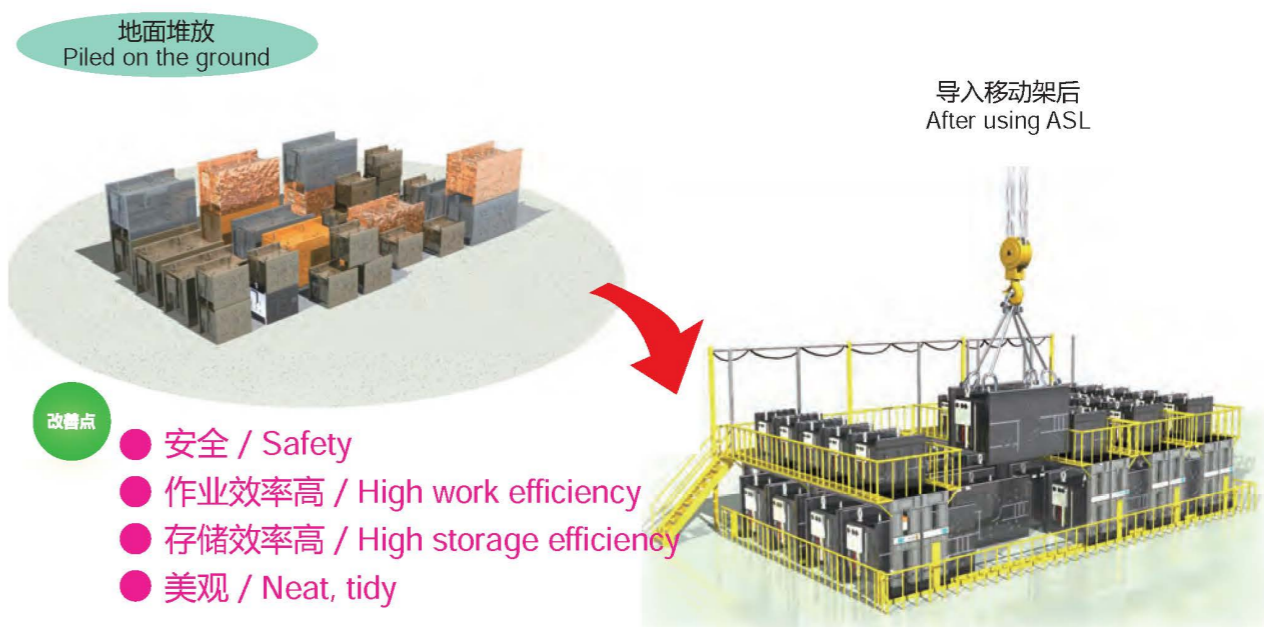
指定通道打开，叉车进去无需等待
Aisle open, without waiting for

提高模具堆放容量，缩短作业时间，更加安全、放心

Improve die stacking capacity, Reduce operation time, more secure, assured



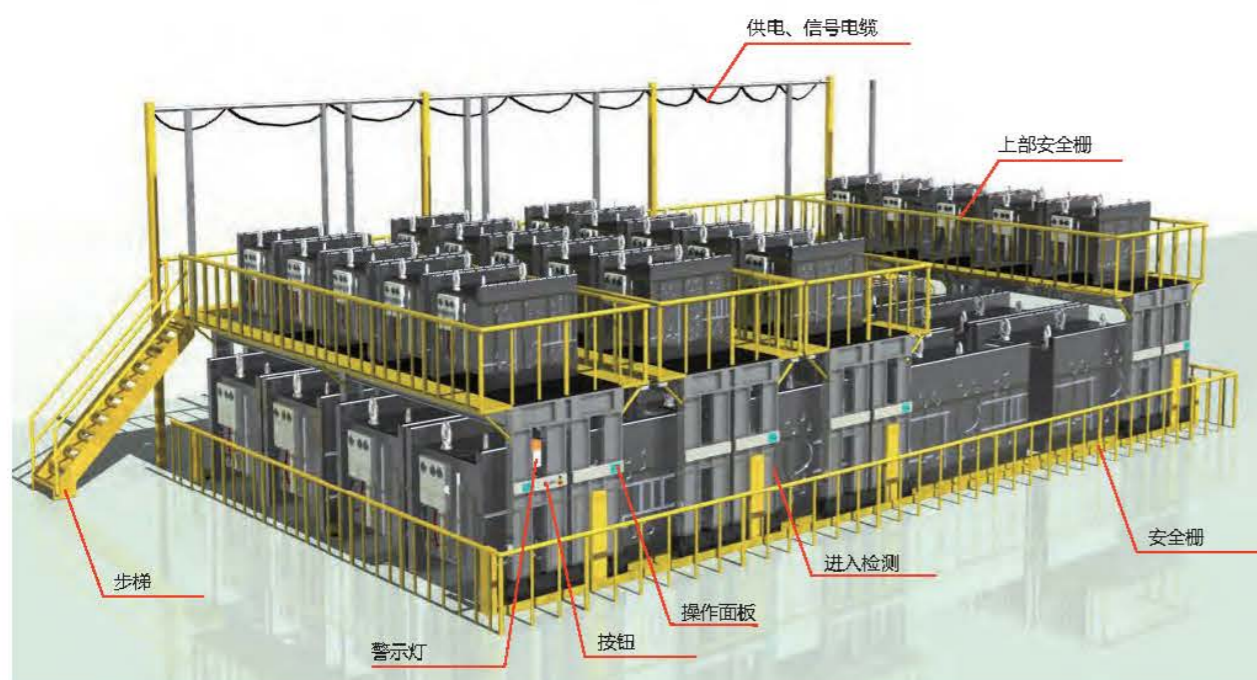
改善使用桁车作业的重型模具存放方法 Improved storage method using crane operation



改善点

- 安全 / Safety
- 作业效率高 / High work efficiency
- 存储效率高 / High storage efficiency
- 美观 / Neat, tidy

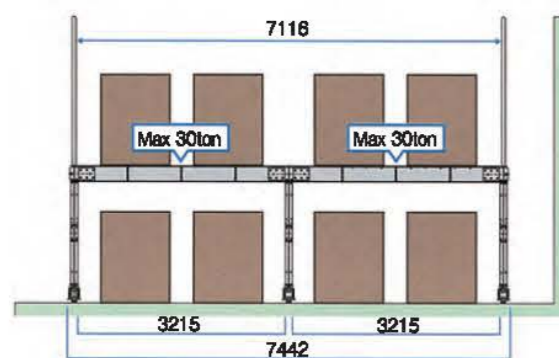
● 主要结构部件 / Main structure



● 标准尺寸图 / Standard size

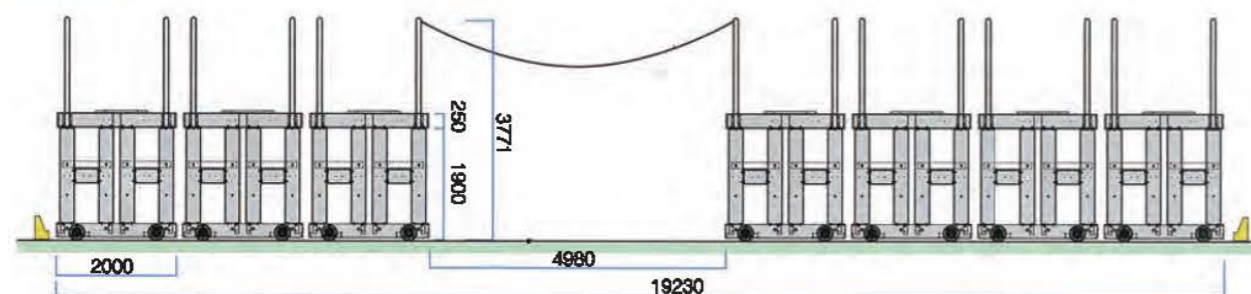
每台上部最大载荷60吨 / The maximum load of 60 tons

正面图



仕様一覧	
台车种类/Rail mode	有轨30吨 Rail mode
温度环境/Temperature	常温 (-10C ~ 40C)
移动速度/Speed	Max 10m/min
马达功率/Motor	0.4KW, 0.75KW
控制方式/Controlling	PLC
电源/Power	三相AC380(50HZ)
安全装置 Secure equipment	<ul style="list-style-type: none"> ● 开通道锁定 Automatic locking of aisle ● 进入检测 Enter checking an lock ● 行走警示灯和声音 Light indicator lamp ● 过载保护 Over loading protection ● 超时保护 Time out protection

侧面图



轻量化

Light

高性能

High performance

高品质

Superior quality



■ 铁质底板

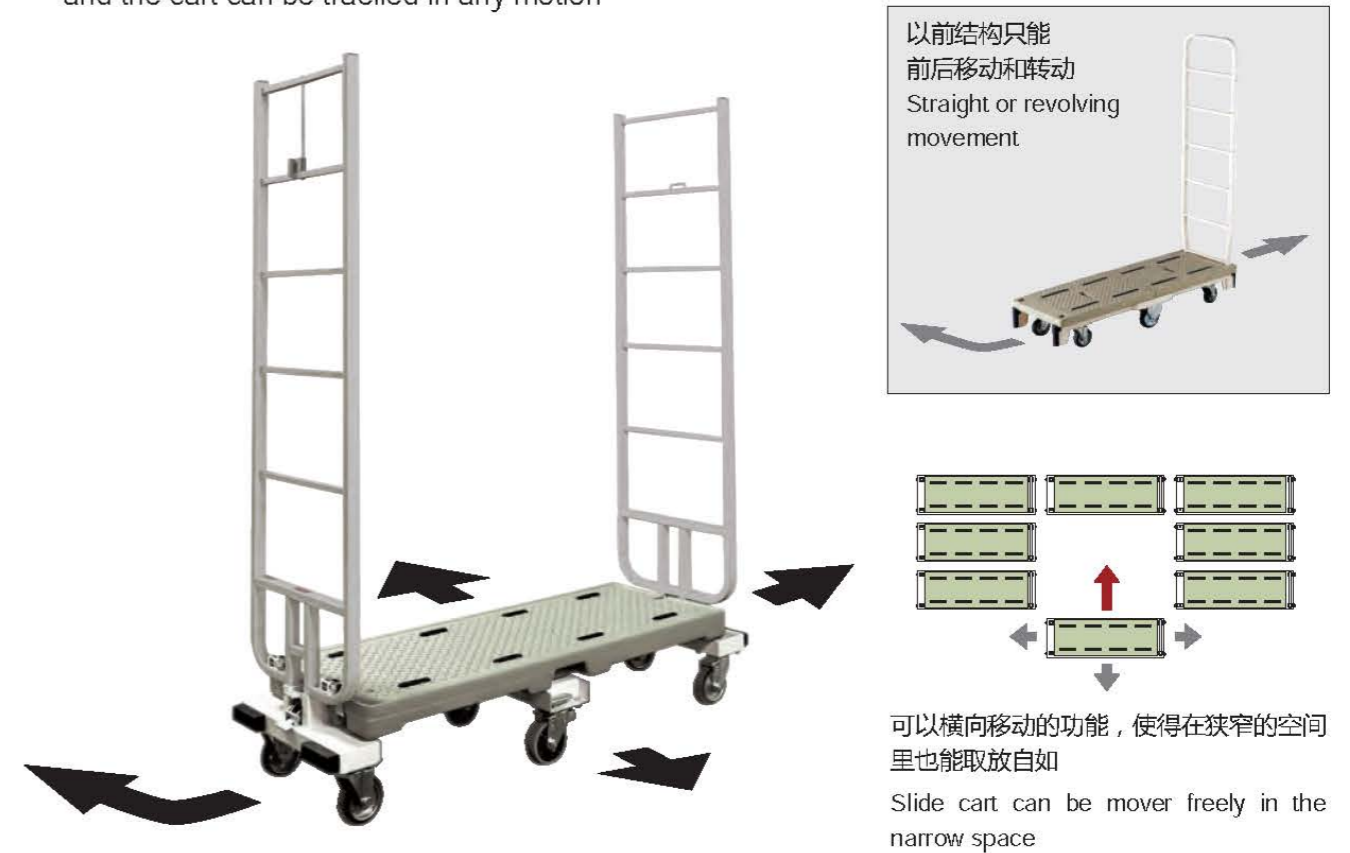
多仕様，多配件 / Multiple configuration, multiple option



■ 铁质底板

六轮车新的行走功能 / Moving capability of slide cart

通过中间轮子的控制，可以横向移动车子
Center castor is shifted from fix to swivel type by pushing down of any pedal, and the cart can be travelled in any motion



特征 / Characteristic



中间脚轮锁定/释放结构，用于横向移动的切换

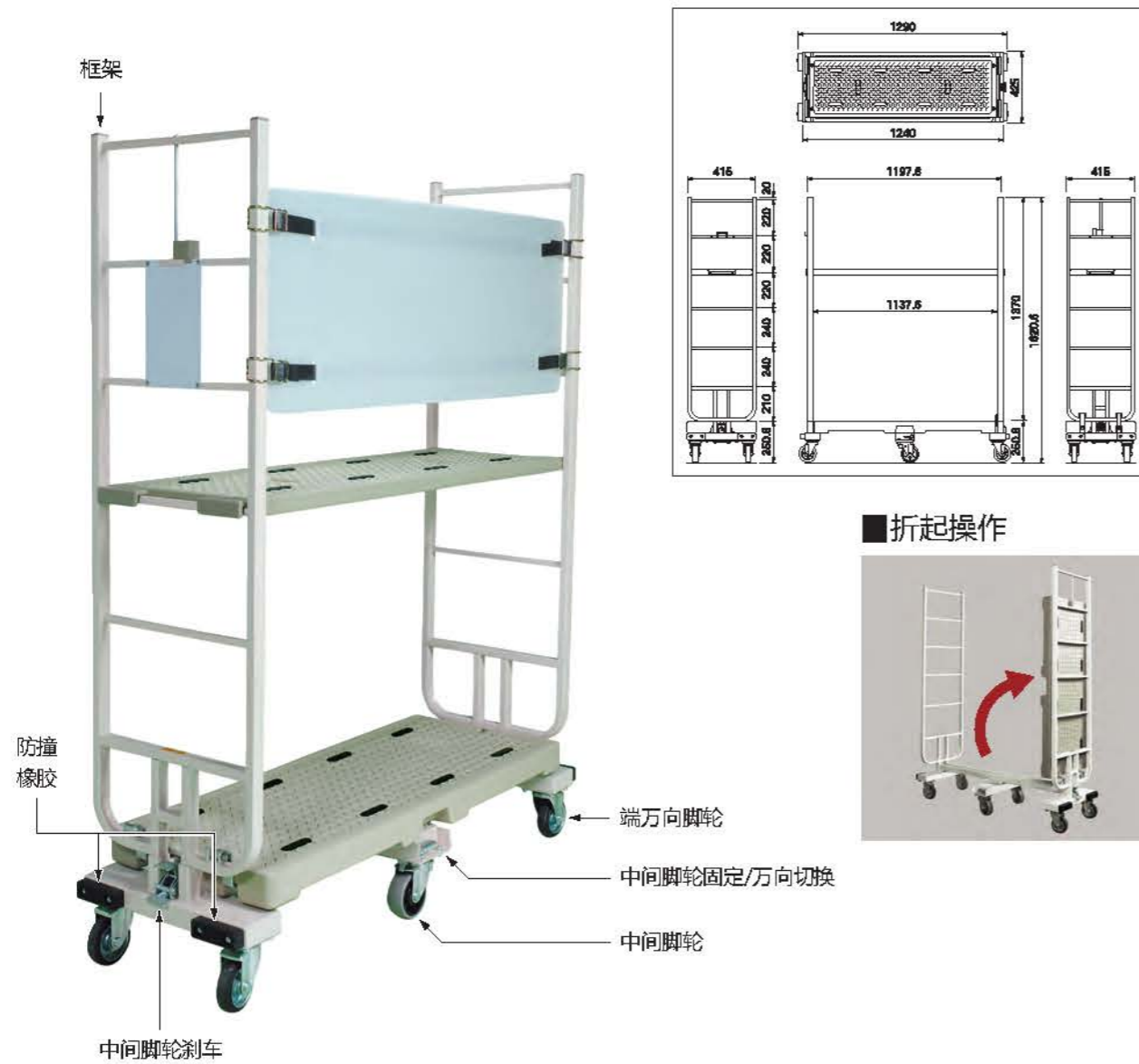


插入式堆叠存放，节省空间
It can save floor space

标准仕様 / Standard specification

形式 Type	本体尺寸 Size (mm) 開口(W)×奥行(D)×全高(H)	底板面高 Height of soleplate (mm)	宽度 Width of plank (mm)	自重 Weight (Kg)	载重 Loading (Kg)	棚板尺寸 Size of clapboard (mm) 開口(W)×奥行(D)×全高(H)	棚板重量 Weight of clapboard (Kg)	棚板载重 Loading of clapboard (Kg)
MJB-6-2	1,290×425×1,621	250	415	37.3	300	1,210×365×35	5.5	100

构成部件 / Structure



选配件 / Option parts

■ 端看板



■ 中间看板



■ 树脂中间板



场所：常州某汽车配件厂仓库
 仕样：常温有轨条
 移动列：3间口3层复4列
 固定列：3间口3层单2列
 货位数：180托盘



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