

## 企业简介 Company Profile



长春北方化工灌装设备股份有限公司成立于1996年，一直专注于化工后处理环节自动化灌装机器人生产线、智能立体仓储、数字化灌装车间的研发与生产的国家高新技术企业。公司凭借先进的技术和丰富的行业经验，已发展成为化工行业生产灌装、车间仓储、物流转运等高端智能设备的龙头企业。作为系统集成商，为客户提供一站式智能工厂交钥匙解决方案。定制设计、专属开发、驻厂式售后维保等服务，产品覆盖灌装机、贴标机、码垛机、缠绕机、捆扎机、立体仓库、物流转运设备等多个领域，是国家批准生产防爆型产品的专业装备制造企业。二十几年来北方灌装以科技创新实现行业梦想为使命，以打造国际化高端智能装备品牌为己任！专注、笃定、锐意创新、恪守商道，成长为“中国制造2025”先锋军。

Changchun Northern Chemical Filling Equipment Co., Ltd. was founded in 1996, has been focusing on developing and manufacturing the automatic filling robot production line, automated storage&retrieval system and the digital filling workshop in chemical post-treatment link. The company is the national high-tech enterprise. With advanced technologies and rich industry experience, the company has developed into the leading enterprise in chemical industry in production of filling, warehousing, logistics and other high-end intelligent equipment. And provide customers with intelligent factory of one-stop turnkey solutions as a system integrator, as well as the customized design, dedicated development, on-site after-sales and maintenance services. Our main products include filling machine, labeling machine, palletizing machine, wrapping and strapping machine, automated warehouse, and logistics equipment. The company is the professional equipment manufacturing enterprise approved by the state to produce the explosion-proof products. "To achieve the industrial dream by innovation of science and technology", the company has taken it as the mission over the past 20 years, and trying to build a brand of international high-end intelligent equipment. With concentration, confidence, innovation and adherence to business principles, the company has grown into a pioneer of "Made in China 2025".

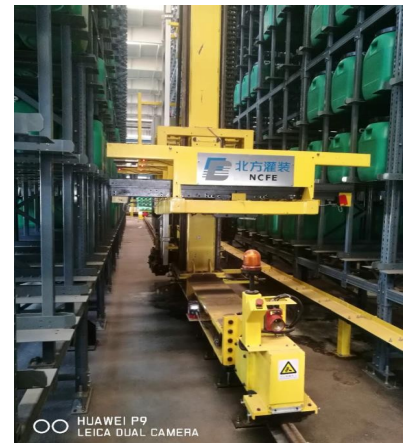
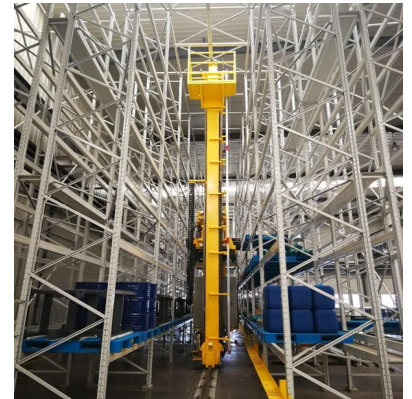
### 智能立体仓储解决方案 AUTOMATED STORAGE AND RETRIEVAL SYSTEM

智能立体仓储系统 (AS/RS) 可广泛应用在石化、医药、食品、工业零部件、物流储运等行业。系统由立体货架、巷道堆垛机、输送辊道、输送设备AGV/RGV、仓储管理系统软件 (WMS) 及仓储控制系统软件 (WCS) 组成。

The automated storage and retrieval system can be widely used in petrochemical, pharmaceutical, food, industrial parts, logistics warehousing and other industries. The system is composed of racks, storage and retrieval machine, roller conveyor, AGV/RGV, warehouse management system (WMS) and warehouse control system (WCS).

采用定制化设计理念，实现了货物立体自动存储、自动出货、货物信息身份识别、货物数据管理、生产过程中存储物流转运环节的数字化、无人化等功能。全面提升了仓储物流作业的自动化水平，实现了密集仓储、动态监控、柔性运储，节省了企业的物流成本，提高了物流系统的运行效率。

With the concept of customized design, the functions of automated storage and retrieval, cargo information identification, data management, digital and unmanned storage and logistics in the production process can be realized. The automation level of warehousing and logistics operation has been comprehensively improved, and realized the intensive warehousing, dynamic monitoring and flexible storage, it saves the logistics cost of companies and improves the efficiency of logistics system.



### 堆垛机 SRM

堆垛机 (SRM) 是自动化立体仓储的主要存取设备, 根据计算机指令在立体货架之间的巷道沿水平和竖直方向行走, 用货叉把货格上的货物取出或存入。具有节省占地面积和人力、作业快捷准确、提高收发效率、降低储运费用等优点。

主要有重载堆垛机、轻载堆垛机、防爆堆垛机。

SRM is the main storage and retrieval equipment of automated storage&retrieval system. According to the computer instruction, running along the horizontal and vertical direction in the aisles between racks, and takes out or stores the goods in the rack cell with a fork. It has the advantages of saving space and manpower, fast and accurate operation, improving the efficiency, and reducing the cost of storage and transportation.

Types: heavy load SRM, mini-load SRM, explosion-proof SRM.



### 自动化灌装解决方案 AUTOMATIC FILLING SOLUTION

#### RF6全自动灌装机器人 RF6 FULLY AUTOMATIC FILLING ROBOT

RF6第六代全自动灌装机器人, 主要应用于基础化工、精细化工、日化、润滑油、医药、食品等行业的定重灌装领域, 采用机器视觉动态目标识别技术、智能灌装流程控制与检测技术、复合防爆技术、故障自诊断与处理技术、基于物联网泄露检测技术等多项自主研发核心专有技术, 能够实现灌装环节智能化、无人化、安全环保灌装生产工艺需求。与MES系统对接进行数据交互, 配合智能立体仓储集成使用。根据需求进行模块配置, 实现整机防爆、多料枪自动切换、多桶型兼容、自动开关盖、自动称重灌装、氮气置换、风幕保护、管线吹扫、清洗、伴热等功能。

The sixth generation of fully-automatic filling robot RF6 is mainly used in the fixed weight filling in basic chemical, fine chemical, daily chemical, lubricating oil, pharmaceutical, food and other industries, adopting the machine vision dynamic target recognition technology, control and detecting technology in intelligent filling process, composite explosion-proof technology, fault self-diagnosis and handling technology, leak detection technology based on Internet of Things (IOT) and other multiple core proprietary technologies that independently developed by our company; realizing the intellectual, unmanned, safe and environmental in filling process. It can be integrated with AS/RS, and interface with MES system for data interaction. The functions such as explosion-proof for whole machine, multi-lances automatic switching, multi-containers compatibility, automatic bunging and debunging, automatic weighing and filling, nitrogen replacement, air curtain protection, pipeline purging, cleaning, heat tracing and other auxiliary functions can be configured according to customers needs.



产品分为RF61高速型灌装机器人、RF62经济型灌装机器人、RF63集约型灌装机器人三大系列。

Types:

RF61 High-speed filling robot

RF62 Economical filling robot

RF63 Intensive filling robot

#### A5系列全自动灌装机器人 A5 FULLY AUTOMATIC FILLING ROBOT

适用于4L-50L包装容器液态计量灌装的产品。满足多工位同时灌装, 实现开盖、充氮、灌装、复检剔除、理盖、压内盖、关盖的全自动化功能。产品具有精度高、安全环保性能高、运行稳定、自诊断自检测、远程运维、复合防爆等特点。Suitable for liquids metering filling of 4L-50L containers. Multiple stations can be filled at the same time to realize the fully automation of debunging, nitrogen charging, filling, weight checking and rejection, cap unscrambling, inner cap sealing and bunging. The products have the characteristics of high precision, high safety and environmental performance, stable operation, self-diagnosis and self-test, remote operation and maintenance, compound explosion protection.



产品分为A51-1小开口桶自动灌装机、A51-2敞口桶自动灌装机。

Types:

A51-1 Automatic filling machine for cans

A51-2 Automatic filling machine for open-head buckets

## 手动对桶口自动灌装机

## AUTOMATIC FILLING MACHINE WITH BUNGHOLE MANUAL ALIGNMENT

H5系列手动对桶口灌装机，主要应用于基础化工、精细化工、日化、润滑油、医药、食品等行业的定重灌装领域。根据需求可实现整机防爆、自动灌装、氮气置换、风幕保护、管线吹扫、清洗、伴热等功能。产品具有结构简单、运行稳定、维修保养方便、占用空间小等特点。

H5 series of filling machine with bunghole manual alignment are mainly applied in the fixed weight filling in basic chemical, fine chemical, daily chemical, lubricants, pharmaceutical, food and other industries. Functions such as explosion-proof for whole machine, automatic filling, nitrogen replacement, air curtain protection, pipeline purging, cleaning, heat tracing can be configured according to customers needs. With the characteristics of simple structure, reliable operation, easy maintenance and small footprint.



## 有轨穿梭车 RGV

有轨穿梭车（RGV）用于各类高密度储存方式的仓库，小车通道可设计任意长，操作时无需叉车驶入巷道，安全性更高。利用叉车无需进入巷道的优势，配合小车在巷道中的快速运行，有效提高仓库的运行效率。

The rail guided vehicle（RGV）can be used in all kinds of high density storage. The channel can be designed to arbitrary length, no forklift is required to be driven into the aisle in operation which makes it much safer. The RGV can move very fast in the aisle, which improve the working efficiency of the warehouse

有轨穿梭车种类：直线有轨穿梭车，环形有轨穿梭车，防爆直线有轨穿梭车。

Types:

Linear RGV

Annular RGV

Explosion-proof linear RGV

