PESMEL MATERIAL FLOW HOW

Your Efficiency and Quality
We are a globally operating supplier for highly automated internal logistic, storing and packing systems. Our unique Material Flow How Concept boosts production with efficient and flexible material flow throughout the mill.

Our customers in the paper and metal industry are the leading companies in their fields. We value good references as that is one of the most important reasons for our success. During the past 35 years of operation, with over 400 handling and packing systems and more than 150 storage systems shows that we are appreciated as an experienced and reliable partner.

We consider every customer to be unique and each project is executed according to customer requirements using the best possible technology.

Our competence is based on four cornerstones: innovation ability, system and engineering know how, and flexibility. Adding to these features, we lead the projects as a single source supplier from engineering and manufacturing all the way to global 24/7 service.

As a company, we are committed to developing and maintaining our quality. Pesmel is ISO 9001:2000 certified company.

Material Flow How

Pesmel Material Flow How reflects the identity of Pesmel and its people. Material Flow How wells from the continuous enthusiasm to create, as well as from the professional pride to be a reliable system supplier.

Finding a different kind of customized solutions is characteristic to our work. Successful outcomes have inspired and encouraged us to continue creating Pesmel’s growth over the years.

Due to our fearless attitude toward challenges, we give our best when working with demanding customer solutions, where we can really put our engineering and machine building skills to use.

From the customer’s point of view, the Pesmel Material Flow How -concept is a flexible part of the production. This concept includes all the functions of internal logistics; conveying, sorting, storing, packing and dispatching, all realized with modern automation and system know how.

With efficient and sophisticated material flows, the Material Flow How -concept maximizes the production capacity. Automation as a relevant part of the concept secures the product quality. Thus, we have clarified the most important features of our concept into two words: Efficiency and Quality.

In conclusion, behind Pesmel Material Flow How, you find the company’s heart and soul, which we forward to our customers along with every project.
Akin to public economy, wherein the infrastructure is vital for the growth, the same complies to metal processing mills, where overall efficiency is dependent on how material handling is organized between the production and shipping processes.

The Pesmel Material Flow How-concept is developed for boosting mills’ internal logistics so that there are no bottlenecks between the production processes. One of the leading ideas of the concept is to straight-line the internal material flow to be smooth and flexible, which is seen as improved efficiency in the entire mill.

Another logistical challenge to which our concept concentrates is how to have efficient shipping functions with 24/7 continuous production. Automated shipment functions with flexible shipment storage have resulted in flexibility of production and increased sales with shorter delivery times and error-free deliveries.

Just as the Material Flow How-concept is focused on efficiency and quality, the product quality is being maintained all the way to the end customer by way of sensitive handling and automated packing. Our packing systems are designed to give the best moisture protection in the market with optimized packing material consumption.

1. Automated Intermediate Storage
2. Automated Coil Packing Line
3. Automated Sheet Packing Line
4. Automated Strip Packing Line
5. Automated Shipment Storage

Metal Industry

Material Flow How-Concept

1. Automated Intermediate Storage
2. Automated Coil Packing Line
3. Automated Sheet Packing Line
4. Automated Strip Packing Line
5. Automated Shipment Storage

Fully controlled material flow shorten the lead times in production.

Export packages for long distance transportation.
Automated logistics and storing

Our automated logistics and storing solution is built from three main components; high bay storage, carriage system and WMS (Warehouse Management System).

The automated high bay storage functions as the heart of the mill taking care of material handling between the production processes. The system buffers products and transfers them between various phases of the manufacturing process. Automated shipment storage, individual or combined with intermediate storage, is for storing, sorting and shipping customer products.

High bay storage has three times bigger handling capacity and uses only 1/3 of the storing area compared to floor storage with over head cranes.

Automated packing

As pioneers, Pesmel has taken part to automating the packing functions at steel mills. Automated packing provides uniform product quality and brings significant cost savings in material usage.

The level of packing needs is selected according to customer requirements and transportation methods. The used packing materials are recyclable and without chemicals.

Research and development

Pesmel has two decades of experience in delivering highly automated, comprehensive solutions to modern metal producing companies like Outokumpu Stainless. Following the leading edge technology, we execute constant product development work.

Product development arising from customer need has already resulted in several competitive products. One of which is through-the-eye wrapping system with automated film roll changing. This is a laboratory and practice proven method that provides the best moisture protection without VCI chemicals.

TransCoil technology for wire rod coil is developed for high capacity handling and high volume storing. In addition, many smaller devices and modifications have been developed for various stages of the system.
The Paper industry has been the front runner for mill automation. Pesmel has been delivering automated storing and packing systems to paper mills and converting plants for over three decades. Based on various reference cases and experience, we have developed our Material Flow How-concept for the paper industry.

Pesmel’s unique TransRoll technology represents the fourth generation solution for paper mills and converting plants’ buffering and storing needs. The automated high-rise AS/RS rack storage solutions, with advanced WMS for the automation control, has unparalleled simplicity with needed conveyor systems and unmatched handling and sorting capabilities.

Pesmel’s automated packing systems complete the concept, making Pesmel a single source supplier from the winder to the shipping.

Packing systems based on stretch film wrapping provide an excellent moisture protection and high system capacity and low operating costs. The packing line configurations are unique solutions with various technical details made according to customer needs.
TransRoll storing

Pesmel TransRoll high bay storage is based on horizontal deep lane storing. It is easy to integrate this type of storage both to new and existing mills, as well as to big or small storage volume needs. This is because the rack structure itself can be stretched according the needs with all three axes, width, length, and height.

The floor space needed is 50-70% smaller compared to other storing methods. The handling capacity with multi-roll handling offers almost unlimited handling capacity.

Automated high bay storages

Automated high bay storages (ASRS) have long been used with great success in the converting industry as an intermediate production buffer and finished product shipping storages.

There, they offer great cost savings with simplified and automated material handling and between the main processes. Properly integrated storages enable the main processes optimization and broke minimization in a way that is hard to believe to be true.

Currently these rack storages have slowly but surely started to spread into the paper mills as well.

Automated packing

Product packing is one of our specialties. Flexibility is characteristic to our solutions, as different roll sizes and packages can easily be handled in the same packing line.

Pesmel systems cover various alternatives from stretch film wrapping to special materials like foam and bubble. Even the most sensitive paper will maintain its quality from the first layers of the roll. Stretch film packing consists of pure plastic and it is light and easy to handle and recycle.

Automated deep lane storage for paper rolls.