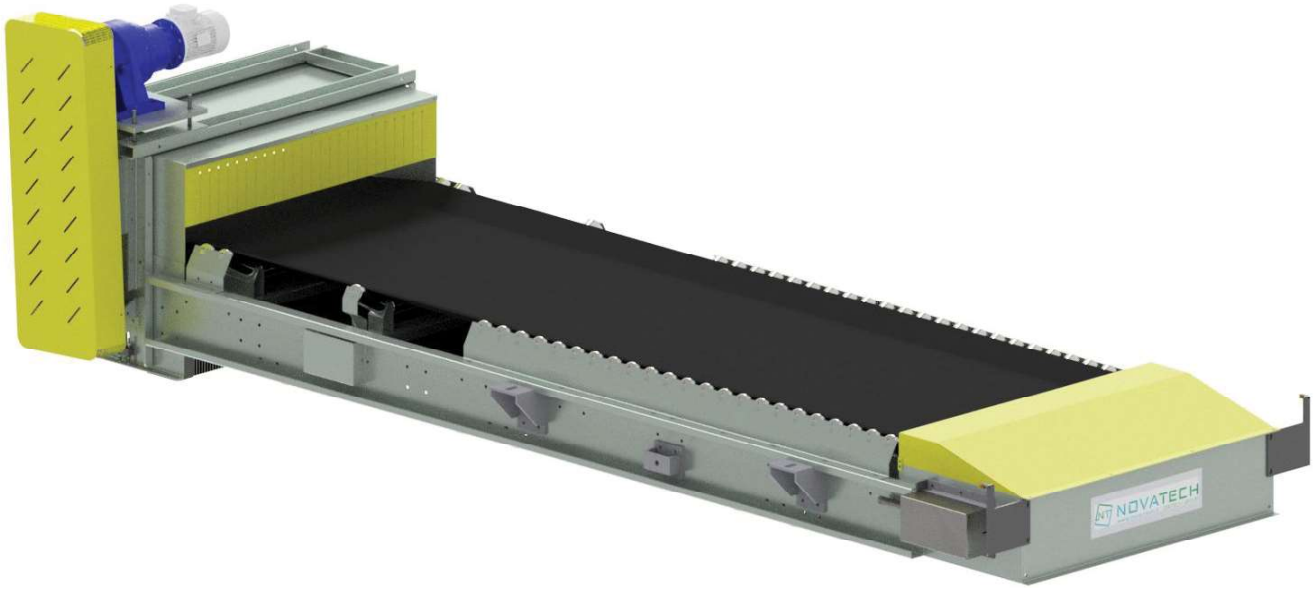
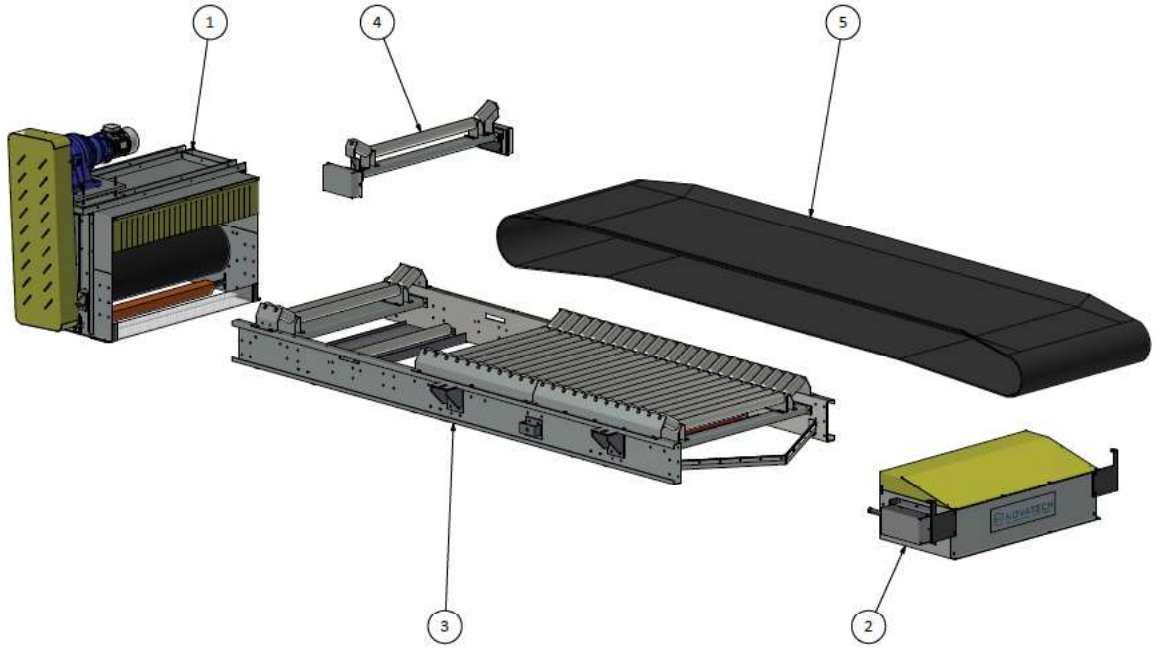
EXTRACTING AND WEIGHING CONVEYOR BELT NEP



Novatech's extracting conveyor belts are designed to ensure efficient and accurate material handling, integrating extraction, transportation, and weighing functionalities. They are used for extracting bulk inert materials from hoppers and/or containment silos.

They can be made in different versions and are designed to best meet specific usage requirements and the regulations in various industrial sectors.



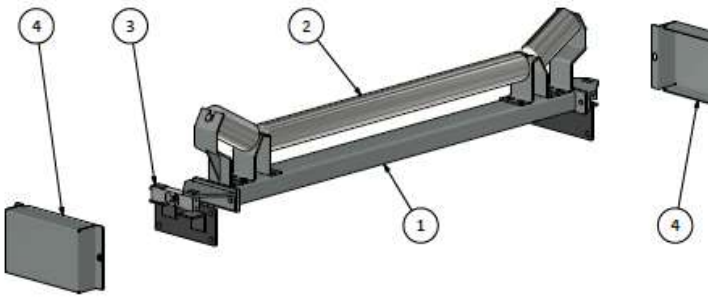
1	HEAD SECTION WITH MOTORIZATION
2	RETURN HEAD
3	INTERMEDIATE FRAME + BELT SUPPORT ROLLERS
4	WEIGHING SYSTEM
5	RUBBER BELT

The extracting and weighing conveyor belts are mainly composed of:

- Head Section: Constructed from thick sheet metal and profiles, housing the motorization. The drum, drive shaft, and their supports are sized according to the characteristics and usage of the conveyor belt, and are designed to ensure easy maintenance and replacement.
- Motorization: Composed of a gearbox and an electric motor. The gearbox can be of the following types:
  - Orthogonal with direct transmission, with the gearbox directly coupled to the drive shaft
  - Epicyclic or coaxial, with chain transmission
- Return Head: Constructed from thick sheet metal and profiles, housing the return drum and shaft, which are appropriately sized and supported by externally mounted supports. The return head also includes a threaded rod system for tensioning and aligning the rubber belt.
- Intermediate Frame: Made from shaped sheet metal, constructed from modular elements fixed together with joining plates and high-strength bolts.
- Belt Support Rollers: The conveyor belt is supported by heavy-duty rollers, ensuring stability and minimizing maintenance requirements.
- Rubber Belt: Joined by hot vulcanization. The rubber belt features a synthetic fiber core, either polyester or nylon, and an anti-abrasive and cut-resistant cover material, offering excellent resistance to tearing, moisture, and weather conditions.

Variable speed drive: To adapt to different material characteristics and flow rates, the system must include a variable speed drive, which allows precise control of the extraction speed.

Weighing System: Precision load cells are integrated into the conveyor structure to provide real-time weight measurements of transported materials. These load cells are calibrated to ensure high precision and reliability.
Digital display and control: The weighing system is connected to a digital control panel, which displays the current load and cumulative weight. This interface allows operators to monitor and manage material flow effectively.



1	ROLLER SUPPORT CROSSBOARD
2	BELT SUPPORT ROLLERS
3	LOAD CELL
4	PROTECTIVE CARTER

Automation and Control

PLC Integration: The entire system can be integrated with a programmable logic controller (PLC) for automated control and monitoring. This integration enables advanced features such as automated flow regulation, data logging and remote operation.
Safety Features: Safety sensors and emergency stop mechanisms are incorporated to protect both equipment and personnel. These features ensure that the system can be shut down quickly in the event of any operational anomalies.

Additional components

Dust control: To minimize dust generation during material handling, the conveyor belt system can be equipped with dust extraction hoods and filter units.
Modular Design: The system's modular design allows for easy expansion and integration with other processing equipment, such as crushers, mixers and storage silos.

Applications

This extraction and weighing conveyor belt system is ideal for industries involved in the processing of bulk raw materials, including:

Ceramic production
Glass production
Mineral extraction and processing
Construction materials

By combining extraction, transport and precise weighing in a single system, Novatech guarantees efficient and streamlined management of raw materials, optimizing productivity and reducing operating costs.

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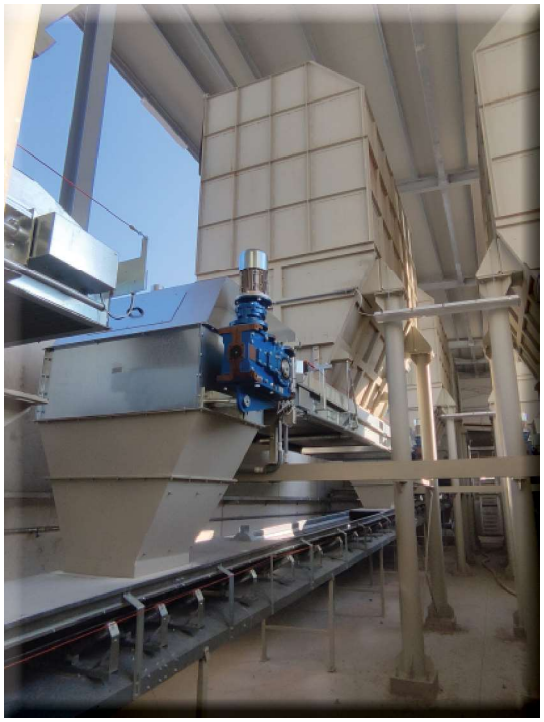

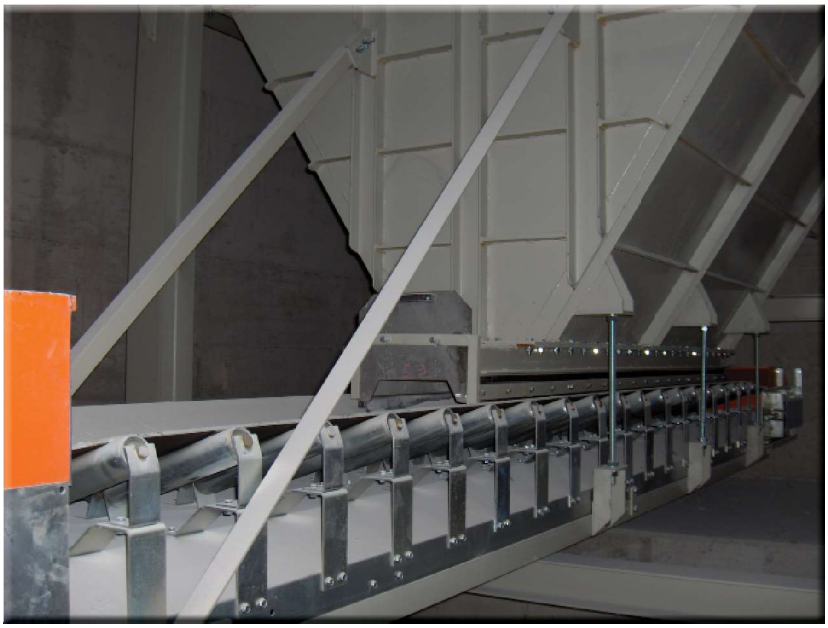

Dimensions in millimetres. Non-binding data.
Novatech reserves the right to modify the technical data indicated above. For any limitations of the product, consult the relevant Use and Maintenance Manual.

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