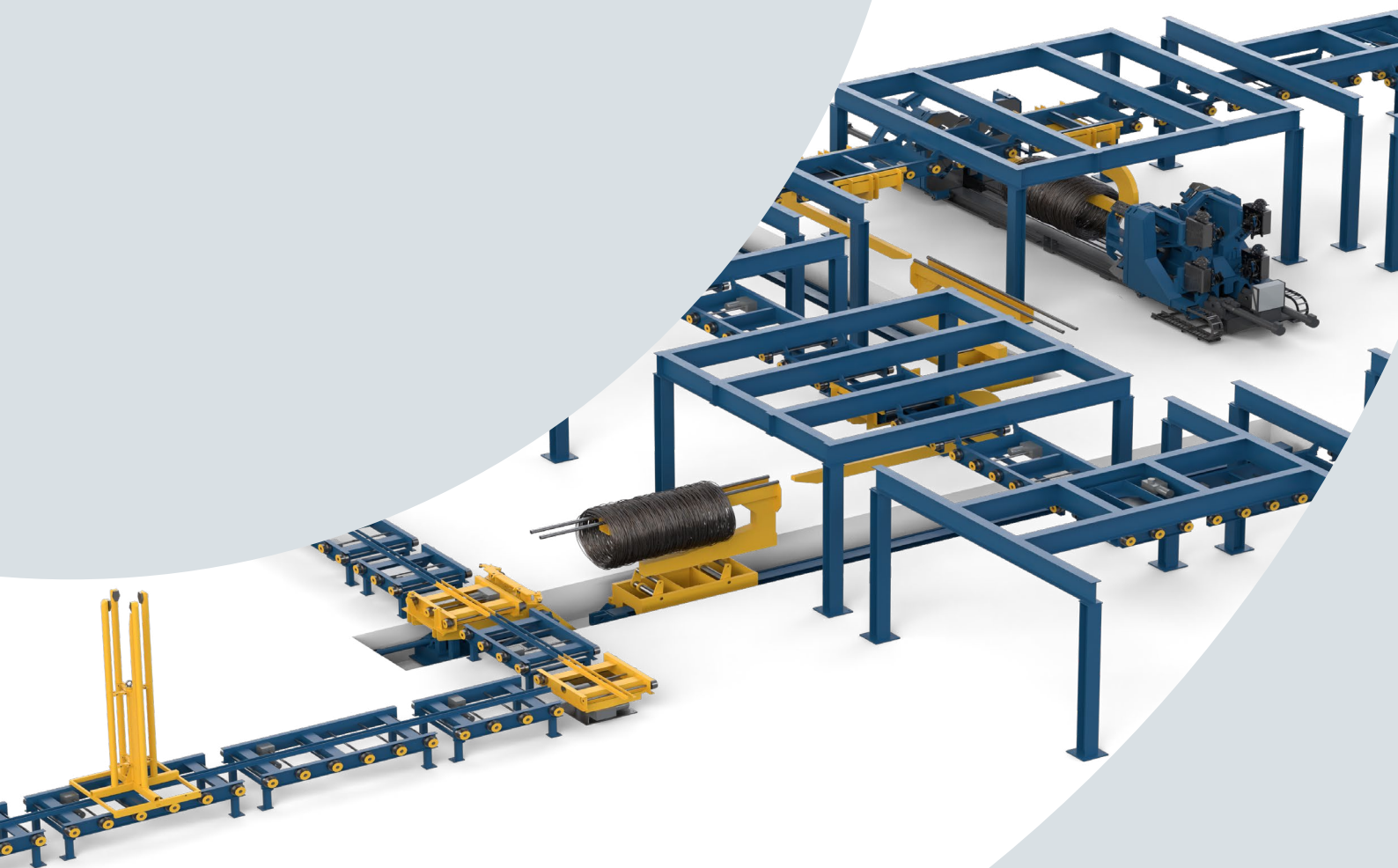
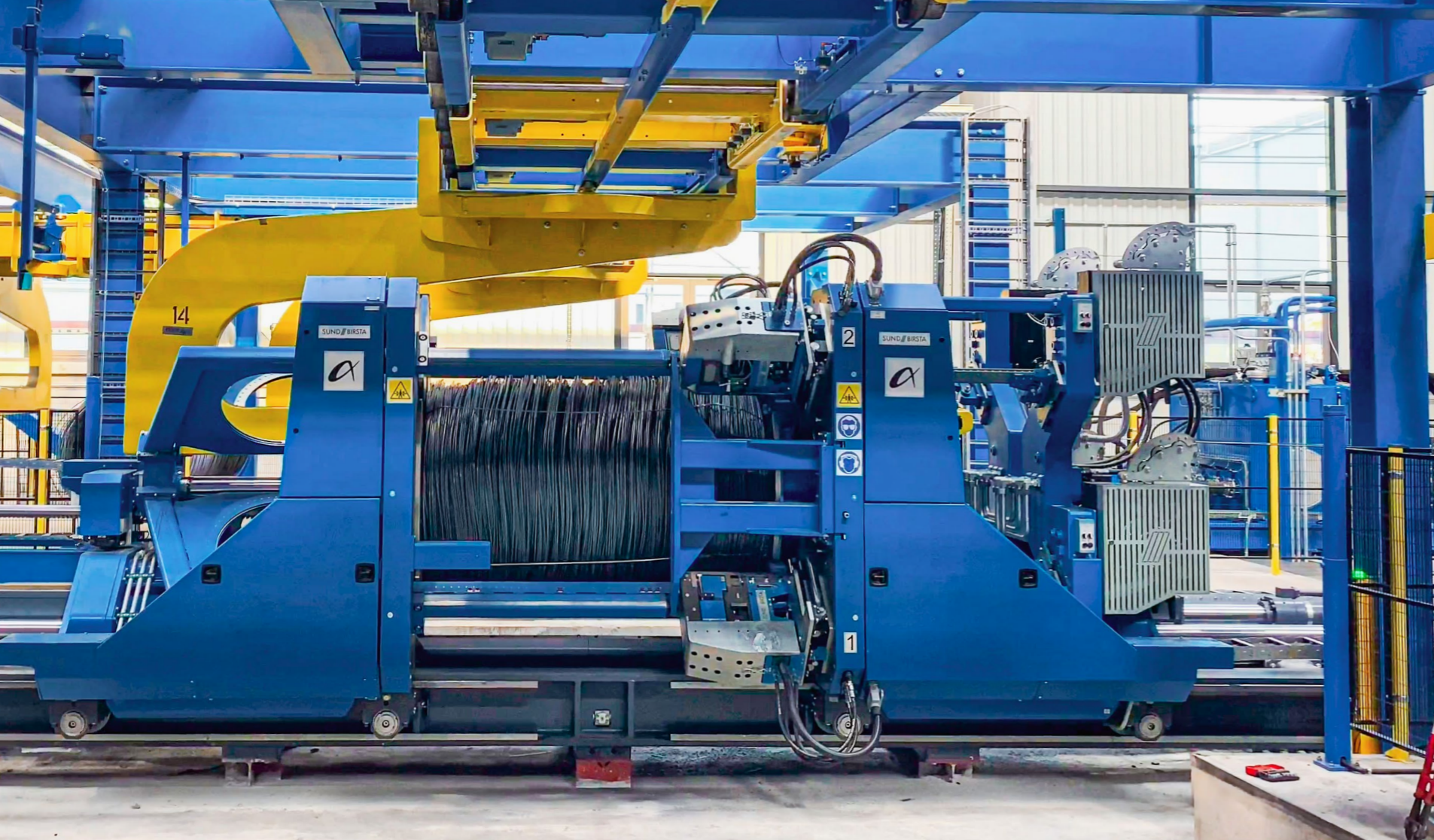


Wire

Coil Handling System SUNDCO Concept

Product brochure





Your solid industrial partner

In a world of technical developments and ever-changing needs, a solid industrial partner is crucial. Sund Birsta has been setting new standards for performance, durability, energy efficiency and safety for decades. Today, we are considered the leading supplier of handling equipment in the rolling mill industry.

Sund Birsta's wide range of solutions can be found in plants of all types and sizes, all over the world. With technology built on over 40 years of know-how, the SUNDSCO Concept has developed into a state of the art handling system for coils.

A versatile coil handling system

The Sund Birsta SUNDSCO handling system is designed for smooth and gentle handling of coils, transporting them to different working stations in the mill. The heavy yet simple construction, devoid of sensitive components and utilizing a quiet belt drive, makes the system very low maintenance.

The SUNDSCO handling system is available for both vertical and horizontal handling of coils, or a combination of the two. The system is fully automatic, but parts can be operated manually.

The pallet line is designed to accommodate the mill layout as per capacity, number of working stations, coil weight and buffer demand.

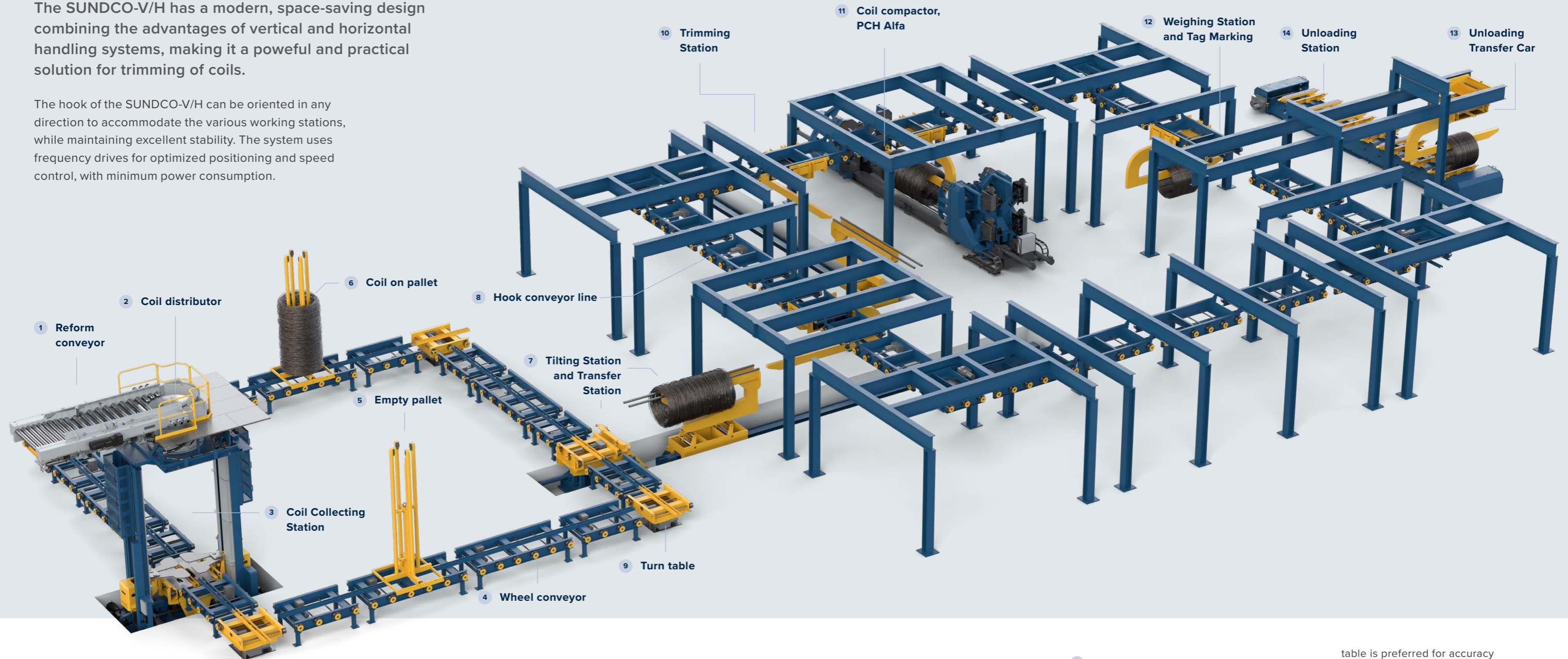


SUNDCO-V/H Wire Coil Handling System

Combining the best of vertical and horizontal coil handling

The SUNDCO-V/H has a modern, space-saving design combining the advantages of vertical and horizontal handling systems, making it a powerful and practical solution for trimming of coils.

The hook of the SUNDCO-V/H can be oriented in any direction to accommodate the various working stations, while maintaining excellent stability. The system uses frequency drives for optimized positioning and speed control, with minimum power consumption.



Optimized safety system

Safety is an important issue for Sund Birsta. Our machines and handling equipment are designed to meet high demands on machine safety. Depending on your requirements, we offer an optimized safety system.



Electrical Control System – Tracking

The complete handling system, from loading of an uncompacted coil to unloading of compacted and tied/strapped coils, is fully automatic PLC controlled. Tracking of the coils is based on hook identification readers interconnected with the mill computer system.

1 Reform conveyor

The reform conveyor, an extension of the cooling conveyor, leads the wire rod towards the coil distributor. The roller section is adjustable in length.

2 Coil distributor

The coil distributor receives the coil waps and distributes them down the tube into an eccentric configuration. This enables reduced coil height and gives better control of the coil shape. It also minimizes potential problems at later de-coiling.

3 Coil Collecting Station

The coil collecting is performed on a pallet in vertical position, and by so avoiding deep foundation pits for down-enders or other mechanisms in the collecting station. The coil collecting station with distributor and easy-down function assures that optimal coils are created and maintained.

4 Wheel conveyor

The conveyor system transports coils from station to station. It consists of sets of motors and belt-driven wheels mounted in parallel beams. All conveyor sections are controlled

by a common MCC, using frequency converters for smooth handling of the coils.

5 Empty pallet

Pallets carries the coils around the handling system. The coil is cooled during transportation.

6 Coil on pallet

Coil shape is maintained on the pallet until it cools down and stabilizes.

7 Tilting Station and Transfer Station

The tilting station is used for transferring the coil from vertical to horizontal handling. The transfer

station pick up the tilted coil and transfer it to the hook conveyor line.

8 Hook conveyor line

The hook conveyor, with belt-operated wheel sections, is tailor-made to suit the mill layout requirements as per capacity, number of working stations, coil weight, required buffer zone and type of unloading station.

9 Turn table

The turn table changes direction of the wheel conveyor.

9 Turn table

The turn table changes direction of the wheel conveyor.

10 Trimming Station

It is easy and quick to take samples and to remove front and tail end of the coil by trimming. The station is designed to give the operator full access to both ends of the coils.

11 Coil compactor, PCH Alfa

The shape of big coils is maintained during compacting, even at very high pressure.

12 Weighing Station and Tag Marking

Weighing scale, wheel conveyor and automatic or manual tag marking. Weighing is possible both with the coil on a hook, or a lifting table. Lifting

table is preferred for accuracy when weighing, while weighing the coils hanging on a hook can simplify installation due to less need for foundation. Weighing and tag marking are designed to follow your specific demands.

13 Unloading transfer car

Transfers the coil to the unloading station.

14 Unloading Station

Various types of unloading stations are available; Storing Rack, Walking Beam and Chain Conveyor.

SUNDCO-V Wire Coil Handling System

A high-quality and cost-efficient vertical coil handling system

The SUNDCO-V has a modern, space-saving design using very little floor space, and a cooling buffer area can be created efficiently. The system uses frequency drives for optimized positioning and speed control, with minimum power consumption.



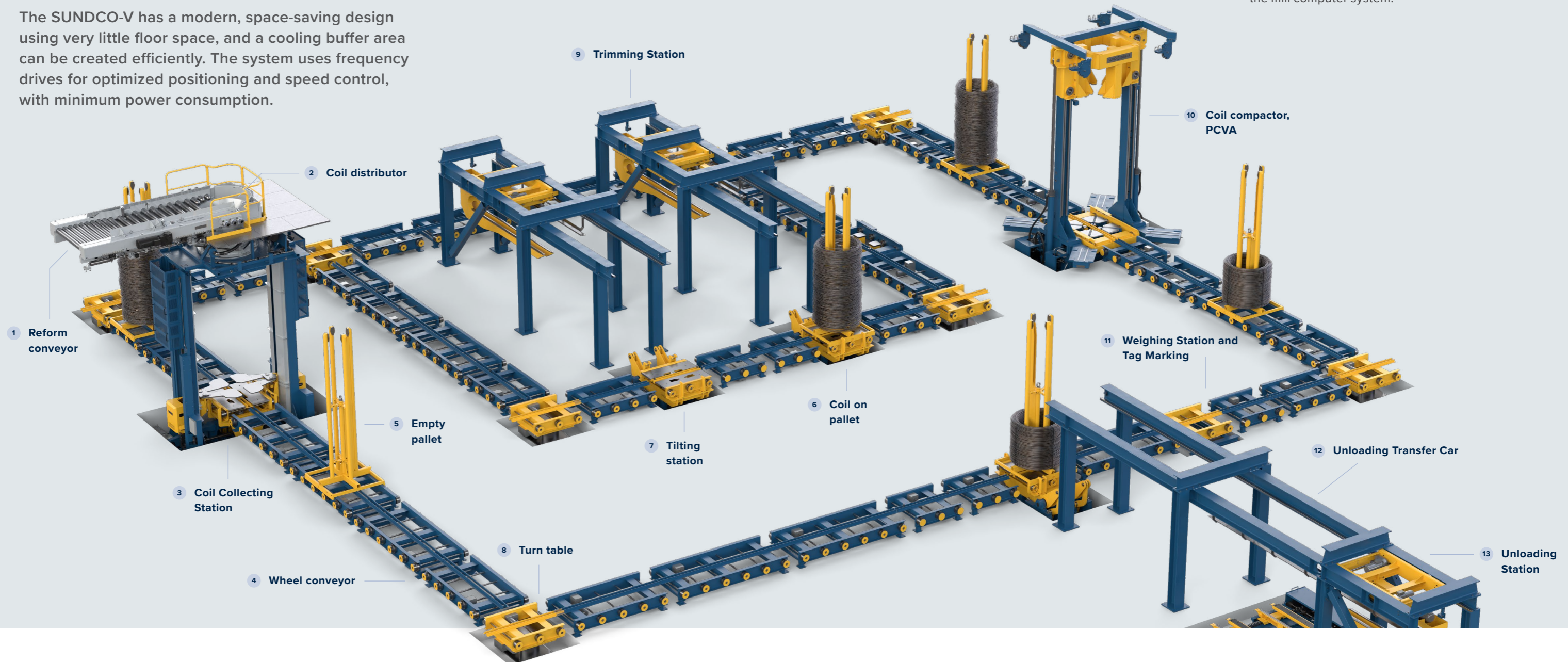
Optimized safety system

Safety is an important issue for Sund Birsta. Our machines and handling equipment are designed to meet high demands on machine safety. Depending on your requirements, we offer an optimized safety system.



Electrical Control System – Tracking

The complete handling system, from loading of an uncompact coil to unloading of compacted and tied/strapped coils, is fully automatic PLC controlled. Tracking of the coils is based on hook identification readers interconnected with the mill computer system.



1 Reform conveyor

The reform conveyor, an extension of the cooling conveyor, leads the wire rod towards the coil distributor. The roller section is adjustable in length.

2 Coil distributor

The coil distributor receives the coil waps and distributes them down the tube into an eccentric configuration. This enables reduced coil height and gives better control of the coil shape. It also minimizes potential problems at later de-coiling.

3 Coil Collecting Station

The coil collecting is performed on a pallet in vertical position, and by so avoiding deep foundation pits for down-enders or other mechanisms in the collecting station. The coil collecting station with distributor and easy-down function assures that optimal coils are created and maintained.

4 Wheel conveyor

The conveyor system transports coils from station to station. It consists of sets of motors and belt-driven

wheels mounted in parallel beams. All conveyor sections are controlled by a common MCC, using frequency converters for smooth handling of the coils.

5 Empty pallet

Pallets carries the coils around the handling system. The coil is cooled during transportation.

6 Coil on pallet

Coil shape is maintained on the pallet until it cools down and stabilizes.

7 Tilting Station

The tilting station is used for transferring the coil from vertical to horizontal handling and for trimming.

8 Turn table

The turn table changes direction of the wheel conveyor.

9 Trimming Station

It is easy and quick to take samples and to remove front and tail end of the coil by trimming. The station is designed to give the operator full access to both ends of the coils.

10 Coil compactor, PCVA

The shape of big coils is maintained during compacting, even at very high pressure.

11 Weighing Station and Tag Marking

Weighing scale, wheel conveyor and automatic or manual tag marking. Weighing is made directly on a special wheel conveyor with load cells. Weighing and tag marking are designed to follow your specific demands.

12 Unloading Transfer Car

Transfers the coil to the unloading station.

13 Unloading Station

Various types of unloading stations are available; Storing Rack, Walking Beam and Chain Conveyor.

SUNDCO Concept

Upgrades

We offer both standard and custom solutions, based on your specific needs. Here are some of the upgrades and options available for the SUNDCO Concept.



Automatic labelling station

Designed for high availability, great accuracy and low maintenance, the automatic labelling station assures a consistent high quality. It has an integrated coil inspection system, with a camera that scans possible positions for tagging and then chooses the best one for fast tagging of the coil.



Workshop service

Each machine has its own unique service demands, and we also understand that each of our customers have their own individual requirements. Our services reflect that, and we deliver the best maintenance available for your Sund Birsta system. Contact us with your specific service and inspection needs.



Remote service

With the Sund Birsta IoT solution, our specialists can perform remote diagnostics and troubleshooting of your equipment. This can also allow for improved preventive maintenance and optimization.



Safety

Sund Birsta machines and handling equipment are designed to meet high demands on safety, for both people and property. Machine safety is important and a priority for us.



Working environment

We strive for continuous improvement through design for a better working environment.

A long-term partnership

Service, cost-effective spare and wear parts and upgrade programs. Safety, support and digital tools. We are in it for the long haul, making sure you maximize the return of your investment in Sund Birsta technology.



Spare parts service

Every Sund Birsta unit is built with high-quality industrial components from leading suppliers. We take great pride in offering the same quality components as spare parts, readily available from our large stock.



Workshop service

Our workshop staff apply the same level of expertise and attention to detail in looking after your unit, that went into building it. From inspections to full machine rebuilds, we've got everything covered.



A wide range of solutions

We have a wide range of solutions for handling all types of products – from durable infrastructure steel to exclusive materials and surface-treated products that must be handled with great care.



60+ years of experience

We have been supplying handling equipment to satisfied customers in the rolling mill industry for over 60 years and our solutions are suitable for plants of all sizes and types.

We increase your productivity.

sundbirsta.com

SUNDBIRSTA

A part of Danieli Group