

Train loader (TLO) – economic loading



Accurate, high-speed loading systems for any application

Zero tolerance to loading mistakes!

We know that accuracy is paramount here,
often more so than in other situations.



When mine operators in Australia need to load train sets with 5 locomotives, 234 rail cars and a length of almost 3km for transport to the port, each rail car has to be precisely loaded – not too light and not too heavy.

Schenck Process equipment is used around the globe, e.g. in Australia, South America or China. A large amount of the ore mined by global companies is weighed and loaded using Schenck Process technology.

- ❖ Fully automatic gravimetric operation
- ❖ Feed rate up to 6,000t/h for coal and up to 12,000t/h for iron ore
- ❖ Suitable also for other bulk materials
- ❖ Turn-key supply
- ❖ High process safety, availability and operational reliability
- ❖ Single, double or triple chute systems
- ❖ Silos can be selected in standard range or custom designed to suit any application
- ❖ Train manifests can be fully integrated for rail car identification

Reliable operation under harshest conditions

minus 20 °C in China



plus 40 °C in Australia



heavy rainfall in Brazil



Schenck Process train loaders are designed to operate reliably in the harshest mining environments. High temperatures, dust and water are commonplace in the mining industry. Schenck Process train loaders will operate reliably for extended periods and require only routine maintenance.

Schenck Process train loaders feature high quality corrosion resistant paints, environmentally sealed electrical equipment, and high quality hydraulic components.

Low maintenance requirements

- ❖ High quality corrosion resistant paints
- ❖ Environmentally sealed electrical equipment
- ❖ High quality hydraulic components
- ❖ Ease of repair
- ❖ Adaptability to process changes

System design

Train loader (TLO) and MULTIRAIL® TrainLoadOut – perfect teamwork



Train loader (TLO) combined with world leading weighing technology using MULTIRAIL® TrainLoadOut offers complete control and automation with accuracies of $\pm 0.5\%$ of the total train weight. Weighing rail cars before and after loading provides a complete picture of axle loads and total train weight as well as any material hang-up that can overload a rail car.

Integration into on-site ERP systems ensures that operations are running smoothly and to optimum efficiency. Fully automatic rail car loading software enables remote train loading, i.e. without the need for operators. The gravimetric batch rail car loading system enables simple calibration by the operator with the help of hydraulically actuated standard weights.

Built-in fail safes ensure full control for all shutdown situations.

A crucial advantage of rail car loading with hopper scales is the possibility of loading the highest possible quantity of material. Systems with simple hopper scales are suitable for handling quantities up to 6,000 t/h, while tandem hopper scales can be used to load up to 12,000 t/h.

MULTIRAIL® TrainLoadOut

Dynamic weighing of rail vehicles

- ❖ Increased average rail car load
- ❖ Optimized loading performance – no overload
- ❖ Improved rail logistics efficiency
- ❖ Management of roll back and data transmission
- ❖ Train loader (TLO) interface
- ❖ Calculating the front/rear and right/left load distribution in the rail car
- ❖ Tare and gross rail car weights to $\pm 0.5\%$ accuracy

Material handling expertise

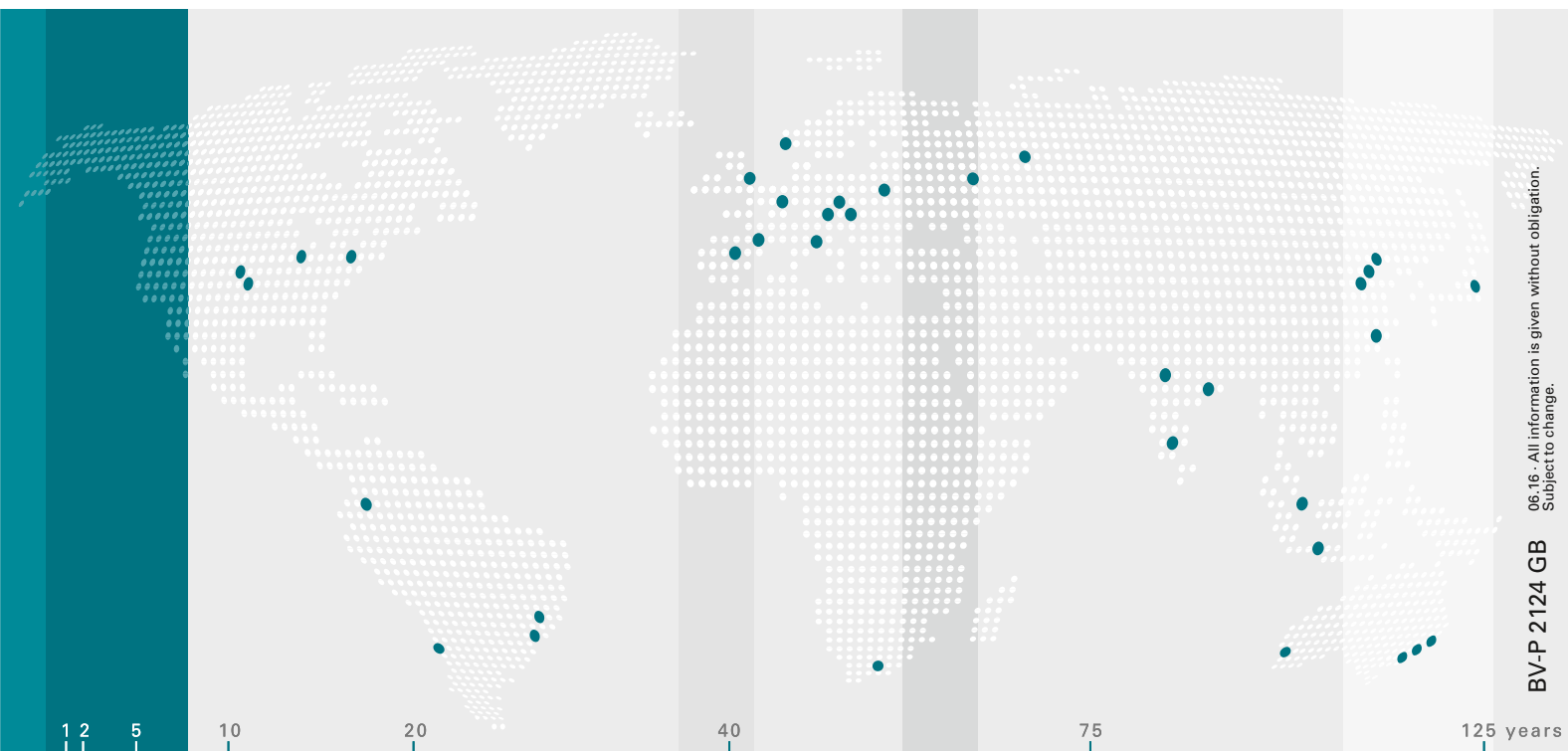
We have been involved in around 80% of all train load out operations for almost 20 years.



The Schenck Process loading systems experts have extensive know-how in materials handling and stockpile reclaim systems. Schenck Process' engineers support customers with materials handling system design, thereby optimizing operation of the reclaim system and train loader while at the same time considering capital expenditure constraints.

Schenck Process can also incorporate electrical and PLC control of the clients' materials handling system into the train loader design if required.

- ❖ Development of tailor-made projects
- ❖ End-to-end project management
- ❖ Inhouse design and R&D
- ❖ OEM for all train load out technology
- ❖ Over 57 train loaders (TLO) supplied to the major miners worldwide
- ❖ Over 30 years experience in train loaders



06.16 - All information is given without obligation.
Subject to change.

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The Schenck Process Group is a global leader in
weighing and feeding technology /// screening and separation systems for bulk materials /// dust collection and air
filtration technology /// pneumatic and mechanical conveying solutions /// automation and diagnostic technology

Schenck Process GmbH
Pallaswiesenstr. 100
64293 Darmstadt, Germany
T +49 61 51-15 31 10 00
mining@schenckprocess.com
www.schenckprocess.com

we make processes work

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