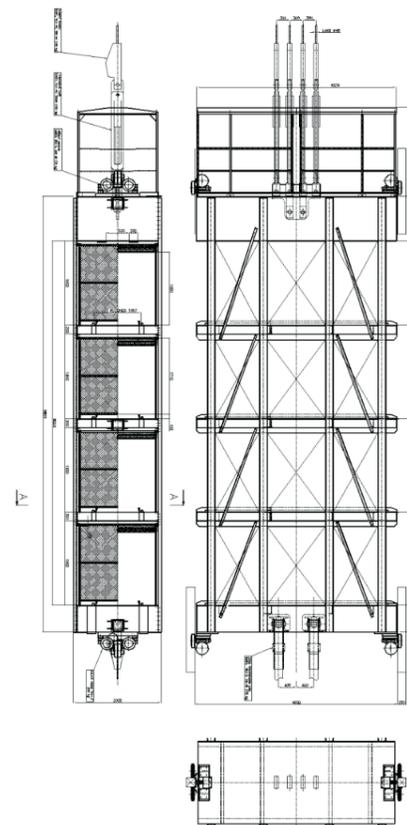
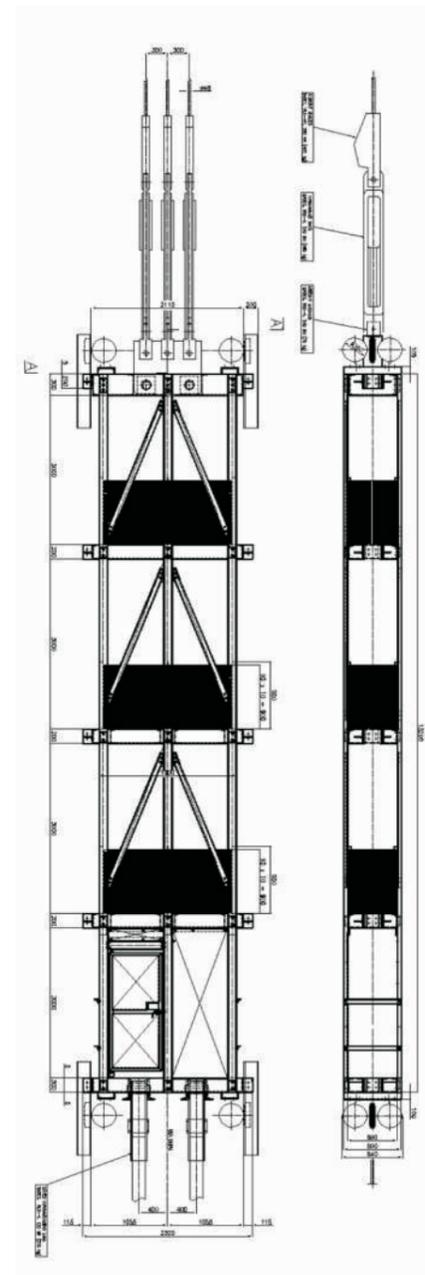


### Counterweights

Counterweight is destined for the single-action operation of the hoist in order to balance the cage or skip. Its weight is usually selected as an aggregate of an empty container weight and a half of its payload. Counter-weight has a screwed or welded design, where its supporting frame is made of rolling sections. In order to obtain the necessary operating weight



the supporting frame is filled up with steel sheets (load boards). If necessary, the operating weight can be altered by adding or removing of steel sheets. Counter-weight is guided in steel shaft guides through wheel guide and fixed guides. The installation of the upper and lower brackets is similar to the one for skips and cages.



In order to carry out inspections of the shaft and guides, a space for inspection-staff transport may be created in the lower part of the counterweight. Aside from that, the counterweight container may be combined with multiple decks for staff transport. This solution finds its use especially in the single-action skip extraction where the transport of staff is operated by the counterweight. Under the counterweight head there are feet that enable chocking or placement of the counterweight on the foldaway supports.

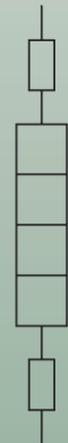
Before the counter-weight delivery to the customer, final epoxy paint is added – 2 basic layers and 2 top layers. Minimum total thickness of the paint is 160 µm.

# Transport-containers

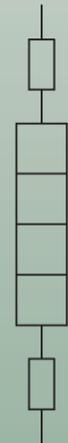
### Cages

Cages are destined for the transport of people, wagon extraction, as well as transport of material. They are manufactured in various proportions and payloads, depending on customers' requirements and needs. They are usually manufactured as welded non-split construction or, in the case of high-dimensional cages; they are designed as split for facilitation of the transport. We supply single-deck to four-deck cages with a payload from 2500 to 16000 kg. The largest (high-capacity) cages reach ground plan proportions of 1840 x 6250 mm (or 1960 x 6100mm) enabling transport of up to 240 people at one go. It also enables transport of oversized objects as the foldaway floors extend the inner height of 10000 mm. Their payload is up to 23000 kg. Cages can also be adjusted for the transport of material in the suspension area under the cage base.

Cages have 2-point side or frontal guides, while high-capacity cages usually have 4-point guides. Slide-way guides or suspended wheel-guides are used. The transport of people is enabled by removable or folding doors. Another element of the equipment is the safety braking (gripping) attachment which automatically activates the wedge-shaped safety devices in case the suspended board is lightened. The deck floors are equipped with rails for the transport of mine wagons that are fixed by a caging device during the transport. In the cage head there is a deck that is used for the inspection transport; the deck is equipped with a removable safety shelter and a protective handrail with safety plates.



# INCO

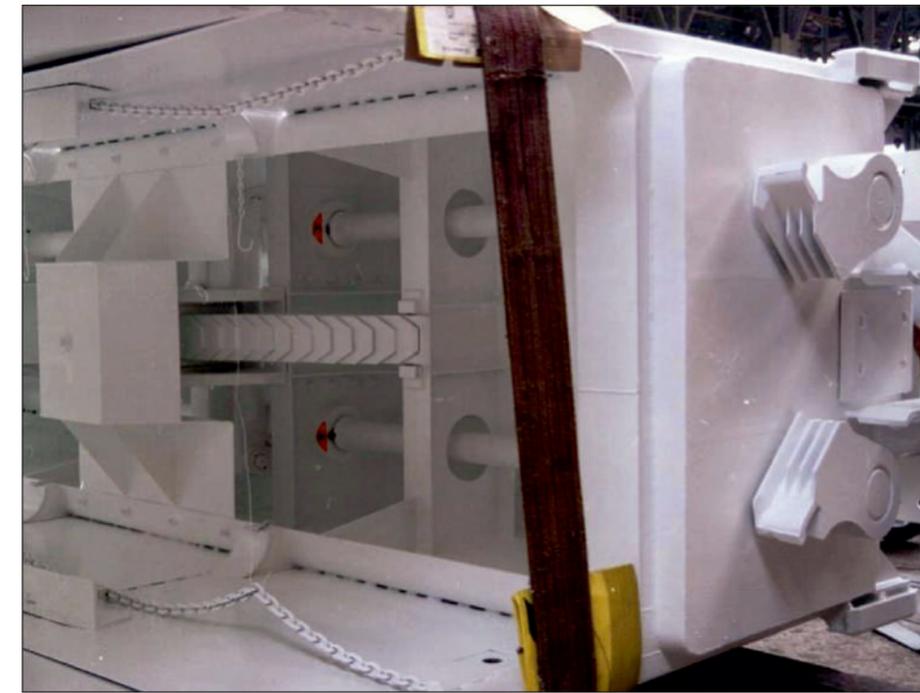
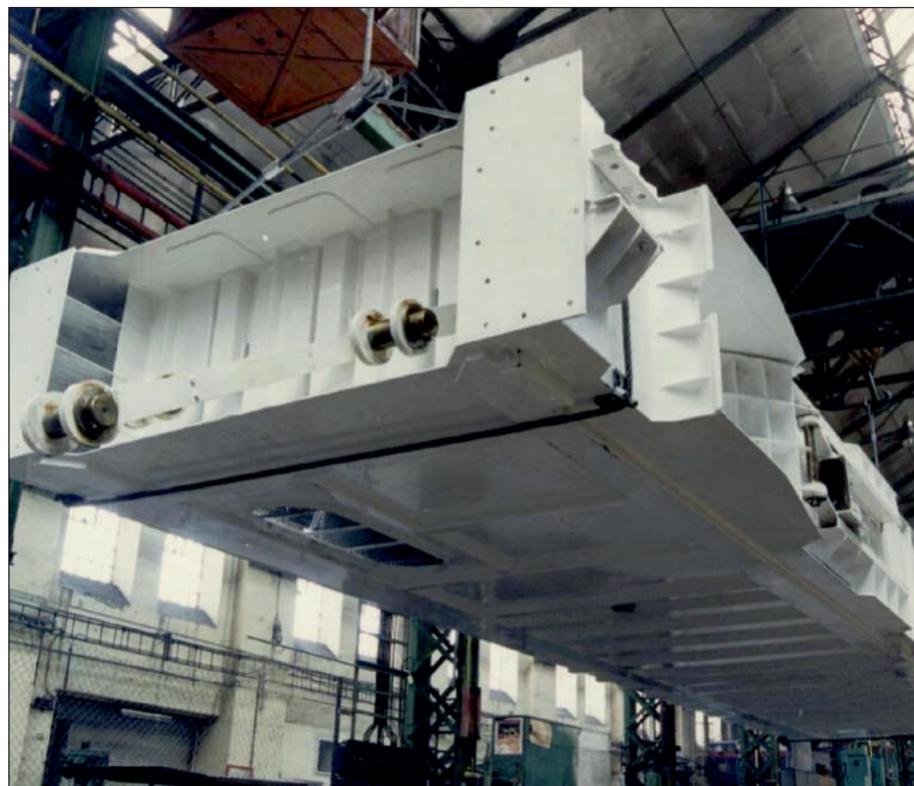


The cage head is equipped with a suspension board to enable installation of the necessary amount of upper brackets. Under the cage foot there are supports that enable installation of the required amount of balancing rope suspensions. Under the cage head and cage foot, there are feet in order to enable container chocking, or its placement on the foldaway supports. The cages are supplied with an anticorrosive final arrangement – epoxy paint, 2 x basic and 2 x top layer. The minimum total thickness of the paint is 160 microns.

### Skips

Skip containers that are used for the transport of loose spoil are double-coated or single-coated made of reinforced materials. Depending on their proportions, the container design is non-split or split. Loading and unloading of the container is one-way or counter-way. We supply a wide range of proportions, and both design and proportions depend on the customer's requirements. The payload ranges from 1500 kg to 50000 kg.

Skip guiding is frontal or side-mounted, enabled by suspended or non-suspended wheel guides combined with safety sliding guides. In the double-casing design the chamber has replaceable abrasion-resistant plates, while the single-casing design is made of steel plates of minimum solidity 450 HB. The skips have an optional construction design of the lower cover. Normally



a guillotine, lever, or cradle cover types are used. Depending on customers' requirements, we can supply skips with other types of cover as well.

The skip head is equipped with a platform for the needs of the inspection staff. The platform is equipped with a protective handrail with safety plates and removable protective shelter. The lower part of the skip under the inclined bottom of the container can be adjusted as a closed cabin for the transport of up to 6 people.

The suspension board at the skip head serves for installation of the required amount of brackets. Under the skip foot, there are brackets in order to enable container chocking, or its placement on the foldaway supports.

The skips are supplied with an anticorrosive final arrangement – epoxy paint, 2 x basic and 2 x top layer. The minimum total thickness of the paint is 160 microns.

### Skip-cages

Skip-cages are destined for the combined use of the container as a cage or for the transport of people and material and, as a skip for the transport of the loose material and spoil in the chamber. The chamber space is usually combined with one or more additional decks. Design of the skip-cage is fully dependent on the shaft type and customer requirements. Their design is similar to the one of skips and cages in previous paragraphs.



# INCO

