

Billet Surface Visual Inspection Device

Before the new billet visual inspection device (VKG) was set, the surface of 140 mm and 180 mm square billets was inspected on, for this purpose adapted stands. To inspect the surface of billets, all the billets had to be rotated manually with a special open-end wrench to inspect all four sides.



Increased share of 180mm square billets at the end of 2012 made us in the Steelworks start planning a new investment into a billet surface inspection device. With transition of complete steel casting assortment to 180mm square billets, the existing procedure of billet surface inspection was not possible due to the billet weight.

The Štore Steel policy to improve technological

procedures, ergonomics and working conditions led the management in 2016 to start with the activities for purchase and setup of a billet surface visual inspection device.

By the end of 2016, we got two offers based on our technical specifications and chose the company KORING d.o.o. from Prevalje due to their preferences and price.

Above: Billet surface manually inspection



The company prepared all the machine, electrical and other technical documentation and automatization for the operation of the device. The whole device was also manufactured by KORING d.o.o.

The device is manufactured to enable visual detection of surface defects on all four billet sides and automatic rejection and rotation of individual billets and sorting to specified strand. The billets are automatically sorted to good and bad ones according to results of surface inspection. The device is capable of inspecting 60 billets per hour.

The billet visual inspection device was placed in the billet depot of the C-D plant. Between September and November 2017, preparations were done to prepare the space by moving the billet stacks to the new location in

the A-B plant. The foundations were made in November according to the machine plans and in December 2017, the new billet visual inspection device was set, all the installations done, the device started, operators trained and the new device tested.

Operators had no serious obstacles with training of operation and feeding.

The new device improved the surface quality control and humanisation of work.

Janko Cesar, Head of steel casting



Photos above: the new device testing