ASPECTS REGARDING EXPERTISE OF THE ORIZONTALIZATION DEVICE OF COMMAND CABINE OF THE COAL MINING MACHINE

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ABSTRACT: This paper presents the technical state of the device for the alignment of a coal-mining machine after the technical expertise. The rehabilitation to which the control cabinet will be subjected will be carried out by performing the intervention works that will restore the normal operating parameters of both the structural part and the functional part. In the paper are presented: the means of verification of the device and the proposed technical solutions for the repair of the device.

KEY WORDS : device, horizontality, cabin, machine, coal.

1. INTRODUCTION

The cabin of the machine to be removed from the solid fuel storage (lignite) is placed on the orizontalization device and support which in turn is located on the elinda at the point where it was considered at the time of designing to be the best placed to supervise the loading from the storage and transporting through the conveyor the coal to the boiler feed station of the boiler (to burning it). We present a sketch of the command cabin and further on what issues are and must be resolved.

2. THE CABIN COMMAND DEVICE OF ORIZONTALIZING

The horizontal alignment device the control cabin is the support and connection between the elinda and the control cabin. The command cabin in which serves the machine, contains the control panel and the visibility of how it takes from the coal storage stack and guides it with the conveyor mounted on the ellipse in the direction of the crushing tower.

We present a sketch of the device with the left side on the rotating platform (position P1-4 + 56) and the right side on the elinda (P5- 25), between these attach the cable grip with the positions P50- 56.

Support cabin frame P12-14, welded under the main beams of the articulated elbow through the ears P22 which support the framework P8+19+24 and the cabin seats on the positions P26+8+7.

Figure 1 shows a sketch of the device of horizontalisation of the control cabin.

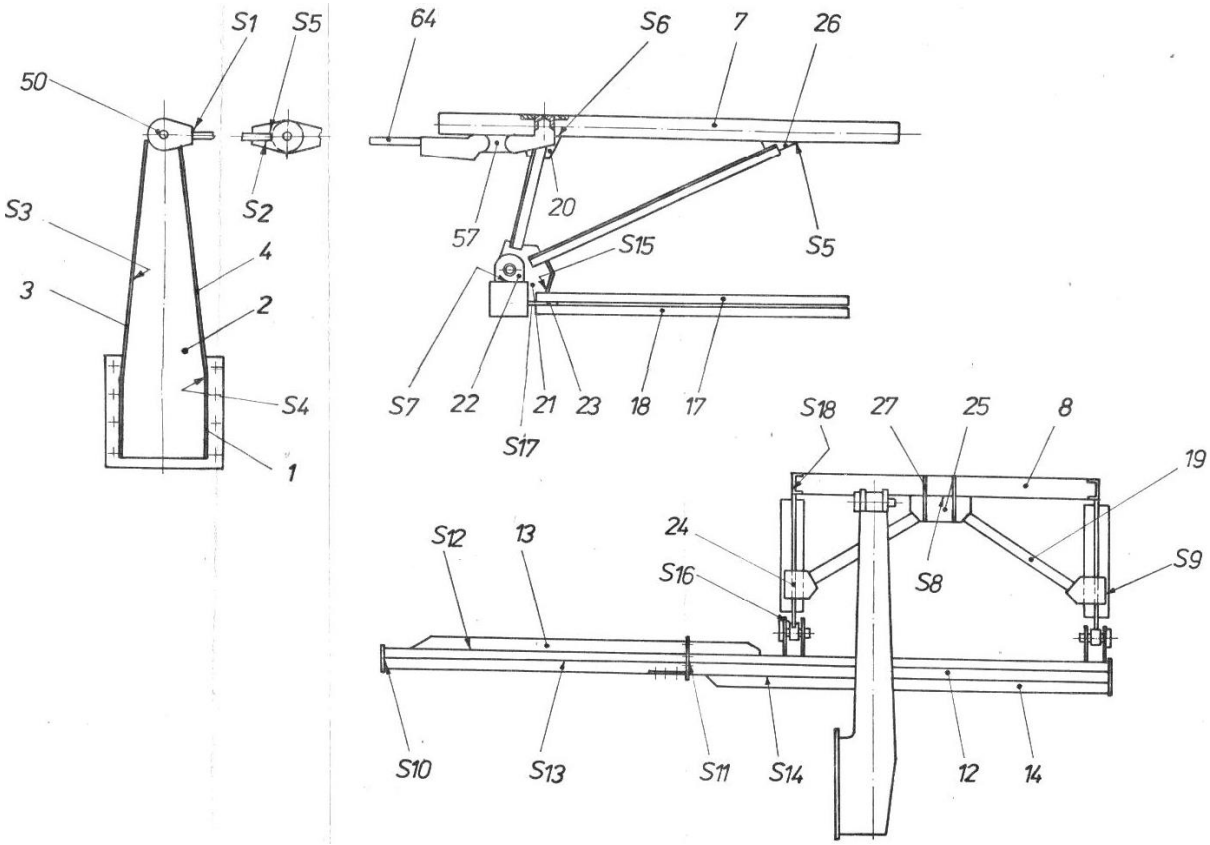

Fig.1. Sketch of the device of horizontalisation of the control cabin.

2. PROPOSALS AND REMEDIES FOR FOR PART ON ROTATING PLATFORM

Control bolts and cable lugs. Rust is observed who attacked the paint on the component parts including the inside of the cable lug. Check that the holder is secure of the rotating platform.

Observe that attacked rust paint on the components including cable inside the puck.

Check the rotating platform mounting bracket.

Painting will follow the instructions of the standards.

Fig.2 Photos with defects

Control bolts and cable lugs.

It can be noted the rust that attacked the paint on the component parts including the inside of the cable lug.

3. PROPOSAL AND REMEDIES FOR FRAMEWORK PART UNDER THE CABIN

Gripping the support frame, the clamping ear of the frame on which the control cabinet is fixed, which oscillates with the frame.

The cab for maintaining the cabin in the horizontal position is not secure, without clamps as required by the documentation. They will be repaired; cable lug + lock and connecting bolts.

Verify that the platform is attached to the rotating platform.

The cable support attachment assembly is strongly corroded.

The repair is impetuously urgent because it jeopardizes the machine-serving machine. Figures 3, 4 and 5 illustrate the support frame

the cab for maintaining the cab in the horizontal position or the cable support attachment.

Fig.3 Gripping of the support frame

Fig4 Cord retaining cable in the horizontal position

Fig.5 The gripping assembly of the cable support

4. CONCLUSION

On the construction that supports the control cabin there is no stop to ensure that the tilting does not in the event of an element breaking in the horizontal alignment device.

The pronounced degradation of the slipper-socket assembly under the cabin floor that holds the support and horizontal cable and requires URGENT intervention and control by a workshop specialized in repairs.

Mounting additional cable clamps to the exit of the slipper so that the free ends fit correctly and parallel to the sack assembly.

Interventions will be performed after an approved technology with the under-voltage car and the undercarrier under the machine disconnected from the power supply.

Emergency repair and thermal insulation will be required to ensure a habitat that meets OSH standards.

In order to achieve the temperature and comfort of a normal operation, all unnecessarily added utilities will be removed.

Ensure a waterproofing roof that protects the condensation ceiling.

The location of the exterior illumination of the cabin with reflectors will be done by directing the lighting flow to the porthole wheel mechanism.

The side air conditioning system will be re-positioned on the railing to be cleaned periodically by air blowing to ensure correct operation.

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