

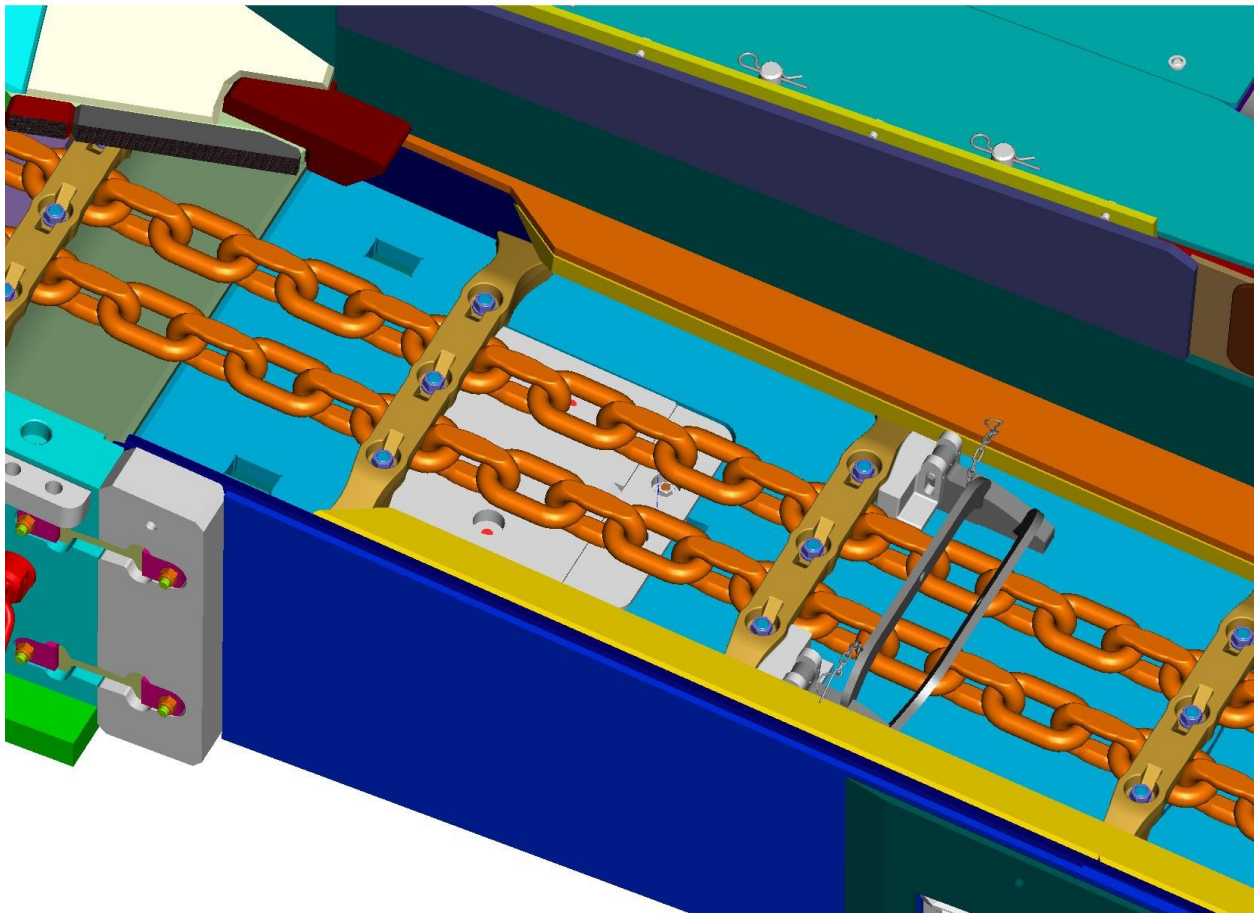
Reliability at work



Operation Manual

CHAIN LOCKING DEVICE

Doc. No.: 08-12-10



CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL



Your safety

Operating conditions

intended use The main gate drive provides two thirds of the drive force for the chain assembly and transfers coal from the AFC to the BSL at up to 3500 tons per hour. One (1) drive unit powers the main gate drive sprocket. The drive unit runs parallel to the BSL.

Gradient (or adapter) pans connect the main gate drive to the AFC pan line and to the BSL. Both the AFC and BSL grade pans are secured to the drive frame by bolted dog bone connectors that are neatly fitted to provide a relatively rigid connection.

main gate drive module Both of the drive modules consist of a water-cooled CST-45 gear box with a 33:1 reduction ratio driven by a water-cooled 1200 HP motor. The KP45 gear box on the face line is a bevel spur gear box transferring the torque from the motor through 90° to the drive shaft while the P45 gear box is in line with the drive shaft.

The CST gear boxes incorporate Controlled Start Transmission technology that allows improved start up performance and extends the productive life of the AFC. The CST technology also allows load sharing between the two main gate drive modules as well as the tailgate drive module.

The gear box is fitted with a hydraulic slow run device that provides an alternative means of driving the chain in the event of chain jams or for joining the chain. The slow run device is mounted on the bell housing between the motor and gear box.

Safety instructions

general rules Always work with full concentration.

- Familiarize yourself with your working environment.
- Always wear your personal protective equipment.

protective equipment Always wear your personal protective equipment. This also means wearing ear protectors, as the noise emissions from the AFC are in excess of 85 dB(A).

Inform your colleagues:

- ☞ Where exactly you are working.
- ☞ What work you are carrying out.
- ☞ How long you expect the work to take.



Installation

installing the conveyor chain The conveyor chain consists of pre-assembled individual chain strands which comprise the following individual parts:

- Scrapers (flights) with mounting elements
- Chain link
- Chain connectors

installing the flights (scrapers) The distance between flights on a 6-pitch chain (a flight is a connection to every 6th link) is 912 mm. The flights are bolted to the horizontal links of the chain.

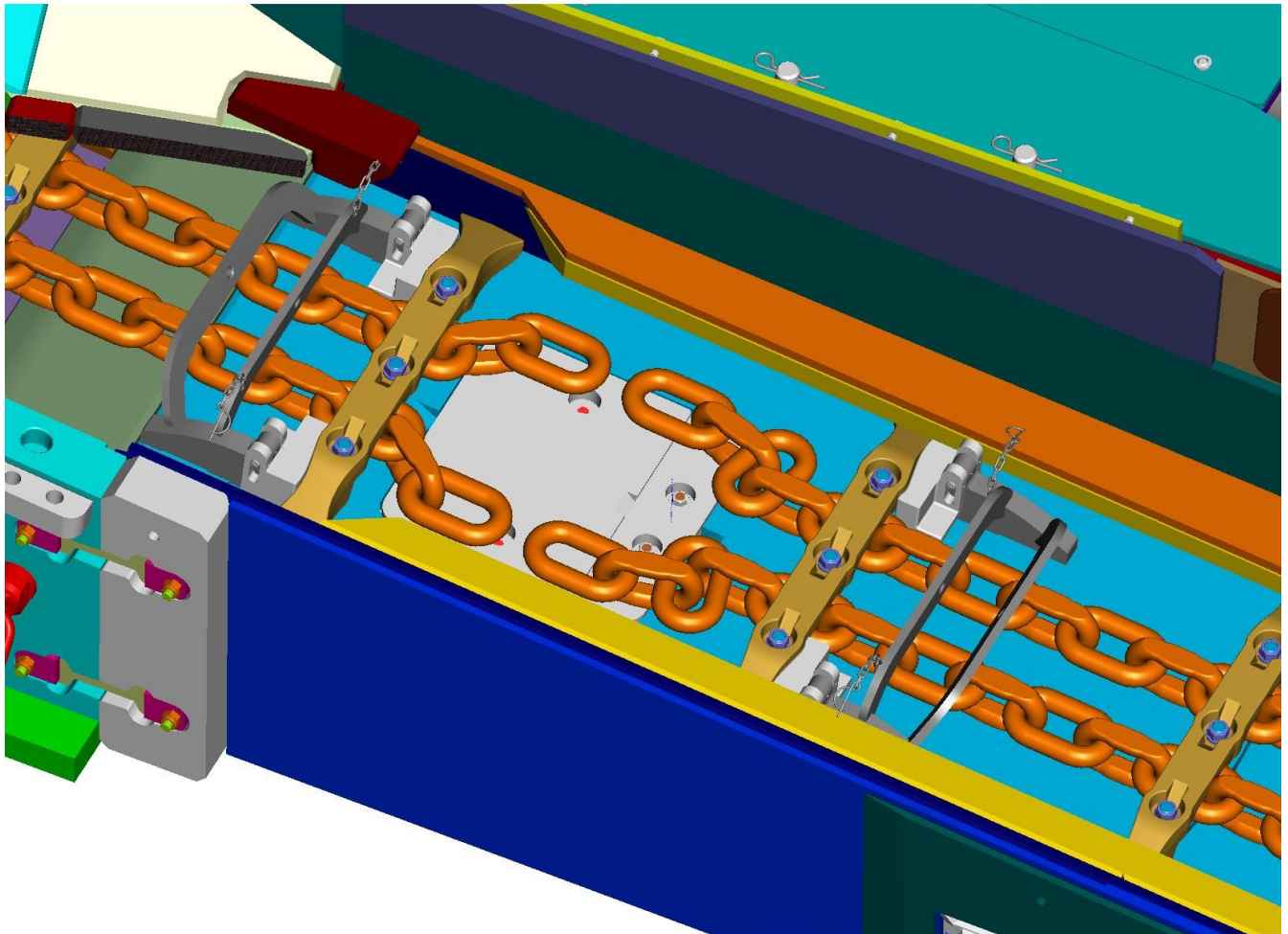


NOTICE

INADEQUATELY SECURED FLIGHTS CAN COME LOOSE AND JUMP OUT OF THE GUIDES. THIS CAN CAUSE JAMMING OF THE CONVEYOR. TIGHTEN THE BOLTS OF THE FLIGHTS TO THE SPECIFIED TORQUE OF 1750 NM.



Remove links as required



© BUCYRUS 2010



Instructions on the maintenance of the conveyor

Maintenance at regular intervals increases the operational safety and prolongs the service life of the conveyor. In particular, observe the safety instructions in chapter 2 "Your safety".

shearer mechanical stop Be sure to observe the intervals specified for maintenance and checks of the conveyor since hot surfaces might cause an ignition of explosive atmospheres (air) and dust

temperature and structure-borne noise monitoring Drive frames, gear boxes, and similar components of the conveyor can be equipped with a temperature and structure-borne noise monitoring system.

The operator can use a continuous structure-borne noise monitoring system switching off the drives if:

- impermissible temperatures are reached.
- impermissible structure-borne noise characteristics are indicated.

important notes Please observe the following notices:

- In order to avoid individual components not being serviced or being only inadequately serviced during maintenance work on the conveyor system as a whole, we recommend that a general maintenance plan be drawn up. You can, for example, draw up a checklist using this operating manual and the manuals of the other components.
- Inadequate maintenance can result in machine damage which leads to considerable costs.

Be sure to observe the specified maintenance intervals.

- Use only suitable and approved tools for maintenance work!
- Use only original BUCYRUS spare parts when replacing components.

Instructions on the maintenance of the steel structure

maintenance of the steel structure includes:

- Lubrication of the system in accordance with the lubrication schedule.
- Inspection of the system for faults and proper function.
- Inspection of wear parts.



Operation

© BUCYRUS 2010

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL