

# Used Impact Crusher Inspection Guide

## 1. Overall visual inspection

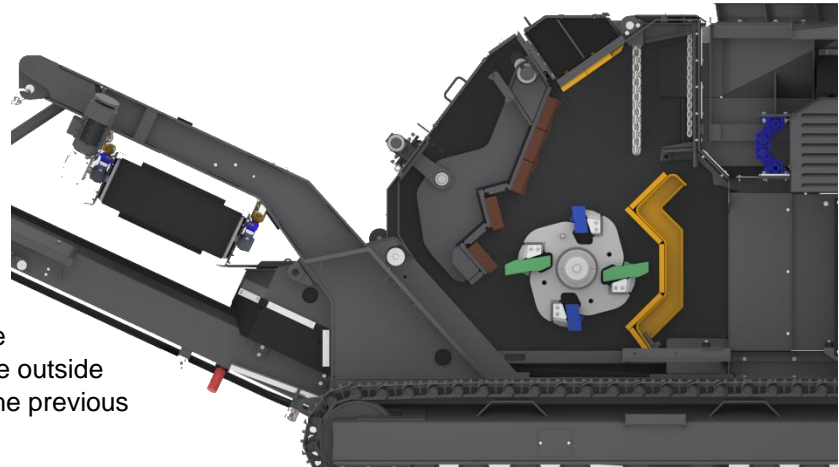
Do a general walk-around and watch out for...

- bent rollers, drums, & mainframe
- cracks in the frame
- overall cleanliness
- completeness of bolts and components
- hydraulic leaks
- cleanliness of the radiators and any leakage

## 2. Check wear items

Costs for wearables can add up quickly if they are worn out. Open the crusher box and inspect your impact plates on the aprons, side wear plates (cheek plates), and hammers (blow bars). Wear plates shouldn't be worn out or worn through.

As soon as the wear parts are worn out, the frame is in danger! Any welding done on the outside of the crusher housing could indicate that the previous owner didn't change wear parts in time.



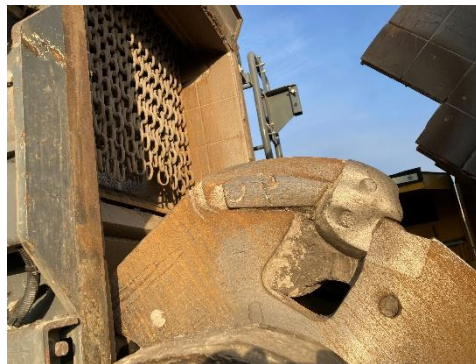
## 3. Check rotor assembly

The rotor body is not a wear item and should not be worn, cracked, or missing parts. If the rotor is worn and out of balance, you risk premature failure of your rotor bearings. Make sure to turn the rotor and watch out for imbalance or damages.

Sometimes damages are not visible. If you fear that the crusher was abused, you can use a dial gauge to measure the straightness of the rotor shaft.



The picture shows a worn rotor body. The previous operator didn't change the hammers in time.



Material built up between the rotor body and side wear plates weren't dealt with. This indicates that the operator didn't open the crusher box for inspection.

#### **4. Electrical cabinet**

Open the electrical cabinet to watch out for jumped breakers or indications that somebody messed with the wiring.

#### **5. Check coil springs/torsion elements**

The feed hopper, active pre-screen, underpan feeder, and onboard screens use springs or torsion elements that oscillate to convey material forward. These elements may crack or sink in overtime.

#### **6. Test run the machine – start-up**

Crank the engine and listen if you can hear any bearings going out. Is there an abnormal noise?

#### **7. Test run the machine – complete function test**

Do a full function test of the machine. Startup the machine completely with the rotor engaged. Let the machine run for an hour and check the temperature of the rotor bearing using a thermometer. If the temperature exceeds the 85-95°C mark, this indicates a failed rotor bearing. In other words, the bearing should be at no point where you can't touch it anymore.

#### **8. Check safety features**

Startup the machine and test all E-stops on your used crusher. Make sure the lanyard control for emergency tracking is with the machine.

#### **9. Oil sample test**

Crushers run in a dusty environment, and operators must clean and change air filters so that the dust doesn't get into the engine. Contact your local engine dealer (e.g., John Deere, CAT, ...) to get an oil sample test to identify indications of extra wear on the block or cylinders or if the engine is dusted.

Please remember that the oil sample is only as good as the last one!

If possible, get an oil sample test before your vendor changes any engine oil.

#### **10. Contact the manufacturer**

Buying a used machine means that you don't have a complete history of the machine's life. It can be hard to obtain records or information about the history of the machine. Contact the manufacturer and ask for the history of the machine. Was there any major work done to it? Get a second opinion and free consultation free of charge.