Stolle Machinery Company, LLC

Stolle Advanced Technology Operations (SATO)

Technical Bulletin Number: 002 **November 2022**

Necker (E-NCKR) Vacuum Blower Maintenance Procedures

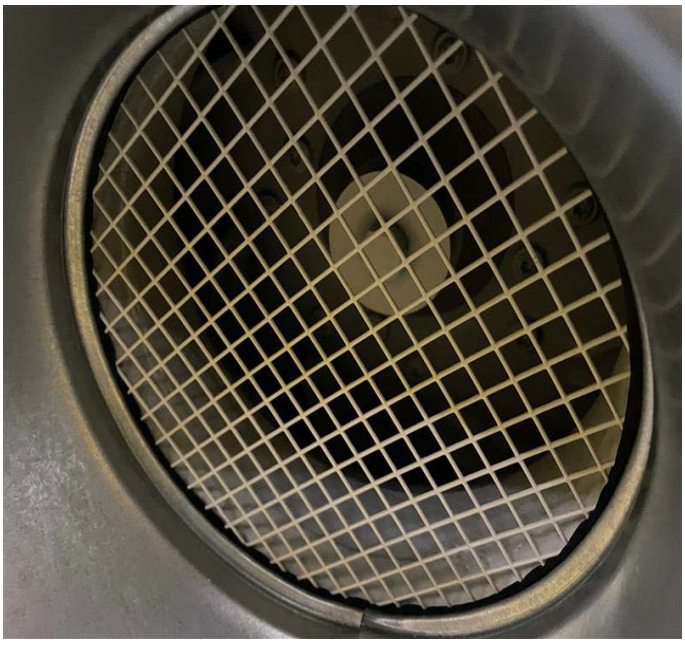
Serial Numbers Affected:
DN100200, DN100300, DN100400, DN100500, DN100700, DN100800, DN100900, DN101100, and DN101200

1.1 Overview

The Stolle Necker (E-NCKR) requires In/HG at 30 SCFM (2000mm-250mm HG at 14 l/s) of vacuum for proper function. The Transfer Turret vacuum is supplied by floor mounted blowers on the drive side of the Necker. The Necker Vacuum Blower creates vacuum by pulling air away from the turrets through vacuum manifolds, and allowing the CANs to be pulled firmly against the pocket segments.

1.2 Issue

Necker crashes can result in debris being pulled into the vacuum manifolds and out to the Vacuum Blower. The screen installed to prevent accidental damage to the blower impeller holds all debris on the inlet, and this can lead to a substantial accumulation over time. Excessive accumulation at the inlet can lead to blockage which will result in reduced vacuum generation. If vacuum is too low the CANs will not hold properly, and may drop CANs at the incorrect time. Refer to Figure 1-1.



Clean Screen

Debris-filled Screen

Figure 1-1. Blower Inlet Screen Debris Accumulation

1.3 Correction

The best way forward with this issue is to implement a new monthly maintenance procedure to clean the Vacuum Blower Inlet Screen. The Inlet Screen should be cleaned as a monthly preventative maintenance procedure.

WARNING!

Stop the Die Necker. Depress the E-stop, and de-energize the electrical power to the blowers. Place the machine in a safe state by following End User's Lock-out/Tag-out procedure. Failure to do so may result in injury to personnel or damage to the machine.

Perform the following steps to clean the Vacuum Blower Inlet Screen:

1. Locate the Vacuum Blower Inlet Adapter and Duct Clip. Refer to Figure 1-2.

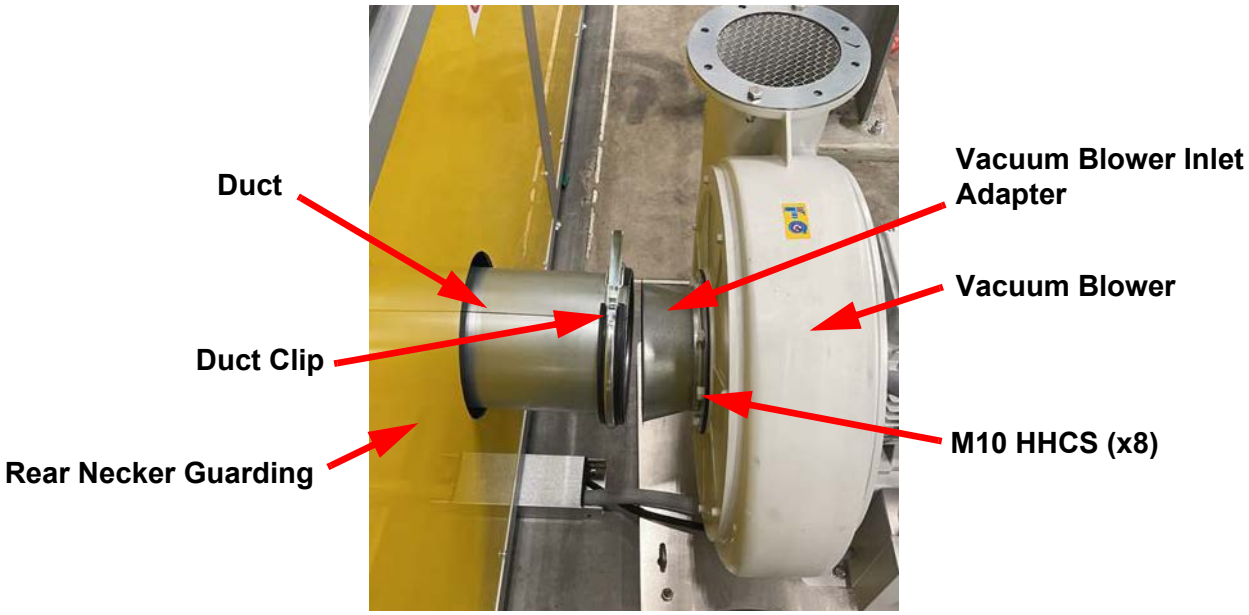


Figure 1-2. Vacuum Blower Inlet Adapter

2. Place hand on closed Duct Clip, and pull to open the clip. Refer to Figure 1-3.

Clip Closed

Clip Open

Figure 1-3. Opening the Duct Clip

3. Slowly pull the Duct away from the Inlet Adapter. It will move just enough to clear the Inlet Adapter and allow it to be removed. Refer to Figure 1-4.

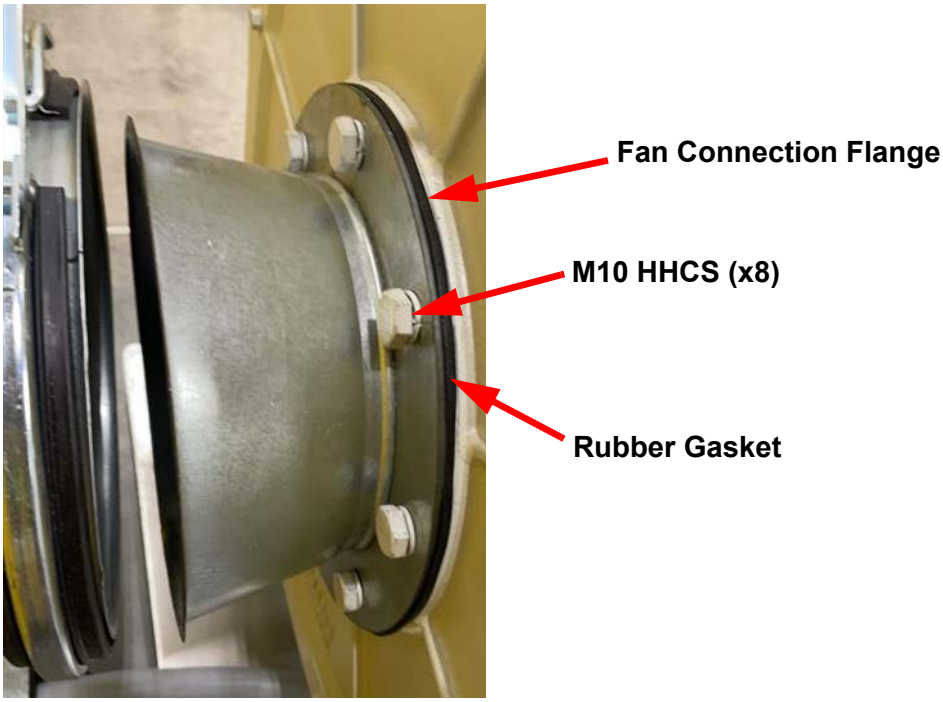


Figure 1-4. Gap between Duct and Inlet Adapter

4. Loosen the eight M10 hex head cap screws with a 17mm wrench.
5. Extract the cap screws one at a time using caution to not drop the Inlet Adapter, Rubber Gasket, or Fan Connection Flange.
6. Remove all three of the items in Step 5 and set to the side.
7. Clean the Inlet Screen, emptying any accumulated debris into a waste container.
8. Reassemble the Inlet Adapter and thread the eight cap screws into the Blower.
9. Torque the bolts to 37 ft/lbs (50 Nm).
10. Gently pull the inlet Duct into position against the Inlet Adapter.
11. Close the Duct Clamp securing the connection between the two. There should be no gaps or vacuum will not be applied efficiently.
12. Repeat this procedure for all Vacuum Blowers on your system.
13. Remove the Lockout/Tagout and re-energize the Necker.
14. Begin operation as normal.

1.4 Design and Part Update

To better accommodate this updated maintenance procedure, Stolle is developing a filter system to aid with isolating and clearing debris. A followup bulletin will be issued when the filter system is available for installation.