## How to do uploads and downloads on Kellenberger grinder

## How to do an upload.

- First go to the DNC system and select the upload path.
- Then press the upload button.
- Name the file to what you want it to save as.
- Then press Ok. (The machine should show pink with upload instead of blue.)
- Then go to the machine and go to external and make sure it is set to punch tape.
  - To set it to punch tape press the shift key and use the page down button till it says punch tape at the top. (You must be on the external page to do this.)
- Then press the export button and type in the name of the program usually NCMxx as example.
- Then press enter and it should go back to the DNC system.
- After it has uploaded check the file to ensure everything is there.

## How to do downloads to machine.

- First go to the machine and make sure you are on the external screen.
- Make sure the machine says punch tape.
  - To set it to punch tape press the shift key and use the page down button till it says punch tape at the top. (You must be on the external page to do this.)
- Then go to import.
- Then press enter.
- Go to the DNC and select the program you want to send.
- Then press download. The DNC should send over the program right away.
- Check the machine to see if it is done and when it is done check the program to ensure it is all
  there.

## Pinout and Xon/Xoff settings

The standard Pinout for Kellenberger machine. Same as pinout used for moxa units.

DB9	DB25
	1 - Shield
2	- 2
3	· 3
5	· 7
7	- 5
8 4	
	Pins 6-8-20 jumped on DB25 side.

When setting Xon/Xoff set the start state to be ON and put a delay if needed