01. ProX 200 Menus

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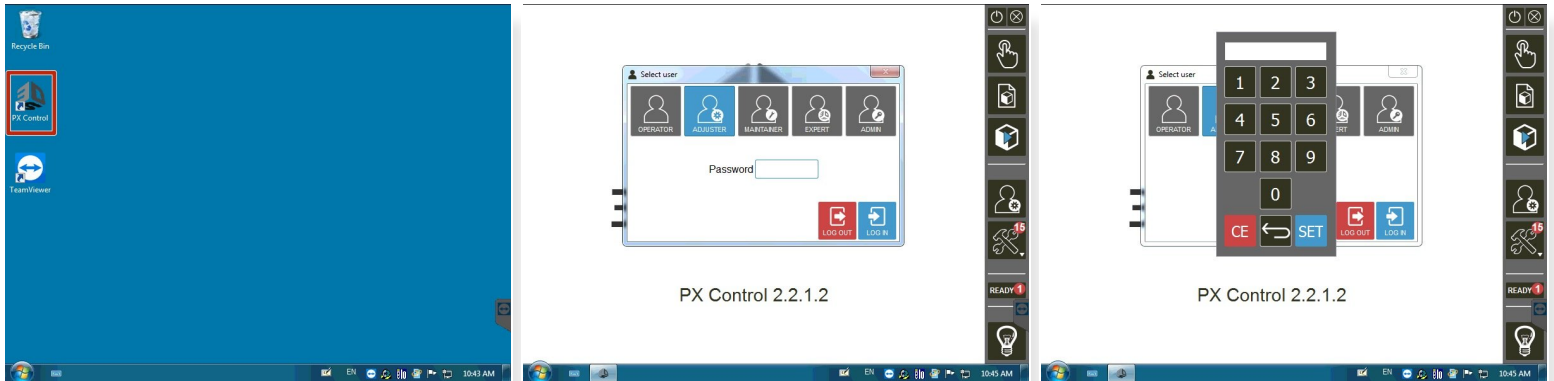
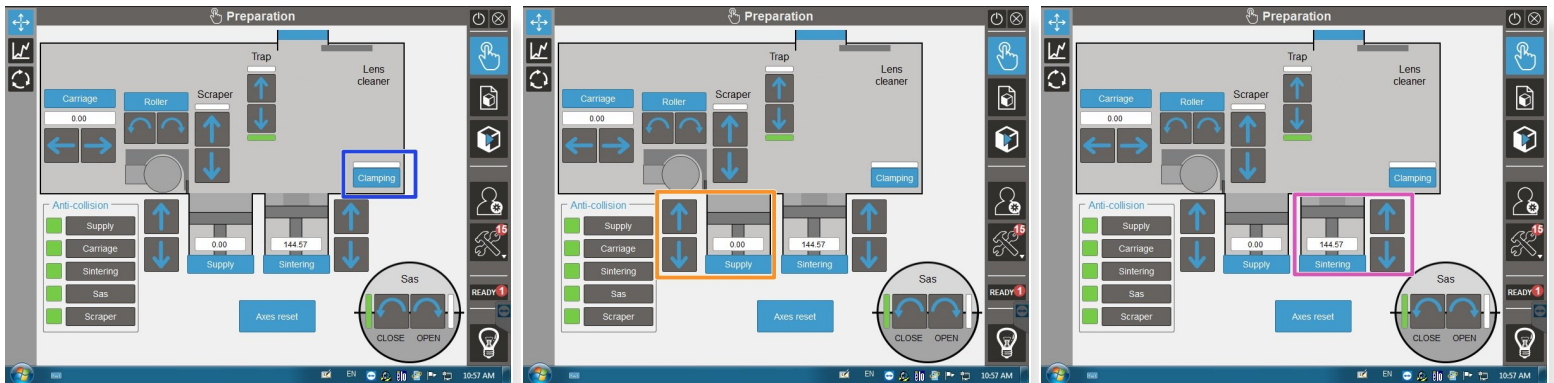This document was generated on 2021-12-27 06:20:08 AM (MST).

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Introduction

This guide will introduce you to all the different menus and icons you will see while operating the ProX 200.

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Step 1 — Startup

(i) The ProX 200 runs on Windows OS

● Double click **PX Control** to open the machine control application

● Make sure the user is selected as **ADJUSTER**

  ● Password **4123**

  ● Touch **SET**

  ● Touch **LOG IN**

(i) Different users have different levels of control

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Step 2 — Preparation Menu

(i) This menu lets you operate the various internal mechanisms

- Green boxes mean the mechanism is operating properly

- Red and orange boxes mean there is an error that needs to be fixed

- **CLAMPING** lets you engage the suction cup on the build plate to hold it in place

- **SUPPLY** lets you control the height of the powder supply (MAX 160)

- **SINTERING** lets you control the height of the build plate (MAX 160)

Step 3 — Preparation Menu
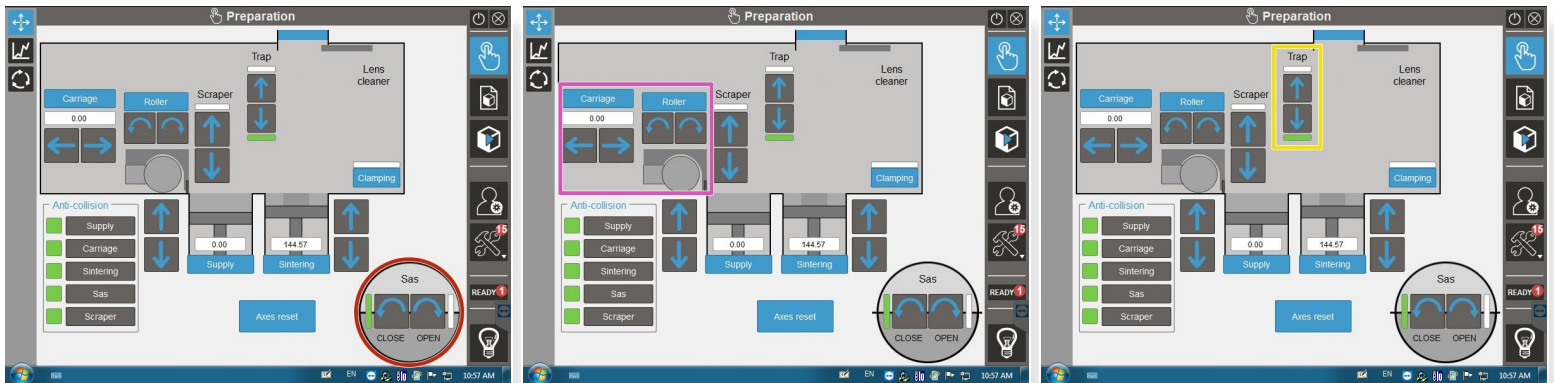
- **SAS** lets you **OPEN** and **CLOSE** the sealed door on the front of the machine for transferring powder and tools

- **CARRIAGE** lets you move the recoater left and right. **ROLLER** lets you rotate the recoater roller

- **TRAP** lets you open and close the protective covering over the mirror system which is used during argon purging

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Step 4 — Preparation Menu (Gas)
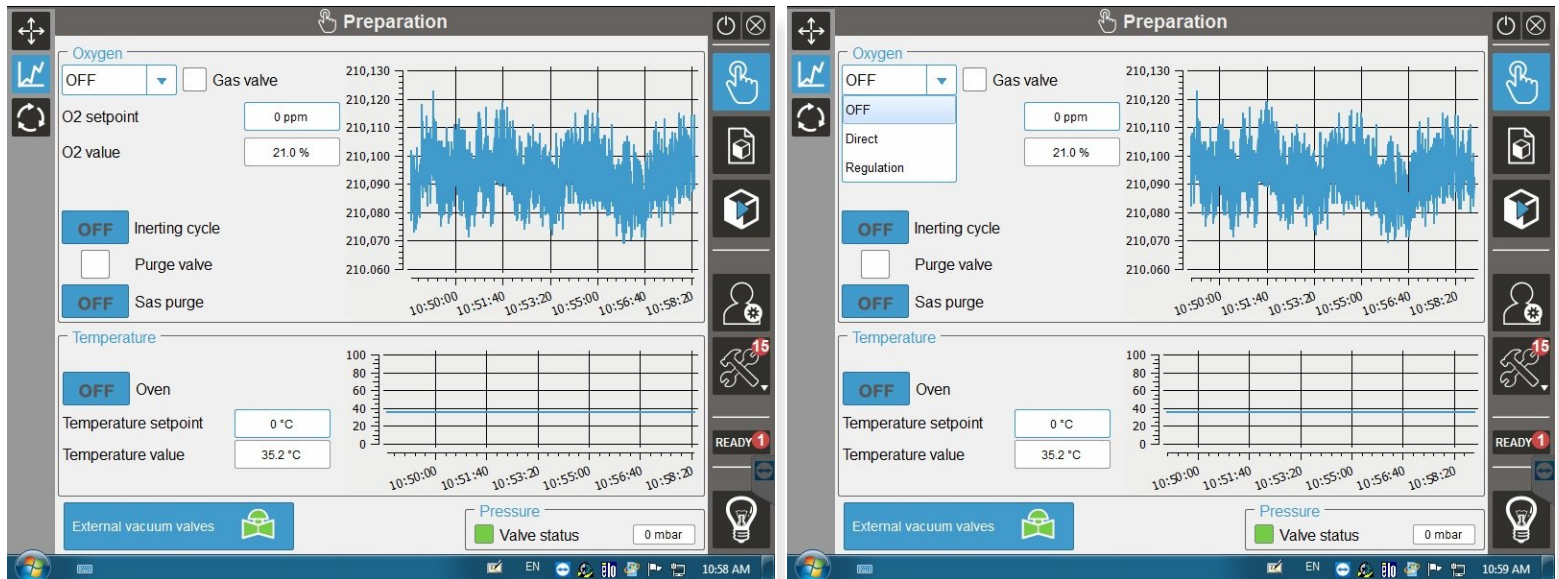
(i) This menu lets you monitor and control the purging process.

- Items you will control:

  - Setting the oxygen ppm level

  - Opening and closing the external vacuum valves

  - Setting the air flow to **DIRECT**

  - Turning the inerting cycle **ON**

- The graph is a helpful visual during the purge cycle to see the oxygen level

Step 5 — Preparation Menu (Layering)
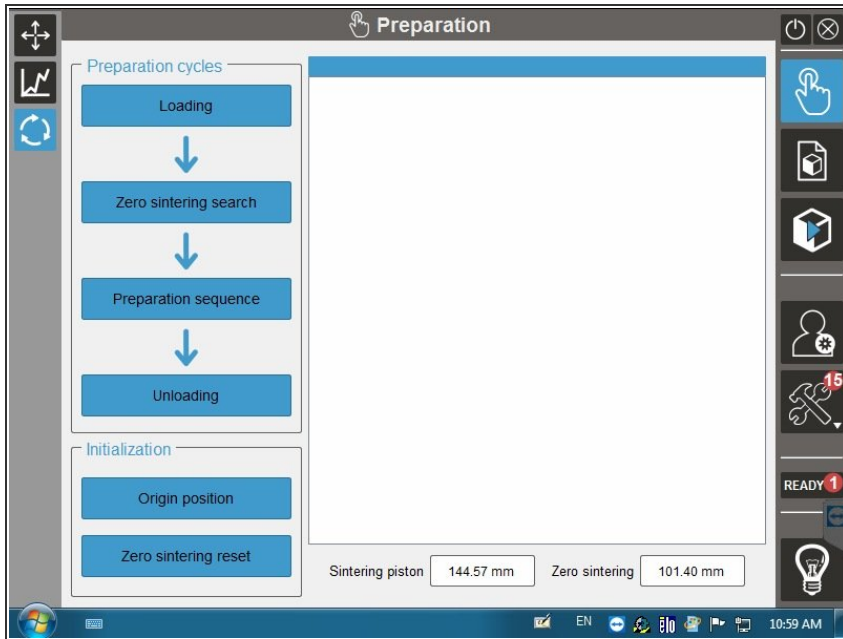
(i) This menu lets you run the preparation layer steps after loading the build plate

- **LOADING** lets you load the build plate

- **ZERO SINTERING SEARCH** automatically sets the build plate to the proper height for the preparation layer

- **PREPARATION SEQUENCE** lets you manually adjust the first layer to visually make sure you have an even distribution of powder

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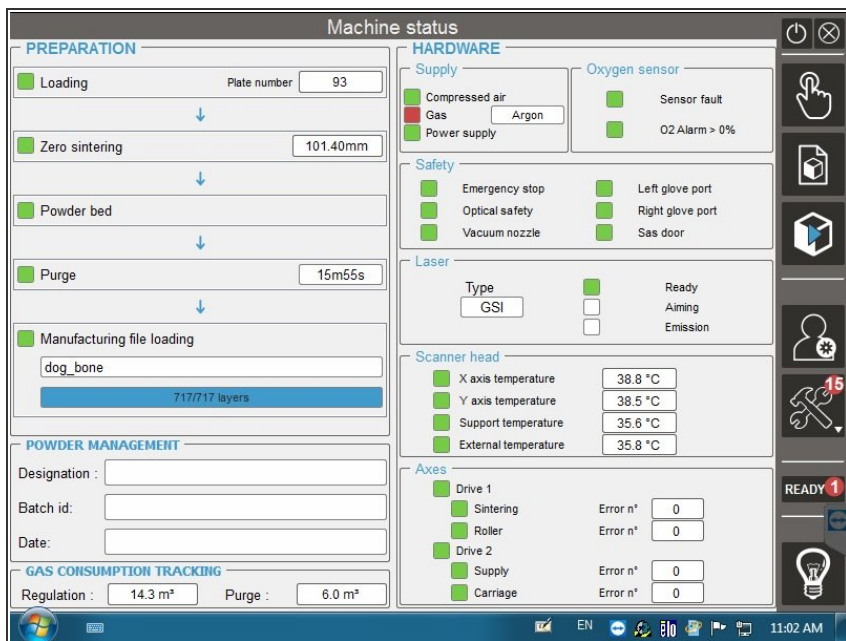
Step 6 — Manufacturing File Menu
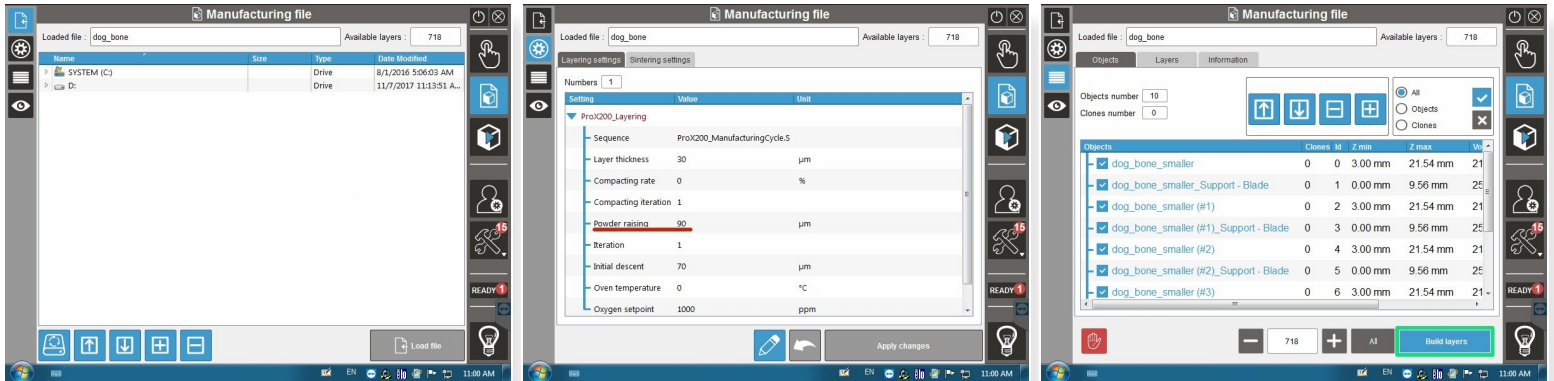
- ⓘ This menu lets you load and view the build file

- You can search through the shared directory to find the file to upload

- The settings tab allows you to view some basic settings for layering and sintering
  - You can adjust the **POWDER RAISING** if you need to reduce the amount of powder being used for a build

- The objects tab lets you see the different components in the build file (part file, support file, etc.)
  - **BUILD LAYERS** allows the selected objects to be converted to the final build file

- ⓘ The eye tab shows a visual of the build file

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Step 7 — Manufacturing Menu
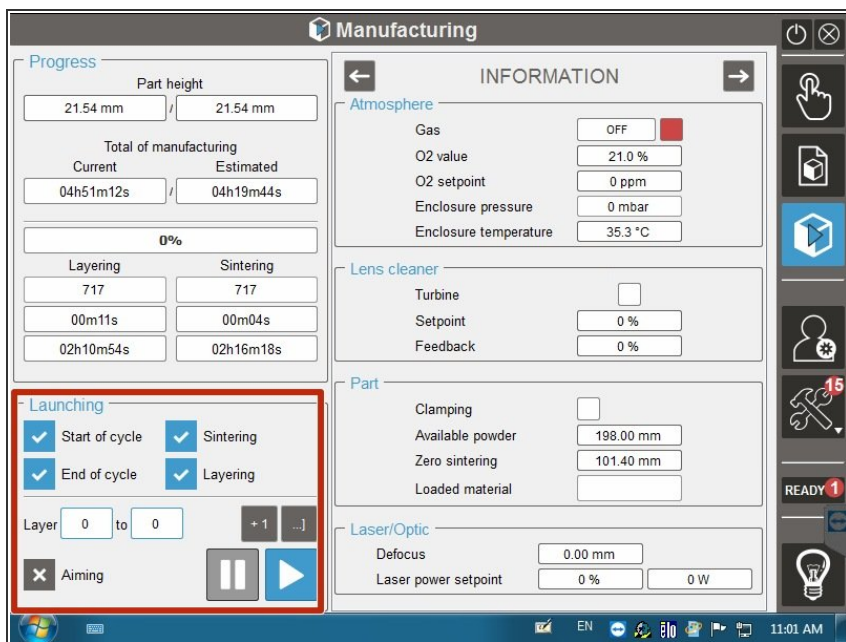
(i) This menu shows the progress of the build and the atmospheric conditions

● These buttons allow you to manually layer and sinter as well as starting the build

Step 8 — Machine Status Menu

(i) This menu shows the status of the machine. You need all green boxes to start the build

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Step 9 — Extras

- The power button turns the machine off

- The close button exits out of PX Control

- The tools menu is for service technicians only

- This button turns the internal light on

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