

## Questions for the workshop-licence

I am the first person to use the laser, what are the required steps to use the machine? (mandatory question)

1. I am the second person to use the laser. As I want to set the height for my material the laser-head doesn't move, even though the machine is switched on. What do I have to do?
2. I am using the laser. Suddenly the orange light on top of the laser starts blinking. What does this mean?
3. What do you have to consider lasering PVC-sheets?
4. How do I have to prepare my file, if I want to cut and carve with the laser? How can I differentiate the jobs?
5. I booked a slot for the laser, unfortunately I can't be there at the appointed time. What should I do?
6. The material in the laser starts burning. How do I react? (candle-flame size)
7. In which unit do I have to draw my file for the laser?
8. I switched on the laser, yet the machine doesn't start homing and the moving controls don't respond. What should I do to make the homing work?
9. In my Rhino drawing all the lines have the right colors for the laser, but in the Trotec software they are black or don't appear at all. What should I check?
10. In Rhino I see my polylines exploded into single-lines even though they were polylines in my original drawing software. Why did this happen and how can I fix it in Rhino?
11. I have a lot of objects in my drawing for the laser. While lasering I notice that the objects are being cut in a random order and not systematically. What did I forget?
12. How and in which software should I do the Vector-sorting (Vektorsortierung)?
13. What is Vector-sorting (Vektorsortierung)?
14. In the Trotec software, I chose the correct properties for my material, nevertheless the lasering leads to a burnt result. What can be the cause of this?
15. How do I define the size of the print area in Rhinoceros?
16. I have set the correct size for my print area, but the drawing appears too large or too small in the preview. What is the problem?
17. The laser suddenly stops working, but is still on. What happened?
18. What is the difference between plexiglas (acrylglas) GS and XT regarding the fabrication?
19. What has to be written in the category "Zublasung" (Air assist) in the Trotec laser program?
20. I have set "Gas 1" for "Zublasung" (Air assist), nevertheless smoke development is unnaturally strong. What could be the cause of this?
21. I have a laser file with two building façades including openings and patterns that need to be carved. How do I have to prepare the laser file?
22. The laser is running, I feel like having a break, what do I have to pay attention to before I leave the machine?
23. The laser is on, the print job is in Trotec with the correct settings, but I can't find the "Play-Button" to start the job. What can be the cause of this?
24. I have an appointment set for the laser but my laser-file isn't completely finished yet. What programs are installed on the workshop-computer to modify my file?
25. What happened when all the lights on the laser start blinking and the machine makes a high pitched sound?
26. What do I have to do if I can't move the table and laser head?

27. What happened if the Trotec program spawns the "Dieser Job kann nicht positioniert werden!" warning? ("This job cannot be positioned!")
28. What happened if the laser doesn't cut through the material but only leaves a thick mark?
29. Can I carve with a different color besides red?
30. What do I have to set in Trotec Job Control to carve a job and what do I have to set to cut it?
31. Where can I get the information on what to set in Trotec in order to cut through 3mm thick plexiglas (Acrylglas GS)?
32. What should I do if it starts burning inside the laser?
33. What should I do if there is strong smoke development in the laser? (there is no fire)
34. How do I book a laser time slot?
35. How do I know which materials are allowed for lasercutting?
36. How does the payment work for the laser?
37. Am I allowed to laser PVC? Why?
38. Which types of wood are allowed to be lasered?
39. Is it allowed to laser metal? Why?
40. How many curves can I send to Trotec from Rhino before the computer freezes?
41. How many hours a week can one student use the laser?
42. Can I change the order of the colors in the Trotec Job Control program?
43. What is the difference between the homing process of the laser and the cnc milling machine?
44. How many axes do the laser and the cnc milling machine have?
45. Where do I discard my Wood-/Cardboard-/Plasticwaste?
46. I am the last person in the workshop. What should I do before leaving?
47. A friend of mine wants to borrow my chip. What do I do?
48. Somebody keeps knocking on the door because she/he/they wants to use some of the machines in the workshop. How do you react?
49. What do I have to expect when I violate the workshop rules?
50. There is a wedge holding the door open. What are my responsibilities and what do I have to expect when I ignore them?
51. There's a problem in the workshop that I can't solve myself. What should I do?
52. My Job on the Laser/Mill is taking very long. Can I leave the machine for a while, if I'm sure that nothing will go wrong?
53. I have a workshop-chip. Somebody without a chip asks me to accompany them to the workshop so that they can use the machines. Is that allowed?
54. I want to use a disc-type sander. What do I have to pay attention to?
55. What should I do before leaving the workshop (last one to leave)?
56. What should I do if I see a wedge holding the door open?
57. Somebody is cutting without an underlay on the workshop tables. What do I say to them?
58. Why am I not allowed to work alone in the workshop?
59. What has to be done if somebody injures themselves?
60. If I have a workshop chip, am I allowed to work on the machines alone?
61. Can I sand concrete, plaster or soapstone on the (disc-type) sanders?
62. Am I allowed to bring somebody who doesn't own a chip to the workshop with me?
63. Can I borrow or pass on my chip? Yes/No? Why?
64. Where is the first aid kit in the workshop?
65. During what times am I allowed to be in the workshop?
66. What should I do when there's no electricity in the front part of the workshop?

67. Why do I have to use underlays on the tables?
68. What do I have to pay attention to when I'm using a cutter on the table?
69. What consequences can I expect if I lend my chip to somebody and the workshop team notices it?
70. What should we do if we are the last ones in the workshop?
71. How do I set the right height for the z-axis on the mill?
72. I want to 2d-cut something on the mill. Describe the difference between inline, outline and carving?
73. In which unit do I have to prepare my drawing for the cnc milling machine?
74. There's a vacuum cleaner next to the mill. Is it relevant for me or is this just a tool for the cleaning staff?
75. What should you pay attention to before starting the milling machine? (3 points)
76. I start the computer of the milling machine, but I can't see my usb stick. What can I do?
77. I have set all the correct parameters for the milling machine and start the job, but it doesn't move in reality only on the computer screen. What is the reason for this and how can I solve this problem?
78. Where do I get the parameters from to set the milling machine? (3mm MDF)
79. Where can I get a milling cutter for the milling machine?
80. What is the problem when the milling machine cuts too deep?
81. How do I know what speed I am supposed to set on the milling machine to cut my material?
82. When and how do I use the vacuum table connected to the milling machine?
83. What should I check before turning on the milling machine? (3 steps)
84. Why does the usb stick have to be plugged in before turning on the milling machine pc?
85. How big can the workpiece for the milling machine be?
86. Which materials can be cut with the milling machine?
87. Which materials can't be cut with the milling machine?
88. What is the red "emergency stop" button at the milling machine for and what happens when I press it?
89. How do I pause the milling machine?
90. What protective gear do I need when I'm working with the milling machine?
91. Why shouldn't I use the milling machine alone?
92. Can I leave the milling machine while it's running?
93. How should the file for the milling machine look like?
94. How do I load my file on the milling machine?
95. My file contains splines. What do I have to pay attention to on the laser and the milling machine?
96. Name 3 possible reasons why the milling machine cuts too deep into the foundation plate.