



SPEC CLEANING QUESTIONNAIRE

We are pleased to have been contacted by you regarding the need for cleaning. We supply a wide range of cleaning equipment using various technologies including ultrasonics and megasonics. Our equipment can include acid, alkaline and solvent processes. It is always made to match the specific needs of the final users, so some additional information will be most helpful to us.

1 What is the size and shape of the parts?

2 What are the types of contamination you want to remove?

3 What are the sizes of the contaminants?

4 How will you know that the items are clean? (test methods)

5 How will you know that the wafers are not clean? (net result to product)

6 Will you tell us the end use of the item?



7 What is the time line for this project?

8 What budget has been allocated for the cleaning and drying system(s)?

9 What methods/chemicals are you using in the laboratory or production now that are successful?

10 Is there anything wrong with your current methods and/or what improvements do you seek?

11 How do you hold the parts now during cleaning and drying?

12 How do you want to hold them in a new system?

13 How much automation is desired in a new system?



14 How much data gathering will you expect the system to perform?
(Data logging, alarm log, SECS interface)

15 Will the process be done in a cleanroom? If so, what level of cleanliness? How much space is available for a system? Do you plan to install the system "bulkhead-style" through the cleanroom wall?

16 Will the tool need internal air filtration?

17 How do the parts become contaminated?

18 Is a batch process acceptable, and what size batch is planned?

19 How many times will they need to be cleaned during the manufacturing process?



20 Is one side more critical for cleaning than the other side? (wafers, glass plates, ceramic substrates)

21 Is there an edge exclusion? By this we mean is there an area on one or both sides that can be touched by a wafer handler and/or by some sort of carrier with slots?

22 Is there a preferred carrier for the items or will a new one need to be created? (Part number if standard product or drawing if custom)

23 How many parts per month are to be cleaned? How many production days or hours can be used per month?

24 How much time can be allowed for the cleaning and drying steps based on your current experience or knowledge?

25 What drying method is used now?



26 What drying methods are acceptable or not acceptable?

27 How warm can the parts get during drying?

28 Please identify both the equipment engineer and process engineer assigned to work on this requirement.

29 How did you learn of SPEC?

30 Other information you believe may be helpful to us.
