

| No. | Area of interest | Need | Imp. |
|-----|----------------------|---|------|
| 1 | Whole system | weigh less than 750 lbs | 1 |
| 2 | Whole system | Made from 304 SS | 1 |
| 3 | Whole system | Lifting handle compatible with EMM | 1 |
| 4 | Whole system | fit in a 9"x24"x22.5" envelope | 1 |
| 5 | Whole system | swagelok fittings on all connections | 1 |
| 6 | Whole system | Needs to work in an argon atmosphere | 1 |
| 7 | Filter | Easily accessible and changeable | 1 |
| 8 | pump | Needs to be in production still | 1 |
| 9 | Handle | Must be at center of gravity | 1 |
| 10 | All individual parts | Need to be compatibly with mechanical manipulators | 1 |
| 11 | Whole system | interface with grinder | 2 |
| 12 | Whole system | Needs to have at least mill finish | 2 |
| 13 | Whole system | Needs to have a bypass valve | 2 |
| 14 | Filter | must be before pump and tank | 2 |
| 15 | Filter | weigh 20 lbs or less with all contents from filter process | 2 |
| 16 | Filter | Needs to be in direction of flow to capture particles | 2 |
| 17 | Filter | Possibly add roughing filter to filter out larger particles | 2 |
| 18 | pump | Needs to have equivalent electrical requirements as previous pump | 2 |
| 19 | Flow rate | Continuous but not overly forceful | 2 |
| 20 | Filter | Cost less than \$2000 | 3 |
| 21 | Filter | at least the same mesh as the current filter | 3 |
| 22 | Heavy pieces | Need to have guide pins | 3 |
| 23 | screws | need to have lead in to make threading easy | 3 |
| 24 | Connection | Inlet must connect to braided cable from the grinder | 3 |
| 25 | Electrical | Need Amphenol connectors | 4 |