

## Manifold Selection Worksheet

| Please Fill One Worksheet Per Manifold             |  |   |
|--|--|---|
| <b>Gas Service</b>                                 |  |   |
| Molecule   |  | That determines all kinds of things such as CGA fitting and materials.            |
| Delivery Pressure                                  |  | We want to make sure we cover the odd ball applications.                          |
| Maximum Flow Rate                                  |  | Flows are generally unknown except when they are exceptionally high.              |
| Normal Flow Rate                                   |  | Most high purity applications are steady low flow.                                |
| Grade/Purity/Level                                 |  | For UHP applications, opt for small equipment like stations.                      |
| <b>Environment</b>                                 |  |   |
| Indoor or Outdoor Installation?                    |  | Outdoor equipment require NEMA 3R, 4, 4X alarms.                                  |
| Space Allowed for this Manifold?                   |  | This is particularly important to configure the header bars.                      |
| Is the Area Ventilated?                            |  | The use of a gas monitoring system might be required in confined spaces.          |
| Is there Fire Sprinklers in the Room?              |  | NFPA 55 regulates the quantity of molecules based on this specific topic.         |
| Is it a Permanent Installation?                    |  | For temporary installation, open-style manifolds are better suited.               |
| In Which Country Will it be Installed?             |  | Determines the cylinder connection (CGA, DIN, BS or NEN).                         |
| Is the Environment Explosive or Corrosive?         |  | It helps to determine the type of alarm or the coating of the equipment           |
| <b>Preferences</b>                                 |  |   |
| How Many Cylinders Were You Planning?              |  | Hint: Consider one cylinder bank replacement per week.                            |
| Any Preference for Stainless Steel Over Brass?     |  | You may not have a choice if the gas is corrosive (stainless steel in that case). |
| Flexible Hoses or Rigid Pigtails?                  |  | Rigid pigtails rarely leak but they are extremely stiff. Go flexible!             |
| Can You Accept Delivery Pressure Variations?       |  | It tells us if you need single or two-stage pressure regulation.                  |
| Is Gas Supply Interruption Acceptable?             |  | Determines if an automatic switchover manifold is required.                       |
| Manifold In an Enclosure or Not?                   |  | In North America, cabinet-style manifold is popular. Not so much in Europe.       |
| <b>Preferences</b>                                 |  |   |
| Do You Want to Be Warned When a Bank is Depleted?  |  | In other words, is an alarm required with your manifold?                          |
| We Recommend Vent Valves for UHP Applications      |  | Venting and purging help to keep a clean system.                                  |
| Is the Equipment Regularly Attended or Supervised? |  | For un-attended equipment, go with a fully automatic switchover manifold.         |

| Project Name | Location | Contact Name | Phone Number | Date |
|--------------|----------|--------------|--------------|------|
|              |          |              |              |      |