NOSHOK’s wide range of needle and manifold valves cover a vast majority of industrial applications, but knowing which needle or manifold valve to select may be a daunting task. As all NOSHOK valves are not created equal, the following are general tips one should consider when deciding which NOSHOK valve is best suited for their application.

1. System Parameters
Knowing the system parameters for which you want to install a NOSHOK valve is critical. What media, gas or liquid, will flow through the system? Is the media corrosive? What is the viscosity? At what temperatures and pressures will the NOSHOK valves be exposed? What is the flow rate at peak efficiency?

2. Function
Does the valve need to meter in-line flow and/or direct media throughout multiple outlets? Will the system need to be bled without disrupting permanent piping installations? Will any other instrumentation be installed to measure system pressure or temperature? Is physical space a concern?

3. Media Compatibility
For those corrosive medias, knowing how they affect certain materials will begin narrowing down the valve options. NOSHOK valve bodies come standard in 360 Brass, Zinc-Nickel plated Steel, and electropolished 316 Stainless Steel. Standard stem o-rings are FKM and PTFE. Acetal soft tips and seats are also standard on certain models. Other body and sealing materials are available to accommodate any media.

4. Flow
Every NOSHOK valve is rated with a flow coefficient, $C_v$, which identifies the relationship between rate of flow and the pressure drop across the valve’s orifice. Understanding the flow coefficient of your system will aid in deciding the proper size NOSHOK valve required.

5. Installation Configuration
NOSHOK valves come in a variety of shapes and sizes that are guaranteed to fit in almost every system application. Whether a male-male, male-female, female-female, in-line or angled configuration is needed, there is a NOSHOK valve suited for the application.

Answering the aforementioned questions will help you select which NOSHOK needle or manifold valve is best for your application. NOSHOK’s Customer Support Team is also available at 440.243.0888 should you need further assistance.