Blast Cleaning Equipment Checklist

The first question to ask in selecting the equipment appropriate to your cleaning application is “What do I need the system to accomplish?” Once you know that, you can proceed down the following detailed checklist, which can lead you to the size and type of equipment needed.

I. Description of Work
- Type(s) of parts to be cleaned
- Size and geometric configuration of parts
  - Largest piece: Length, width, height, diameter, weight
  - Smallest piece: Length, width, height, diameter, weight
- Is cleaning demonstration needed?

II. Operating Parameters
- Desired production rate
- Available time to accomplish the work
- System type: Continuous, batch or batch continuous
- Condition of part to be cleaned
- Cleaning requirements
  - De-core, de-scale, burned-in sand, de-burr, cosmetic, etc.
  - Specific customer specifications to be met
- Temperature of parts to be cleaned
- Is part-on-part impingement OK?
- Requirements for sand or magnetic separation
  - Recycling sand for downstream reclamation or disposal
- Is moisture a problem?
  - Do castings sit in the elements before cleaning?

III. System Requirements
- Space limitations
  - Available floor space
- Can a pit be constructed?
  - Substrate or water level problems?
- Can roof section be raised if necessary?
- Heaviest weight to be processed
- Overhead or jib crane requirements

IV. Material Handling Parameters
- How are parts to be introduced into the cleaning system?
- How are parts to be removed from the cleaning system?
- Plant-wide uniform tote box system to be maintained?
- Overhead monorail system required?
- Transfer system required?
- Standard transfer conveyor to be used?

V. Mechanical and Electrical Requirements
- Type of cabinet lining to be supplied
  - Manganese, manganese with hard lining, etc.
- Type of mill drive
  - Hydraulic or gear motor
- Bearing, drive, and cylinder specifications
- Type of blast wheel drive
- Abrasive handling systems required?
- Primary and secondary power requirements
- Type of controls
  - Standard
  - Programmable
  - Diagnostic
  - Linked to other equipment?
- Variable speed drives?
- Wiring required and panel location
- Remote operator station needed?

VI. Pollution/Emission Control (Dust Collection)
- Cartridge or bag-style?
- Type of filter medium desired
- Size requirements
  - Tie into existing system?
- Clearances under/around collector and type of discharge?
- Disposal system?
- Is fire protection needed?
- Is sound abatement required?
- Controls and safety equipment
- Interior or exterior ventilation required?

VII. Supplemental Considerations
- Which options are desirable?
  - Abrasive replenishers
  - Recirculation systems
- Nice to have vs. need to have
- What are major priorities?

VIII. Site Requirements
- Any permits required?
- Any civil or structural engineering required?
- What is impact on ventilation system?
  - Make-up air required?
- Is current compressor adequate?