

Vapor Blasting vs. Dry Blasting

- 1) Makes it easier for the media to be transported through the blast hose due to reduced friction.
- 2) The reduction of friction causes the speed factor to remain high. (weight X speed = momentum)
- 3) The reduction of friction causes reduced wear on the hose and nozzle. (Our hoses and nozzles last up to 5 times longer than do the same hoses and nozzles in dry blasting.)
- 4) The water encapsulated particle presents a larger profile to the compressed air making it easier to push the media through the blast hose.
- 5) Makes the transportation of the media more efficient because of the lubrication factor.
- 6) Enables the use of a larger bore nozzle while using the same size air compressor. Larger “cone” of cleaning area.
- 7) Adds weight to each particle (weight X speed = momentum).
- 8) The wet media in the pot becomes a “cohesive mass” that can be forced into the blast stream by the addition of water into the top of the pot.
- 9) Allows the use of a needle valve to meter the flow of the media – no need for a Thompson® valve.
- 10) The water that encapsulates each particle is driven into any imperfection of the material being blasted (due to inertia). The next particle will cause a “blow-out” of the edges of the imperfection. Basically this aids in feathering the edges.
- 11) Water attaches to the dust particles that are created by the removal of the coating and shattering of the media, making the dust particles heavier than air. This causes the particles to fall quickly to ground reducing the chance of dust getting air-borne.
- 12) Optimized medias - the air, water and media ratio, result is a fine mist with a blast that is powerful like the dry method, but with up to 92 percent less airborne dust.
- 13) Rust inhibitors can be applied during the blasting process.
- 14) Mold inhibitors can be applied during the blasting process.
- 15) Water substantially reduces the buildup of friction heat which can distort thin material being cleaned.
- 16) Water helps suppress some of the noise level generated by the compressed air leaving the nozzle.
- 17) The need for keeping the media dry is not a concern.
- 18) The need for drying the air from the compressor is not necessary.
- 19) Water mixed with the media in the blast hose reduces the chance of creating a static charge. Created sparks are cold sparks, having no enough energy to ignite hazardous vapors and fumes. Vapor blasting should be considered as cold work permitted.
- 20) EcoQuip’s Vapor Abrasive technology gives you an equally powerful blast that works quickly like dry blasting, but requires a fraction of the media and the time required to clean it up. That leaves you with savings in material, labor and disposal costs, which you can turn into profit. Abrasive savings can reach 50%-75% of used media comparing to dry blasting.

