



## RUNWAY EXCELLENCE ! by a clearer spec.

- Road workers train under different criteria, and this influences airfield pavements in the end.
- Road traffic contemplates multiple vehicles in multiple shared lanes going multiple directions of travel. This requires high removal percentage. While Aviation ground traffic contemplates a single vehicle with its own dedicated lane going only one direction. Aviation has the more expensive and delicate pavement, the least conflict of traffic, and is limited to a “single vehicle/ same direction” scenario. Therefore, removal of pavement markings % is less important than preserving the pavement. Runways are more costly to pave than highways.
- The good news is, much of this can be effectively addressed with a new fairly simple focus on a single overlooked element.

### Suggestion:

Draft a spec which precisely measures the most critical elements, while providing flexibility in its' application. Basically, this will be a simple matter of weighing the criteria in favor of the vulnerable elements. This is accomplished by measuring unaltered pavement profile distance between the top of the aggregate and the top of the binder, then naming a maximum reduction of “depth-to-binder”.

There will be cases where this maximum “depth-to-binder” target is not sufficient to allow the desired removal % for the marking eradication. When this happens, a supplemental spec needs to guard against excess removal. This Supplemental Spec can be

given a name such as SS Marking vs Binder or “Supplemental Spec RWI 3116”. SS RWI 3116 should state that in a conflict between the “depth-to-binder” result and a “marking removal percentage” result, the DTB (Depth-to-Binder”) spec should prevail and the “MRP” (Marking Removal percentage) should be downgraded by the engineer on site.

Our company currently mediates the conversation to apply these principles without the existence of a supplement. We apply these suggestions voluntarily.



Often the Tech is left to self-resolve pavement challenges as the expert, while the PM and PE rely on the spec. Ambiguity in spec language give the tech expertise power and sort of handcuff the PM and PE from making “best-for-the-pavement” decisions. Short work windows tend to stack the deck against all stakeholders when it comes to sound decisions about removal of pavement markings.

The team at Performance Hydroblasting is working hard to equip Pavement Engineers, Airfield Maintenance Officials, and Technicians with curriculum, knowledge, experience, visual aids, references, and tools to ensure the best possible outcome on airfield pavements when removing markings.

### These topics heavily influence the results on airfield projects.

#### Project Logistics and access to Work Windows.

- Complex regional, national and international air traffic logistics, affect on-site productivity and available work windows during the planning phase.
- Hierarchy and Chain of Command structure in critical decision making often present critical double-jeopardies during limited work windows.
- A rarely understood and even more rarely addressed difference between two basic removal methods (grinding and blasting) causes significant defects in the language of most removal specifications. This renders them difficult to apply and more difficult to enforce.
- The nuances of a new evolving trade set up a need for new criteria which obsoletes certain aspects of conventional wisdom in defining a written specification.
- Limited work windows place field mechanics and personnel into “situational power” roles and “expert power” roles. Many of these people have earned their “wings” in a less structured environment and under severely conflicted written specifications. This results in well disciplined overseers standing by with some of their authority capped, while they are forced to rely upon experts whose experience level is diminished by a conflicted written spec and the industry that the spec has nurtured.
- The mysteries inside the science, art, and physics of water blasting have rendered highly qualified specifiers short on words to define their goals in a written spec without using words that negate other key words in the spec. This can be decluttered by separating the two removed types with each it’s own spec.
- Conventional knowledge of Pavements, applied energy, and markings produces many “catch 22” scenarios on an airfield in which critical judgement and discretion are needed, but largely untrained.