

P e, P e a e d

There's more than one way to surface prep a member.

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What is "surface profile" in reference to prepared steel?

Surface profile refers to the depth and shape of the microscopic pits and peaks that make up the steel surface. The depth and shape can be varied to some degree by the surface preparation chosen and the abrasive media used. Some high-performance coatings adhere better to a deeper or more angular profile. The profile depth can be measured and is quantified in mils. Surface profile is also commonly referred to as "anchor profile" or "anchor pattern." The abrasive media must be clean so as not to redeposit oil on the steel. Blasting with abrasives can either be done with commercial rotary blasting machines or with nozzles.

What are the different categories of surface preparation?

A basic description of the different standards is as follows:

SSPC-SP1 Solvent Cleaning. Oils used in various cutting and drilling machines are deposited on the steel. These must be cleaned off prior to applying any coatings. The solvent cleaning process uses an organic solvent that is either wiped or sprayed on the steel to remove dirt, oil, grease, and other contaminants from the surface of the steel. This can be followed with detergents or steam cleaning. This step is integral because it is the only surface preparation process that removes oil and grease from the steel. Other processes will roughen the steel but not remove oil and grease.

