## airblastechtips



## Estimating production rates for blast cleaning



With such a wide variety of coating types and rust conditions in existence at most plant sites, how does a contractor estimate surface preparation production rates for bidding (i.e., abrasive blast cleaning, wet blast cleaning, power tool cleaning, etc.)?

A contractor estimates production rates based on his experience in similar situations. The best estimates are made by the most experienced contractors making the best use of a broad base of related projects. A contractor should always base his estimate upon the ability and knowledge of his crews, and the equipment and technology available to them.

Overall surface preparation production (and cost) depends heavily on factors other than the condition of the surface to be cleaned and the methods to be used. These factors include weather, access, waste disposal, rigging, scheduling, covering and protection, abrasive removal and recovery (especially wet abrasive), and coordination with other activities.

Lightly rusted, uncontaminated, uncoated steel surfaces with no tight mill scale are the easiest steel surfaces to abrasive blast. All of the following affect abrasive blasting production.

Rust pitting and heavy corrosion will require additional cleaning effort, especially in cleaning the pits.

Non-corroded, tightly adherent mill scale is very difficult to remove and may require blasting effort in excess of that normally required for white metal. Occasionally, mill scale remains under existing coatings.

Delaminating, rusted steel may require removal using hand tools.

Splinters in the steel surface often require removal by grinding

Existing coatings on the steel surface will reduce abrasive blast production. Generally, the thicker the coating and the more that remains intact, the greater the reduction in abrasive blast production.

The type of existing coatings is crucial in judging abrasive blast production. For example, epoxy and urethane coatings are much harder and more difficult to remove than latex or oil paints.

Coating integrity is important in judging blast production. Coatings which are delaminating between coats, have become brittle, or have otherwise lost cohesive strength are much easier to remove.