

3.8.2 Type III. Type III coatings shall not be sealed where the main function of application is to obtain the maximum degree of abrasion or wear resistance. Where Type III coatings are used for exterior non-maintained applications requiring corrosion resistance but permitting reduced abrasion resistance, the contract or purchase order shall specify that sealing is required. Sealing for such Type III coatings shall be accomplished by immersion in a medium, such as boiling deionized water, in a hot aqueous 5 percent sodium dichromate solution, in a hot aqueous solution containing nickel or cobalt acetate or other suitable chemical solutions (see 6.2). When Type III coatings are provided unsealed, parts shall be thoroughly rinsed in cold, clean water and dried after anodizing.

6.1.3 Type III. Type III coatings are intended to provide wear and abrasion resistant surfaces with improved corrosion protection due to greater thickness and weight than the conventional anodic coatings. Sealing of Type III coatings is not recommended unless corrosion resistance is also a factor. Wear resistance is reduced by sealing. Anodic coatings form an excellent base for most types of paint systems, adhesives and dry film lubricants. Hard coatings may reduce fatigue strength. These factors should be considered in proposed use of parts subjected to cyclic loads. Generally, these hard coatings should not be used on parts or portions of parts which normally during rework would require restoring of dimensional tolerances because of wear of hard coated surfaces.