

## Wire Rod Rust Guide

The following are examples showing the various degree of rust which may be present on wire rod coils. The effectiveness of A WILCO Mechanical Descaling System will be directly affected by the amount and type of coil rust present. Rod coil rust will vary from simple surface staining limited to the scale itself to base metal pitting. A misconception concerning rod rust and mechanical descaling is that wire rod needs to be “seasoned” prior to use. Intentional rusting of rod coils is definitely not recommended.



### **ZERO RUST:**

A-1 quality wire rod with essentially no rust present. Perfect for descaling with basic or brush type (aggressive) WILCO Descalers.



### **LIGHT RUST: 10%.**

More typical than zero rust. The base metal will be a nice matte gray. This material is also good for processing with standard or aggressive WILCO Descalers.



### **LIGHT RUST: 20%.**

Typical quality. Some rust areas will have penetrated the scale to the base metal. Any rust stains on the wire will be very light and typically disappear in multiple drafts. These stains are removed by a WILCO Brush system.



### **MEDIUM RUST: 30%.**

More base metal pitting than 20% rust above. Still acceptable for basic descaling when occasional stains on the final wire product are not an issue. Once again stains may draft out. Easily converted into high quality descaled rod when using a WILCO Brush Descaling System.



### **MEDIUM RUST: 50%.**

While still suitable for basic mechanical descaling, this material will convert into wire that has an overall brownish stain to the surface. Typically not a problem for industrial quality wire products. Can still be converted into quality wire by descaling with a WILCO Brush System.



### **MODERATE RUST: 50-60%.**

Not typical for wire rod that will need conversion into top quality wire products. Material surface is excessively pitted from rust. With basic descaling there will be a good degree of red rust remaining on the rod surface. Brush descaling will clean up the surface but deep pits hold rust.



### **HEAVY RUST: 75% +.**

Material is so rusted you might as well send it to the scrap pile or let someone else deal with it. Not possible to make any sort of quality wire product as most scale has converted into rust. Base metal is completely and severely pitted.