

WEAR PLATE COMPARISON CHART

SHEFFIELD™ WEAR PLATE 400 BHN	AR-400
Designed to provide maximum service life. Designed to minimize movement warp and fracture, when oxy cutting and cold work are present. Designed for excellence in resistance to all forms of sliding abrasion; impact, and gouging.	Adequate product for general wear areas. Engineered primarily for economy. Subject to warp (oil canning) during cut and weld operations. Subject to mushrooming under heavy load.
Rich alloy Brake-Die chemistry engineered for maximum abrasion resistance. Deep and uniform hardness.	Carbon steel type chemistry. Hardness diminishes away from surface. Susceptible to hard and soft spots.
Custom “Carbide Former” chemistry undergoes “High-Temperature-Tempering” at mill.	Lean carbon steel type chemistry relies on rapid cooling to shock the plate to hardness. Most types are delivered “as-quenched”, not tempered.
Resists the softening affects of elevated temperature to 800°F.	Begins to soften, and/or, warp at 300°F.
Free from hard spots e means better, more predictable, drilling and machining. Less tool breakage.	Hard and soft spots. Unpredictable response to fabrication processes. Unpredictable wear.
May also be used to replace alloy brake-die and tool steels for short run dies. Eliminates the need for pre-machining, heat treatment, and finish machining.	Not an acceptable substitute for other die materials.
Low Carbon Equivalency C.E. (52 typical). User friendly. Responds well to fabrication in the field.	Low Carbon Equivalency C.E. (54 typical). Subject to warp, twist and bow in thermal cutting and welding operations.
Welds with Standard Low Hydrogen Process	Welds with Standard Low Hydrogen Process
Responds well to localized flame hardening in the field; such as the cutting edge on a bucket. Inquire on flame hardening information.	Erratic response to flame-hardening. Warp and fracture are likely.
Available in cut-to-size pieces to 3” thick.	Varies with vendor

Information stated is general in nature, for informational purposes, and is stated relative to other high hardness wear plate products. Caution should be exercised when dealing with any hardened alloy or carbon steel. Utilize experienced machine operators familiar with hardened steel products. Insure protective gear is utilized.

Information about our Sheffield™ Wear Plate..... see Pages 46 and 47