

# Allen-Sherman-Hoff® Ni-hard Grinder Rolls for Bottom Ash Double-roll Clinker Grinders

Allen-Sherman-Hoff® (A-S-H®) Ni-hard clinker grinder rolls from Babcock & Wilcox (B&W) provide wear-resistant crushing to pulverize bottom ash material to a suitable transport size. Our grinder rolls are made of hard-as-cast Ni-hard for a longer wear life — up to five times that of work-hardened manganese rolls (depending on service conditions).

Ni-hard grinder rolls are best suited for service in water-quenched applications having a normal operating temperature range of 140 to 150F (60 to 66C). Ni-hard grinder rolls are not recommended for high thermal stress applications normally encountered in dry bottom ash service.

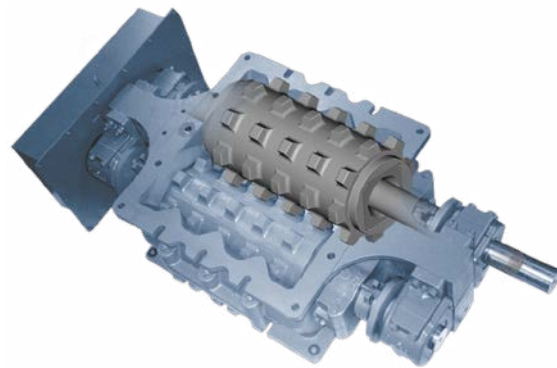
## Benefits

### No work-hardening needed

Allen-Sherman-Hoff’s Ni-hard grinder rolls have a higher initial hardness than manganese steel rolls. The as-cast hardness of our Ni-hard grinder rolls eliminates the need for any work-hardening to obtain satisfactory wear life. In certain applications, there’s not enough crushing resistance to work-harden manganese steel.

### Longer wear life

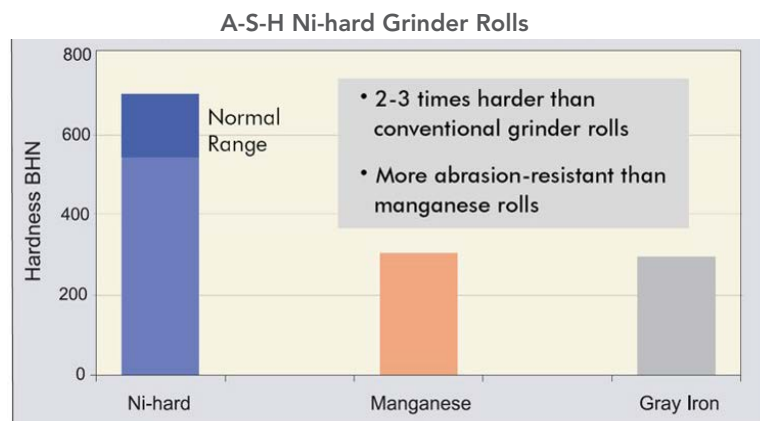
Ni-hard is a harder, more abrasion-resistant metal than manganese steel. Our Ni-hard grinder rolls offer improved wear characteristics and may last five times as long as manganese steel.



Superior design, material, fabrication and assembly make the Allen-Sherman-Hoff® Ni-hard grinder rolls ideal for grinding the softer bottom ash that is typical of Western coals.

### Higher crushing force capability

Allen-Sherman-Hoff’s Ni-hard grinder rolls have been extensively modeled and tested to ensure that the shaft and roll-to-shaft connection are tough enough to meet the high crushing force demand application of coal ash clinker grinders. Our grinder rolls are tougher from surface to core than work-hardened manganese steel rolls, with a minimum surface hardness of 550 BHN. The rigid assembly of these grinder rolls means they can withstand the force of the grinding operation, even under heavy loading conditions.



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## Features

- Shaft and roll assemblies made of Ni-hard for reliable, wear-resistant performance
- Mechanical roll-to-shaft attachment with welded retaining plate design
- Drop-in replacement for most existing manganese steel counter-parts with no additional parts needed in most cases

## Availability

Available for both 2 ft and 2 ft-10 in. grinder housings and in two roll tooth patterns, coarse or fine particle size.

## Specifications

### Roll tooth pattern

Coarse: 2 in. nominal particle size

Fine: ¾ in. nominal particle size

### Roll

Ni-hard; minimum surface hardness of 550 BHN

### Shaft

High-grade steel

### Shaft sleeve

High-temperature, corrosive-resistant

Diamonized® stainless steel



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