

## Definite Chilled Iron Rolls

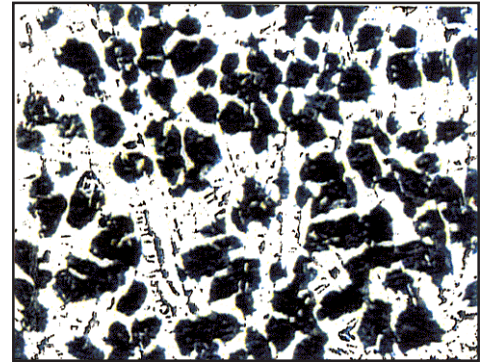
### Hitachi Roll Material

- Adamite Steel
- Cr Iron
- Cr Steel
- Definite Chilled Iron**
- High Speed Steel
- Indefinite Chilled Iron
- Nodular Iron
- Special Cast Steel



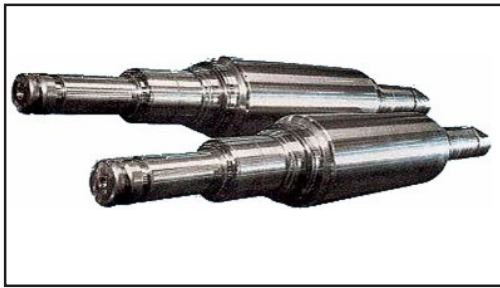
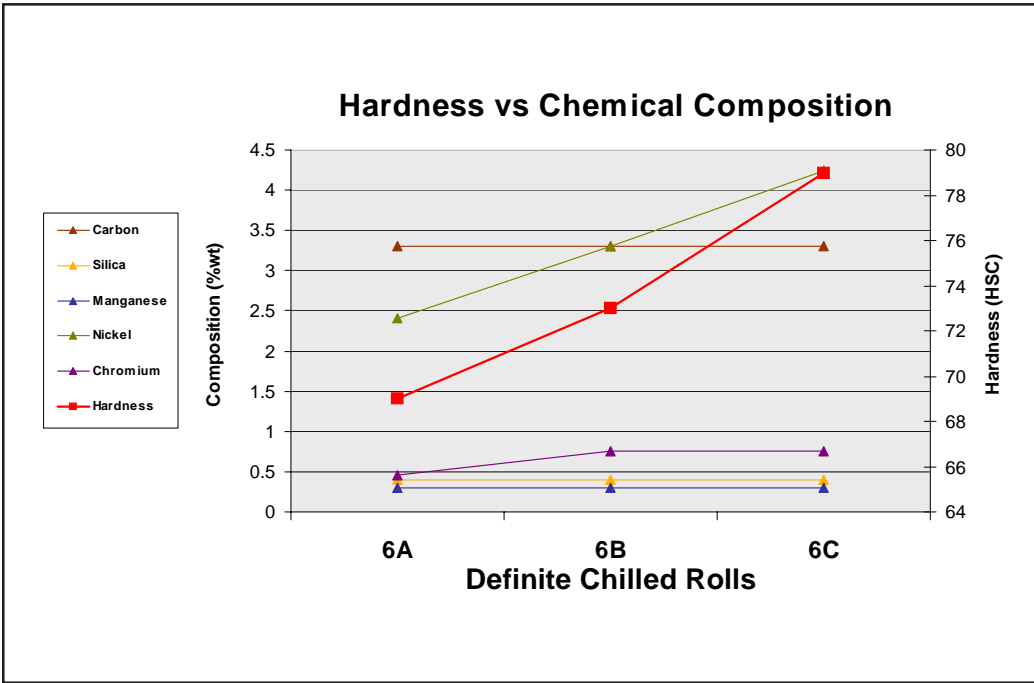
**D**efinite chilled iron rolls have a high-hardness layer of white cast iron at the surface. If a fine surface finish is required, these low-nickel chilled rolls can meet the demand. Rolls for hoop and skelp mills must be chosen with particular regard for strength and hardness, primarily so the rolls will match the roughing, intermediate, and finishing stands. The various applications of these rolls include:

- 6A** Strip finishing; wire rod and bar finishing
- 6B** Strip finishing; wire rod finishing
- 6C** Strip finishing



6C Metal Structure

Definite Chilled Iron Rolls	6A	6B	6C
Hardness (HSC)	70-75	72-77	77-82
Composition (% wt)			
Carbon (C)	3.1-3.5	3.1-3.5	3.1-3.5
Silica (Si)	0.2-0.6	0.2-0.6	0.2-0.6
Manganese (Mn)	0.2-0.4	0.2-0.4	0.2-0.4
Nickel (Ni)	2.0-2.6	3.0-3.6	4.0-4.5
Chromium (Cr)	0.3-0.6	0.6-0.9	0.6-0.9



Since 1915, Hitachi Metals, Ltd. has been a leading roll manufacturer. Through constant study and research, Hitachi has kept abreast of the demands and advances of the industry. Today, Hitachi is a full-line roll manufacturer, second to none in the world. With its innovative roll manufacturing techniques, Hitachi supplies all types of mill rolls to industries in all parts of the world, meeting the special demands of each industry.

This information does not constitute a warranty or guarantee.

Hitachi Metals America, Ltd.  
 Materials Trading Division  
 222 North Park Drive, Suite 2  
 West Hills Industrial Park  
 Kittanning, PA 16201-8883  
 Toll Free: 1.877.787.3120  
 Phone: 724.545.3161  
 Fax: 724.545.3164  
[www.hitachimetals.com](http://www.hitachimetals.com)

