



NIRA P CR

Cast Nodular Iron

Chemical composition

	C	Mn	Si	Cr	Mo	Ni	W, V Nb
NIRA P CR	3.0 4.0	0.5 1.5	1.0 2.5	0.5 2.0	<1.0	2.0 4.0	-
NIRA P	3.0 4.0	0.3 1.0	0.5 2.5	<1.0	<1.0	1.0 3.5	-
NIRA AC	3.0 4.0	0.3 1.3	0.5 2.5	<1.0	0.5 1.0	2.5 4.5	-
NIRA AC CR	3.0 4.0	0.5 1.5	1.0 2.5	0.5 2.0	<1.0	2.0 4.0	-
NIRA MO	3.0 4.0	0.5 1.5	1.5 2.5	<0.5	0.2 1.0	1.5 2.5	-
NICRA	3.0 4.0	0.3 1.0	0.5 2.5	<1.0	<1.0	1.0 3.5	0.5 2.0

Description

Cr-alloyed, pearlitic nodular iron rolls.

Applications

Intermediate and Finishing stands of heavy and medium section mills.

Features & Benefits

- Small hardness drop
- High wear resistance

Properties

	Hardness ShC	Tensile strength MPa	Bending strength MPa
NIRA P CR	51-67	400-600	600-900
NIRA P	45-67	400-600	800-1100
NIRA AC	48-76	500-800	800-1200
NIRA AC CR	51-67	400-600	750-1000
NIRA MO	38-48	500-750	900-1300
NICRA	45-67	400-600	800-1100

Comparative properties

	Fire crack resistance	Toughness	Wear resistance
NIRA P CR	—	—	—
NIRA P	—	—	—
NIRA AC	—	—	—
NIRA AC CR	—	—	—
NIRA MO	—	—	—
NICRA	—	—	—