ArcelorMittal South Africa

Newcastle Works: Process Configuration

Iron Making

Blast Furnace N5

Sinter

Sinter plant

Iron ore — Lump, Fines

Fluxes — Lump, Fines

Coal — Coke ovens

Coke — Lump

Fines

Liquid iron

Steel Making

Vacuum degassing unit

Steel scrap and pool iron

Induction furnace

Ladle furnace 2 x from '98

3 x Basic oxygen furnaces

Flame cutter

Cooling

2 x 6 Strand continuous bloom casters

Billet Mill

Blooms

Blooms sales

Billet sales

Bloom dresser

Billet stock

Billet cooling bed

Reheating furnace

Reversing stand

Bloom shear

Bloom cooling bed

Continuous mill 2 Vertical 2 Horizontal Stands

Flying shear

Magnetic particle inspection ultrasonic and billet grinding dresser

Medium Mill

Reheating furnace

Reversing Stand No. 1

Transfer bank

Reversing Stand No. 2

Hot saw

Continuous mill

Dividing shear

Walking beam cooling bed

Roller straightening machine

Cold saw

Bundeling

Magnetic Particle Inspection

Products of medium mill

- Rails
- Billets
- Joints and special profiles
- Rounds
- Flats
- Angles
- Channels

Bar Mill

Billet

Reheating furnace

Roughing Mill 5 Stands

Crop shear

2 x Intermediate mill 5 Stands each

Dividing shear

2 x Finishing mill 4 Stands each

Kocks PSB

2 x Cooling bed

Saw

Shears

Bundling

Roller straightening

Saw

Bundling

Water Cooling

4 x Pouring reels

Forced air cooling

Cooling conveyors

Compactor coil tying

Coiled rounds

Products:
- Rounds
- Flats
- Angles
- Reinforcing bars
- Squares

Rod Mill

Reheating furnace

Crop shear

Roughing mill 7 stands

Crop shear

Intermediate mill 6 stands

180° repeater

Intermediate Mill 2 stands

180° repeater

Shea

2 x Morgan no-twist finishing blocks 10 stands each

Water cooling line

2 x 4 Stand Morgan-Tekisun reducing/sizing blocks

In-line bar gauge

Water cooling line

Inclined laying heads

Cooling conveyor

Coil reforming

Compactor coil tying

Straightening and building

Coiled wire rod

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