



# MRK

## METAL REFINING KONVERTER

For Stainless Steel Alloy & Steel Manufacturing



### Special Features

- Boiler quality MS Plates are used for fabrication of MRK vessel which are stress relieved and have ultrasonically tested welding joints
- Dual brakes provide greater safety. One brake is thruster type while other is spring applied air retract disk brake, which has faster response time
- Trunion ring and shaft are specially fabricated from special alloys and all welded portions are completely X-ray scanned
- Planetary Gear Box are used to optimize space
- Torque arm is used to absorb vibration on foundation and gear box
- Jerk-less rotation with angular position encoder
- PLC Based Ferro Alloy Feeder for continuous feeding of ferro alloys and scrap (optional)
- Fully automatic Pollution Control System with retractable water-cooled duct (optional)



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*The Leader Steel Melt Shop and Foundry Technology*

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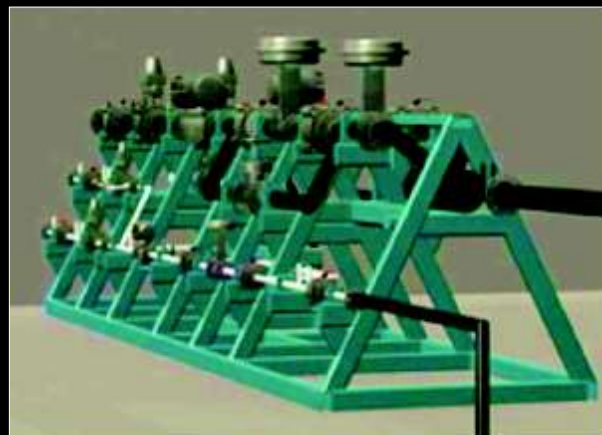
# MRK

## METAL REFINING KONVERTER

Metal Refining Konverter (MRK) is metallurgical equipment used for Argon - Oxygen Decarburization (AOD) process for making the following:

- Stainless Steel
- Low Carbon Alloy Steel
- Structural Steel using High Carbon Steel Scrap / Cast Iron

### GAS MIXING STATION



### FUME EXTRACTION SYSTEM



## Attributes

- PLC Based Gas Mixing Station of MRK gives flow measurement compensated for pressure and temperature variation. This avoids “**OVER OXIDATION**” of liquid metal
- Imported Transducer used for accurate flow and pressure measurement in Gas Mixing Station of MRK enables high turndown ratio which results in low process gas and refractory consumption and high recovery of alloying elements
- Use of dry air (-80° C dew point) as process gas reduces the cost of production
- PLC based MRK process control software uses unique blowing pattern selection system which reduces Oxygen and Nitrogen consumption and idle time during process
- Fully suspended drive mechanism minimizes vibration to the foundation and surrounding
- By-pass valve for safe operation
- Overall process display on touch screen HMI
- Recording facility helps improve traceability, quality, reliability and repeatability
- High level of automation facilitating remote monitoring

### GEAR BOX

