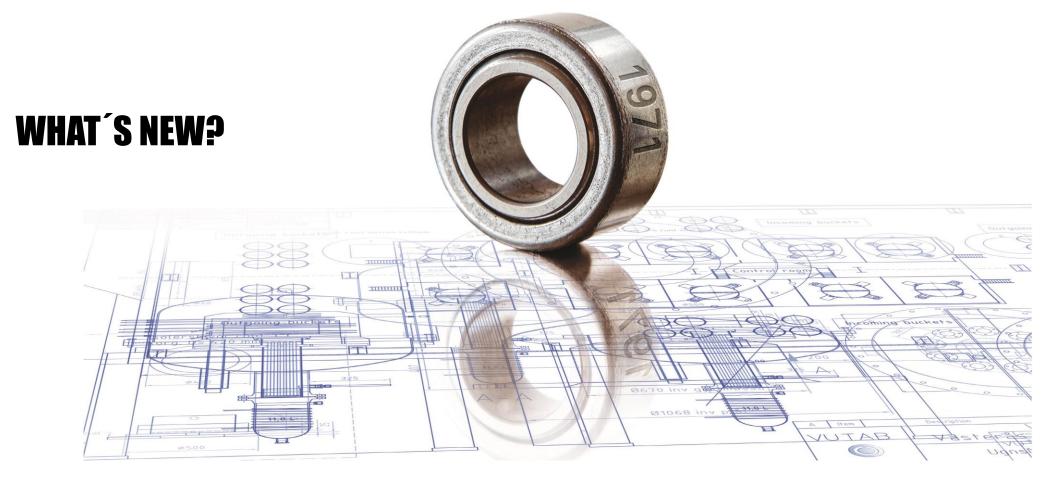


# THIS FRICTION BEARING OF STEEL WAS PRODUCED 100% CO2-FREE 50 YEARS AGO!





# **BREAKTROUGH PRODUCER OF 100% CO2-FREE METALS**

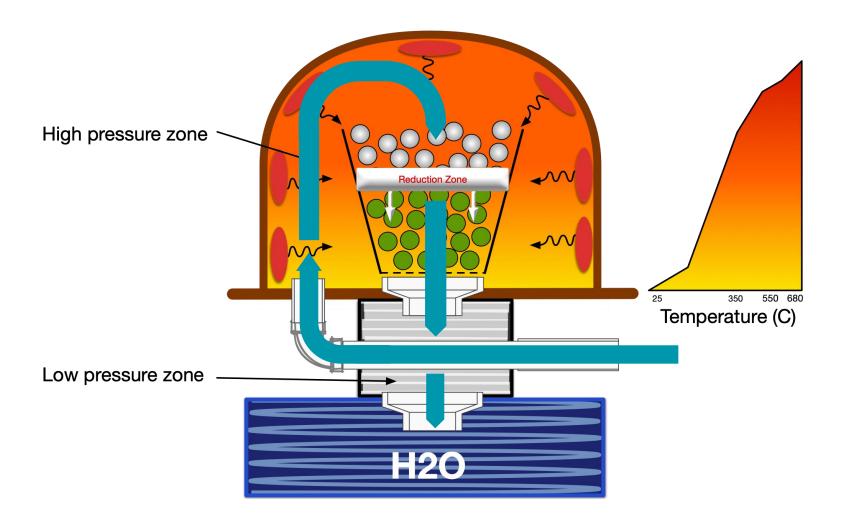
- Can produce iron from iron ore, waste and residuals
- Patent protected furnace and process
- Small scale and scaleable
- Iron and other materials
- Ready for commercialization
- Low Capex, low Opex





# **100% CO2-FREE PROCESS DESCRIPTION**







# **THE 100% CO2-FREE PRODUCTION PROCESS**

- Total energy/ton of hematite 2.100 kWh
- Closed circuit solution
- No waste or residuals
- No emissions
- 3 Natural laws as main drivers
  - Gravity, temperature and pressure
- Low temperature
- Low maintenance
- Flexibility in regard to input material





# THE GREENIRON MARKET

	Iron Ore	Filter Dust	Oxidised Scale	Grind Shaving	Grinding Swarf	Mine Tailings	Bottom Ash	Metal based Deposits (+REE
Mines	<b>✓</b>					<b>√</b>		(+RLE
Manufacturing				<b>√</b>			<b>√</b>	
Recycling		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>
Foundries	<b>✓</b>	<b>√</b>		<b>√</b>	<b>√</b>			
Steel producers	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>				



## **GREENIRON MARKETS**

#### **Iron Based**

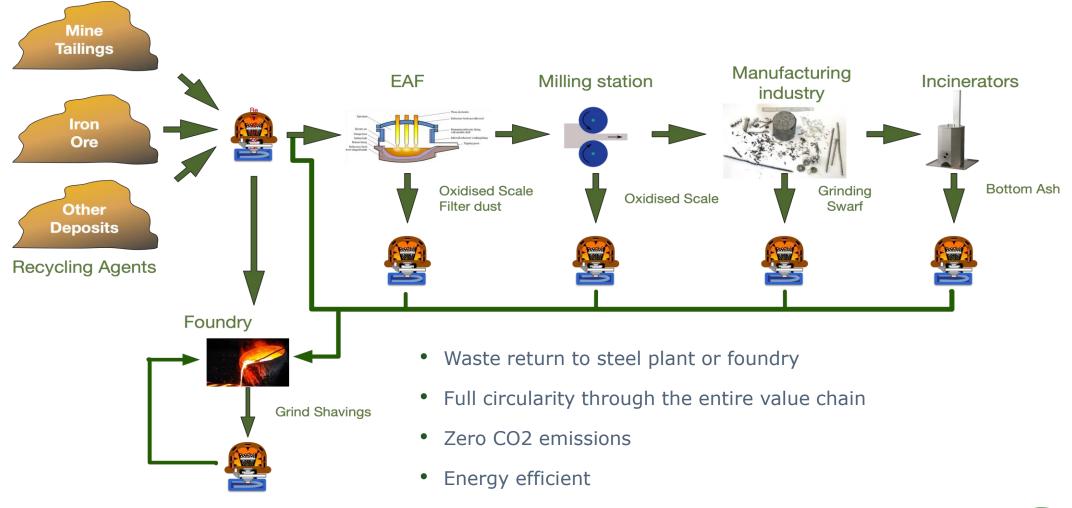
- Oxidised scale ca 100 mtonnes/year
- Filter dust (steel plants only) ca 34 mtonnes/year
- Pelletmaking "debris" ca 20 mtonnes/year (and growing)

#### Iron and other mineral based

- Ores ultralarge volumes
- Minetailings unknown, ultralarge large volumes
- Deposits and slags unknown very large volumes
- Secondary material flows –unknown very large volumes
- Can price compete with fossilbased reduction process
- Every furnace is profitable at current energy prices



## MATERIAL HANDLING THE GREENIRON WAY





# **THANK YOU**

#### **CONTACT DETAILS**

**Edward Murray** 

Mobile: + 46 709 80 50 46

Email: <a href="mailto:edward.murray@greeniron.se">edward.murray@greeniron.se</a>

Visiting address: Jakobsbergsgatan 16, Stockholm



