TEMBO STEELS

2023 Edition

Pure TMX Rebars

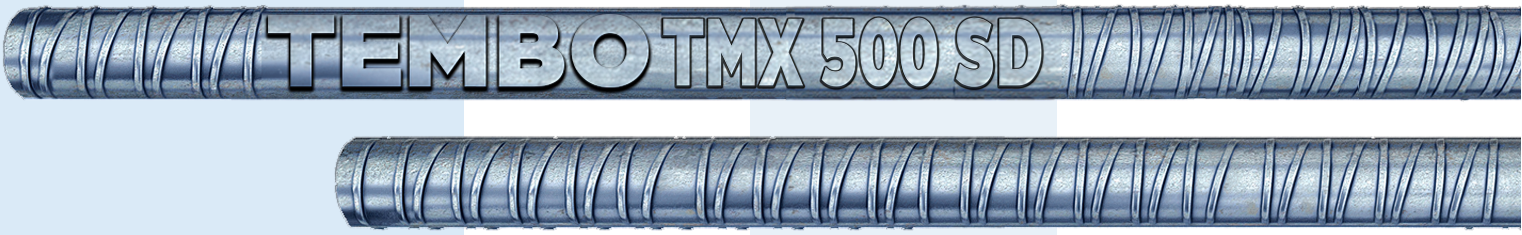
INTRODUCING

TEMBO PURE TMT TMX REBARS

TEMBO STEELS

THE AGE OF GREENSTEELMAKING

TEMBO TMX 500 & 550 CWR TMT REBARS



GREEN
STEEL-MAKING

Carbon Neutral Process of TMX TMT Production

We understand where the steel industry is heading. More sustainable steel production through the DRI / Scrap Route, Usage of renewable energy, elimination of billet reheating, compact layout and Direct hot Charge of billet through caster to Rolling Mill minimizes carbon emission by 80% in primary steel making.

These practices are the current, most advanced trend in the world of steel and is viewed as the ideal steel making practice in the developed "Rich" Countries concerning environmental awareness.

The aggregate of all above mentioned steel-making practices of Primary Steel making remains a global benchmark of decarbonization of the steel industry throughout the entire process.

Virgin TMT Rebars From DRI/Scrap/EF/IF Route
(70% C02 Emission less in comparison to BF/BOF Route)

Tembo leverages synergistic approach of Fully Integrated facility that is also Environmentally Friendly. There are 2 Principal Integrated Routes of Producing **Primary Steel**.

1. Blast Furnace route that generates 2.2 tons of Co2 every ton of Steel produced
2. DRI, Scrap to Electric Furnace route that vastly minimizes Co2 emission by 70%

The countries adopting the DRI, Scrap Electric Furnace route of the total steel produced in their respective countries, approximate figures are:

USA-70% Italy-80% Spain-70% Middle East- 94% Slovenia- 100%

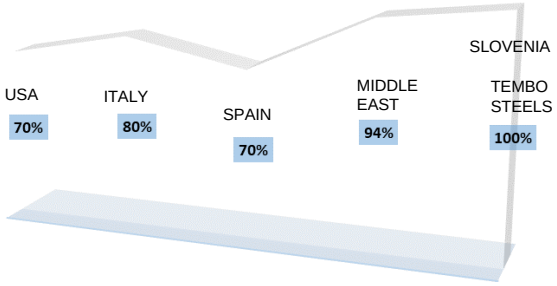
Tembo Steels also adapts the same route of cleaner steel making, right here in Uganda by 100%. We initiated and built a futuristic modern steel plant that is environmentally friendly and adapts to a leaner, more innovative, efficient manufacturing process

DRI/Scrap based route is a major shift in green steel transition to achieve energy efficiency, product quality, minimizing carbon emissions towards environment compliance. There is an effort worldwide to lower carbon emissions by replacing the blast furnace steel making technology.

Tembo Steels uses renewable energy which is hydropower for its steel production, our electricity is powered by the Bujagali Dams.

95% of Tembo Steels TMT is directly Hot Rolled through the castor, eliminating the conventional billet reheating. This green steel making practice is only achieved to the tune of 30% even in Developed countries. This achievement of surpassing the billet reheating enables 90% carbon emission elimination in the segment.

Tembo Steel's super compact and efficient manufacturing layout is capable of further enhancing the steelmaking process through a greener route. This straight layout is capable to minimize the time taken to deliver the end product, saving time, fuel & energy.



GLOBAL AVERAGE OF ACHEIVING THE CARBON NEUTRAL MATRIX AS ABOVE

Green Steel Making Route	Other Developed Countries Data	Tembo Steels @ Uganda
DRI Scrap Route	70%	100%
Renewable Energy	50%	100%
Elimination of Billet Reheating	30%	95%
Straight Layout	50%	100%

TEMBO IN SYMPHONY WITH SUSTAINABILITY - A MILESTONE TOWARDS NATURAL EVOLUTION

DRI SPONGE IRON PLANT

TEMBO
STEELMAKING

PROCESS FLOWCHART

IRON ORE

COAL

DOLOMITE

DRI KILN

SCRAP

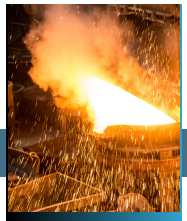
SPONGE IRON

CAST IRON

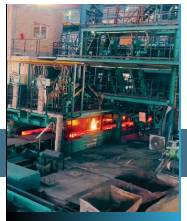
LIQUID STEEL

LADDLE REFNING

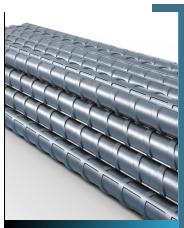
DEGASSING



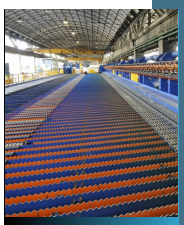
PURGING



BULLET CASTOR

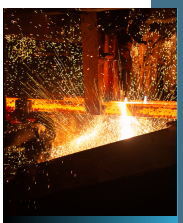


TMT TMX REBARS



AUTOMATIC COOLING BED

TMT DIRECT CONTINIOUS ROLLING



CONTINIOUS CASTING MACHINE

UNMATCHED **PROPERTIES**

Strength and Ductility

APPLICATIONS OF 500 & 550 SUPER DUCTILE TMT REBARS

TEMBO TMX 500 & 550 SD TMT Rebars, 100% Made in Uganda offers the ideal balance of ductility and strength as well as unmatched quality & consistency.

Our World Class, made in Uganda, locally manufactured Rebars are available for all reinforced applications, including houses to ultra-large commercial & super-critical engineering projects for construction of a **Stronger Uganda and the region at large.**

There is a growing trend and demand for taller stronger constructions with exceptional Seismic resistant properties. Tembo Steels TMX rebars are suitable for all Seismic zones (III, IV V and VI).

Tembo Steels delivers quality assurance using Six Sigma.

IMPROVED STATE OF ART ROLLING PROCEDURES, PREMIUM CHEMICAL, MECHANICAL PROPERTIES AND ENHANCED STEEL QUALITY

UNBS

PROUDLY UGANDAN

BUBU
Buy Uganda

PURE **STEEL**

Tembo TMX 500, 550 CWR TMT Rebars, licensed by HSE Germany.

HIGH QUALITY **HYQST TECHNOLOGY**

- **QUENCHING**

The finishing mill's hot rolled TMT is quickly cooled by a unique split-style nozzle cooling method after leaving the mill at 1050° Celsius. The bar surface layer becomes martensite after quenching, which causes it to shrink. While the core is still hot and austenite, the shrinkage presses the core, aiding in the formation of the proper crystal structure.

- **SELF TEMPERING**

The TMT leaves the Quench box with a temperature gradient through its cross section. As the TMT cools, heat moves from the the center to its surface, correctly tempering an intermediate ring of martensite and bainite.

- **ATMOSPHERIC COOLING**

Finally, the austenite core of the bar is automatically refined to ferrite and pearlite on the cooling bed by the slow cooling process after quenching. This gives the bar its **ductile property**. The bar now has a tough, tempered martensite layer on the surface, an intermediate layer of tough martensite and bainite, and a core made of ferrite and pearlite.

OUR TMT MANUFACTURED TO SAFETY, STRENGTH, DUCTILITY & UNMATCHED QUALITY

— TOWARDS PURE STEEL

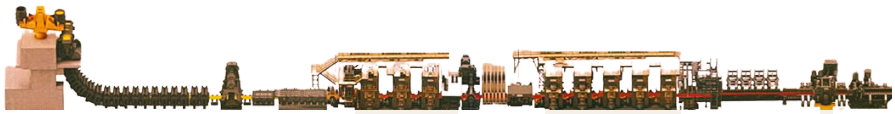
A STEP AHEAD

TMT Rebars, tend to have 2 main harmful impurities, Sulfur & Phosphorous, mainly responsible for reducing the strength of the steel in extreme conditions. Virgin Iron Ore coupled with sorted scrap in perfect proportionate blend can help achieve a controlled and superior steel with dramatic reduction in the levels of Sulphur and phosphorous. Throughout the years of using this blend, we can proudly say that the blend has helped Tembo Steels achieve the best values of P & S across the region.

SD are **super ductile** TMT rebars that not only contain restricted S & P levels, they are more ductile due to their special chemistry, enhancing the Yield Strength and the Ultimate Tensile Strength gap, meaning the rebar can easily absorb extreme weather conditions without rupture.

Even when the stress surpasses the yield strength, it must not exceed the tensile strength in order to prevent building collapse. Tembo TMX 500 or 550 Super Ductile rebars are intended to have a far higher UTS/YS ratio than regular rebars. In other words, they can undergo substantially greater plastic deformation without exceeding their Ultimate Tensile Strength. This avoids any accidental building collapses.

STATE-OF-ART **TMT MAKING FACILITY**



KEY HIGHLIGHTS

Tembo Steels is at Par with the most Modern Technology of Producing TMT Rebars across the Globe

- **Level 2 mill automation and control**
- Single strand high speed continuous mill
- Straight Line Logistics from entry to cooling bed to the discharge dispatch Area
- Inter-stand tension control rolling
- Automatic mill shears, and cut-to-length
- **Production of HYQST TMT rebars in straight length**
- Movable Rack Automatic Cooling bed
- TMT Uniform Air-cooling
- High pressure water de-scaling facility
- **Online rapid water quenching unit**
- Automatic bundling facilities
- **Thermax Licensed By HSE Germany**

COMPARATIVE

WHY & HOW Tembo Steels is a step ahead

How Tembo TMX Rebars are superior & purer in comparison to other TMT Manufacturers

A Technical Elaboration of TMT manufacturing process

SCRAP ROUTE

Alone Scrap Charging in the furnace results in uncertain chemical and mechanical properties due to inclusion of tramp elements. Tramp elements do not serve useful purpose and are undesirable in the steel bath

Scrap is often contaminated with residual elements that essentially require **dilution and secondary treatment** to reduce the concentration to meet the product specifications.

All Scrap are not the same, its quality is often determined by the presence of tramp elements that severally effect the quality of steel. Inherited Scrap may attract tramp elements such as Copper, Sulphur, Tin, Zinc, Phosphorous, Lead among others. They negatively impact the steel properties and therefore must be avoided.

DRI SPONGE SCRAP CHARGE MIX

Our Raw Material receivable for making clean, pure steel is a combination of **high grade virgin Iron Ore** up to 60%, Scrap & Cast Iron in perfect proportionate. Using this raw material charge mix for our steel melting, results in a highly clean and homogeneous quality steel rebars.

This charge mix enables the liquid bath to **minimize the tramp/residual elements present in Scrap**

Clean steel is generally defined as steel with very low content of undesired elements such as Phosphorous, Sulfur, Copper, Zinc, Nickel etc. The demand for high quality products increases with the advent of more stringent requirements of steel cleanliness. Such can only be possible by using virgin Iron ore coupled with limited quantities of scrap for most optimum chemical and mechanical properties.

These properties can only be maintained and achieved at this stage of steelmaking.

Tembo is the only primary steel making facility in the country (From Rock to TMT TMX Rebars)

REFINING

To manufacture quality steel, molten steel is further refined in the Ladle Refiner with tight controls on ladle metallurgy for producing high grade steel.

Ladle refiner serves as a Reactor for metallurgical operations and treatment of metal, chemistry adjustment and inclusion modification. It enhances and improves the quality of steel by refining, and is termed as secondary metallurgy.

High purity steel with ultra low levels of phosphorous, Sulphur and silicon values are hence achieved through secondary metallurgical treatment at ladle refining.

Desulphurization, Desiliconization and degassing is performed as multifunction secondary refining process that improves the toughness, ductility and cleanliness of Steel.

Advantages include:

- Reduce Tramp elements
- Inclusion floatation and removal for more purity
- Homogenization in both chemistry and temperature
- Micro- Alloying
- Desulfurization

A Rare process across the region

DEGASSING

Degassing is a vital and critical part in steel making. Dissolved oxygen in liquid bath must be lowered because of the oxygen reaction with carbon to form CO, resulting in blow holes in the cast.

Deoxidization is done by adding Silicon, Aluminum; both elements that are strong oxide formers and react with dissolved oxygen to form Alumna and Silica. As a result, they float to the surface where they are absorbed by Slag.

Moreover, the argon gas, commonly used to degas metals stirs with electromagnetic precipitate, ensures optimum levels of Oxygen and Nitrogen in the bath.

O2 and N2 have harmful effects on mechanical and physical properties as they cause pinholes, porosity in solidified steel, losing its tensile properties and Ductility

As a Result: Oxygen & Nitrogen are controlled to less than 50 PPM/Mass, Leading to a Homogeneous Bath.

Degassing process leads to high quality steel bath by the removal of dissolved gasses from the liquid for the internal cleanliness of the steel, avoiding brittle nature and un-even compositions of the rebars.

Metallurgical Advantages of Degassing

- Limits formation of non metallic oxide inclusion
- Ideal compositional tolerances and Gas content
- Removal of undesired tramp elements
- Removal of dissolved gases: O2, N2, H2

Dehydrogenization, Denitrification, Deoxidization is performed

Reducing the levels of harmful inclusion in Steel plays a critical role in steel purification

A Rare process across the region

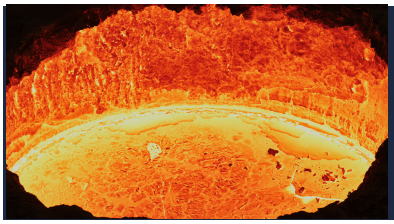
Other Steel Companies in Uganda

SMALL SIZE TUNDISH

Lesser than 2 Ton Tundish liquid pool

A smaller size tundish cannot prevent emulsification of slag into the liquid steel during its flow through the tundish. These inclusions are certainly going to effect the quality of the final product.

Tembo Steels Uganda Limited



TUNDISH METALURGY

Greater than 5 Ton Tundish liquid pool

Larger and Deeper tundish have become the norm for producing quality steel. Tundish is a continuous critical metallurgical reactor for casting high grade quality steel. Only a large vessel can accept inert gas shrouding to reduce air re-oxidization and slag emulsification. There are numerous benefits to tundish metallurgy:

- Enhances the flotation of inclusion
- Inclusion Separation
- Thermal & Composite homogenization
- Acts as a continuous refiner
- Higher Productivity and increased casting speed
- A bigger size tundish hence has a beneficial effect on steel cleanliness

Largest Tundish liquid Pool across the region

NORMAL CASTER

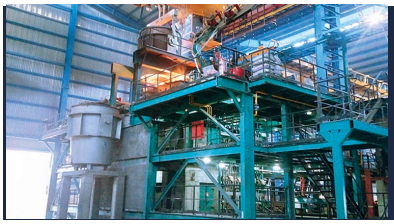
4/7 / Meter (Old Technology)

Billets are subject to large temperature fluctuations due to the slower speed (**max @ 2.5 m per minute for a 110 section size**) causing phase transformation and often microstructural changes that affect the quality of the steel rebars..

Many inconsistencies include:

- Radical Cracks
- Transverse and Longitudinal surface cracks
- The micro structure of the metal
- The solidification profiles

Radiative heat transfer coefficient and temperature distribution throughout the stand is very challenging.



MULTI RADIUS, BULLET CASTER

9/11 / Meter (Latest Technology)

Multi Radius, High Speed Bullet Caster in Tembo Steels has a multipoint unbending and straightening automotive, primary and secondary spray cooling and process automation ensures seamless high speed casting that suits direct rolling of hot billets at **5 meter / minute speed @110 section size.**

Better oscillation frequency decreases the depth of the surface stress, providing highest surface quality and uniform temperature to rolling mill. It is defect free continuous casting delivering heat transfer and solid liquid interphase.

There are clear optimization of cooling parameters and mass force equilibrium between liquid pool and the solid shell.

Moreover, the billet surface temperature and liquid core temperature optimizes resulting in thorough improved casting quality

There is an excellent thermo-fluid mechanics and program based on temperature distribution, solid shell thickness profile and phase change phenomenon during the entire metallurgical length of the caster.

As a Result the solidus, Liquidus Temperature and phase transformation temperatures are constant.

The single stand multi radius caster is designed to produce approx. 350,000 tons per year of prime quality billets up to 160*160. The caster has a vertical curve geometry and advanced mold level control for process stability and excellent surface quality of billets. It also ensures accurate control of solidification across the cross section length ensuring defect free result of optimal temperature at bending and unbending areas.

The caster also has quality assessment in real time concept

First Bullet Caster in Africa and the only in Uganda

STATE OF ART ROLLING MILL

Tembo has state of art rolling mill with higher degree of space optimization and better flexibility with minimum man on floor concept for better safety by adapting Fully Automated process concept of industry 3.0, large sequences and steady state condition delivery for efficient high class TMT Quality. **Largest ladle Sequence in the country**

Other Steel Companies in Uganda

SEMI-AUTOMATIC ROLLING

Semi- automatic continuous rolling through reheating or direct rolling at 2 to 2.9 meter / minute maximum caster speed

Lower Caster speed and the reheating furnace leads to inconsistent temperature liquid profile and some times rolling below recrystallization temperature. This may lead to surface defects and microstructural challenges.

Semi Continuous Mill takes more time to clear the mill stock leading to lower temperature profile, deviating from the standard rolling practices and formation of internal defects as well as more FeO generation at the surface level.

The physical and mechanical properties of the rebars are therefore compromised at slower speeds of approx. **17 meter / second max.**

The heating of billet in the reheating furnace is not very uniform as reducing the temperature differential between the head and tail is not possible.

Tembo Steels Uganda Limited

FULLY AUTOMATIC STRAIGHT ROLLING

Billet through High Speed Caster @ 5 meter / minute caster speed- (Highest in the country)

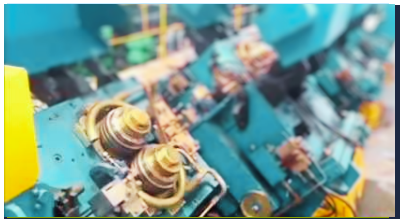
Higher Casting Speed allows more time to complete solidification ensuring constant phase transformation.

A Fully continuous terrain of block and cantilever stands can reach up to **30 meter per second** of rolling speed translating to minimal temperature drop due to very less rolling time of approx. 50 seconds, producing excellent surface quality.

As the Mill configuration is a straight and a no twist mill, such a configuration enables avoidance of any fractures or quality and time deviations.

95% of billets are directly rolled in the rolling mill, surpassing the environmental unfriendly route of billet reheating

0.5km Straight Continuous Casting & Rolling terrain @ 30m/sec- Only facility in the country (Highest productivity and efficiency



TUNGSTEN CARBIDE ROLLING

Tembo Steels is the only facility in Africa for TMT Rolling via Tungsten Carbide Rings in Block configuration ensures high productivity, high quality, **optimum rolling speed up to 30 meter /second velocity** ensures minimal grade deviation and enhanced mechanical and physical properties of Rebars that produces Ultra High strength, Micro Alloyed Multiphase steel.

Other steel companies have a maximum rolling speed of 17 meter / second

Only company having TC Rings rolling technology in TMX

SINGLE STAND CONTINIOUS DIRECT HOT ROLLING

CHEMICAL MECHANICAL PHYSICAL PROPERTIES

CHEMICAL **PROPERTIES**

	UNBS STD (MAX)	TEMBO RANGE
% C	0.25	0.16-0.23
% Mn	1.65	0.55-0.70
% S	0.058	0.04-0.05
% P	0.058	0.04-0.05

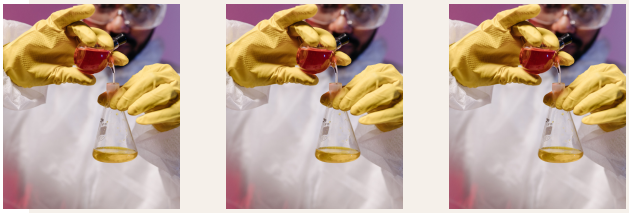
TEMBO TMT FE 500 & 550 CWR IS MANUFACTURED THROUGH A COMBINATION OF SUPERIOR PROCESSES USING PRIMARY STEEL MAKING ROUTE FROM KABALE IRON ORE (BEST GRADE IN THE WORLD)

More than 70% TMT bars in Uganda are produced through
scrap, induction furnace route. Balance 25% are produced through imported billet. Both have technological limitations to eliminate harmful impurities in steel.

Tembo FE 500 & 550 CWR grades have low Carbon, low Sulphur & low Phosphorous content, much lower than specified limit to maintain excellent ductility, bendability, weldability & corrosion resistance properties.

Tembo Steels is the **only Company in Uganda to Produce TMT Bars through Primary Virgin and Integrated Route.** Ensuring Desired Consistent Properties in Rebars

The purity of the steel is obtained due to the primary steel making route along with the refining facilities.



MAKERERE UNIVERSITY VISIT

- State of Art Product Delivery and Resource planning
- Scheduled Planning and Quality Assessments
- Material Tracking, process and equipment control optimization
- Shop Floor Instrumentation and Controls
- Plant level efficient production

GROWING TOGETHER WITH IDEAS, EXPERIENCES AND PERSPECTIVES FOR CUSTOMER NEEDS AND DEMANDS

Daily improvements and quality assessment are done at every stage; the new and refined system ensures breaking daily records, working closely undergoing training, to upskill our workforce to be entirely conversant with the latest technology down the production line. Constantly working on reducing our key bottleneck areas, ensuring material is in the right place with better flow through to our customers.

MECHANICAL **PROPERTIES**

	UNBS STD	TEMBO RANGE
Y.S (Min)	500	500-600
T.S (Min)	575	575-700
T.S/Y.S	1.14	1.14-1.21
%EL (Min)	14	14-20

Our Rolling Mill is fully Modernized with latest Rolling Technologies like Tungsten Carbide Rings in place of Conventional Steel Rolls. This ensures perfect Surface Quality and Dimensional Tolerances

Cast Billets are Hot Rolled directly from Bullet Castor in our Fully Automated No Twist Continuous Mill Equipped with monitoring devices through Computer-Controlled Process for Ideal Properties to Enable Controlled Temperature Rolling to Produce Superior Grain Structure.

Advantages include:

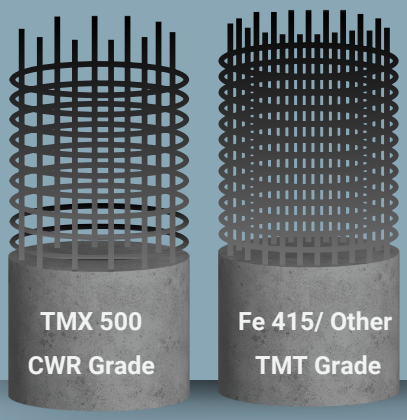
1. Bendability due to special microstructure
2. Weldability due to low carbon equivalent
3. Rib patterns on the surface give consistent bonding with cement only when produced via CNC.
4. Seismic resistant properties by maintaining superior ductility throughout the repeated stress cycle
5. Corrosion resistant characteristics because of composite and uniform microstructure

SAVINGS

Constructions with Fe 500 CWR results in a reduction of 12–15% in the amount of steel used.

Fe 500 super ductile rebars are more durable than other rebars, which reduces the overall consumption of steel and lowers costs.

More Spacing, therefore less amount of TMT bars used for the same strength.



TEMBO STEELS IS THE ONLY COMPANY IN EAST AFRICA TO USE CANTILEVER STANDS WITH TC RINGS FOR EXCELLENT PHYSICAL PROPERTIES.

PRODUCT RANGE

Tembo TMX 500 & 550 TMT Rebars are available in the following sizes throughout our distribution network across the country.

6 8 10 12 16 20 25 32

STATE-OF-ART **LABORATORY FACILITY**

TESTING EQUIIPMENTS FOR ZERO DEFECTS

- **4** Spectrometers from Spectromax Germany *(No1 in the world)*
- **3** Universal Testing Machines
- Bend & Re-bend Testing Machine
- Metal Analyzer
- Hardness Testers
- Micro Structures
- Test Apparatus for characteristics of Iron Ore, Pellets
- Examiner for C, S, H2, N2, O2
- Well-equipped Wet Analysis Laboratory
- Impact Test Machines

LICENCES AND CERTIFICATIONS & AWARDS

LICENCED BY **THERMAX**

HSE GERMANY

THERMEX QST LICENCE

This is to

Tembo Steels (U) Limited

has been granted Licence Rights to use the THERMEX QUENCHING SYSTEM and TECHNOLOGY of M/s HENNIGSDORFER STAHL ENGINEERING GmbH, GERMANY in its rolling mill at Plot no. 93, Block No. 74, Najjemba Mutuba II, Lugazi, Buikwe District, Uganda to produce high strength Thermex Quenched & Self Tempered (QST) rebars in sizes 8 to 32 mm having mechanical properties as per Grades B500BWR & B500CWR of US EAS 412-2 and ISO 6935-2.

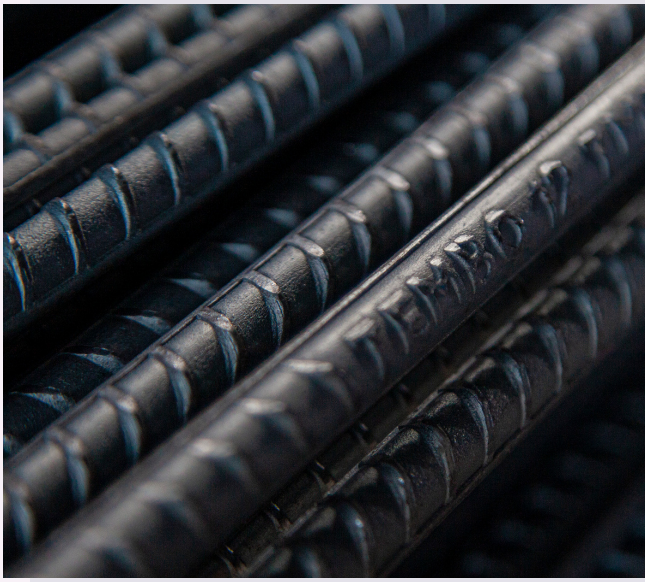
This Licence is valid up to **11th August 2024.**

for H&K ROLLING MILL ENGINEERS PVT. LTD.

Managing Director

H&K Rolling Mill Engineers Pvt. Ltd. MUMBAI

(THERMEX is the registered trademark of H&K in India and of HSE Germany in other countries)



BUBU
Buy Uganda

RAISING THE BAR TO INTERNATIONAL STANDARDS

We aspire to manufacture world class TMT TMX bars.

Tembo TMX 500 CWR with elongation of more than 17% is the most preferred product for reinforcement with the best elongation value across the region and globe.

Our Licensed Technology provider HSE Germany supplies equipment that can manufacture products that meet French, Swiss, German and British standards.

We strive to provide Uganda the same standard of product that is available globally.






TMT PRODUCT VERIFIED

- Uganda: UNBS
- Kenya: KBS
- Tanzania: TBS
- Rwanda: RBS (Ongoing)
- South Africa: SABS (Ongoing)
- India: BIS

PROFESSIONAL HR MANAGEMENT

INTERNATIONAL **AWARDS**

AFRICA'S FASTEST GROWING BRAND 2023

VOTED
Superbrands
EAST AFRICA'S CHOICE
2022-2024

SUPER BRAND 2023

E.A BRAND QUALITY EXCELLENCE AWARD 2022

For Best Steel and Rolling Company in East Africa

AWARDS
CONTD.

Consumer Choice Awards

2023 Platinum winners for steel innovation and technology advancement

SIX CONSECUTIVE PEOPLE CHOICE AWARDS

For Best metallic products (2018-2023)

BUBU STRONGHOLD 2022

Manufacturing Excellence Award
By Ministry of Trade, Industry and Co-operatives

UMA OVERALL EXHIBITOR

AMBIANCE

CLEAN AND GREEN

























TEMBO ACHIEVEMENTS
AT A GLANCE

Tembo has revolutionized the process of steel making in Uganda. Our drive to excel with unmatched quality and innovation have enabled us to become a trailblazer in the steel industry.

Tembo Steels has an installed capacity of **1.8MTPA** of primary and secondary steel product.

The company is continuously scaling its primary steel making capacity for building self-reliant Uganda.

The ultimate goal remains to significantly contribute to attain self- sufficiency in the steel sector with improved high quality product in all four steel verticals.

We aim to provide the complete product basket from integrated primary route, covering the entire backward to forward integration.

WORLDWIDE

- First company in the world to produce low carbon steel from Cast Iron.
- First company in the world to produce 0.7mm hot rolled sheets from continuous configuration through direct rolling.
- Lightest structural sections through direct rolling in the world

CONTINENTAL

- First Bullet caster in Africa
- Most diversified product portfolio in commercial steel covering up to 70% of all steel produced globally through integrated route in Africa
- The only company in Africa to manufacture HRC Tubes from Iron Ore.
- First 18 stand Horizontal Vertical Section Mill through direct rolling
- Largest product portfolio through integrated route

REGIONAL

- 100% Green Steel making process in all four verticals.
- First company to produce 6mm TMT through integrated process adopting direct rolling
- Only facility in the region for manufacturing Hot rolled sheet through primary route

COUNTRY

- First company to produce TMT in Uganda
- Manufacturing from rock to fully finished steel products for GDP enhancement
- Largest Oxygen and Nitrogen Facility
- Largest Liquid Steel Capacity
- Largest Structural steel Capacity
- Largest Wire Rod Facility
- Largest TMT making facility

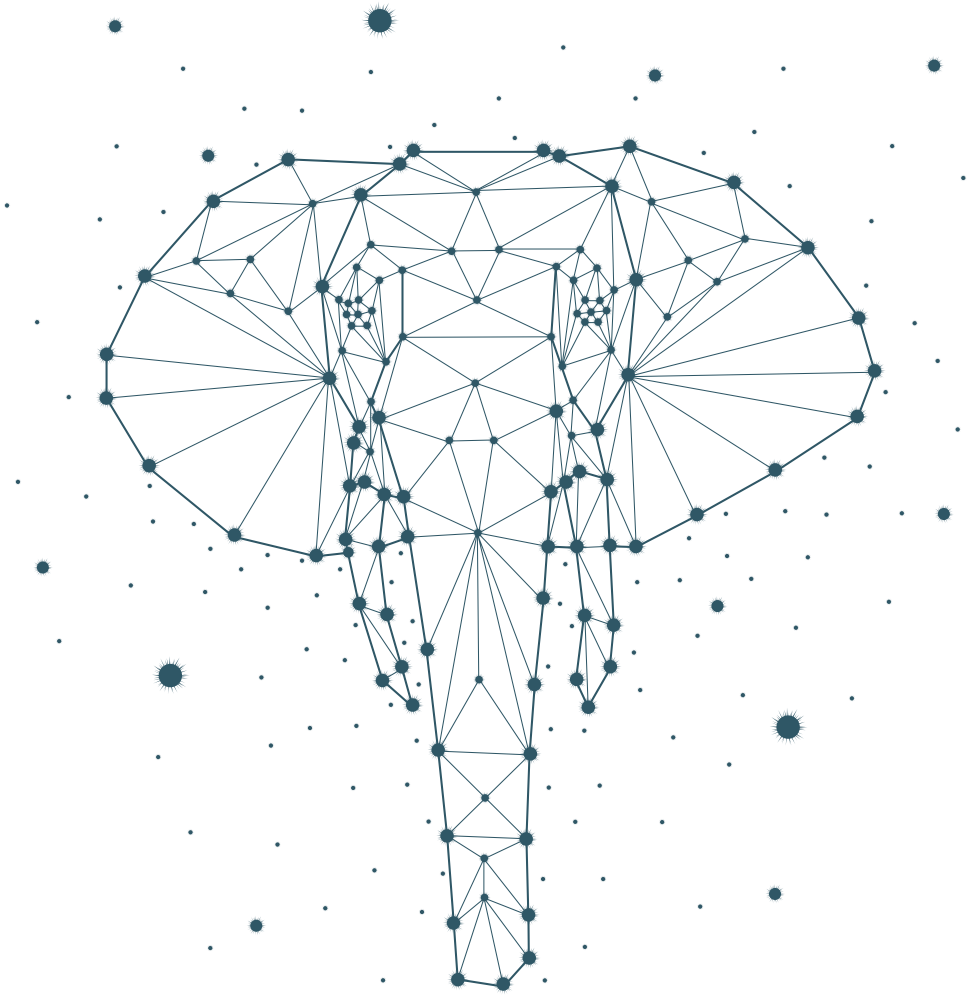
ECONOMY WISE

- Number 1 Power Consumer in the country overall
- Among the top 5 taxpayer in Core Sector industry from 0 to 100% value addition
- Best Credit Worthiness among all Financial institutions
- Promoting up to 1,000+ Local Raw Material, Consumable, Spare Suppliers
- Employment up to 10,000 Direct/Indirect
- Zero Outlets in the country, Promoting Local trading network
- 500+ Local Distribution Channels
- Zero Importation of Semi-Finished & Finished Products in any form

LEVEL 4 SECURITY

Controls and Instrumentation
for best Quality Rebars

VOTED
Superbrands
EAST AFRICA'S CHOICE
2022-2024



TEMBO
STEELS