

### VISION

To be the leading industrial group to have made giant contribution to the construction industry infrastructure growth and technological advancement in Sri Lanka, with the MELWA brand name synonymous with quality, excellence, economy known as a household favourite, trusted and dependable partner.





# MELWIRE ROLLING (PVT) LTD

Sri Lanka's Steel Giant with a Global Reach

MELVVIRE Rolling – Sri Lanka's premium steel manufacturer has been revolutionising the Sri Lankan infrastructural landscape since its inception in 2002. A 100% Sri Lankan owned family business that is dedicated to provide quality steel products, whilst steering ahead as a major player in the Sri Lankan economy.

Operating under the brand name - MELWA, the company plays a major role in supplying to the construction and infrastructural industry; whilst being the most sought after brand by reputed local and international companies in and around Sri Lanka.

2007 saw the setup of the second plant to cater to the rising demand of the country. TMT technology was introduced in 2011-12 with the launch of QST - RB 500 and wire rods for the first time in Sri Lanka at the Block Mill facility as an import replacement for the country which is currently the most widely used around the world. In 2016 the fast growing infrastructural landscape resulted in the introduction of GI pipes and box bars manufacturing.



The factories located in the suburbs of Colombo, in Ekala, Ja-ela has a production capacity of 500,000 MT per year and a plant facility expanding over 50 acres. As industry leaders, MELWIRE expanded with a first of its kind - state of the art plant (Danieli — Italy) in 2018, encompassed with ultra-modern technologies to manufacture some of the most demanded products used across the island today.

Equipped with industry sought after technologies and cutting edge manufacturing capabilities, the MELWIRE group remains in the forefront. The portfolio comprises a diversified range of infrastructural steel units which contributes and strengthens Sri Lanka's construction industry for local infrastructural growth by raising the standards in par with international levels.

Leadership, Innovation, sustainability and quality are the core values that MELWIRE is built on, just like the strength of its steel the company operates in full force to be in the forefront of the advancing steel industry in Sri Lanka, making it the largest steel manufacturer and market leader.





### A TRUSTED BRAND MELWA

MELWA has turned into a household brand in the local market as well as the most preferred amongst international clients operating in Sri Lanka. Emerging as a thriving progressive steel enterprise, MELWA has been able to transform itself since inception in order to meet the changing demands of the highly competitive market. Encompassed with a driven, talented and experienced team the MELWA brand has an extensive portfolio of products including the revolutionary MELWA-QST Rebars (SLS375 Certified), which plays a pivotal role in Sri Lanka's infrastructural and industry growth due to their superior properties in comparison to other steel bars.

The MELWA brand is stamped across its wide portfolio of products which has made it the most established and preferred brand in the industry, Providing that assurance of high quality through its strength, safety and most importantly durability. MELWA continues to be the premium choice for sustainable steel products and has successfully been recognised for its advanced technologies and industry defying products redefining the steel industry, operating in a socially responsible manner, respecting its employees and the communities in which it functions.





### **Excellence in Quality**

MELWA strives to deliver unparalleled quality throughout its processes, which has resulted in high credibility across all sectors in Sri Lanka. Product quality is achieved through utilization of advanced manufacturing processes, advanced monitoring & testing procedures and equipment at every stage of the production cycle. Adhering with international & local standards (SLS Certification & British Standards), the entire production process from raw material to the finished product is checked to ensure excellence within the line of products and services.

High quality prime billets are imported from premium manufacturers inclusive of recognised multinationals. Recognised for its intense quality procedures, MELWA uses only prime billets for production of sustainable steel bars where all products are strictly tested in advance testing laboratories to ensure quality is controlled throughout the manufacturing process. Continuous R & D allows for MELWA to be innovative and set quality standards as a market leader.

The entire process is aligned as per SLS products certification for the QST Reinforcement steel bars (All profiles 8mm - 40mm), ISO 9001-2015 (Quality Management systems), ISO 14001-2015 (Environmental Management Systems) and



OHSAS 18001-2007 (Occupational Health and Safety Management System), ISO 45001-2018 (Occupational Health and Safety Management System) with frequest process audits.

The MELWA Group has also been awarded the Certificate of Corporate Platinum Membership by the prestigious Green Building Council of Sri Lanka and ISO 14001-2015 Environment Management Systems Certificate for its commitment to sustainability and green building practices that set the stage for effective environmental protection initiatives.



### MATERIAL TESTING

The finest prime billets are imported from the most reputed steel suppliers around the world which are then again tested locally at the high tech facilities in house, adhering to the ISO 9001-2015 quality management system. MELWA has also secured the SLS 375-2009 specifications for QST grade RB500 as well as the ISO 9001-2015 quality management certification.

**Tensile Testing** – via fully computerised, tamper proof, testing machines with (1000KN and 2000 KN capacity)



**Chemical Testing** — via the most technologically advanced atomic emission spectrometer

Bending and Re-bending – via fully automated equipment





### PRODUCTION PROCESS

The strong vision, passion and drive for excellence along with technical expertise is portrayed today in MELWA'S state of the art facilities covered over 50 acres in the suburbs of Colombo, Sri Lanka.

The first of its kind to be introduced in Sri Lanka with the latest technology and fully automated facility to establish superior quality across its wide range of products. In keeping up with the demand of the aggressive market, a second completely automated mill was established in 2016 which houses the brand's most significant product - the MELWA-QST steel Rebars. 2018 saw the establishment of the finest in Sri Lanka - the Danieli /Italy, recognised as the world's premium equipment producer in the industry,

which has doubled the manufacturing capacity with 100% efficiency. The production mills exceed market expectations with excess production to supply for the export market, making it one of the few in the Asian region to contribute to the South Asian construction development industry.

Continuous enhancements on the facilities through innovation will see increased operational efficiency, increasing the production volumes and improved product quality through the entire process in order to spearhead the international markets.



#### SALIENT FEATURES/ADVANCE TECHNOLOGICAL AREAS AT MELWA.

#### Overhead cranes equipped with lifting magnets for material handling.

Manpower involvement in material handling has always been a risky affair. In order to eliminate this we came up with lifting magnets, which helps to load and unload materials without human involvement. Through this we have been able to reduce the process cycle time and prevent damages in loading and unloading activities.

#### Automatic temperature controlled burners (Danieli- Italy)

The implementation of auto-controlled burners has enabled us to do a saving on the production cost and also eliminate excessive combustion of furnace oil. Also this has allowed us to reduce the size of the furnace.



## ■ PRODUCTION PROCESS

#### Horizontal-Vertical Stand arrangement for rolling

Coming out from the conventional rolling system, company decided to install horizontal-vertical stands for rolling (Danieli- Italy). With this smooth rolling system, we were able to develop the shaping process, And to maximize the quality standards.



#### **Multi-Slitting technology**

As an organization, MELWA initially accommodate the multi-slitting technology rolling process in Sri lanka (Danieli- Italy). Through this the company was able to increase the production without increasing the mill speed or any other factors. By this technology we do 2 slit for 12mm, 3 slit for 10mm and 4 slit for 08mm bars.

#### **Automatic Bar counter**

MELWA installed an automatic bar counter at the finishing area to count the finished bars. This has enabled us to reduce the cycle time of the process. This bar counter comes with a Swedish technology which uses laser technology to count the bars.



## ■ PRODUCTION PROCESS

#### Automatic bundling machine

The automatic bundling machine is the first of its kind in SriLanka. This machine is originated in Sweden and has helped us to reduce the cycle time in the material finishing area.



### **VALUES/STRENGTH**

- MELWA has committed to have best practices throughout all of its operations which have been embedded in to the corporate culture.
- Integrity and diversity has always been a core value, practised in all of its relationships including employees, customers, partners, suppliers, and the public.
- Customers play a vital role where MELWA is dedicated to provide service excellence through superior quality products and complete customer satisfaction. Growing at a steady pace the organisation has risen to the top to be the most preferred steel manufacturer in Sri Lanka.

- The backbone of MELWA is supported by a team inclusive of multi-talented industry professionals and technical experts, who bring insights and deliver tailored customer solutions.
- This practise has resulted in long term customer relationships and repetitive customers due to the trust, dependability and service guarantee offered along with its globally recognised certification (BS4449/SLS375, SLS26).
- Further, Openness and transparency is vital to the operation of MELWA as a commitment to function in a responsible manner.





### **DISTRIBUTION**

MELWA strongly believes and practices effective processes throughout its pipeline. As the market leader, MELWA has excellent transport links across the island for prompt delivery to clients. Owning the largest private fleet in the steel sector of Sri Lanka, MELWA is able to distribute its products island wide. Additionally, it has its own custom vehicles for the larger steel bars, especially for the 6 and 12-meter-long rods, which has largely benefitted customers located in any part of the country. The advanced GPS Tracking System allows for convenient tracking of the fleet operation with integrated features for a smooth process.

Ownership of its own fleet emits many aspects of logistical issues and this is displayed through the appreciation by the clients, with cost effective and guaranteed on time delivery. Keeping ahead of competition, MELWA continues to innovate with the latest technology developments in the transport sector providing complete customer satisfaction.





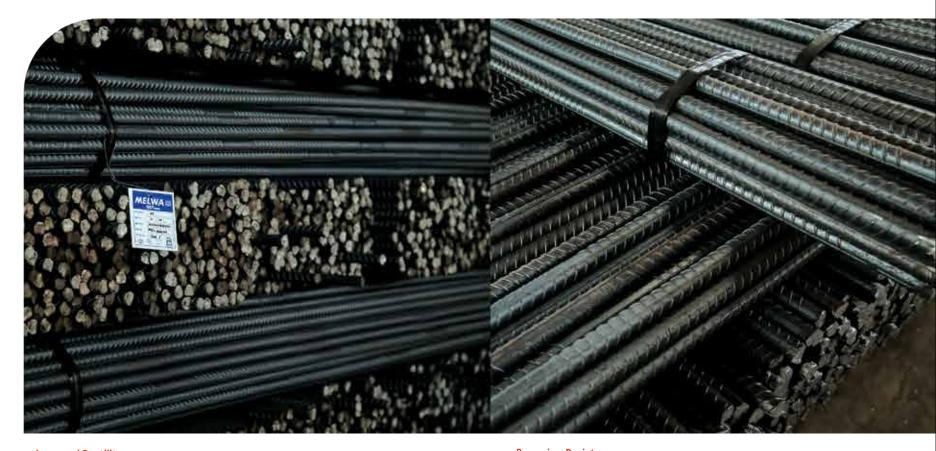


### QST Re-bars (Quenched and Self Tempered)

MELWA has an extensive product portfolio inclusive of several leading products in the steel market, with a production capacity of over 50,000 MT per month. This puts MELWA ahead in terms of range and production to meet the needs of individual customers with the ultimate goal of providing premium products for all construction based projects. MELWA assures that its continuous dedication for product portfolio improvement at cost effective prices allows for clients to choose the most suitable material to meet their specific requirements.

Popularly used in the construction industry for concrete reinforcement, they are manufactured with cutting edge technologies. The design standards exceed expectations with a grade RB500 and produced under BS certification in accordance with ISO 1786.

Greater Strength – produced to be stronger than conventional steel bars resulting in lesser quantities being used saving up to 19% of usage. Its added strength makes it a favourite for larger concrete structures. (SLS 375-RB500 MPa grade)



Improved Ductility – allows workability at the construction site

Improved Bendability – Low brttleness due to its low quantities of carbon, allowing them to withstand bending and re-bending without loss of strength

Earthquake Resistance — due to its flexible and added strength

Heat Resistance — with no change in strength up to 500°C and minimum change above 500°C -600°C, making it the most preferred choice for construction sites abiding by fire hazard safety measures.

**COTTOSION RESISTANCE** — due to the quality assurance during manufacturing. A protective oxide layer is formed on the bars making them more durable than CTD bars. Additionally, due to internal technical capabilities, corrosion resistance can be improved to suit the need of specific customer resistance by altering the chemical properties during production.





### **Special Value Added Solutions**

#### Technical expertise -

MELWA embraces the different skills in this changing market and comprises of a team of expertise that allows customers to consult in purchasing the most suitable product for their needs. Engineers are made available for site visits for technical assistance and consultation.

#### Product customisation -

MELWA goes above and beyond in order to ensure complete customer satisfaction with availability of product customization in terms of lengths and bar bending.

#### Integrated system -

MELVVA practices internationally acclaimed quality and safety standards as well as work practices throughout its processes. This is reflected with the achievement of OHSAS 18001 health and safety management system. Sourcing of high quality Re-bars, which is cut to special lengths and bent in site on customer requirements, are monitored and tracked with advanced technological systems, enhancing customer needs.



#### Lab Testing -

MELWA provides extra quality assurance through independent lab testing followed by free delivery island wide.

#### Social Sustainability –

As a major player in the steel industry in Sri Lanka, MELWA is committed to an injury free and healthy workplace. Part of its responsibilities include training and education to both its employees and customers alike in practising social and environmental sustainability.

#### **Lead time** — Shorter lead time to manufacture and supply.

MELWA is committed to provide customer care before, during and after allowing to stay ahead of competition with their all-round servicing, which is a main contributor to its success.





### PROJECTS AND CUSTOMERS

In a span of over 15 years, the company has been able to capture the market, overriding all other key and eminent players in the industry. Presently MELWA contributes to over 60% of Sri Lanka's structural development landscape.

Reshaping the industry, it has become the primary choice in the Sri Lankan construction and infrastructure sector.

Large conglomerates as well as government and public bodies that commission and approve building projects recognise and trust the MELWA brand for its true value in the present and for the future.





Presently Melwa holds the major share as the market leader as well as the largest steel manufacturer in Sri Lanka and suppling to most of the major projects, including both government and private sector in the country.



### Wire Rods

The MELWA block mill has revolutionised the industry with its local production of wire rods, allowing it to play a large role in contributing to the local market at cost efficient pricing to eliminate the foreign export charges & as an import replacement. As the largest producer, MELWA is capable of meeting the demands of the local market as well as contributing to the export market whilst being a player in the South Asian steel industry.

MELWA MS Wire rods are shown its quality by achieving SLS26. In this achievement premium low carbon billets play a pivoting role which meets SAE 1006 and 1008 standards.



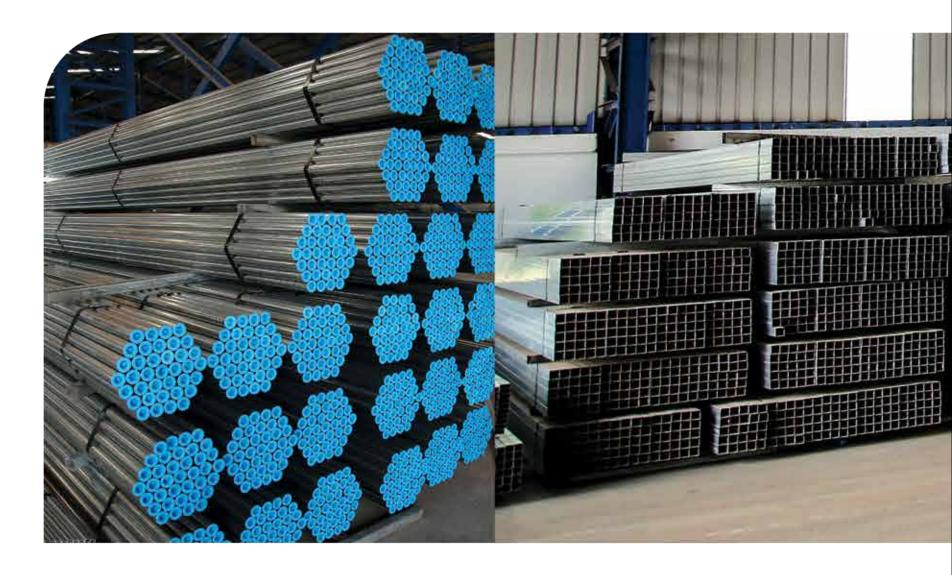


## Gl Tubes | Gl Pipes

2015 saw the establishment of the high-tech facility in Seeduwa, to cater to the increasing demand of the country. Sourcing only the highest quality of raw materials from renowned manufacturers, the MELWA GI Plant is equipped with European equipment and machinery, whilst adhering to European quality standards.

The modern infrastructure allows for multiple profiles with a production capacity of 7000 MT in 10 acres.

The local production of GI Pipes and GI tubes has allowed the company to save large sums of foreign exchange and in turn bring in foreign exchange through the export of GI pipes.



## **SPECIFICATIONS**

MELWA QST Rebars and MS Wire Rods Specification										
	Mass Per Meter (kg/m)			Lower Yield Strength	Elongation (Min)	Bars Per Ton (12m)	Rib Geometry (mm)			
Products							Height of Transverse Rib	Height of Longitudinal Rib	Rib Spacing	Transverse Rib
	Min	Average Max (Min)	Min - Max	Min (0.05D)		Min - Max (0.05D - 0.10D)	Min - Max (0.50D - 0.70D)	Inclination		
8 mm QST	0.372	0.395	0.418	500 MPa	14%	200 - 224	0.40	0.40 - 0.80	4.0 - 5.6	
10 mm QST	0.589	0.616	0.643	500 MPa	14%	130 - 141	0.50	0.50 - 1.00	5.0 - 7.0	
12 mm QST	0.849	0.888	0.927	500 MPa	14%	90 - 98	0.60	0.60 - 1.20	6.0 - 8.4	
16 mm QST	1.509	1.58	1.651	500 MPa	14%	51 - 55	0.80	0.80 - 1.60	8.0 - 11.2	65° (60° - 70°)
20 mm QST	2.359	2.47	2.581	500 MPa	14%	33 - 35	1.00	1.00 - 2.00	10.0 - 14.0	[60° - 70°]
25 mm QST	3.677	3.85	4.023	500 MPa	14%	21 - 22	1.25	1.25 - 2.50	12.5 - 17.5	
32 mm QST	6.027	6.31	6.593	500 MPa	14%	13	1.60	1.60 - 3.20	16.0 - 22.4	
40 mm QST	9.417	9.86	10.303	500 MPa	14%	8	2.00	2.00 - 4.00	20.0 - 28.0	
5.5 mm Coil	0.170	0.186	0.203	220 MPa	30%	Diameter Tolerance $\pm$ 0.25 mm, Ovality 0.4 mm				
6.0 mm Coil	0.204	0.222	0.240	300 MPa	16%	Diameter Tolerance $\pm$ 0.25 mm, Ovality 0.4 mm				

MELWA QST Rebar Product Range					
Diameter (mm)	Туре	Standard Length			
8, 10, 12, 16, 20, 25, 32, 40	Bundle / Straight	6m / 12m			

Mechanical Properties of MELWA QST Rebar					
Lower Yield Strength (min)	Elongation at Fracture (min)	Stress Ratio (min)			
500 N/mm²	14%	1.08			

Chemical Compositions of MELWA QST Rebars					
Element	Billet Analysis	Product Analysis			
Carbon	0.220% [max]	0.240% [max]			
Sulphur	0.050% [max]	0.055% [max]			
Phosphorous	0.050% [max]	0.055% [max]			
Nitrogen	0.012% [max]	0.014% [max]			
Copper	0.800% [max]	0.850% [max]			
Carbon Equivalent	0.500% [max]	0.520% [max]			

MELWA QST Rebar Products Size Chart					
Size	Mass Per Meter (kg/m)	NO. of Bars per MT [6m Lenght]			
8 mm	0.395	415 - 420			
10 mm	0.616	270 - 275			
12 mm	0.888	180 - 185			
16 mm	1.58	105 - 107			
20 mm	2.47	66 - 67			
25 mm	3.85	43			
32 mm	6.31	26			
40 mm	9.86	17			





# TAKING ON CORPORATE SOCIAL RESPONSIBILITY (CSR)

MELWA being a family owned business has contributed largely to the steel industry and economy bringing major changes to the infrastructural landscape of Sri Lanka. Whilst keeping to its roots, Melwa believes in giving back to the communities by uplifting the living standards and surroundings through contribution to the economic and social development across the country MELWA excels in creating its own CSR environment concentrating especially on building the country's present and future generations. Playing a pivotal role in multiple sectors, including the support of infrastructure and financial assistance to build self-confidence for quality education and health. Community

development is also a part of its CSR initiatives to develop the living conditions of the people of Sri Lanka. **MELWA FOUNDATION** is one such programme that has been developed throughout the business involvement.

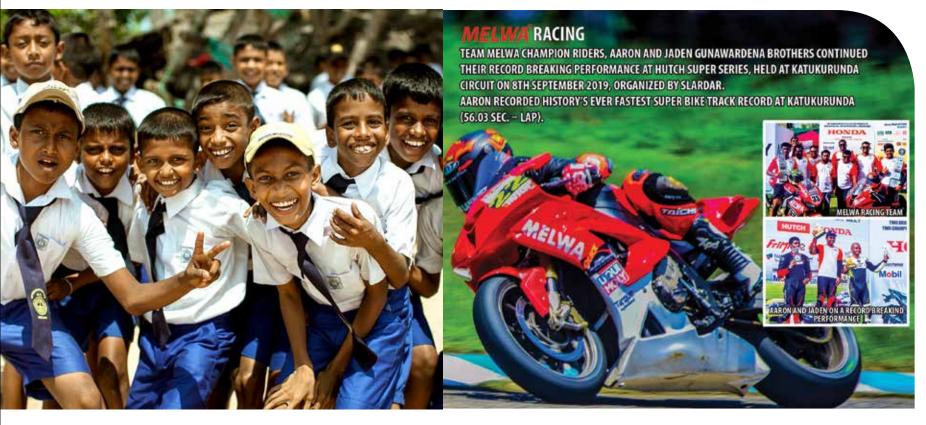
We created our own CSR environment, giving maximum support through infrastructure and financial assistance, to build self-confidence for quality Education, Health, and Sports in the county. Our primary focus on CSR has always been on healthcare and education.



#### **HEALTH**

We aim to enhance understanding of CSR among the national public and promote greater assistance about how CSR can best be leveraged to improve population health. By providing infrastructure to the health sector in Sri Lanka, various projects in the health sector have been carried out by Melwa. Our first key CSR project which was associated with the healthcare sector was the upgrading and the refurbishment of the Intensive Care Unit of the Ragama Teaching Hospital, which costed nearly 15 million. One of our groundbreaking CSR projects in recent times is, **Suraksha Lama Seva Unit**, which is a two-storied pediatric complex, with an overall investment value of over 250

million rupees in Negombo General Hospital, and this total project was initiated under the Melwa CSR arm "Melwa Foundation" in the year 2019. It is one of the biggest CSR projects carried out by a Sri Lankan own company. Going forward, We have taken it upon ourselves by signing an MoU with the Provincial Government to be responsible for the maintenance of the entire unit as well. The MoU covers janitorial services and linen supply, building maintenance, and security services. Despite the additional cost, Melwa decided to continue to maintain the building and its facilities to ensure that the patients get the highest standards of the facility.



#### **EDUCATION**

In terms of CSR under the 'Melwa Educare' project, we have almost 150 students enrolled in the Melwa scholarship program and we have contributed to build and renovate units for schools around the country. Melwa's CSR adds a bit to the governments' vision of increased education enrollment and provides access to quality education, making the students enlighten and empower them progressively, and also our CSR funded worth over 100 million for the furniture and infrastructure materials for schools during past few years. Since our inception, over 5 million per year has been spent to uplift the quality of the education sector, by offering scholarships for university undergraduates, around the island, including North & East.

#### **SPORTS**

We took up sports to support the upcoming generations, creating a culture in par with the melwa foundation theme **unity**, **diversity and priceless**. Melwa racing was melwa's initial sport which we strated with too young kids. "Young Racing Bros Jaden and Aaron Gunawardena" made sure they kept the crowd entertained with their skillful moves. Young Aaron Gunawardena, made a benchmark record of the history's ever fastest superbike track record at Katukurukunda circuit . Over Rs, 6 Million worth of donations were given to the Motorsports industry, under the title of **"Building Champions"** in Sri Lanka, by providing Bikes and Accessories. Also, a fund was being initiated for FOX HILL, Nuwaraeliya, 4X4 Races annually & Water Sports in Sri Lanka.

#### **OCCUPATIONAL HEALTH & SAFETY POLICY**

Melwire Rolling (Pvt) Limited is aware that operating its business has significant health & safety risks. It is therefore essential that all parties concerned with the operation of the business take appropriate steps to protect personnel from injury and ill health. To this end we at Melwire Rolling (Pvt.) Limited are committed to the followings:

- To operate our business with regard to the health & safety of all persons affected by our operations in order to prevent injury and ill health.
- To use appropriate safety equipment and work to approved systems when undertaking our work.
- To integrate health & safety issues into our decision making
- To continually improve our Occupational health & safety systems.
- To educate and train our employees on safe working practices
- To ensure compliance with relevant health & safety legislation and other requirements related to our operations.
- To set and achieve our health & safety objectives and targets . To eliminate hazards and reduce OHS risks.
- To consultation and participation of workers.

### ENVIRONMENTAL POLICY

We at Melwire Rolling (Pvt) Limited are committed to,

- Exceed customer expectations through effective and efficient operations and optimum resource utilization.
- Provide our products and services in an environmentally friendly manner
- Make all employees aware of environmental impacts arising from their work Eliminate
  or mitigate any adverse impacts arising from their activities and contribute to the
  protection of environment
- Always fulfil our compliance obligations, and
- Continually improve our environmental management system.





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