



**METALTECH INDUSTRIES
PRIVATE LIMITED**

ERW PIPE

MANUFACTURING



Strength • Precision • Innovation





AFI METALTECH INDUSTRIES PRIVATE LIMITED

— MY 25 YEARS OLD DREAM PROJECT —



MY DREAM PROJECT



AFI METALTECH PLANT LAYOUT



HYDRAULIC DECOILER



STRIP ACCUMULATOR



COIL CAR



STRIP BUTT WELDER



UNIT 1 : ERW ROUND PIPE MANUFACTURING
(32mm NB - 300mm NB)



UNIT 3 : SQUARE & RECTANGULAR PIPE PLANT



UNIT 2 : HEAVY ERW ROUND PIPE MANUFACTURING



UNIT 4 : CDW TUBE PRODUCTION



HYDRO TESTING



EDDY CURRENT TESTING



EOT CRANE



PLC CONTROL PANEL



HF WELDING MACHINE



OUTSIDE SCARFING



SIZING MILL



WELD SQUEEZE ROLLS



FORMING & SIZING ROLLS



ROLLER TABLES



FORKLIFT



FINISHED PIPE BUNDLES



MATERIAL YARD



UNIT 1: ERW ROUND PIPE PLANT



UNIT 2: HEAVY ERW ROUND PIPE PLANT



UNIT 3: SQUARE & RECTANGULAR



UNIT 4: CDW PIPE TUBES

STRENGTH • PRECISION • INNOVATION

AFI METALTECH INDUSTRIES PVT. LTD.

Engineering Strength • Manufacturing Excellence • Delivering Trust

Welcome to AFI Metaltech Industries Pvt. Ltd.

AFI Metaltech Industries Pvt. Ltd. is an upcoming integrated steel pipe manufacturing company being established in Hyderabad, Telangana, with a vision to become one of India's leading manufacturers of ERW Pipes, Heavy ERW Pipes, Stainless Steel Pipes, and CDW Precision Tubes.

The company is promoted by Mr. Sabghatullah Khan, whose family has been associated with the steel pipe industry for more than 60 years. The promoter personally possesses over 25 years of practical experience in MS Seamless Pipes, ERW Pipes, CDW Tubes, standard and non-standard pipes, and industrial steel products.

Through our existing businesses, AL AFI INDUSTRIES PVT. LTD. and S S STEEL TRADERS, we have successfully built a strong customer base across Telangana, Andhra Pradesh, Maharashtra, Gujarat, and Karnataka with a combined annual turnover of approximately ₹40–45 Crore.

Vision Our Manufacturing

AFI Metaltech Industries Pvt. Ltd. is developing a state-of-the-art 10-acre integrated manufacturing campus comprising four specialized production units designed to serve the growing demand from construction, infrastructure, automobile, hydraulic, solar, engineering, and industrial sectors.

Project Highlights

- Total Land Area: 10 Acres (4,35,600 Sq. Ft.)
- Manufacturing Units: 4
- Direct Employment: 300–350 People
- Production Capacity: 70,000+ MT Per Year
- Location: Hyderabad, Telangana
- Operating Model: Three Shift Continuous Producti



OUR 4 MANUFACTURING UNITS

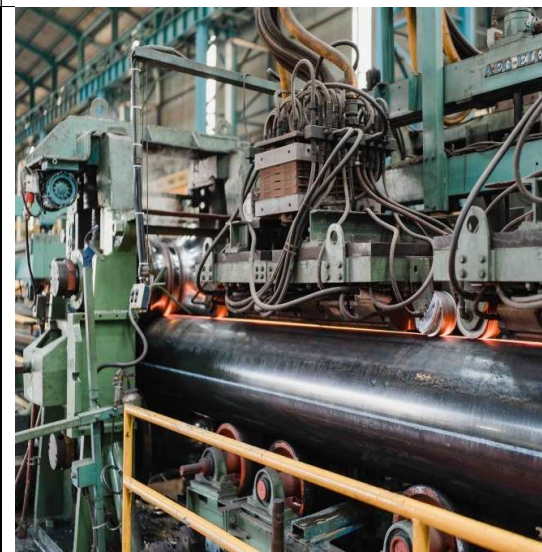
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OUR 4 MANUFACTURING UNITS

UNIT-1 : ERW STANDARD PIPE MANUFACTURING





Products

- ERW Round Pipes
- 20 NB to 300 NB
- 4 mm to 9.5 mm Thickness

Applications

- Construction
- Infrastructure
- Water Supply
- Agriculture
- Fabrication
- PEB Buildings

Production Capacity

- 48 MT Per Day
- 1,248 MT Per Month
- 15,000 MT Per Year

Employment

- Approx. 60–70 Personnel

UNIT-2 : HEAVY ERW PIPE MANUFACTURING**IS (INDIAN GRADE . IS STANDARDS)**

- 1) IS 1161 YST 310 (OR YST 240)
- 2) IS 4923 YST 355
- 3) IS 3589 FE 410
- 4) IS 1239 HEAVY GRADE (B/C) BLAK ERW PIP LOW CARBON

INTERNATINAL / ASTM / API

- 1) ASTM A53 GRAD B
- 2) API 5L GRAD B
- 3) API 5 LX 42 / X 46 (HSL)

NORMALIZED HSLA TYPE

- 1) API 5L X 42 / X 46 NORMALIZED
- 2) IS 1161 YST 310 NORMALIZED
- 3) IS 4923 YST 355 NORMALIZED

STANDARD SIZ ROUND PIPES (BLACK)

- 1) 150 MM NB 5.5 MM THICK TO 9.5 MM THICK
- 2) 200 MM NB 5.5 MM THICK TO 9.5 MM THICK
- 3) 250 MM NB 5.5 MM THICK TO 9.5 MM THICK
- 4) 300 MM NB 5.5 MM THICK TO 9.5 MM THICK

USED SECTOR

- 1) HEAT EXCHANGERS
- 2) FERTILIZER INDUSTRY
- 3) POWER GENERATION AND ENVIRONMENTAL TECHNOLOGES
- 4) DEVELOP SHIP – BUILDING FOR INTERNATIONAL CLIENTS
- 5) OIL AND GAS APPLICATIONS
- 6) MECHANICAL AND PLANT ENGINEERING & CONSTRUCTION
- 7) AUTOMOTIVE INDUSTRY
- 8) PROJECT SERVICES
- 9) HIGH TEMPERATURE AND PRESSURE SERVICE

NON STANDARD SIZE ROUND PIPES

S/NO	MM NB	THICK MM NB
1	133 MM OD	6 MM TO 9 MM THICK
2	136 MM OD	6 MM TO 9 MM THICK
3	140 MM OD	6 MM TO 9 MM THICK
4	143 MM OD	6 MM TO 9 MM THICK
5	145 MM OD	6 MM TO 9 MM THICK
6	150 MM OD	6 MM TO 9 MM THICK
7	153 MM OD	6 MM TO 9 MM THICK
8	158 MM OD	6 MM TO 9 MM THICK
9	163 MM OD	6 MM TO 9 MM THICK
10	170 MM OD	6 MM TO 9 MM THICK
11	178 MM OD	6 MM TO 9 MM THICK
12	184 MM OD	6 MM TO 9 MM THICK
13	193 MM OD	6 MM TO 9 MM THICK
14	210 MM OD	6 MM TO 9 MM THICK

15	228 MM OD	6 MM TO 9 MM THICK
16	234 MM OD	6 MM TO 9 MM THICK

USED SECTOR

1) ROTO PRINTING MACHINE ROLLERS
2) ROTO PRINTING CYLINDER
3) OFFSET PRINTING MACHINE ROLLERS
4) PAPER MACHINE ROLLERS
5) PAPER MACHINE PAPER INDUSTRIES IRON ROLL
6) VALMET PAPER MACHINE PAPER INDUSTRIES IRON ROLL
7) SUGAR MILL MACHINE INDUSTRIES IRON ROLL
8) MILL ROLLS ROLLER FLOUR
9) CHILL ROLLS MILL ROLLS FLOUR
10) PRESS MACHINE ROLLER
11) PRESS ROLLER
12) RUBBER ROLLER
13) CONVEYOR ROLLER SECTION ROLL
14) ROLLER CONVEYOR
15) INTERROLL ROUND CONVEYOR ROLLER SPRING LOADED
16) BOREWELL DRILLING

UNIT-2 : HEAVY ERW PIPE MANUFACTURING

BOREWELL DRILLING SECTOR



BOREWELL DRILLING PIPE



BOREWELL DRILLING PIPE



BOREWELL DRILLING



BOREWELL



BOREWELL DRILLING METHODS



MS STRAIGHT SHANK BOREWELL DRILLING PIPE

1) ROTO PRINTING MACHINE ROLLERS



ROTO GRAVURE PRINTING MACHINE



ROLLER PLAIN ROTOGRAVURE



ROTO GRAVURE MACHINE PART



ROLL FOR ROTOGRAVURE BAG



ROTO GRAVURE MACHINE ROLLER



ROTO GRAVURE PRINTING PRESS

Products

- Heavy ERW Pipes
- 114 mm OD to 234 mm OD
- 6 mm to 9 mm Thickness

Applications

- Water Transmission
- Solar Structures
- Infrastructure Projects
- Telecom Towers
- Industrial Structures

Production Capacity

- 120 MT Per Day
- 3,120 MT Per Month
- 37,440 MT Per Year

Employment

- Approx. 80–90 Personnel

AFI METALTECH INDUSTRIES PVT LTD

CDW Pipes Manufacturers

Cold Drawn Welded CDW lines and cylinders are extensively used in various modern applications because of their high strength, accuracy, and smooth completion. **AFI METALTECH INDUSTRIES PVT LTD** is one of the top Cdw pipe manufacturers and cylinders makers that has achieved popularity for providing probably the best lines and cylinders in the Indian market.

What is the Difference between ERW and CDW Pipes?

keywords: erw pipe, cdw pipe, erw pipe vs ceu pipe

Electric resistance welded pipes (ERW steel pipe) are longitudinally welded from metal after moving it afterward. CDW pipes are produced by expelling the metal to the required length; Hence ERW pipes have a welded joint in its cross-section, while CDW pipes do not have any joint in its cross-section all through its length.

Welded tubes are cold drawn over mandrel when the application requires close dimensional resistance. They are called **CEW tubes** or CDW tubes. These tubes are broadly used in the automotive industry and furthermore to manufacture gears, special-purpose machines, hydraulic hardware, apparatus, and so forth. Much the same as seamless precision tubes, they too have low carbon content, are very flexible, reasonable for bowing. If required, these tubes will be toughened after being drawn, fixed, and experience a pickling procedure that gives it a fantastic flawless package process.

ERW Pipe VS. CEW Pipe: What's the Difference?

What are ERW and CEW?

ERW and CEW are both welding process types. ERW stands for electric resistance welding, while CEW stands for cold electric welding. Both methods use electricity to weld metals together, but they differ in how the electricity is used.



Difference between ERW and CEW steel pipes:

1. Manufacturing process

There are significant differences in the manufacturing processes of resistance welded pipe (ERW) and cold drawn electric welded pipe (CEW). ERW pipe is formed by heating a strip of steel and passing it through rollers to form it into a cylinder. An electric charge is then used to fuse the material, welding the edges together. In contrast, the CEW process involves pulling a heated steel rod through a die, creating a seamless tube. There are pros and cons to both methods, but it mainly depends on the specific application.

2. Strength and durability

One of the most critical factors when selecting pipe is its strength and durability. ERW pipe has a smooth surface finish and is generally stronger than CEW pipe. However, CEW pipes are more resistant to external stresses such as vibration and shock. They also have a higher durability limit, meaning they can withstand greater pressures and strains than ERW pipes.

3. Cost and availability

Another important factor when choosing pipe is its cost and availability. ERW pipes are generally less expensive than CEW pipes, which makes them more popular in the market. However, in some cases, the greater durability and durability of CEW pipe may justify the additional cost. It also depends on material availability, manufacturing costs and shipping costs, which may vary by supplier and location.

4. Maintenance

Pipeline maintenance and upkeep is critical to ensuring the longevity of your pipes. ERW and CEW pipes require little maintenance, but their regulations vary widely. ERW pipes may require coating or sealing since welds are more susceptible to rust and corrosion. In contrast, CEW pipe is seamless, which reduces the chance of corrosion and leaks. However, they require regular cleaning to remove impurities and prevent clogging.

5. Application areas

The intended application is critical in determining the type of pipe required. ERW pipe is widely used in construction, water systems, and plumbing systems because it is affordable and easy to fabricate. CEW pipes, on the other hand, are suitable for high-pressure applications such as oil and gas transportation, hydraulic systems, and the automotive industry. They are the first choice in areas where reliability and durability are critical.

Which is better, ERW or CEW?

As for which process is better, there is no clear answer. Each has its advantages and disadvantages. ERW welding is faster and more economical, but may cause weld quality issues. CEW welding is slower and more expensive, but produces higher quality welds.

Clarifying common cognitive misunderstandings

1. "CEW pipe is seamless pipe": This is incorrect. CEW pipe uses ERW welded pipe as its base material and is essentially still a welded pipe, but the weld is invisible after cold drawing.
2. "ERW pipe cannot be used in high-pressure applications": one-sided. High-end ERW pipe (such as API 5L X70 grade) can withstand pressures exceeding 2850 psi after weld heat treatment and is suitable for medium-pressure oil and gas transportation.
3. "CEW pipe is too expensive to be practical" : incorrect. In hydraulics, automotive, and other fields, CEW pipe can replace seamless pipe at a 20%-30% cost reduction while offering comparable performance.

Conclusion:

Choosing the right pipe for your application is critical to ensuring safe and efficient operation. Whether it is ERW or CEW pipe, they have unique advantages and disadvantages. By understanding the differences between the two, you can make an informed decision based on

your needs and budget. It is necessary to consult a **PMC [carbon steel pipe manufacturer](#)** to help you evaluate the various options and select the pipe that best suits your requirements.

Tips: [ASTM A53 Gr.B](#) is the grade in ERW high frequency welded pipe, divided into A and B grades. API 5L Gr.B is also the American standard material, [A53 GR.B ERW](#) refers to the electric resistance welded steel pipe of A53 GR.B; API 5L GR.B Welded refers to the material Welded steel pipe of API 5L GR.B. ASTM is only a set of specifications. ASTM steel pipe A53 A corresponds to the Chinese standard GB8163 raw material is 10# steel, and A53 B corresponds to the Chinese standard GB8163 raw material 20#.

For example: ASTM (standard) A53 (grade) gr is grade (abbreviation of grade) b (grade B)

- **【Prev】** : [Principle of High Frequency DC Resistance Welding \(ERW\)](#)
- **【Next】** : [The Packaging Method and Main Parameters of Tubing and Casing](#)

Recommend

- Carbon Composite Steel Pipes for Water Supply Pipelines...
- Pipeline Requirements for Long-Distance Steam Transmission Pipelines...
- Stainless Steel Seamless Pipes for Drinking Water Pipelines...

CDW Lines Production Cycle:

Assembling of CDW pipes is comprised of a few stages:

- **Unrefined substance Choice:**
- **Welding:**
- **Cold Drawing:**
- **Heat Treatment:**
- **Repairing:**
- **Surface Wrapping up:**
- **Cutting and Bundling:**



WHY AFI METALTECH INDUSTRIES PVT LTD (FUTURE PLAN)

(Upcoming Leading Manufacturer of ERW, CDW & SS Pipes)

- ◆ **Advanced Manufacturing Facility (Future Ready Plant)**

AFI METALTECH INDUSTRIES PVT LTD is developing a **modern, state-of-the-art manufacturing facility** equipped with advanced machinery and automation systems for ERW, CDW, and Stainless Steel pipe production.

The plant is designed to deliver:

- ✓ High dimensional accuracy
- ✓ Superior surface finish
- ✓ Consistent product quality

◆ **Advanced Manufacturing Facility (Future Ready Plant)**

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The plant is designed to deliver:

- ✓ High dimensional accuracy
- ✓ Superior surface finish
- ✓ Consistent product quality

◆ **Commitment to Quality**

The company is committed to maintaining **strict quality control standards** at every stage of production — from raw material selection to final inspection.

All products will be tested as per:

- ✓ IS Standards
- ✓ ASTM Standards
- ✓ International Quality Norms

◆ **Strong Industry Experience**

Backed by over **65 years of family business legacy** and **30+ years of hands-on experience**, AFI METALTECH has a deep understanding of:

- ✓ Steel pipe industry
- ✓ Customer requirements
- ✓ Market demand

This ensures reliable and performance-driven products.

◆ **Wide Product Range (Future Manufacturing)**

AFI METALTECH INDUSTRIES will manufacture:

- ✓ ERW Round Pipes (25 NB – 300 NB)
- ✓ Heavy & Non-Standard Pipes
- ✓ CDW Precision Tubes

- ✓ Stainless Steel (SS) ERW Pipes
- ✓ Stainless Steel (SS) CDW Pipes

👉 Custom sizes and special applications will also be supported.

◆ Customer-Centric Approach

The company focuses on building **long-term relationships** by offering:

- ✓ Consistent supply
- ✓ On-time delivery
- ✓ Customized solutions
- ✓ Strong after-sales support

◆ Technology & Continuous Improvement

AFI METALTECH is committed to:

- ✓ Continuous process improvement
- ✓ Adoption of latest technology
- ✓ Automation & efficiency

This helps maintain competitive pricing and high productivity.

◆ Sustainability & Responsibility

The project is designed with a focus on:

- ✓ Environment-friendly processes
- ✓ Efficient resource utilization
- ✓ Compliance with pollution norms

🔥 FINAL POSITIONING LINE

AFI METALTECH INDUSTRIES PVT LTD aims to become a **trusted and leading manufacturer of ERW, CDW, and Stainless Steel pipes in India**, delivering quality, reliability, and long-term value to its customers.

🏭 AFI METALTECH INDUSTRIES PVT LTD

Leading CRC Pipe Manufacturer in India (Future Vision)

◆ About CRC Pipes

Cold Rolled Coil (CRC) pipes, also known as cold rolled steel pipes, are widely used across industries for their **high strength, superior surface finish, and excellent corrosion resistance**.

AFI METALTECH INDUSTRIES PVT LTD is establishing itself as a **modern and reliable manufacturer of CRC pipes**, designed to meet the growing demand of industries such as construction, automotive, engineering, and fabrication.

◆ What are CRC Pipes?

CRC pipes are manufactured from **cold rolled steel coils**, which undergo a cold rolling process to achieve:

- ✓ High dimensional accuracy
- ✓ Smooth surface finish
- ✓ Superior tensile strength

Unlike conventional welded pipes, CRC pipes offer **better uniformity and precision**, making them ideal for high-performance applications.

◆ Why Choose AFI METALTECH INDUSTRIES PVT LTD?

With strong industry background and future-focused manufacturing, **AFI METALTECH PVT LTD** stands out due to:

✓ Advanced Manufacturing Facility (Upcoming)

The company is setting up a **state-of-the-art plant** equipped with modern machinery and automation systems to ensure precision and consistency in every pipe.

✓ Commitment to Quality

All CRC pipes will be manufactured under strict quality control systems and tested as per:

- IS Standards
 - ASTM Standards
 - International norms
-

✓ Customization Capability

We offer customized CRC pipes in:

- Various sizes
- Thickness ranges
- Surface finishes

👉 As per specific client requirements

✓ Competitive Pricing

Our goal is to provide **high-quality pipes at competitive prices**, ensuring value without compromising on quality.

✓ On-Time Delivery

Efficient production planning and logistics ensure **timely delivery** for all orders.

✓ Durability & Performance

CRC pipes manufactured by AFI METALTECH will be designed to:

- ✓ Withstand harsh environments
 - ✓ Deliver long-term performance
 - ✓ Maintain structural integrity
-

◆ Applications of CRC Pipes

CRC pipes are used across multiple industries:

- Construction & Infrastructure
 - Automobile Industry
 - Furniture & Fabrication
 - Water & Gas Pipelines
 - Agricultural Equipment
 - Energy & Power Sector
-

◆ Benefits of CRC Pipes

1. Smooth surface finish
2. High strength and durability
3. Corrosion resistance
4. Dimensional accuracy
5. Customizable specifications

Our Strength

Backed by:

- ✓ **65+ years family business legacy**
- ✓ **30+ years personal experience**
- ✓ **Strong market presence across India**

AFI METALTECH is committed to becoming a **trusted and leading pipe manufacturer in India.**

Quality Assurance

Every product will go through:

- ✓ **Raw material inspection**
- ✓ **In-process quality checks**
- ✓ **Final testing and certification**

Ensuring only **premium quality products reach customers.**

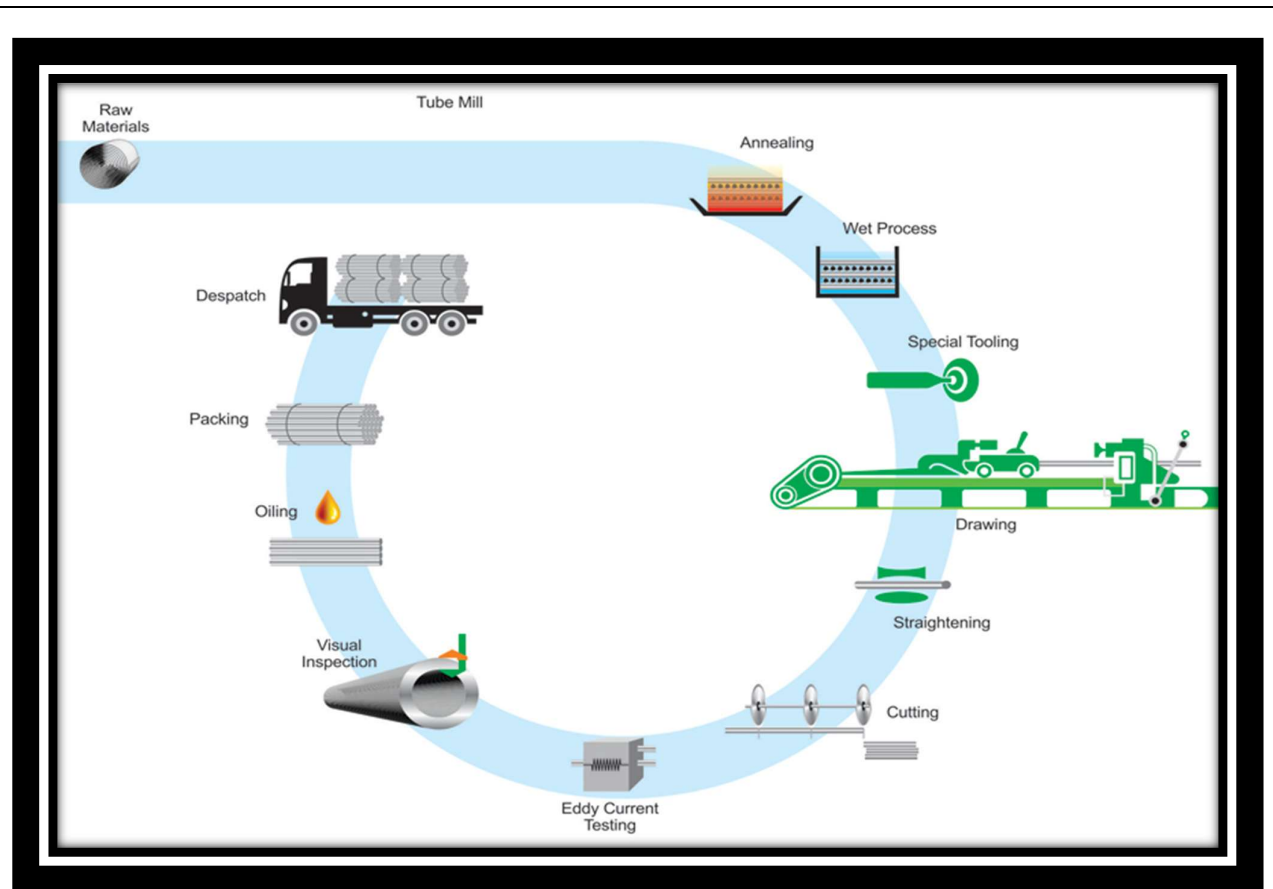


FINAL POSITIONING LINE

AFI METALTECH INDUSTRIES PVT LTD aims to become a **leading manufacturer of CRC, ERW, CDW, and Stainless Steel pipes**, delivering precision, quality, and reliability to industries across India.

CDW Steel Tubes

CDW tubes are customized products as required by customers for specific purposes wherein high precision, tolerance, tensile strength, mechanical enhancement, better surface finish, custom sizes and quantities etc are desired. Herein, the finished ERW tube is the starting raw material from which the CDW tubes are made. ERW tubes are subjected to processes like pickling, annealing, lubricating and swaging. Next, the desired size is attained by passing the tube through multiple drawing operations. A final round of visual and mechanical inspection is followed by oiling, packing and dispatch.



CDW PIPES USED SECTOR

CDW PIPES (8 MM - 65 MM NB) – INDUSTRIES WITH HIGH DEMAND

CDW TUBES KA MARKET ERW SE ZYADA PREMIUM HOTA HI BECAUSE WRLD INVISIBLE + HI ACCURACY

1) AUTOMOBILE INDUSTRY (HIGHEST DEMAND)

- Shock absorber tubes
- Steering column tubes
- Fuel lines
- Brake pipes
- Clutch tubes
- Clutch tubes
- Chassis components
- Telescopic front fork (bikes)

(8 MM – 50 MM OD KA SABSE ZYADA DEMAND RAHTA HI)

2) TWO – WHEELER & THREE - WHEELER PARTS

- Handle bar
- Frame tubes
- Suspension parts

3) HYDRAULIC & PNEUMATIC INDUSTRY

- Hydraulic cylinder tubes
 - High – pressure air lines
 - Precision fittings
- (20 – 65 NB CDW KA HIGH DEMAND BAHUT HOTA HI)

4) FURNITURE INDUSTRY

- Premium office chair components
 - Hospital bed mechanisms
 - Wheelchair frames
- (CDW strength + invisible weld – high load bearing)

5) FITNESS & GYM EQUIPMENT

- High strength handles
- Machines ke moving parts
- Dumbbell rods

6) INDUSTRIAL MACHINERY

- Textile machine parts
- Packaging machines
- CNC machine

7) BICYCLE & E – BIKE INDUSTRY

- Frame tubes
 - Fork tubes
- Handle & handle – post tubes

8) DEFENCE & AEROSPACE (LIMITED BUT PREMIUM DEMAND)

- Precision instrument tubes
- Recoil system tubes
- Aircraft seat

9) MEDICAL EQUIPMENT

- Stretchers
- Surgical tubes
- High precision

CDW / HR BRIGHT PIPE GRADE

- 1) IS 3074 (CDW 1 / CDW 2)
- 2) 3601
- 3) IS 3074 GRADE ERW – C + COLD DRAWN
- 4) EN 1010 / 1012 / 1018
- 5) EN 10305 – 2 (E235 / E255/E355)

HIGH DEMAND SECTORS

- AUTOMOBILE INDUSTRY**

Shock absorber tubes
Steeringcolumn
Fuel & brake pipes
Stabilizer bars

- FURNITURE INDUSTRY**

Office chairs
Hospitalbeds
Tables

- ENGINEERING & FABRICATION**

- 1) Construction & Infrastructure
- 2) General pupose

STANDAR AND NON STANDARD HR – BRIGHT ERW AND CDW PIPES

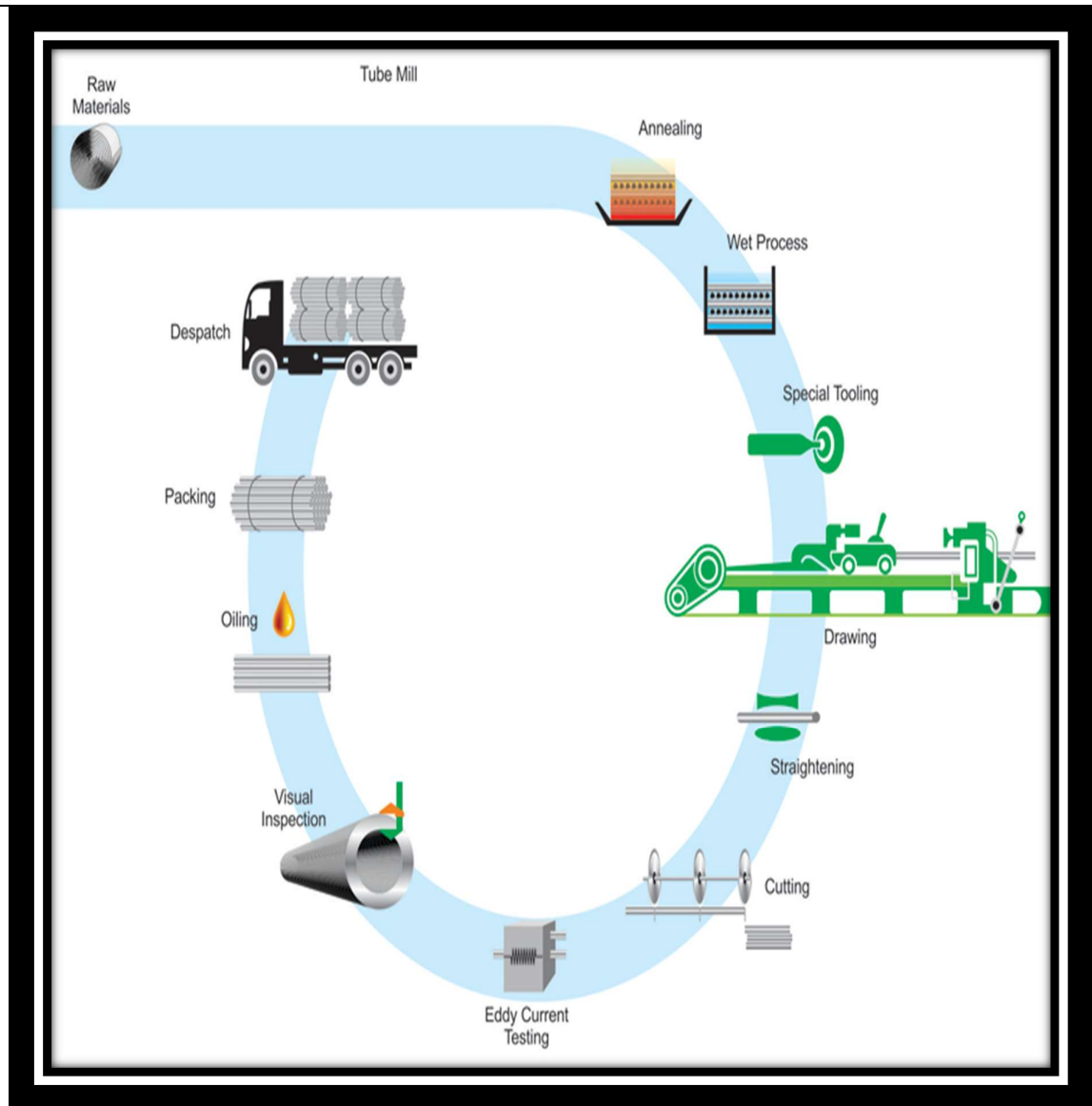
STANDARD SIZE

S/NO	MM NB	THICK MM NB
1	6 MM NB	.5 MM THICK TO 1.5 MM THICK
2	8 MM NB	.5 MM THICK TO 1.5 MM THICK
3	10 MM NB	.5 MM THICK TO 1.5 MM THICK
4	15 MM NB	.5 MM THICK TO 1.5 MM THICK
5	20 MM NB	.5 MM THICK TO 1.5 MM THICK
6	25 MM NB	.5 MM THICK TO 1.5 MM THICK
7	32 MM NB	.5 MM THICK TO 1.5 MM THICK
8	40 MM NB	.5 MM THICK TO 1.5 MM THICK
9	50 MM NB	.5 MM THICK TO 1.5 MM THICK
10	65 MM NB	.5 MM THICK TO 1.5 MM THICK

NON STANDARD SIZE

S/NO	OD MM NB	THICK MM
1	10 MM OD	1.2 MM THICK TO 2 MM THICK
2	12.7 MM OD	1.2 MM THICK TO 2 MM THICK
3	16 MM OD	1.2 MM THICK TO 2.3 MM THICK
4	19 MM OD	1.2 MM THICK TO 3.2 MM THICK
5	25 MM OD	1.2 MM THICK TO 3.2 MM THICK
6	30 MM OD	2 MM THICK TO 3.5 MM THICK
7	38 MM OD	2 MM THICK TO 3.5 MM THICK
8	41 MM OD	2 MM THICK TO 3.5 MM THICK
9	44.5 MM OD	1.2 MM THICK TO 3.5 MM THICK
10	51 MM OD	1.2 MM THICK TO 3.5 MM THICK
11	57 MM OD	1.2 MM THICK TO 3.5 MM THICK

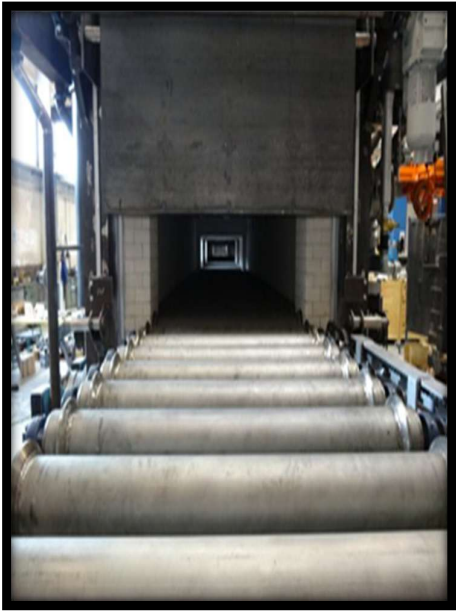
CDW Steel Tubes



CDW TUBE PLANT – (Size Range : OD 8 mm to 70 mm & Thick 0.80mm to 4.00mm)

Along with Roller Hearth Furnace 1.5 Ton / hour capacity supplied,

AFI METALTECH INDUSTRIES PVT LTD



CDW Tube Division

Sl.NO	PAETICULARS	CAPACITY	QTY . IN NOS
1	ROLLER BENCH	1.5 MT / HR	1
2	DRAW BENCH	40 TON CAPACITY	3
3	NITROGEN GAS PLANT	100 NM3	1
4	SURACE TREATMENT PLANT		1
5	THERMO PACK – THERMIC HEATER		1
6	SWAGING / PUSH POINTING MACHINE		5
7	CUTTING MACHINE	½” to 2”	2
8	STRAIGHTENING MACHINE – 1.6 ROLL TYPE	8 MM OD TO 30 MM OD	1
9	STRAIGHTENING MACHINE – 2.10 ROLL TYPE	30 MM OD AND ABOVE	1
10	EDDY CURENT TESTER MACHINE		1

AFI METALTECH INDUSTRIES PVT LTD

PRODUCT RANGE FOR CDW TUBES

CDW	THICKNESS (M M)														
OD (MM)	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.80	3.00	3.25	3.60	4.00
8.00	0.80	0.90	1.00	1.25											
9.00	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00							
10.00	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00							
12.00	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60					
12.70	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60					
14.00	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60				
15.00	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00			
18.00	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00			
19.05	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25		
20.00	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	
22.23	0.80	0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	
25.40		0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
28.58		0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
31.75		0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
34.00		0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
38.00		0.90	1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
41.28			1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
44.45			1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
45.00			1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
46.00			1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
48.30			1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
50.80			1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
55.56			1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
57.15			1.00	1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
60.33				1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
63.50				1.25	1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
65.00					1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
69.85					1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00
70.00					1.50	1.60	1.80	2.00	2.30	2.60	2.60	3.00	3.25	3.60	4.00

TECHNICAL SPECIFICATIONS [space]

SIZE

OD)(mm)	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.50	2.8/3.0
9.53	0.80	0.90	1.00	1.20	1.6/1.5				
10.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00			
11.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00			
12.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00			
12.70	0.80	0.90	1.00	1.20	1.6/1.5	2.00			
13.80	0.80	0.90	1.00	1.20	1.6/1.5	2.00			
14.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00			
14.25	0.80	0.90	1.00	1.20	1.6/1.5	2.00			
15.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00			
15.88	0.80	0.90	1.00	1.20	1.6/1.5	2.00			
16.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	
17.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	
17.50	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	
18.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	
19.05	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
20.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
21.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
21.35	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
21.70	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
22.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
22.20	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
23.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
24.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
25.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0

25.40	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
26.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
26.80	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
27.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
27.20	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
27.50	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
27.80	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
28.00	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0
28.60	0.80	0.90	1.00	1.20	1.6/1.5	2.00	2.20	2.20	2.8/3.0

NOTE:

- Sizes Other than mentioned above can also be manufactured up to a maximum 70 mm OD of 4mm thickness.
- ID X OD, OD X Thickness, ID X Thickness, ID X OD X Thickness Parameters can be maintained.

Tubes can be supplied in 'As Drawn' or 'Annealed' condition as requirement

AFI METALTECH INDUSTRIES PVT LTD

ERW PIPE WILL THICKNESS SIZE CHART :

DN	Out Diameter		Thickness Chart														
	A series	B series	Sch	Sch	Sch	LG	Sch	Sch	STD	Sch	Sch	XS	Sch	Sch	Sch	Sch	Sch
			5s	10s	20s		20	30		40	60		80	100	120	140	180
32	42.4	38	1.6	2.8	3.2	-	-	-	-	3.6	-	-	5.0	-	-	-	6.3
40	48.3	45	1.6	2.8	3.2	-	-	-	-	3.6	-	-	5.0	-	-	-	7.1
50	60.3	57	1.6	2.8	3.6	-	3.2	-	-	4.0	-	-	5.6	-	-	-	8.8
65	76.1	76	2.0	3.0	3.6	-	4.5	-	-	5.0	-	-	7.1	-	-	-	10.0
80	88.9	89	2.0	3.0	4.0	-	4.5	-	-	5.6	-	-	8.0	-	-	-	11.0
90	101.6	-	2.0	3.0	4.0	-	4.5	-	-	5.6	-	-	8.0	-	-	-	12.5
100	114.3	108	2.0	3.0	4.0	-	5.0	-	-	5.9	-	-	8.8	-	11.0	-	14.2
125	139.7	133	2.9	3.4	5.0	-	5.0	-	-	6.3	-	-	10.0	-	12.5	-	16.0
150	168.3	159	2.9	3.4	5.0	-	5.6	-	-	7.1	-	-	11.0	-	14.2	-	17.5

200	219.1	219	2.9	4.0	6.3	-	6.3	7.1	-	8.0	10.0	-	12.5	16.0	17.5	20.0	22.2	
250	273.0	273	3.6	4.0	6.3	-	6.3	8.0	-	8.8	12.5	-	16.0	17.5	22.2	25.0	28.0	
300	323.9	325	4.0	4.5	6.3	-	6.3	8.8	-	10.0	14.2	-	17.5	22.2	25.0	28.0	32.0	
350	355.6	377	4.0	5.0			8.0	8.0	10.0	10.0	11.0	16.0	13.0	20.0	25.8	28.0	32.0	36.0
400	406.4	426	4.0	5.0			8.0	8.0	10.0	10.0	12.5	17.5	13.0	22.2	28.5	30.0	36.0	40.0
450	457.0	478	4.0	5.0	-		8.0	8.0	11.0	10.0	14.2	20.0	13.0	25.0	30.0	36.0	40.0	45.0
500	508.0	529	5.0	5.6	-		8.0	10.0	12.5	10.0	16.0	20.0	13.0	28.0	32.0	40.0	45.0	50.0
550	559	-	5.0	5.6	-		8.0	-	-	10.0	-	-	13.0	30.0	-	-	-	-
600	610	630	5.6	6.3			8.0	-	-	10.0	17.5	-	13.0	32.0	-	-	-	-



CDW PIPE WALL THICKNESS SELECTION BASIS

1. Select by purpose

Low-pressure water pipe/gas: ASTM A53 SCH 40

Typical wall thickness range: 2.77mm~8.18mm

Oil/gas transmission: API 5L B

Typical wall thickness range: 3.91mm~12.70mm

High-pressure industrial pipeline: API 5L X42/X52

Typical wall thickness range: 6.0mm~15.0mm

Building, bridge, mechanical structure pipe: ASTM A500 ERW (cold-formed welded carbon steel structure pipe)

Typical wall thickness range (round pipe): 1.0mm~22.0mm; outer diameter: 21.3mm ~ 660mm.

Building scaffolding: GB/T 3091

Typical wall thickness range: 2.0mm~4.0mm

can take into account both economy and performance, and are suitable for most medium and low pressure scenarios. 2. Select by pressure level

Low pressure ($PN \leq 1.6\text{MPa}$): wall thickness $\geq 2.5\text{mm}$ (such as DN50×3.0mm)

Medium pressure ($PN \leq 4.0\text{MPa}$): wall thickness $\geq 5.0\text{mm}$ (such as DN150×7.11mm)

High pressure ($PN \geq 10\text{MPa}$): wall thickness $\geq 10\text{mm}$ (such as DN300×12.7mm)

3. Wall thickness calculation formula

For ERW pipes that need to bear pressure, ASME B31.3 Formula to estimate minimum wall thickness:

$$t = 2 \times (S \times E + P \times Y) \times P \times D$$

CDW PIPE WALL THICKNESS SELECTON BASIS

1. Select by purpose

Low-pressure water pipe/gas: ASTM A53 SCH 40

Typical wall thickness range: 2.77mm~8.18mm

Oil/gas transmission: API 5L B

Typical wall thickness range: 3.91mm~12.70mm

High-pressure industrial pipeline: API 5L X42/X52

Typical wall thickness range: 6.0mm~15.0mm

Building, bridge, mechanical structure pipe: ASTM A500 ERW (cold-formed welded carbon steel structure pipe)

Typical wall thickness range (round pipe): 1.0mm~22.0mm; outer

diameter: 21.3mm ~ 660mm.

Building scaffolding: GB/T 3091

Typical wall thickness range: 2.0mm~4.0mm

can take into account both economy and performance, and are suitable for most medium and low pressure scenarios2. Select by pressure level

Low pressure (PN≤1.6MPa): wall thickness ≥2.5mm (such as DN50×3.0mm)

Medium pressure (PN≤4.0MPa): wall thickness ≥5.0mm (such as DN150×7.11mm)

High pressure (PN≥10MPa): wall thickness ≥10mm (such as DN300×12.7mm)

3. Wall thickness calculation formula

For ERW pipes that need to bear pressure, ASME B31.3 Formula to estimate minimum wall thickness:

$$t=2 \times (S \times E + P \times Y) P \times D$$

t: minimum wall thickness (mm)

P: design pressure (MPa)

D: outer diameter (mm)

S: allowable material stress (MPa)

E: weld coefficient (0.85~0.95 for ERW pipe)

Y: temperature correction factor (0.4~0.7)

ERW pipe wall thickness tolerance:

API 5L wall thickness tolerance: +15% / -12.5%

ASTM A53 wall thickness tolerance: $\pm 10\%$

GB/T 3091 wall thickness tolerance: $\pm 10\%$ ($DN \leq 100\text{mm}$); $\pm 7.5\%$ ($DN > 100\text{mm}$).

FAQ: Q1: What is the difference in wall thickness between ERW pipe and seamless pipe?

→ Under the same specification, the wall thickness of ERW pipe is more uniform (controlled by cold rolling process), but [seamless pipe](#) can produce thicker wall (such as SCH 160).

Q2: Does the wall thickness of galvanized ERW pipe need to be increased?

→ No, the effect of the galvanized layer ($50 \sim 100\mu\text{m}$) on strength can be ignored, but attention should be paid to the adhesion of the zinc layer.

Q3: How to detect the wall thickness of ERW pipe?

→ Ultrasonic thickness gauge (UT) or caliper measurement (avoid the weld area).

Q4: Can ERW pipe replace seamless pipe?

→ Yes, but it must meet the following conditions:

Pressure $\leq 10\text{MPa}$ and no severe impact (such as seamless pipes required for hydraulic systems).

Ensure the quality of welds through UT testing.

Q5: Can ASTM A500 ERW pipe be used for pressure fluid transportation?

→ Not recommended, fluid pipe standards such as [ASTM A53](#) or API 5L should be selected.

Q6: What are the differences in mechanical properties between square pipes and round pipes?

→ At the same level, round pipes have better torsion resistance,

and square pipes have better bending resistance (cold work hardening effect at corners).

Q7: Difference between A500 ERW and A53 ERW

ASTM A500 is designed for structural design (non-fluid transportation), emphasizing mechanical properties and cross-sectional shape tolerance.

ASTM A53 is mainly used in high-pressure systems in the fields of construction, machinery, and automobiles. The design uses cover stress-bearing structural parts and general industrial pipeline systems, and are suitable for conveying non-corrosive media such as steam, water, gas, and air.

In short, through reasonable selection, ERW pipelines

COLD DRAWN SEAMLESS / WELDED . / TUBE CDW TUBE

The process of manufacturing cold drawn tubes – both seamless and welded, embodies an intricate combination of technology and precision that results in products of exceptional strength, accuracy, and quality. Cold drawn tubes are recognized industry-wide for their superior mechanical properties and dimensional accuracy, qualities that are a consequence of a unique production process that distinguishes them from other tubular products.

Beginning with seamless tubes, these are produced from a solid round steel 'billet' which is heated and then pushed or pulled over a form until the steel is shaped into a hollow tube. The cold drawing process of a seamless tube involves pulling the tube through a die and over a mandrel. This reduces the diameter of the tube and improves surface finish, while also increasing the strength of the steel manifold.

Cold drawn welded tubes, on the other hand, commence as a flat strip, which is rolled to form a cylindrical shape. Subsequently,

the opposing edges are then fused together using an electric weld, post which the tube undergoes the cold drawing process. The cold drawing for welded tubes significantly enhances their concentricity and yield strength, with the added benefit of minimizing variability.

In terms of benefits, cold drawn tubes possess several unique advantages. Due to the extra processing involved, these tubes inherently possess increased strength and higher physical properties compared to their hot-finished counterparts. Additionally, the desirable smooth and shiny surface finish of cold drawn tubes reduces the need for additional finishing processes.

Cold drawn seamless tubes are renowned for their uniformity in terms of shape and size. They offer excellent dimensional precision, both on outer and New Eagle Industrial Corporation diameters, ensuring a precise fit in complex mechanical systems. Welded tubes, when cold drawn, exhibit an impressive strength-to-weight ratio and can be produced in custom sizes, therefore making them an ideal choice when weight or space constraints are a consideration.

Applications of cold drawn seamless/welded tubes are diverse and widespread, encompassing sectors such as the automotive industry, hydraulic machinery, heat exchangers, and construction equipment manufacturing, among others.

High strength, enhanced mechanical properties, and dimensional precision of cold drawn seamless and welded tubes make them suitable for a vast array of applications. The choice of using these tubes not only signifies a lean towards quality and performance but also an appreciation of technological precision in the era of advanced materials and manufacturing techniques.

AFI METALTECH INDUSTRIES PVT LTD

AVAILABLE TUBES IN OUR WAREHOUSE



THIN WALL TUBING



E R W TUBE



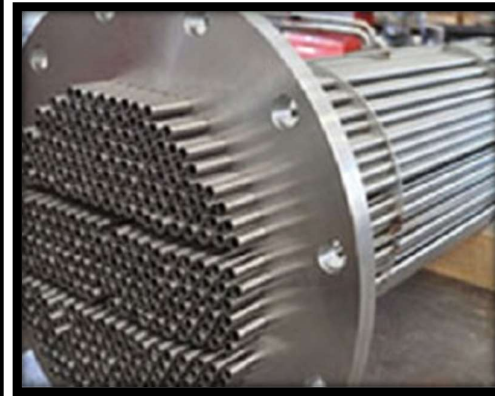
E R W TUBE



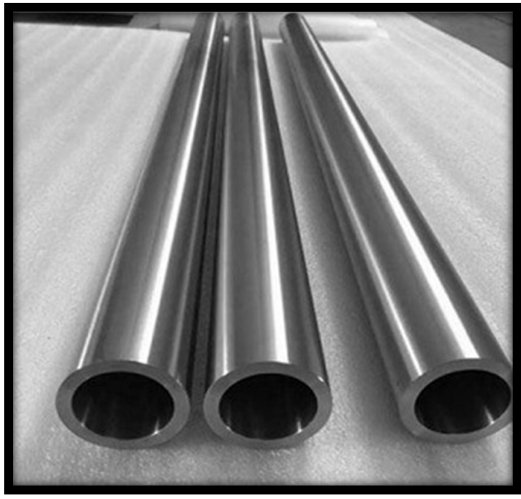
BRIGHT ANNEALED TUBE



COIL TUBING



CONDENSER TUBE



SEAMLESS TUBES



HEAT EXCHANGER



CDW TUBE



TUBE

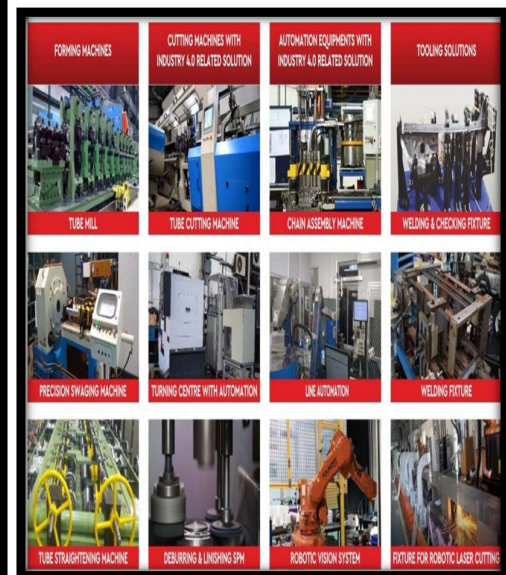
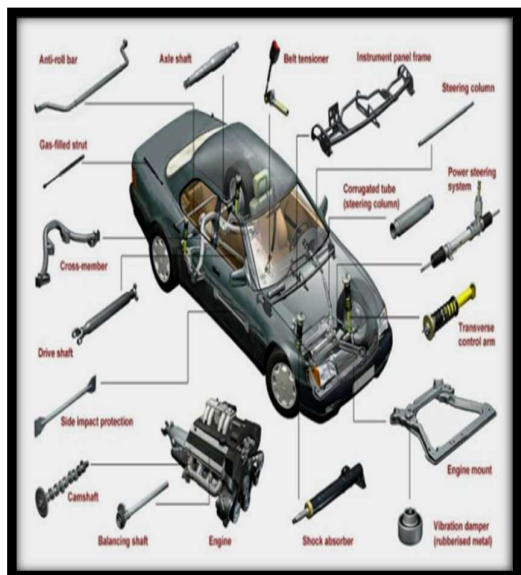


BRIGHT ANNEALED TUBE

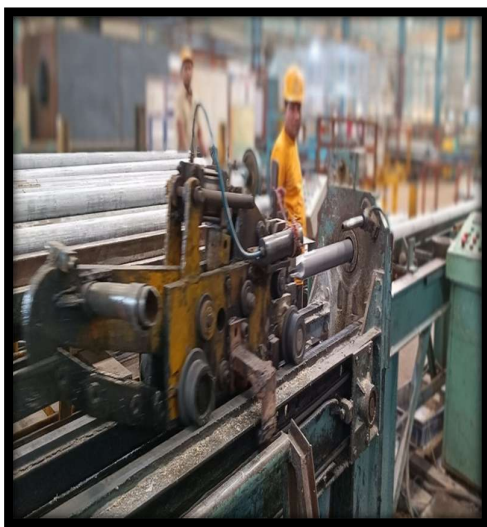


BRIGHT ANNEALED TUBE

CDW PIPE USED SECTOR IMAGES



CDW PIPE INDUSTRIES MACHINE



Products

- CDW Precision Tubes
- Hydraulic Tubes
- Automobile Tubes

Applications

- Automobile Industry

- Hydraulic Cylinders
- Pneumatic Systems
- Engineering Equipment
- Industrial Machinery

Production Capacity

- 8.8 MT Per Day
- 230 MT Per Month
- 2,746 MT Per Year

Employment

- Approx. 40–50 Personnel

WEBSITE MENUS

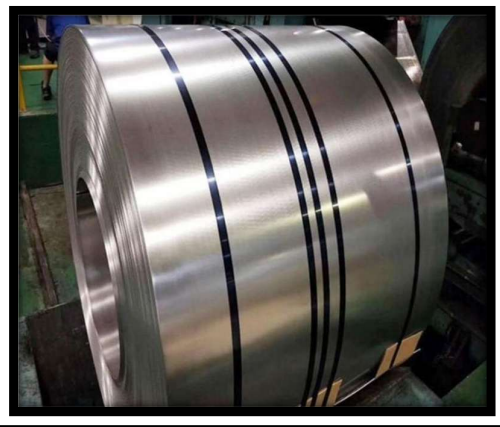
1. Home
2. About Us
3. Promoter Profile
4. Manufacturing Units
5. Products
6. Industries Served
7. Infrastructure
8. Quality Assurance
9. Project Gallery
10. Careers
11. Contact Us

AFI METALTECH INDUSTRIES PVT LTD



STAINLESS STEEL PIPE MANUFACTURING (SS 304 / SS 316) (ERW + CDW – COMPLETE GUIDE)

◆ 1. RAW MATERIAL (START POINT)



✓ **Material:**

- SS 304
- SS 316

✓ **Form:**

- CR Coil / HR Coil
- Thickness: **0.5 mm – 6 mm**

◆ **2. SIZE RANGE (Aap kya bana sakte ho)**

◆ **ERW (SS Pipes)**

- OD: **6 mm – 114 mm**
- Thickness: **0.5 mm – 3 mm**

👉 Furniture + structure + light industrial

◆ **CDW (Precision Tubes)**

- OD: **6 mm – 76 mm**
- Thickness: **0.5 mm – 2.5 mm**

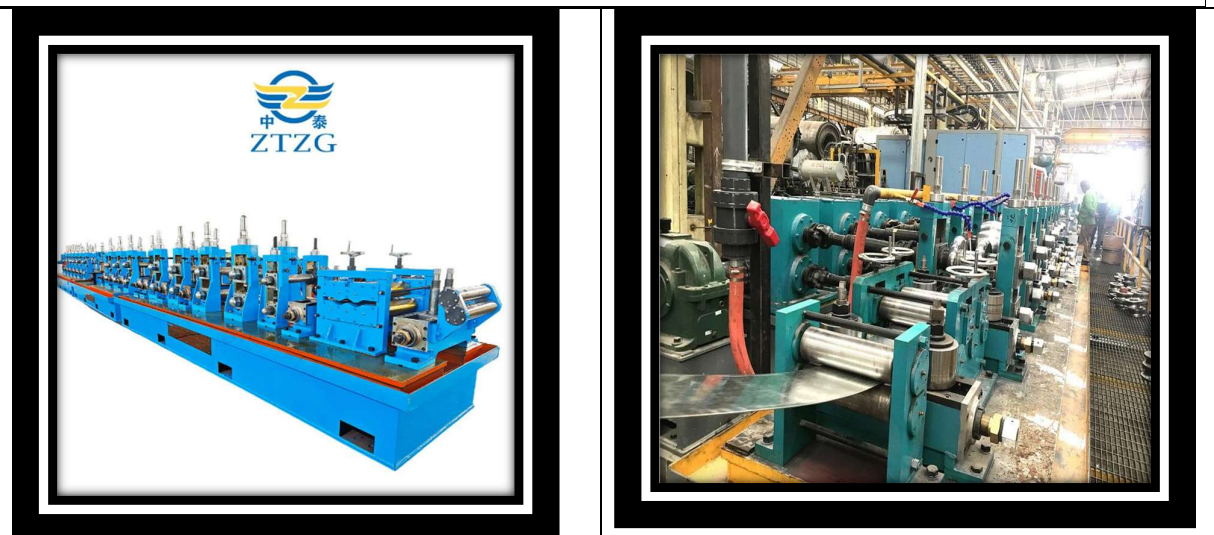
👉 Automobile + hydraulic + precision

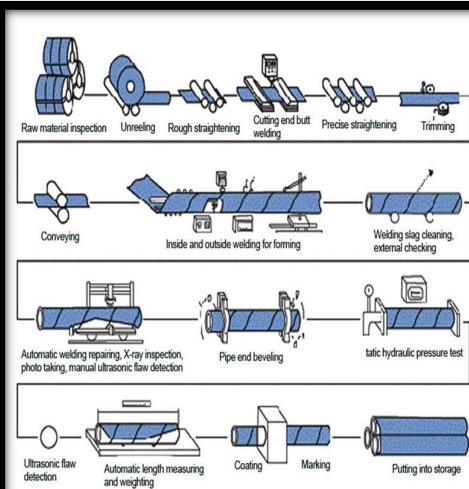
◇ **3. ERW PIPE MANUFACTURING PROCESS**

⚙️ **STEP-BY-STEP FLOW**

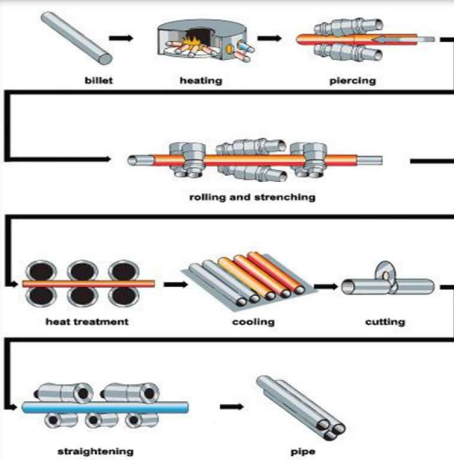
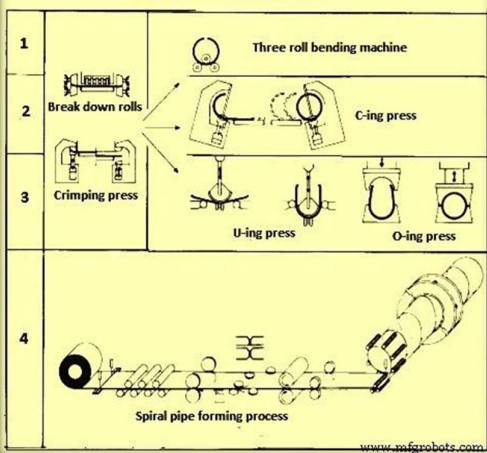
👉 Coil → Forming → Welding → Sizing → Cutting → Finishing

◆ **PROCESS DETAIL**





Pipe forming processes



1. Decoiling

- Coil machine me load hota hai

2. Strip Forming

- Roll se pipe shape banta hai

3. Welding (TIG / Laser)

- Seam weld hota hai

4. Weld Bead Removal

- Inside + outside smooth

5. Sizing

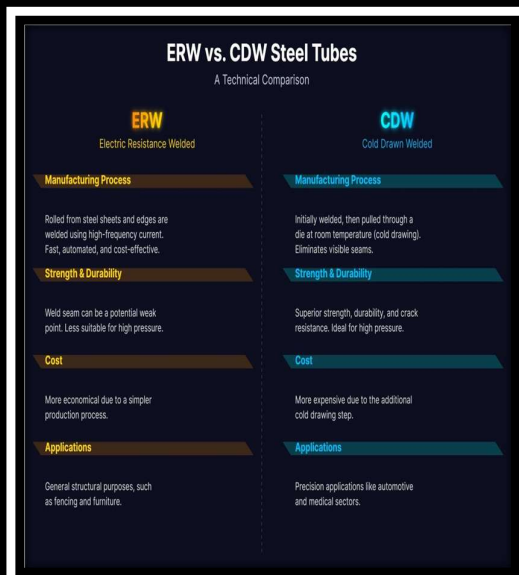
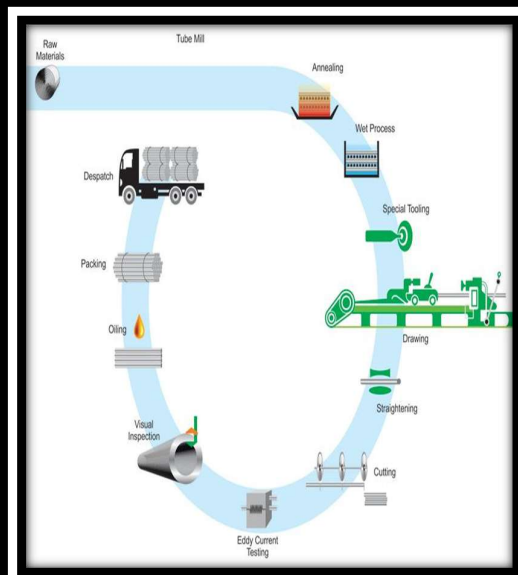
- Final OD fix

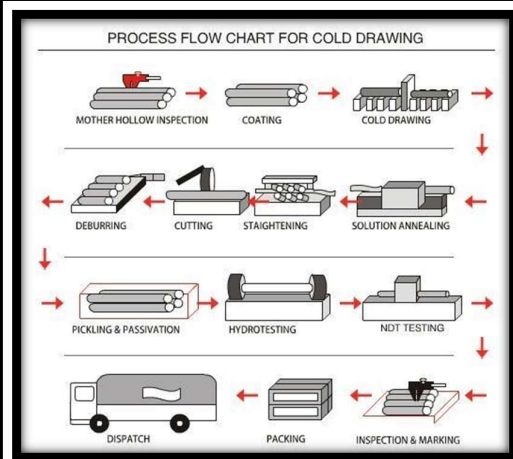
6. Cutting

- Required length

7. Polishing

- Mirror / matte finish





FLOW:

☛ ERW Tube → Pickling → Drawing → Annealing → Straightening

◆ DETAIL

1. Pickling → scale removal
2. Cold Drawing → size reduce + strength increase
3. Annealing → soft + bright
4. Straightening → accuracy

AFI METALTECH INDUSTRIES PVT LTD

SS PIPE WEIGHT CHART

SS 304 Pipe Weight Per Meter and Stainless Steel Tube Dimensions.

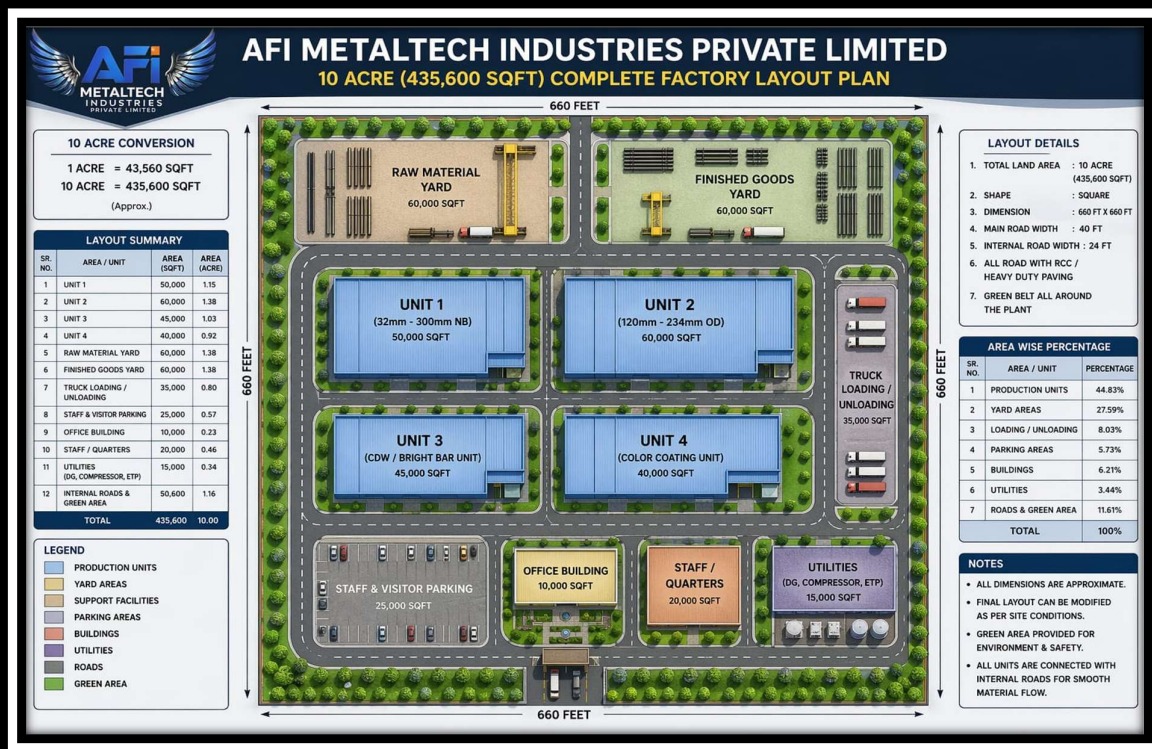
Nominal Bore		Outside Diamete	Sch-5S		Sch-10S		Sch-40S		Sch-80S		Sch-160S	
mm	INCH	Wt mm	Weight (Kg/mt)	Wt mm	Weight (Kg/mt)	Wt mm	Weight (Kg/mt)	Wt mm	Weight (Kg/mt)	Wt mm	Weight (Kg/mt)	Wt mm
3	1/8	10.3	1.24	0.276	1.24	0.28	1.73	0.37	2.41	0.47	-	-
6	1/4	13.7	1.24	0.390	1.65	0.49	2.24	0.631	3.02	0.80	-	-
10	3/8	17.1	1.24	0.490	1.65	0.63	2.31	0.845	3.20	1.10	-	-
15	1/2	21.3	1.65	0.800	2.11	1.00	2.77	1.27	3.75	1.62	4.75	1.94
20	3/4	26.7	1.65	1.03	2.11	1.28	2.87	1.68	3.91	2.20	5.54	2.89
25	1	33.4	1.65	1.30	2.77	2.09	3.38	2.50	4.55	3.24	6.35	4.24
32	1 1/4	42.2	1.65	1.65	2.77	2.70	3.56	3.38	4.85	4.47	6.35	5.61
40	1 1/2	48.3	1.65	1.91	2.77	3.11	3.68	4.05	5.08	5.41	7.14	7.25
50	2	60.3	1.65	2.40	2.77	3.93	3.91	5.44	5.54	7.48	8.74	11.1
65	2 1/2	73.0	2.11	3.69	3.05	5.26	5.16	8.63	7.01	11.4	9.53	14.9
80	3	88.9	2.11	4.51	3.05	6.45	5.49	11.30	7.62	15.2	11.1	21.3
100	4	114.3	2.11	5.84	3.05	8.36	6.02	16.07	8.56	22.3	13.49	33.54
125	5	141.3	2.77	9.47	3.40	11.57	6.55	21.8	9.53	31.97	15.88	49.11
150	6	168.3	2.77	11.32	3.40	13.84	7.11	28.3	10.97	42.7	18.2	67.56
200	8	219.1	2.77	14.79	3.76	19.96	8.18	42.6	64.6	64.6	23.0	111.2

WEIGHT & THICKNESS OF S.S GUAGE PIPES

Find here Stainless Steel Pipe Dimensions , SS Pipe Schedule Chart and Weight of Stainless Steel Pipe

DIMENSION		10 SWG (3.2 MM)	12 SWG (2.6 MM)	14 SWG (2.1 MM)	16 SWG (1.65 MM)	18 SWG (1.2 MM)	19 SWG (1.0 MM)
Size	OD	Weight/MTR	Weight/MTR	Weight/MTR	Weight/MTR	Weight/MTR	Weight/MTR
1/2"	12.7	0.754	0.651	0.552	0.452	0.342	0.290
5/8	15.875	1.006	0.856	0.718	0.582	0.437	0.369
3/4"	19.05	1.258	1.061	0.883	0.712	0.531	0.448
1"	25.4	1.762	1.470	1.214	0.972	0.720	0.605
1 1/4"	31.75	2.266	1.880	1.544	1.232	0.909	0.763
1 1/2"	38.1	2.770	2.289	1.875	1.492	1.098	0.920
2"	50.8	3.778	3.108	2.537	2.012	1.476	1.235
2 1/2"	63.5	4.786	3.928	3.198	2.531	1.854	1.550
3"	76.2	5.794	4.747	3.860	3.051	2.232	1.865
3 1/2"	88.9	6.802	5.566	4.521	3.571	2.610	2.180
4"	101.6	7.810	6.385	5.183	4.091	2.988	2.495

10 ACRE FACTORY LAYOUT



Total Land Area: 10 Acre (4,35,600 sq.ft)



Project: 1) ERW Standard, 2),ERW Non-Standard,3) SS ERW,CDW, & 4) CDW Pipe Manufacturing Unit

AFI METALTECH INDUSTRIES PRIVATE LIMITED

10 ACRE MASTER FACTORY LAYOUT (FINAL – CORRECTED & PROFESSIONAL)



1. TOTAL LAND DETAILS



Area Conversion

- 1 Acre = 43,560 sq.ft
- 10 Acre = 4,35,600 sq.ft



Recommended Shape

- ✓ Square Layout (Best for planning)
- ✓ Approx Size: 660 ft × 660 ft



2. MASTER FLOW PLANNING (VERY IMPORTANT)



Factory Golden Flow:

👉 Raw Material → Production → Finished → Dispatch

- ✓ No cross movement
- ✓ Smooth truck flow
- ✓ High efficiency layout



3. MASTER FLOW STRUCTURE

[RAW MATERIAL YARD]



[UNIT 1] [UNIT 2]
[UNIT 3] [UNIT 4]



[FINISHED GOODS YARD]



[TRUCK DISPATCH]



4. AREA DISTRIBUTION (CORRECTED)



A. PRODUCTION UNITS (MAIN PLANT)

◆ UNIT 1 – ERW STANDARD PIPE

- Size: 50,000 sq.ft
- Location: Center Left
- Work: 32mm – 300mm NB Pipes

◆ UNIT 2 – HEAVY ERW PIPE

- Size: **60,000 sq.ft**
- Location: Center Right
- Work: **120mm – 234mm OD Pipes**

◆ UNIT 3 – SS ERW & CDW PIPE UNIT (UPDATED)

- Size: **45,000 sq.ft**
- Location: Bottom Left
- Work:
 - **SS ERW Pipe (TIG / Laser)**
 - **SS CDW Tube**
- Grades:
 - **SS 304 / SS 316**

👉 NOTE:

✓ SS Unit alag rakha gaya contamination avoid karne ke liye

◆ UNIT 4 – MS ERW & CDW PIPE (FINISHING UNIT)

- Size: **40,000 sq.ft**
- Location: Bottom Right
- Work:
 - MS ERW Pipe
 - CDW Pipe
 - Finishing / Value Addition

Total Production Area

= 1,95,000 sq.ft (~45%)



B. RAW MATERIAL & FINISHED YARD

◆ RAW MATERIAL YARD

- Size: **60,000 sq.ft**
- Location: Top Left
- Use:
 - HR/CR Coil storage
 - Crane unloading

◆ **FINISHED GOODS YARD**

- Size: **60,000 sq.ft**
- Location: Top Right
- Use:
 - Ready pipe storage
 - Dispatch preparation

Total Yard Area

= 1,20,000 sq.ft



C. TRUCK MOVEMENT & DISPATCH

◆ **Loading / Unloading Zone**

- Size: **35,000 sq.ft**
- Location: Right side edge
- Features:
 - Separate entry/exit gate
 - Direct road connectivity



D. PARKING AREA

◆ **Staff & Visitor Parking**

- Size: **25,000 sq.ft**
- Location: Front (entry side)



E. BUILDINGS

◆ **Office Building**

- Size: **10,000 sq.ft**
- Location: Front center

◆ **Staff / Quarters**

- Size: **20,000 sq.ft**
- Location: Front side / corner

F. UTILITIES AREA

◆ Utilities Zone

- Size: **15,000 sq.ft**
- Location: Back corner (safe zone)

Includes:

- DG Set
- Air Compressor
- Cooling System
- ETP (Effluent Treatment Plant)



G. INTERNAL ROADS & GREEN AREA

◆ Roads

- Main Road: **40 ft width**
- Internal Roads: **24 ft width**
- Type: RCC Heavy Duty

◆ Green Belt

- Boundary ke around
- Pollution clearance ke liye important

Roads + Green Area

= **50,600 sq.ft**



5. FINAL AREA SUMMARY (PERFECT TOTAL)

S/NO	SECTION	AREA (SQ.FT)
1	Production Units	1,95,000
2	Raw Material Yard	60,000
3	Finished Goods Yard	60,000
4	Truck Area	35,000
5	Parking	25,000
6	Office	10,000
7	Staff Quarters	20,000
8	Utilities	15,000
9	Roads + Green	50,600
	TOTAL	4,35,600

Products

- SS ERW Pipes
- SS CDW Precision Tubes
- SS 304
- SS 316

Applications

- Food Industry
- Pharmaceutical Industry
- Chemical Industry
- Hydraulic Industry
- Medical Equipment
- Engineering Industry

Production Capacity

- 60 MT Per Day
- 1,560 MT Per Month
- 18,720 MT Per Year

Employment

- Approx. 90–100 Personnel

UNIT 1: ERW PIPE PRODUCTION

ERW STANDARD PIPE MANUFACTURING LINE



HIGH STRENGTH
ERW PIPE MANUFACTURING



ADVANCED TECHNOLOGY



SUPERIOR QUALITY



CONSISTENT PERFORMANCE



BUILT FOR EXCELLENCE



RAW MATERIAL
HR COIL



COIL UNCOILING
& STRAIGHTENING



PIPE FORMING
(ERW)



HF WELDING



SIZING



HYDRO TESTING
& INSPECTION



CUT TO LENGTH



FINISHED PIPE
STORAGE

QUALITY • PRECISION • DURABILITY • PERFORMANCE

UNIT 2: HEAVY DUTY MILLING UNIT

HEAVY OD ERW PIPE PRODUCTION LINE



HIGH STRENGTH



HIGH PRECISION



HEAVY DUTY MACHINERY



CONSISTENT QUALITY



MAXIMUM PERFORMANCE



RAW MATERIAL
HR COIL



PIPE FORMING



HF WELDING



MILLING



SIZING



HYDRO TESTING



PIPE FINISHING



FINISHED PIPE
STORAGE

HEAVY DUTY • PRECISION ENGINEERED • RELIABLE PERFORMANCE

UNIT 3: SS ERW & CDW PIPE PRODUCTION

STAINLESS STEEL ERW & CDW PIPE MANUFACTURING LINE



HIGH PRECISION
SS PIPE MANUFACTURING



ADVANCED TECHNOLOGY



SUPERIOR QUALITY



CORROSION RESISTANT



BUILT FOR EXCELLENCE



RAW MATERIAL
SS COIL



SS ERW PIPE
FORMING



TIG WELDING
& SIZING



ONLINE
EDDY CURRENT
TESTING



PICKLING &
PASSIVATION



HYDRO TESTING
& INSPECTION



FINISHED PIPE
STORAGE

QUALITY • PRECISION • DURABILITY • STAINLESS STEEL EXCELLENCE

UNIT 4: CDW TUBE PRODUCTION

COLD DRAWN WELDED (CDW) TUBE MANUFACTURING LINE

HIGH PRECISION
CDW TUBE MANUFACTURING

ADVANCED TECHNOLOGY

SUPERIOR QUALITY

CONSISTENT PERFORMANCE

BUILT FOR EXCELLENCE



CDW TUBE PRODUCTION PROCESS FLOW



✓ PRECISE DIMENSIONAL ACCURACY

✓ SMOOTH SURFACE FINISH

✓ HIGH STRENGTH & DURABILITY

✓ WIDE APPLICATION RANGE

FINAL CONCLUSION & INDUSTRIAL IMPACT SUMMARY

AFI METALTECH INDUSTRIES PRIVATE LIMITED

INTEGRATED 4–UNIT PIPE MANUFACTURING PROJECT

The proposed AFI Metaltech Industries Private Limited project represents a large-scale integrated manufacturing initiative focused on ERW Pipes, Heavy ERW Pipes, Stainless Steel ERW & CDW Precision Tubes, and MS ERW & CDW Pipes. The project has been strategically planned with modern industrial infrastructure, advanced machinery systems, structured production flow, and long-term expansion capability.

The project is designed not only as a manufacturing setup, but as a professionally managed industrial ecosystem capable of serving multiple sectors including construction, infrastructure, fabrication, engineering, automobile, furniture, oil & gas support industries, and precision tube applications. The proposed facility aims to establish a strong manufacturing

The proposed **AFI Metaltech Industries Private Limited** project is envisioned as a professionally planned integrated steel pipe manufacturing complex comprising:

- ✓ **UNIT–1** : ERW Standard Round Pipe Plant
- ✓ **UNIT–2** : Heavy ERW Pipe Plant
- ✓ **UNIT–3** : Stainless Steel ERW & CDW Precision Tube Plant
- ✓ **UNIT–4** : MS ERW & CDW Pipe Plant

The project has been strategically designed with modern industrial planning, advanced machinery systems, dedicated production flow, strong infrastructure, and future-ready expansion capability

S/NO	PARTICULAR	VALUE
1	Total Land Area	10 Acre
2	Total Machinery	114 Machines
3	Total Production Capacity	73,000+ MT / Year
4	Total Estimated Turnover	₹770+ Crore / Year
5	Total Estimated Net Profit	₹65–67 Crore / Year
6	Total Manpower	~350 Employees
7	Total Machinery Investment	₹44–61 Crore
8	Total Infra Development	₹28–43 Crore

INDUSTRIAL IMPORTANCE OF THE PROJECT

This project is designed to serve multiple industrial sectors including:

- ✓ Construction Industry
- ✓ Infrastructure Projects
- ✓ Engineering & Fabrication
- ✓ Automobile Industry
- ✓ Furniture Industry
- ✓ Precision Tube Applications

✓ OEM & Industrial Supply Chains

✓ Future Export Markets

The inclusion of Stainless Steel ERW & CDW precision tube manufacturing further strengthens the project's value addition capability and enhances its long-term industrial competitiveness.



EMPLOYMENT GENERATION & SOCIAL IMPACT

One of the strongest contributions of the proposed project is large-scale employment generation.

Direct Employment:



Approximately 350+ Employees

Including:

- Engineers
- Operators
- Welders
- Helpers
- Supervisors
- Quality Control Staff
- Accounts & Administration
- Logistics & Dispatch Teams

Indirect Employment:

The project is also expected to generate large indirect employment opportunities through:

- ✓ Transporters
- ✓ Scrap handling vendors
- ✓ Maintenance contractors
- ✓ Packaging suppliers
- ✓ Labour contractors
- ✓ Local fabrication units
- ✓ Industrial service providers
- ✓ Mechanical & electrical support industries



Estimated Indirect Employment:

700–1000+ Persons



CONTRIBUTION TO STATE & NATIONAL ECONOMY

The proposed project is expected to contribute significantly toward industrial development and economic growth through:

- ✓ GST Revenue Generation
- ✓ Industrial Production Growth
- ✓ Manufacturing Sector Expansion
- ✓ MSME & Vendor Ecosystem Development
- ✓ Employment Generation
- ✓ Steel Value Addition
- ✓ Export Potential Development
- ✓ Infrastructure Sector Support



GST & TAX CONTRIBUTION

With an estimated annual turnover exceeding:

 **₹770+ Crore / Year**

the project is expected to generate substantial government revenue through:

- ✓ GST collections
- ✓ Income tax
- ✓ TDS
- ✓ Electricity duties
- ✓ Industrial registrations & compliance revenue

This will contribute positively to both:

- State Government revenue
- Central Government revenue



GDP & MANUFACTURING CONTRIBUTION

The project aligns strongly with:

- ✓ “Make in India” initiatives
- ✓ Industrial manufacturing growth
- ✓ Infrastructure expansion
- ✓ Domestic steel processing capacity enhancement

The project is expected to support:

- domestic manufacturing,
- industrial self-reliance,

- and long-term GDP growth through high-volume steel processing and value-added manufacturing.



TECHNOLOGY & INDUSTRIAL DEVELOPMENT

The proposed manufacturing setup includes:

- ✓ Modern ERW technology
- ✓ Heavy ERW pipe systems
- ✓ TIG welding systems
- ✓ CDW precision tube processing
- ✓ Automated production control systems
- ✓ Industrial quality testing systems
- ✓ Advanced handling & utility systems

This will help create:

- higher quality industrial products,
- better manufacturing standards,
- and stronger industrial competitiveness.



FUTURE EXPANSION & EXPORT POTENTIAL

The project has strong future scalability and export potential, especially in:

- ✓ Stainless Steel Precision Tubes
- ✓ CDW Tubes
- ✓ Engineering Grade Pipes
- ✓ Industrial & OEM Applications

Potential export markets may include:

- Middle East
- Africa
- South Asia
- Industrial OEM markets



MANAGEMENT & SYSTEM-DRIVEN APPROACH

The project planning has been prepared with strong emphasis on:

- ✓ Industrial systems
- ✓ ERP-based management
- ✓ Inventory controls
- ✓ Scrap control systems
- ✓ Production monitoring
- ✓ Purchase & dispatch controls
- ✓ Internal audit systems
- ✓ CCTV & operational supervision

The objective is to build:

“A system-driven industrial organization rather than a person-dependent factory.”



LONG-TERM INDUSTRIAL VISION

AFI Metaltech Industries Private Limited aims to establish itself as:

- ✓ A large integrated pipe manufacturing group
- ✓ A high-quality industrial supplier
- ✓ A value-added steel processing company
- ✓ A professionally managed manufacturing organization

with long-term focus on:

- quality,
- operational discipline,
- controlled expansion,
- industrial systems,
- and sustainable growth.



FINAL PROFESSIONAL CONCLUSION

“The proposed AFI Metaltech Industries Private Limited integrated 4-unit manufacturing project represents a large-scale industrial initiative with strong potential for manufacturing growth, employment generation, tax contribution, infrastructure support, and long-term industrial development. With professionally planned infrastructure, advanced machinery, system-driven operations, and future-ready expansion capability, the project is expected to contribute significantly toward industrial productivity, economic activity, and value-added steel manufacturing under a modern integrated manufacturing model.”