

EONMETALL GROUP BERHAD.

MACHINERY & EQUIPMENT:-

- Cold Rolling Mill Machine
- Annealing Furnace
- Continuous Hot Dipped Galvanizing Line
- Prepainted Galvanizing Line
- Slitting Line Machine
- Cut To Length Machine
- Pipe Line Machine
- Angle Bar Machine
- Flat Bar / Square Bar / Deformed Bar Machine
- Cold Rolled Forming Machine
- Expanded Metal Machine
- Industrial Roofing Sheet Forming Machine
- Corrugated Sheet Forming Machine
- Powder Coating Line
- Overhead Crane
- Palm Fibre Oil Extraction Plant (PFOE)
- Auto Packing Machine

FLAT STEEL PRODUCTS:-

- Cold Rolled Coil
- Hot Dipped Galvanizing Coil (GI)
- Prepainted Galvanizing Coil (PPGI)
- Roofing Sheets
- High Tensile G.I. Purlin
- Steel Tubes & Pipes

STEEL STORAGE SYSTEMS:-

- Selective Racking System
- Double - Deep Racking System
- (VNA) Very Narrow Aisle Racking System
- Drive-in And Drive-through Racking System
- Rack Supported Platform / Office
- Steel Building
- Mezzanine Floor Planks (Galvanized Iron)
- Rack Components And Accessories
- Boltless Shelving Systems
- Slotted Angle Shelving Systems
- 2 In 1 Racking & Easy Rack

ENGINEERING & TECHNOLOGY:-

- IT Solution:
 - a) Shop Floor Automation
 - b) Enterprise Software (ERP)
- District Cooling System



www.eonmetall.com

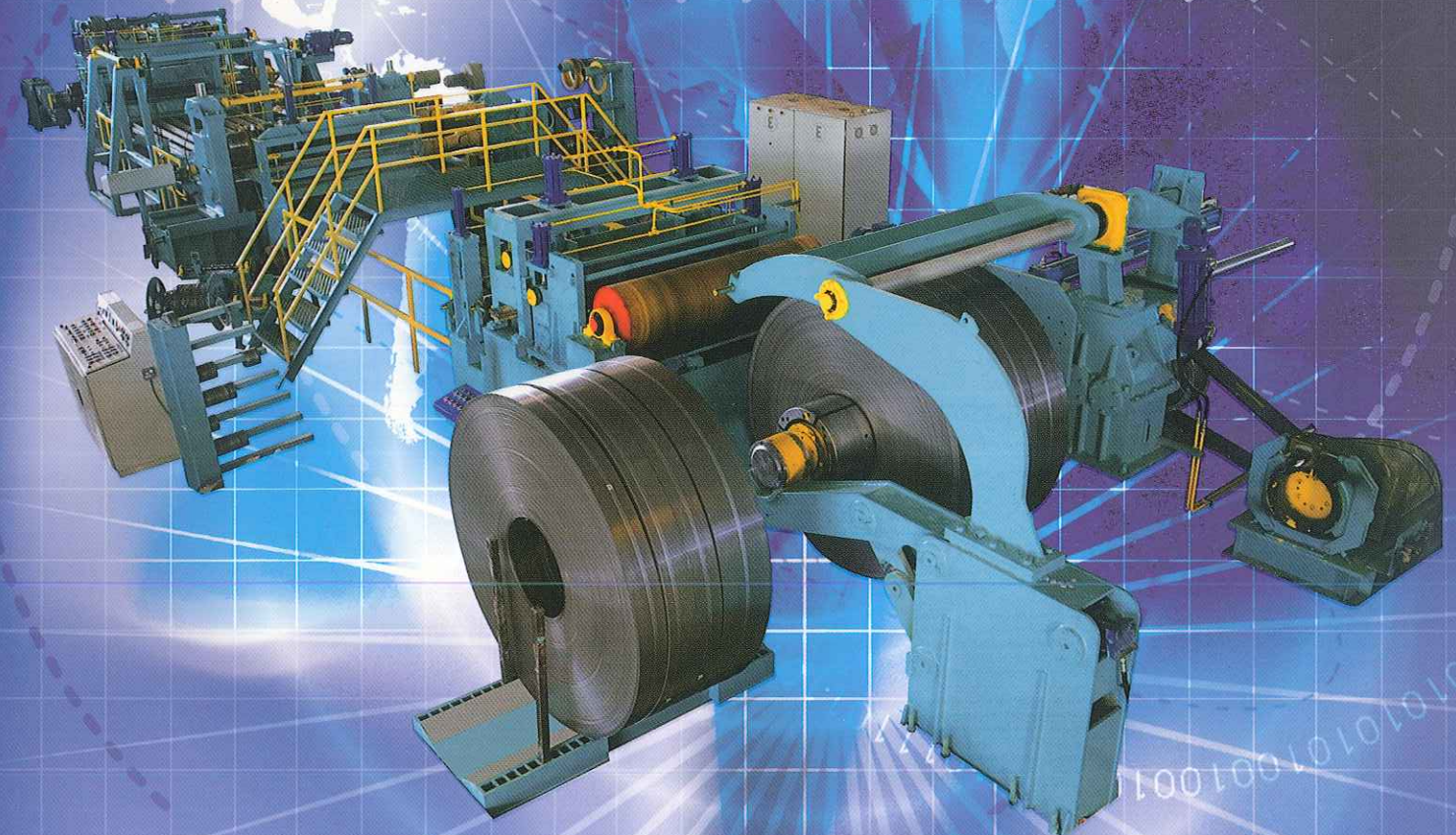
info@eonmetall.com

Plant 1.
Lot 1258 & 1259, Mk. 12, Jalan Seruling,
Kawasan Perusahaan Valdor,
14200 Sungai Bakap, Penang, Malaysia.

+604-5828323
+604-5821525

Plant 2.
Lot 385 & 393, Mk. 12, Jalan Perindustrian Valdor,
Kawasan Perusahaan Valdor,
14200 Sungai Bakap, Penang, Malaysia.

+604-5828651
+604-5828727



Technological Advancement Worldwide





Welcome to EONMETALL

Eonmetall was incorporated in Malaysia and is a Main Market public listed Company in the Malaysia Bourse.

The principle activity of **Eonmetall** is in the manufacturing of world class metalwork and industrial process machinery and equipment, globally accepted high quality flat steel products as well as the easy to assemble and quality assured steel storage system.

Solely, understanding manufacturing needs is not always enough to guarantee an edge over our customers' business requirements, **Eonmetall** pushes beyond traditional boundaries and works across disciplines. We have firm commitment in providing IT solutions to complement our customers' needs. Keeping pace with the fast moving business world, we ventured into District Cooling System (DCS) related projects in GCC region, in particular Dubai, United Arab Emirates.

Eonmetall consistent philosophy of uncompromising quality has gained recognition as the leading manufacturer and design innovator of Metalwork machinery and equipment. We are also the Patent owner of Palm Fibre Oil Extraction Plant (PFOE) technology, an invention to extract oil from mesocarp palm fibre. We have grown steadily over the years and simultaneously built up an extensive distribution network of established customers and markets.

Eonmetall's products are globally accepted with market penetration in Asia, Asia Pacific, Africa, Europe and America. **Eonmetall** gives its customers a Total Solution in advance design, reliable engineering, world class manufacturing and cost effective Project Management.



• Eonmetall Worldwide Customers.



CONTENTS

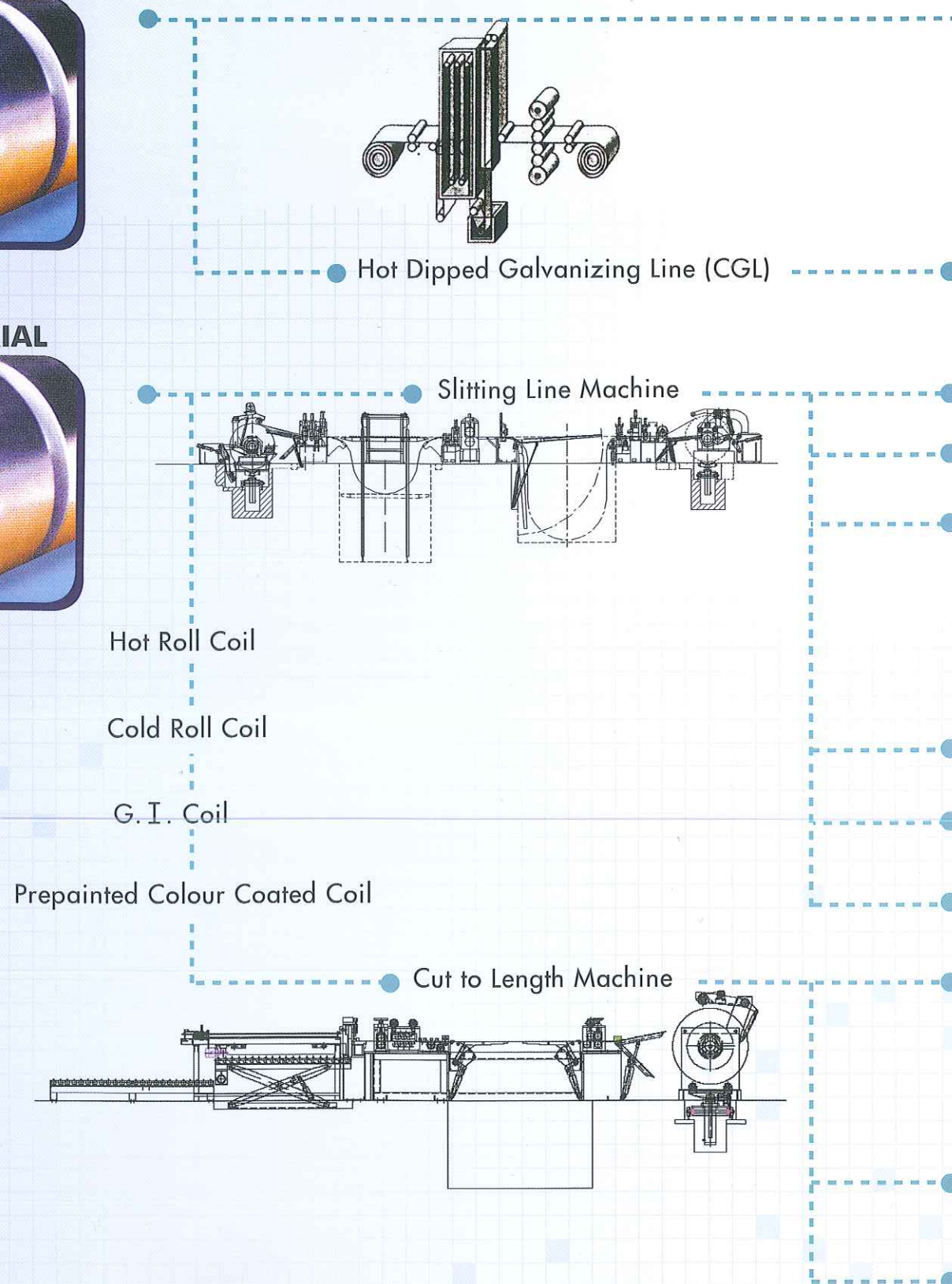
	Page
Process Flow	4 - 5
Turnkey Projects	6 - 7
Slitting Line Machine	8 - 9
Cut to Length Machine	10 - 11
Pine Line Machine	12 - 13
CGL - Continuous Hot Dipped Galvanizing Line	14 - 15
Angle Bar Machine (with medium frequency heater)	16 - 17
Flat Bar Machine, Square Bar Machine & Deformed Bar Machine	18 - 19
Cold Rolling Mill	20 - 21
Cold Roll Forming Machine	22
Auto Packing Machine	23
Powder Coating Line	24
Overhead Crane	25
Expanded Metal Machine	26
Palm Fibre Oil Extraction Plant	27

PROCESS FLOW

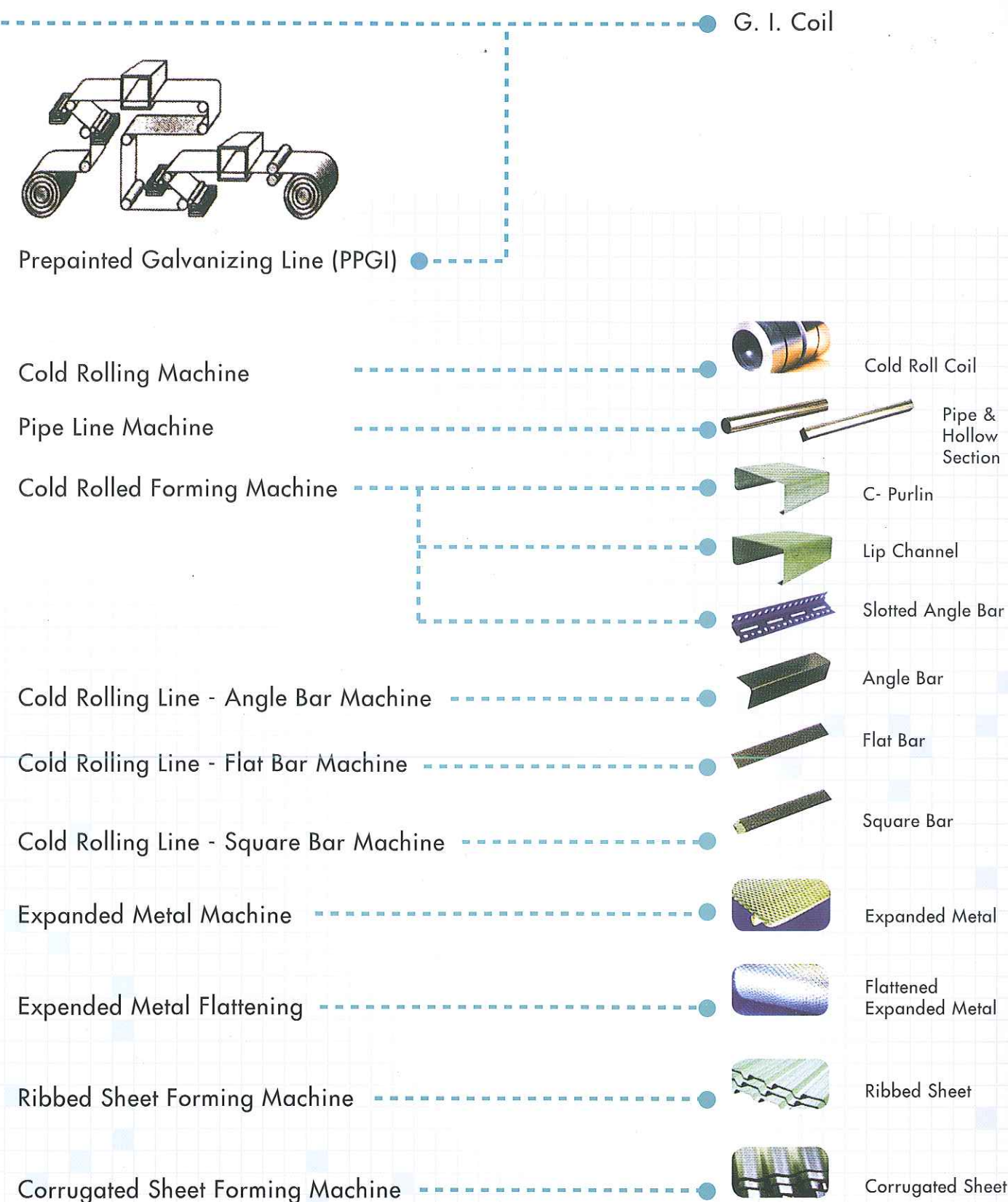
HOT ROLLED COIL



RAW MATERIAL



PROCESS FLOW



TURNKEY PROJECT



SUDANESE MALAYSIAN STEEL FACTORY, SUDAN

Scope of work	: Design, Built, Operate & Transfer Operation
Total built up area	: 120,000sf
Year complete	: 1998
Yearly production capacity	: 80,000 ton
Total workers	: 110 workers
End products	: Steel related product (Angle Bar, Flat Bar, Mild Steel Pipe, Corrugated Sheet & Expanded Metal, Slitted Coil, Cut to Length Steel Sheet).



TURNKEY PROJECT

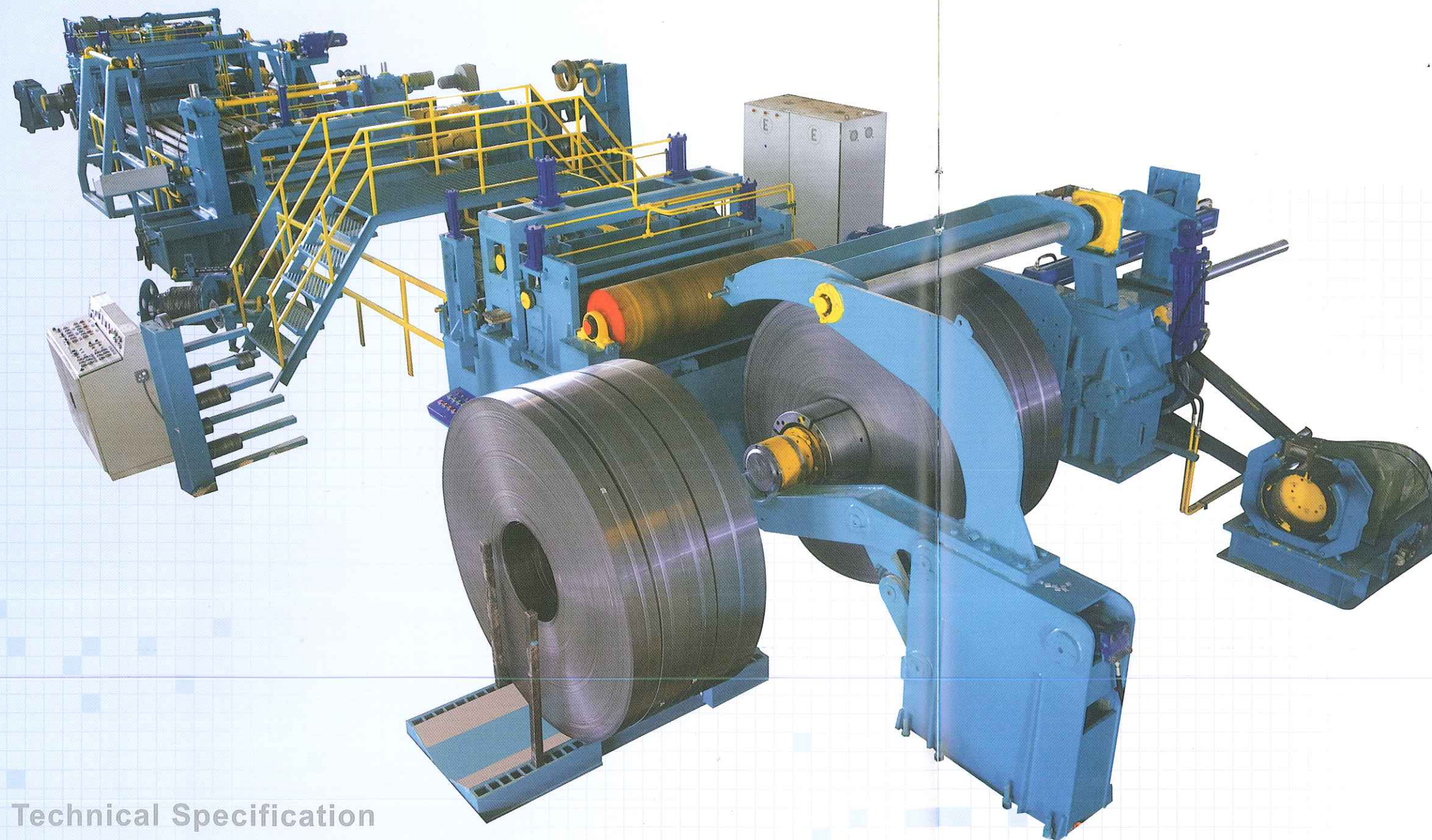


YEMEN STEEL MANUFACTURING FACTORY, YEMEN

Scope of work	: Design, Built, Operate & Transfer Operation
Total built up area	: 220,000sf.
Year complete	: 1999
Yearly production capacity	: 60,000 ton
Total workers	: 95 workers
End products	: Steel related product (Angle Bar, Flat Bar, Mild Steel Pipe, Corrugated Sheet & Metal Sheet, Cut to Length Steel Sheet Slitted Coil, Expanded Metal).

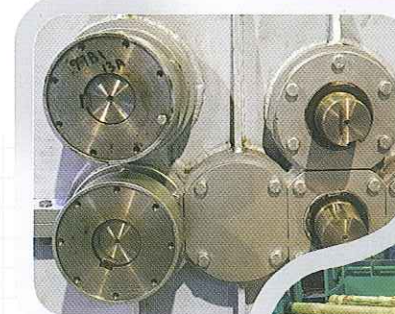
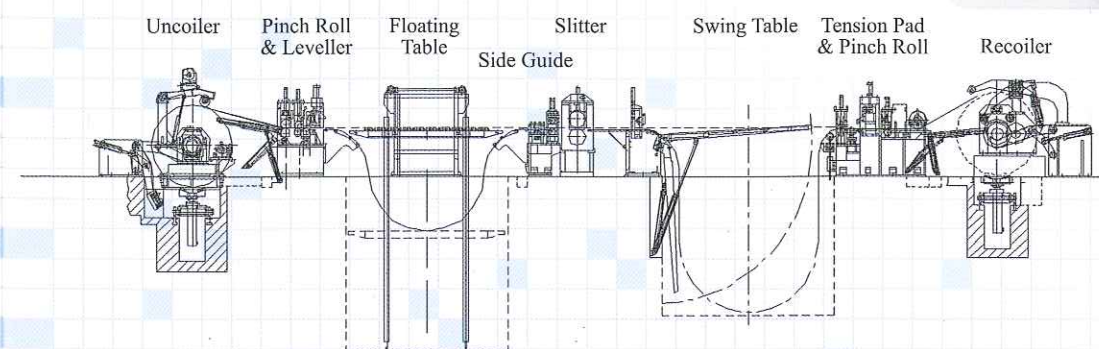


SLITTING LINE MACHINE

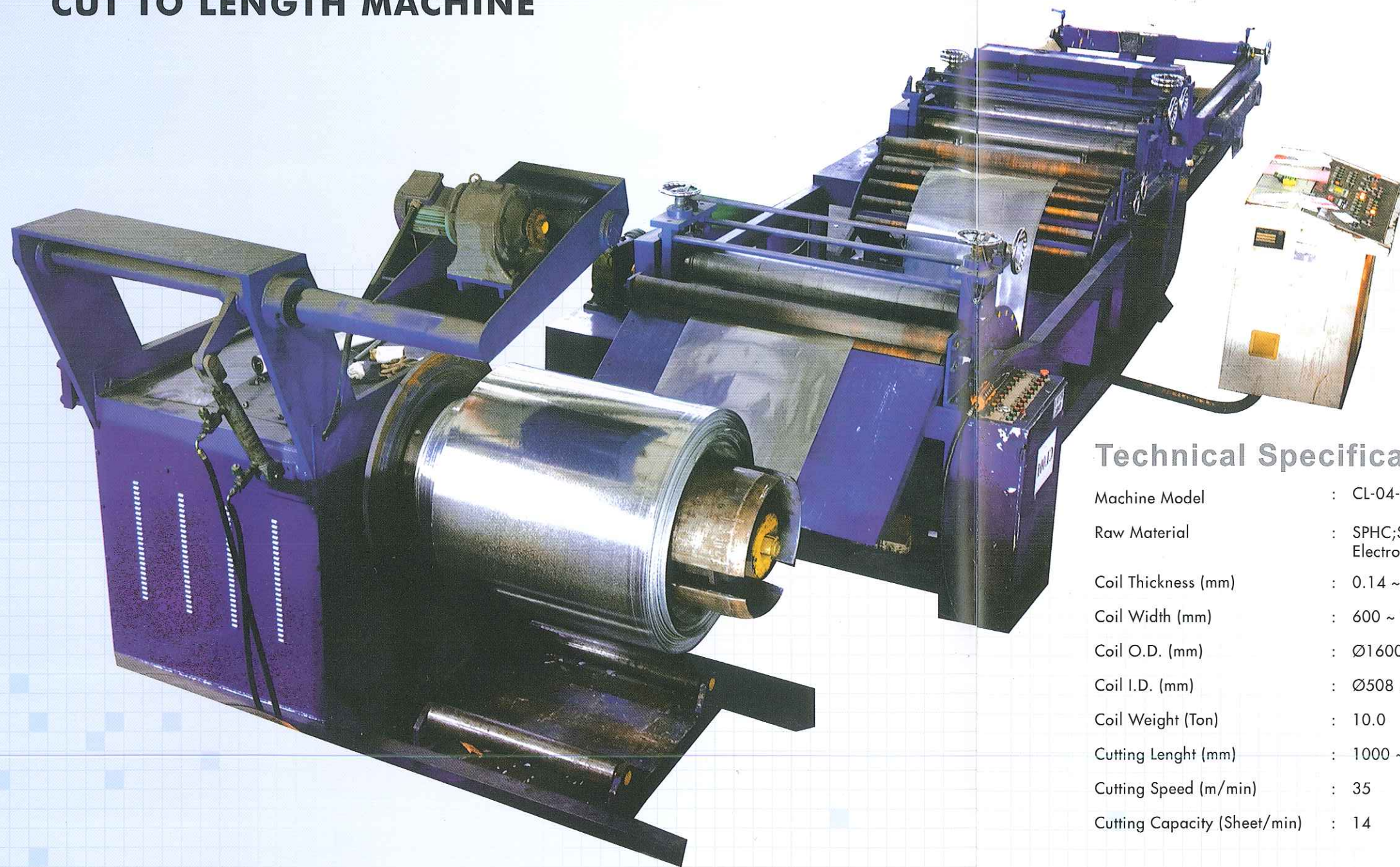


Technical Specification

Machine Model	SL-01-03	SL-04-04	SL-04-06	SL-05-04	SL-05-06
Raw Material	SPHT-1,08KP, 3SP, SS400 & ST37.2				
Coil Thickness (mm)	1.0 ~ 3.0	0.4 ~ 4.0	0.8 ~ 6.0	0.4 ~ 4.0	0.8 ~ 6.0
Coil Width (mm)	400 (max.)	405 ~ 1250 (max.)	405 ~ 1250 (max.)	405 ~ 1550 (max.)	405 ~ 1550 (max.)
Coil O.D. (mm)	Ø1600	Ø1900	Ø1900	Ø1900	Ø1900
Coil I.D. (mm)	Ø508	Ø508 / Ø610	Ø508 / Ø610	Ø508 / Ø610	Ø508 / Ø610
Coil Weight (Ton)	5.0	15.0	15.0	20.0	20.0
Cutting Capacity					
Thickness: ≤ 1.0mm	20 cuts	25 cuts	25 cuts	25 cuts	25 cuts
Thickness: 3.0mm	10 cuts	7 cuts	7 cuts	7 cuts	7 cuts
Thickness: 6.0mm	-	-	3	-	3
Line Speed (m/min)	120	200	100	200	100



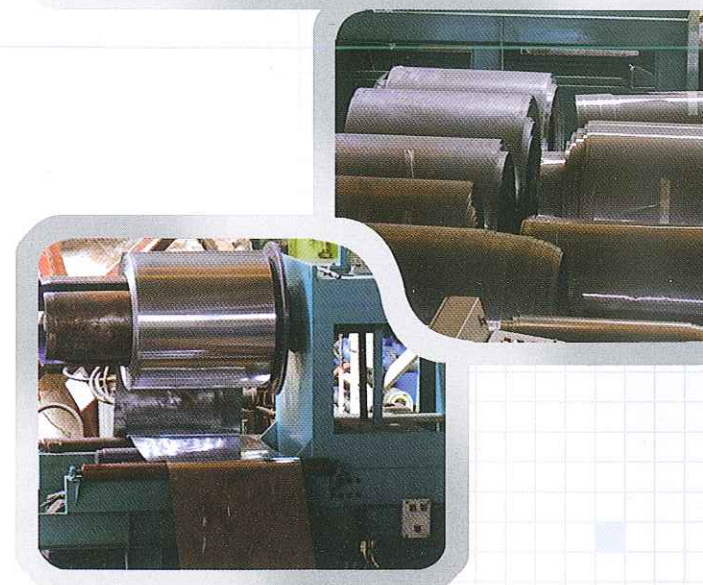
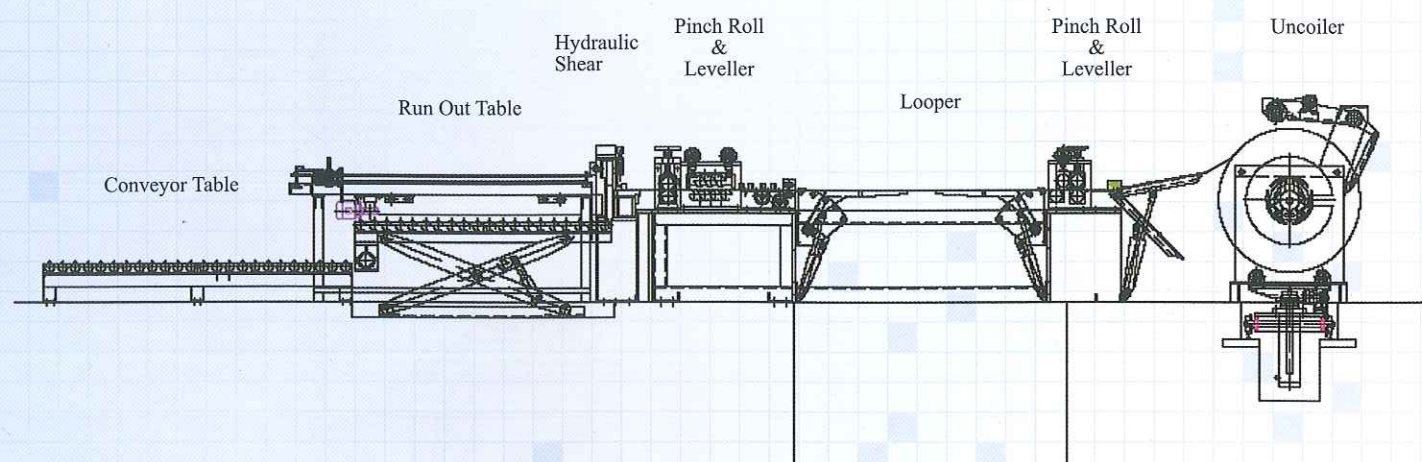
CUT TO LENGTH MACHINE



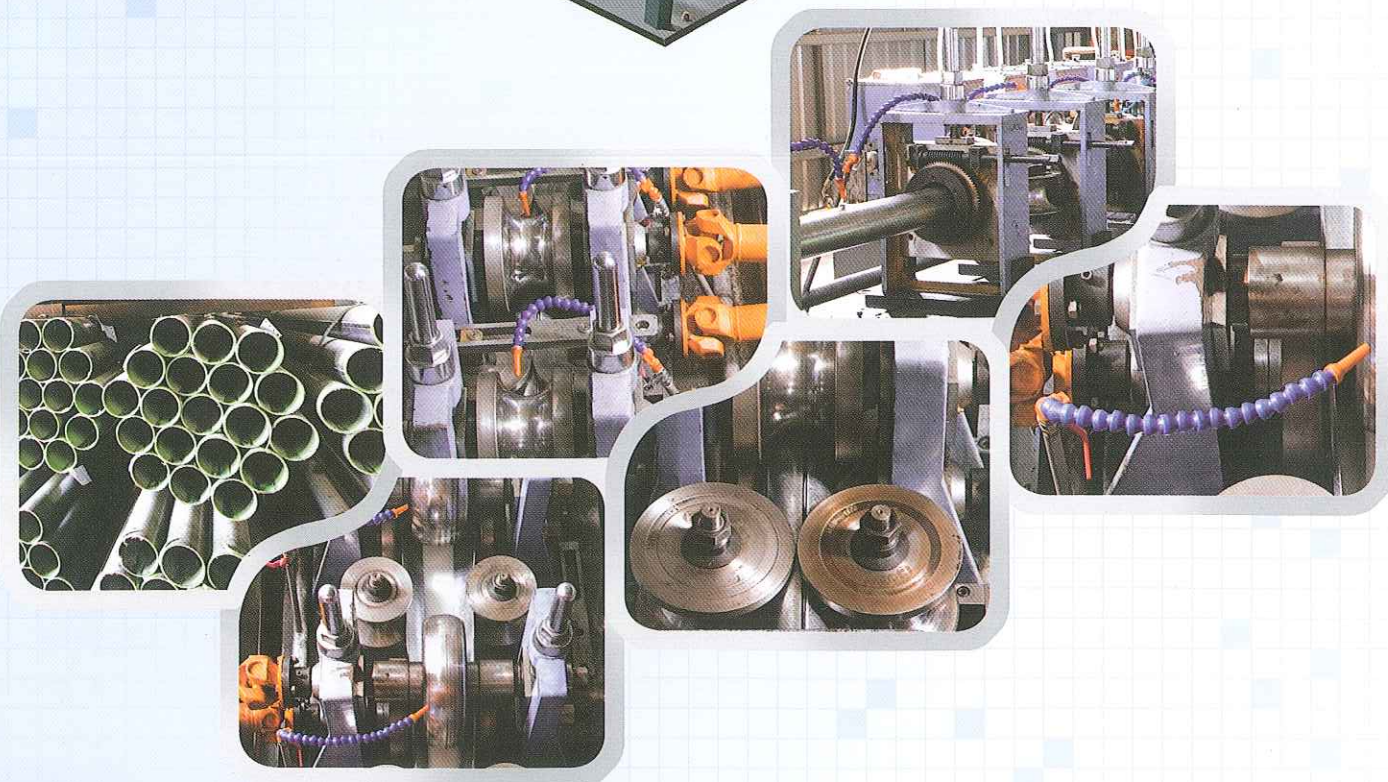
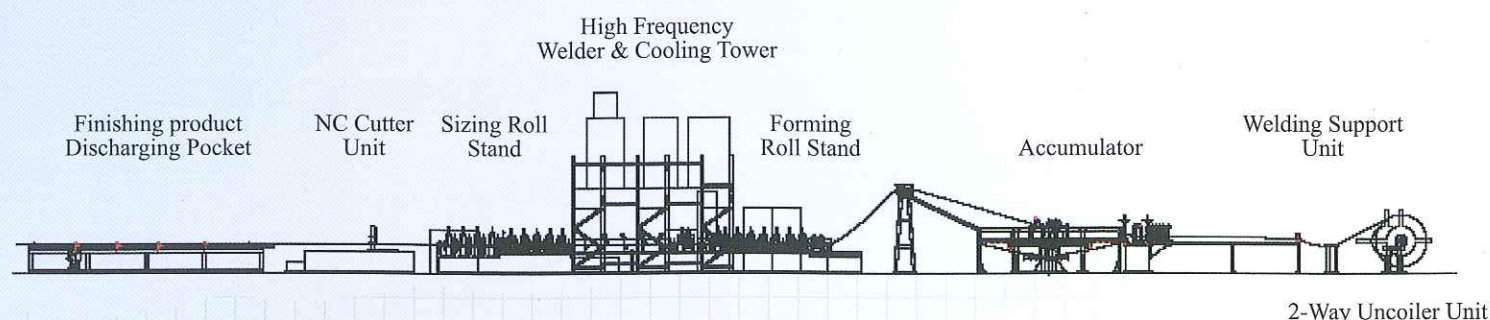
Technical Specification

Machine Model	: CL-04-02
Raw Material	: SPHC;SPCC;GI; Electro-Galvanized
Coil Thickness (mm)	: 0.14 ~ 2.0
Coil Width (mm)	: 600 ~ 1250
Coil O.D. (mm)	: Ø1600
Coil I.D. (mm)	: Ø508 / Ø610
Coil Weight (Ton)	: 10.0
Cutting Length (mm)	: 1000 ~ 2440
Cutting Speed (m/min)	: 35
Cutting Capacity (Sheet/min)	: 14

Machine Model	: CL-05-06
Raw Material	: SPHC;SPCC;GI; Electro-Galvanized
Coil Thickness (mm)	: 1.0 ~ 6.0
Coil Width (mm)	: 1550
Coil O.D. (mm)	: Ø1900
Coil I.D. (mm)	: Ø508 / Ø760
Coil Weight (Ton)	: 20.0
Cutting Length (mm)	: 6000
Cutting Speed (m/min)	: 24
Cutting Capacity (Sheet/min)	: 6 ~ 7



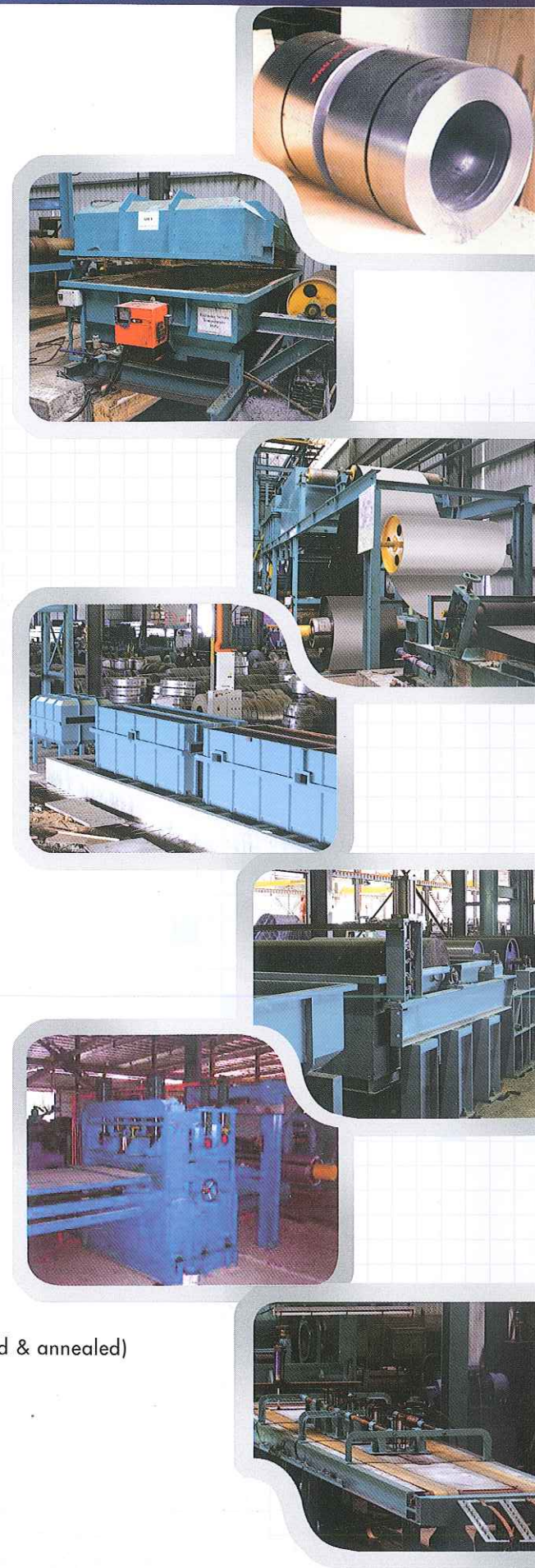
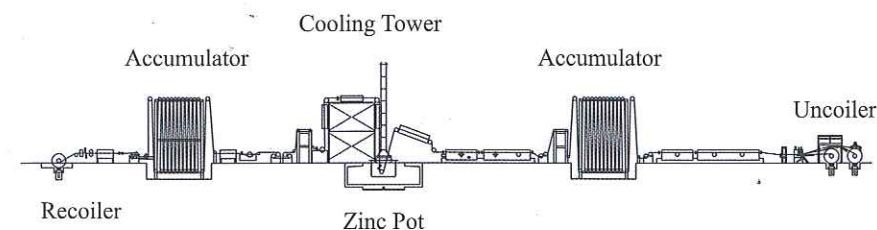
PIPE LINE MACHINE



Technical Specification

Machine Model	: P-1250 PFL-50	P-1976 PFL-76	P-60100 PFL-114	P-50165 PFL-165	P-60168 PFL-168
Raw Material	: Hot rolled strip, SPHT-1 to 2, ST37-2, SS400				
Coil Thickness (mm)	: 0.6 ~ 2.0	0.8 ~ 3.0	2.0 ~ 4.0	2.0 ~ 6.0	2.0 ~ 6.0
Coil Width (mm)	: 40 ~ 160	60 ~ 240	190 ~ 360	160 ~ 520	190 ~ 528
Coil O.D. (mm)	: Ø1800	Ø1800	Ø1800	Ø1800	Ø1800
Coil I.D. (mm)	: Ø508 / Ø610	Ø508 / Ø610	Ø508 / Ø610	Ø508 / Ø610	Ø508 / Ø610
Coil Weight (Ton)	: 2	2	4	7	7
Product Range:					
Round Pipe (mm)	: Ø12.7 ~ 50.8	Ø19 ~ 76.2	Ø60.3 ~ 114.3	Ø50.8 ~ 165	Ø60.3 ~ 168
Square Pipe (mm)	: 12x12 ~ 38x38	15x15 ~ 60x60	50x50 ~ 90x90	38x38 ~ 130x130	50x50 ~ 130x130
Rectangular Tube (mm)	: 10x20 ~ 25x50	15x30 ~ 40x80	30x60 ~ 60x120	25x50 ~ 80x160	30x60 ~ 80x160
HF Welder Capacity (kW)	: 100	150	200	300	300
Line Speed (m/min)	: 100	50 ~ 90	30 ~ 60	20 ~ 30	20 ~ 30

CGL - CONTINUOUS HOT DIPPED GALVANIZING LINE

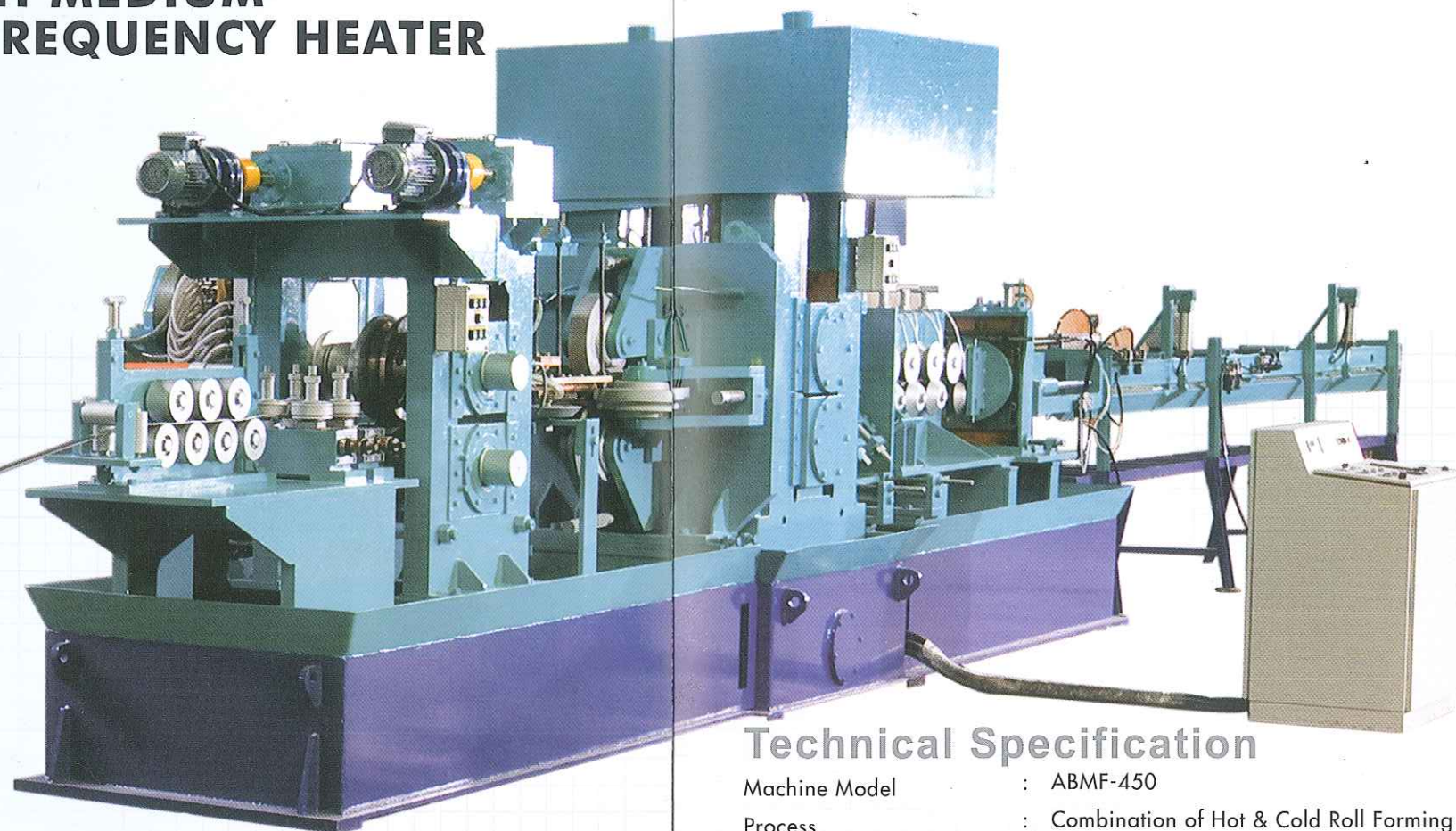
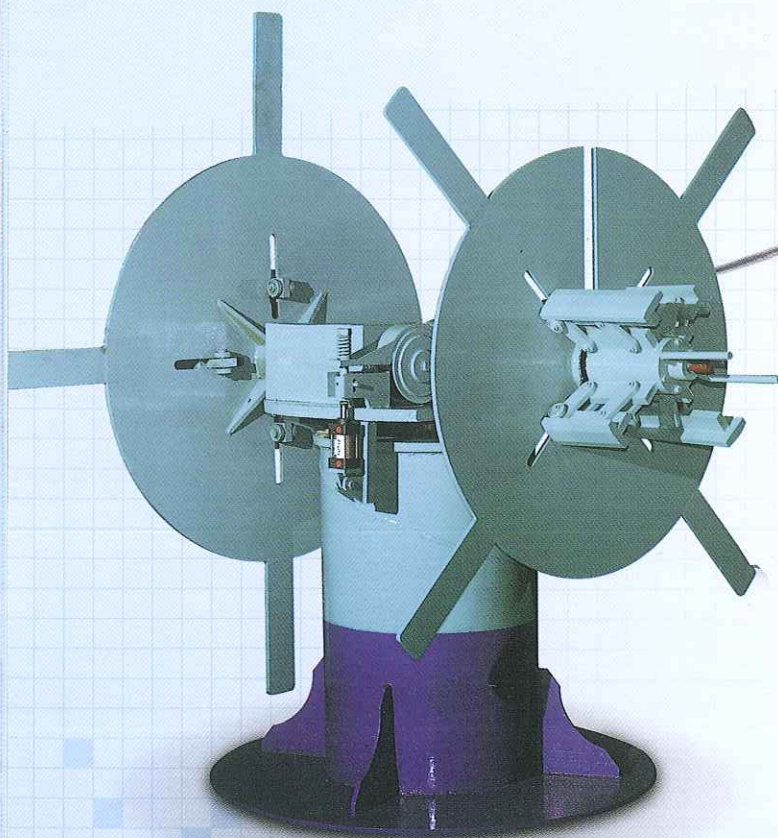


Technical Specification

Machine Model	: CGL- 1000-50
Type	: Coil-to-Coil
Raw Material	: Cold rolled low carbon steel (full hard & annealed)
Coil Thickness (mm)	: 0.17 ~ 1.2
Coil Width (mm)	: 762 ~ 1000
Coil O.D. (mm)	: Ø2000
Coil I.D. (mm)	: Ø508
Coil Weight (Ton)	: 20
Production Capacity (Ton/hr)	: 4.0
Zinc Coating Weight (g/m ²)	: 183
Line Speed (m/min)	: 50
Line Capacity	: 50,000 TPA

Machine Model	: CGL-1250-100
Type	: Coil-to-Coil
Raw Material	: Cold rolled low carbon steel (full hard & annealed)
Coil Thickness (mm)	: 0.17 ~ 1.5
Coil Width (mm)	: 762 ~ 1250
Coil O.D. (mm)	: Ø2000
Coil I.D. (mm)	: Ø508
Coil Weight (Ton)	: 20
Production Capacity (Ton/hr)	: 9.0
Zinc Coating Weight (g/m ²)	: 183
Line Speed (m/min)	: 100
Line Capacity	: 100,000 TPA

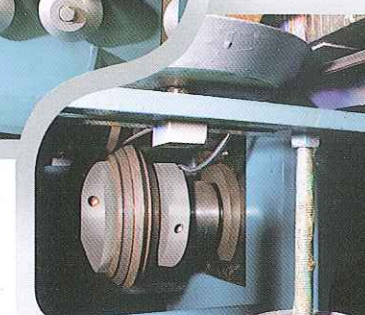
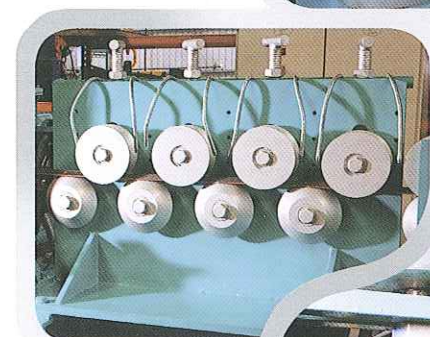
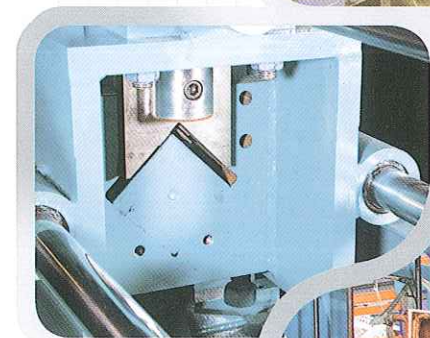
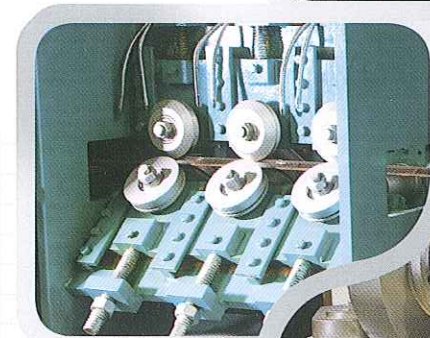
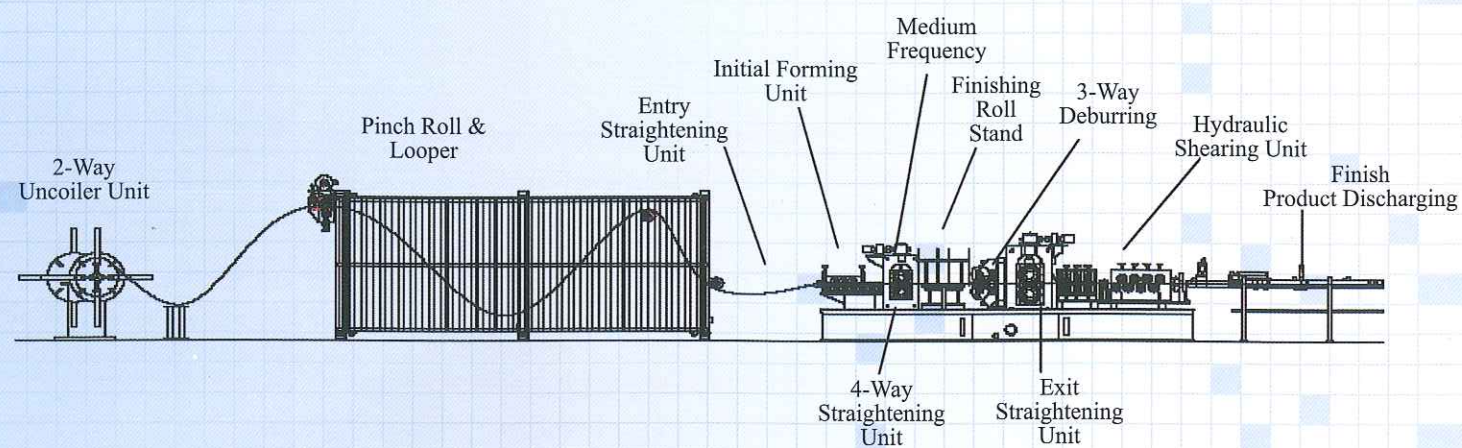
ANGLE BAR MACHINE WITH MEDIUM FREQUENCY HEATER



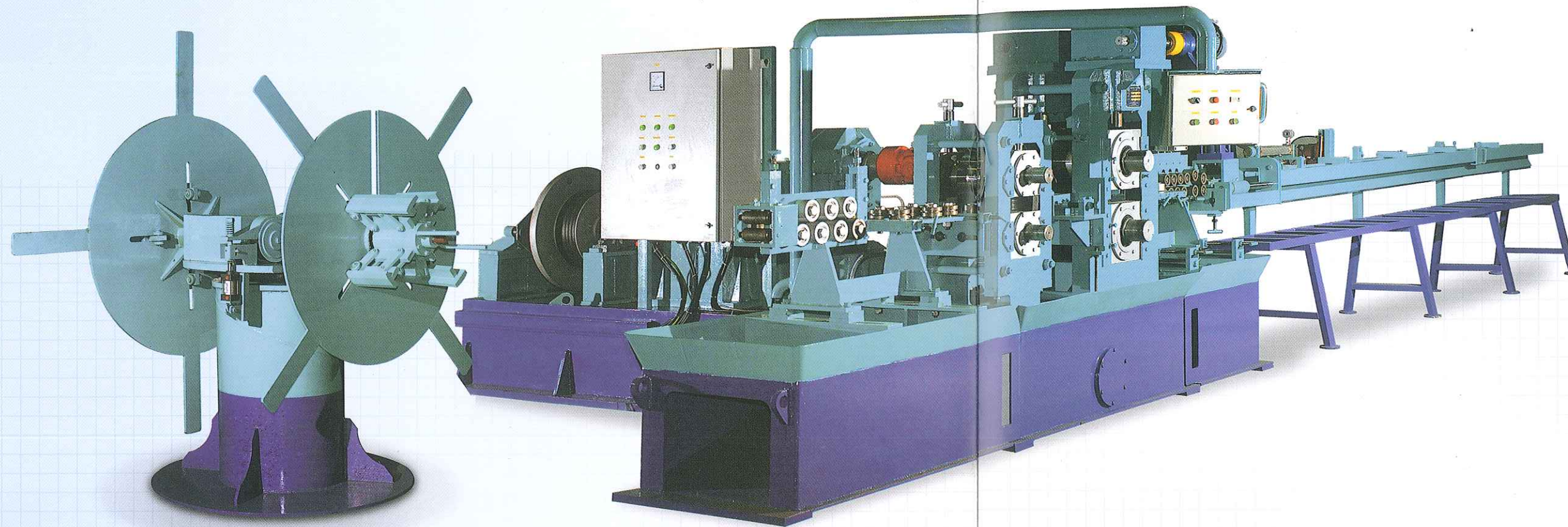
Technical Specification

Machine Model	: ABMF-450
Process	: Combination of Hot & Cold Roll Forming
Raw Material	: SPHT-1,08KP
Coil Thickness (mm)	: 4.0 (max.)
Coil Width (mm)	: 32 ~ 95 (max.)
Coil O.D. (mm)	: Ø1900 (max.)
Coil I.D. (mm)	: Ø508 / Ø610
Coil Weight (Ton)	: 2 (max.)
Angle Bar Size (mm)	: 20x20, 25x25, 30x30, 35x35, 40x40, 45x45, 50x50
Heater Capacity (kW / kHz)	: 350 / 6
Line Speed (m/min)	: 40

Machine Model	: ABMF-550
Process	: Combination of Hot & Cold Roll Forming
Raw Material	: SPHT-1, 08KP
Coil Thickness (mm)	: 6.0 (max.)
Coil Width (mm)	: 75 ~ 125 (max.)
Coil O.D. (mm)	: Ø1900 (max.)
Coil I.D. (mm)	: Ø508 / Ø610
Coil Weight (Ton)	: 2 (max.)
Angle Bar Size (mm)	: 40x40, 45x45, 50x50, 55x55, 60x60, 65x65
Heater Capacity (kW / kHz)	: 350 / 6
Line Speed (m/min)	: 40



FLAT BAR / SQUARE BAR & DEFORMED BAR CR FORMING MACHINE (FB/SB/DB-350)



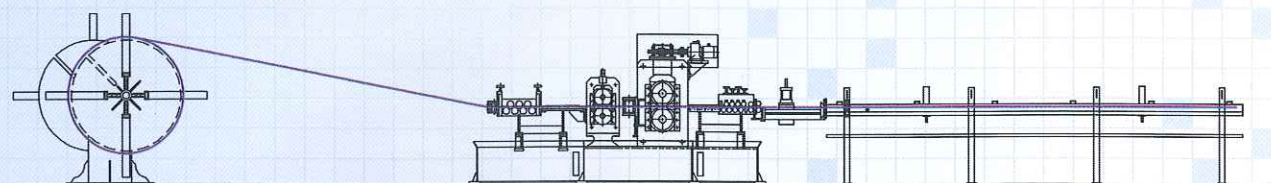
Technical Specification

1. Material to be process
 - a) Raw material
 - : Wire rod, SWRM-10K, JIS G3505, $\varnothing 7 \sim 14\text{mm}$.
 - : Slitted coil, 1.2 ~ 6.0mm(T) x 50mm(W) max.
 - b) Inner diameter of the coil
 - : $\varnothing 508\text{mm}$
 - c) Outer diameter of the coil
 - : $\varnothing 1900\text{mm}$ (Max.)
 - d) Coil weight
 - : 2 Tons (Max.)
2. Machine capacity
 - a) Power source
 - : 75Hp AC motor, 1760rpm/3ph/415V/50Hz
 - b) Linear speed
 - : 50m/min.
 - c) Production output
 - : 500 Ton/month.
 - d) Reference size
 - : 25mm (W) x 5mm(T) Flat Bar.

3. Finished product width
 - Flat Bar
 - a) For slitted coil with thickness 1.2 ~ 6mm
 - : 20 ~ 50mm
 - b) For wire rod with thickness 3mm, 4mm & 6mm
 - : 12 ~ 20mm
 - Square Bar
 - : 6x6 ~ 12x12
 - Deformed Bar
 - : $\varnothing 8.0 \sim 10.0\text{mm}$.

4. Production flow direction
 - : Right to left (viewed from operator's side) or
 - Left to right (upon request by customer).

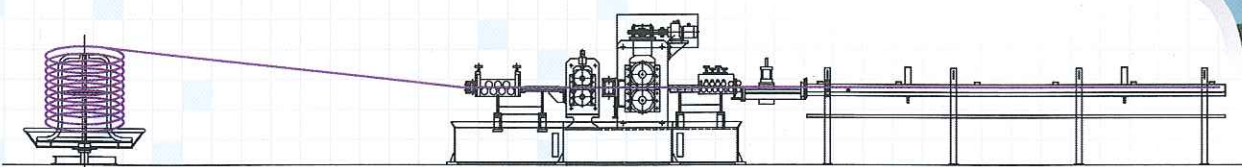
5. Machine area requirement
 - : 5m(W) x 27m (L)



UNCOILER
(SLITTED COIL)

FORMING UNIT

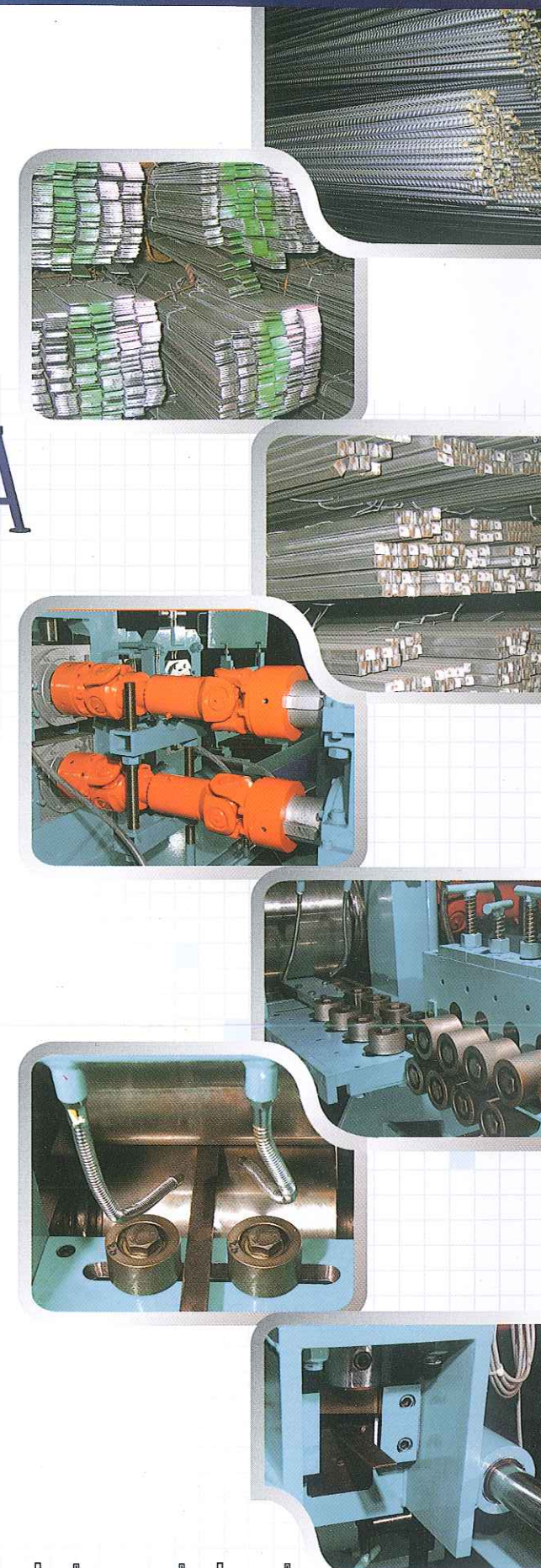
FINISHED PRODUCT HOLDER



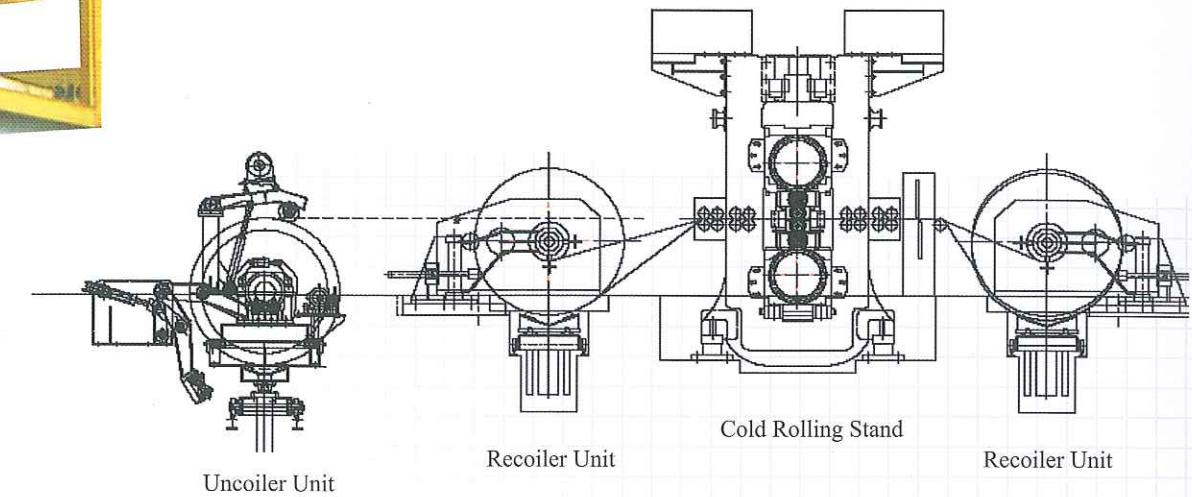
UNCOILER
(WIRE ROD)

FORMING UNIT

FINISHED PRODUCT HOLDER



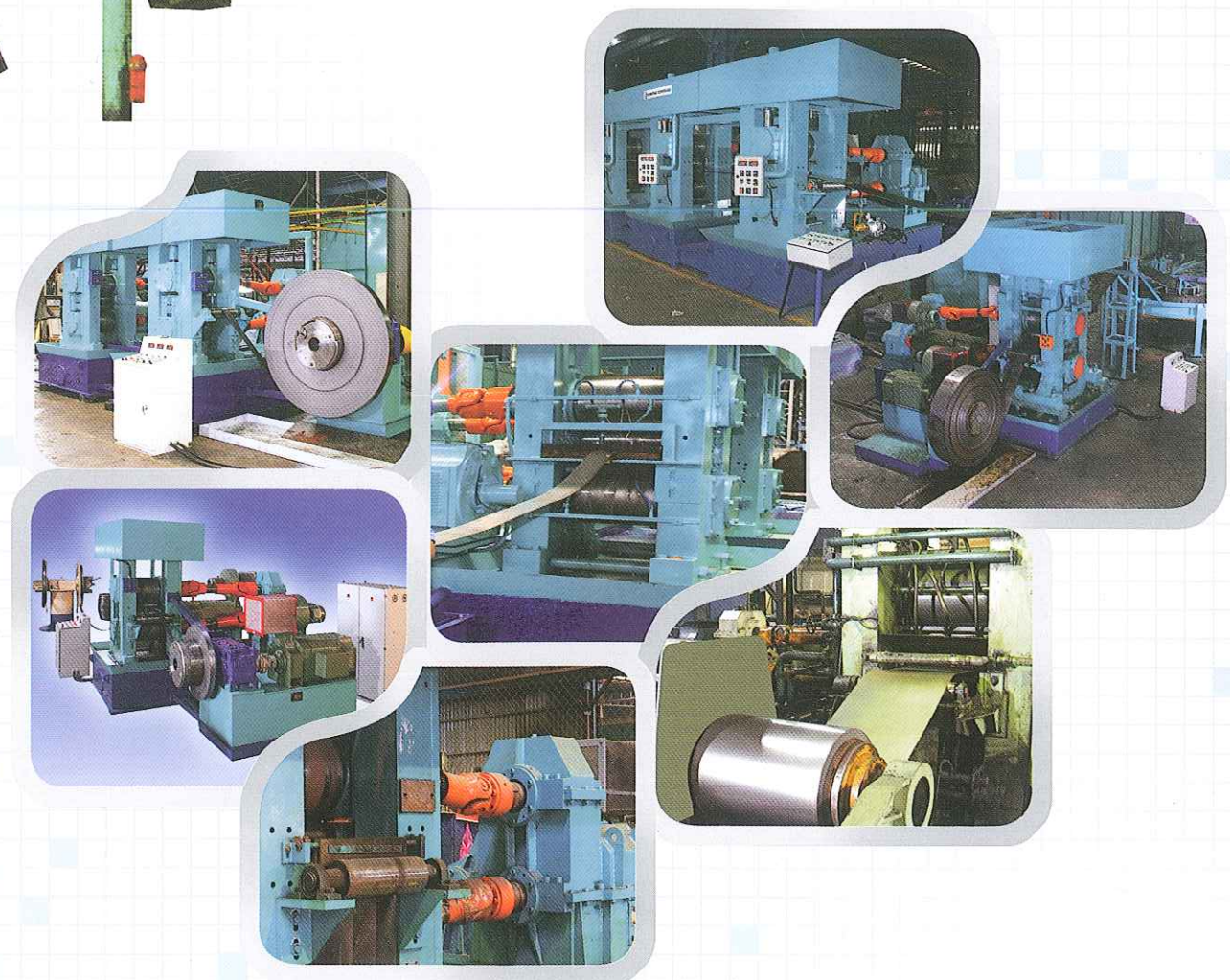
COLD ROLLING MILL



Technical Specification

Machine Model	: CRM-4H-400	CRM-4H-450	CRM-4HR-450	CRM-4HR-750	CRM-4HR-1250	CRM-6HR-450	CRM-6HR-800
Mill Type	: 4-High, Non-Reversing	4-High, Non-Reversing	4-High, Reversing	4-High, Reversing	4-High, Reversing	6-High, Reversing	6-High, Reversing
Raw Material	Hot rolled low carbon steel, 0.05-0.10%C; SAE1008; 08KP						
Strip Thickness (mm)	: ≤ 3.0	≤ 3.0	≤ 3.0	≤ 3.0	≤ 1.6~4.0	≤ 2.0	≤ 2.0
Strip Width (mm)	: ≤ 250	≤ 320	≤ 320	≤ 650	≤ 650~1250	≤ 320	≤ 760
Coil Weight (Ton)	: 4.0	4.0	4.0	6.0	15.0	4.0	8.4
Finishing Strip Thickness (mm)	: ≥ 0.5	≥ 0.5	≥ 0.5	≥ 0.5	0.16~1.5	≥ 0.16	≥ 0.18
Line Speed (m/min)	: 150	150	150	300	0-244-610	210	0-120-300

Machine Model	: CRM-4H-400/2R	CRM-4H-400/3R
Mill Type	: 4-High, Double Tandem, Non-Reversing	4-High, Triple Tandem Non-Reversing
Raw Material	Hot rolled low carbon steel, 0.05~0.10%C; SAE1008; 08KP	
Strip Thickness (mm)	: ≤ 3.0	≤ 3.0
Strip Width (mm)	: ≤ 250	≤ 250
Coil Weight (Ton)	: 4.0	4.0
Finishing Strip Thickness (mm)	: ≥ 0.5	≥ 0.5
Line Speed (m/min)	: 150	150



COLD ROLLED FORMING MACHINE

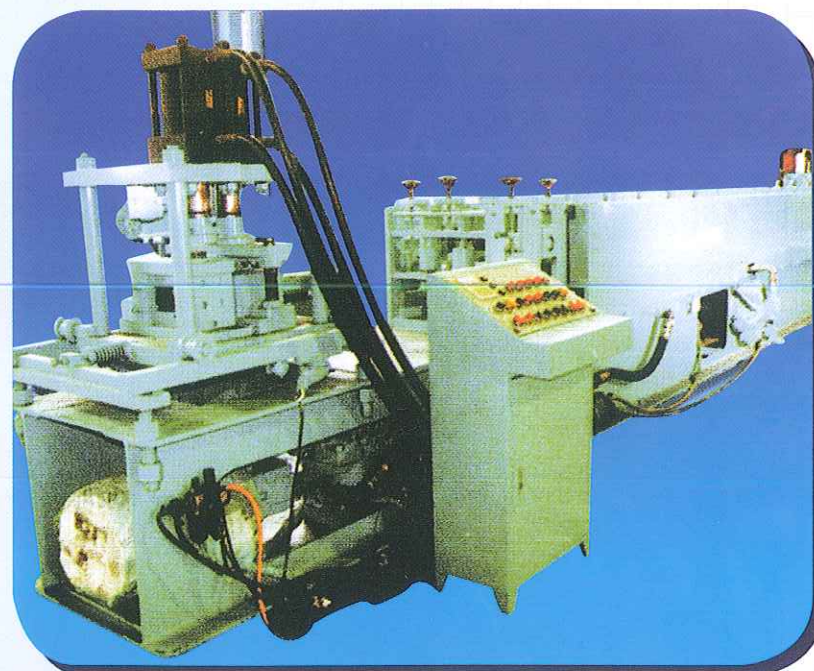
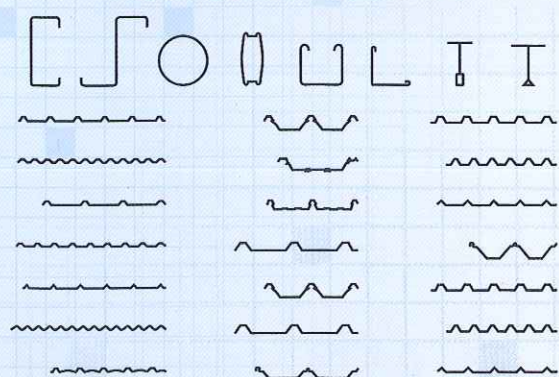
COLD ROLL FORMING MACHINE-C-PURLIN

Machine Model	: C100/150-50-15	C150/200-65-15	C155-50-15	C160/180-60-15
Raw Material	: Hot Dipped Galvanized Coil			
Coil Thickness (mm)	: 1.2 ~ 2.5	1.2 ~ 2.5	1.2 ~ 2.5	1.5 ~ 2.5
Coil Width (mm)	: 226 ~ 276	310 ~ 360	280	310 ~ 330
Coil O.D. (mm)	: Ø1500	Ø1500	Ø1500	Ø1500
Coil I.D. (mm)	: Ø508	Ø508	Ø508	Ø508
Coil Weight (Ton)	: 3	3	3	3
Rectangular Tube (mm)	: C-100/150x50x15	C-150/200x65x15	C-150x50x15	C-160/180x60x15
HF Welder Capacity (kW)	: 6	6	6	6
Line Speed (m/min)	: 12	7 ~ 10	12	7 ~ 10

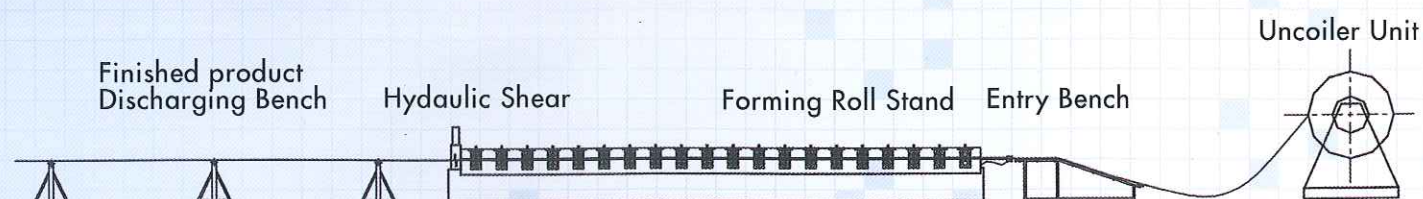
COLD ROLL FORMING MACHINE-Z-PURLIN

Machine Model	: Z150/200-65-15
Raw Material	: Hot Dipped Galvanized Coil
Coil Thickness (mm)	: 1.2 ~ 2.5
Coil Width (mm)	: 310 ~ 360
Coil O.D. (mm)	: Ø1500
Coil I.D. (mm)	: Ø508
Coil Weight (Ton)	: 3
Rectangular Tube (mm)	: Z-150/200x65x15
HF Welder Capacity (kW)	: 6
Line Speed (m/min)	: 7 ~ 10

VARIOUS SHAPES



COLD ROLLED FORMING MACHINE



AUTO PACKING MACHINE

Technical Specification

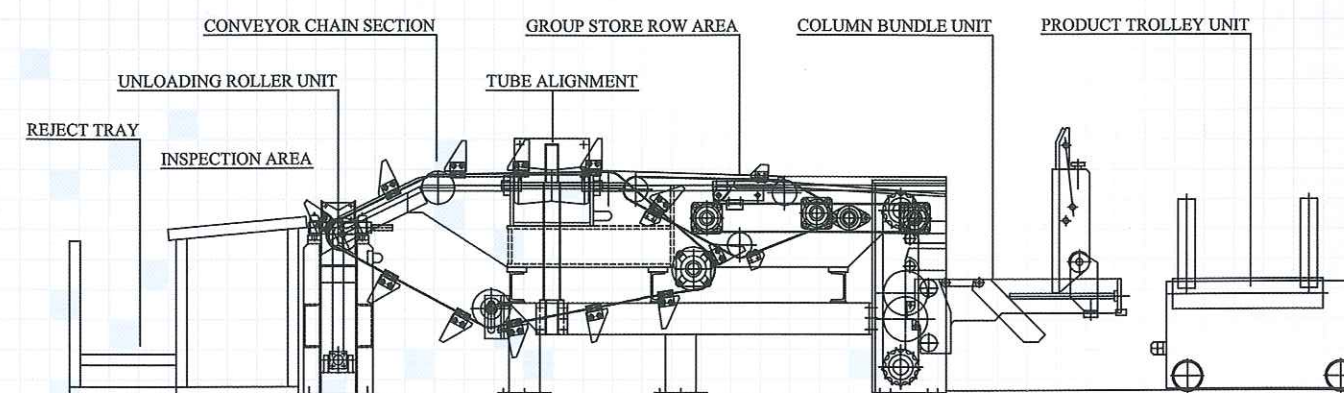
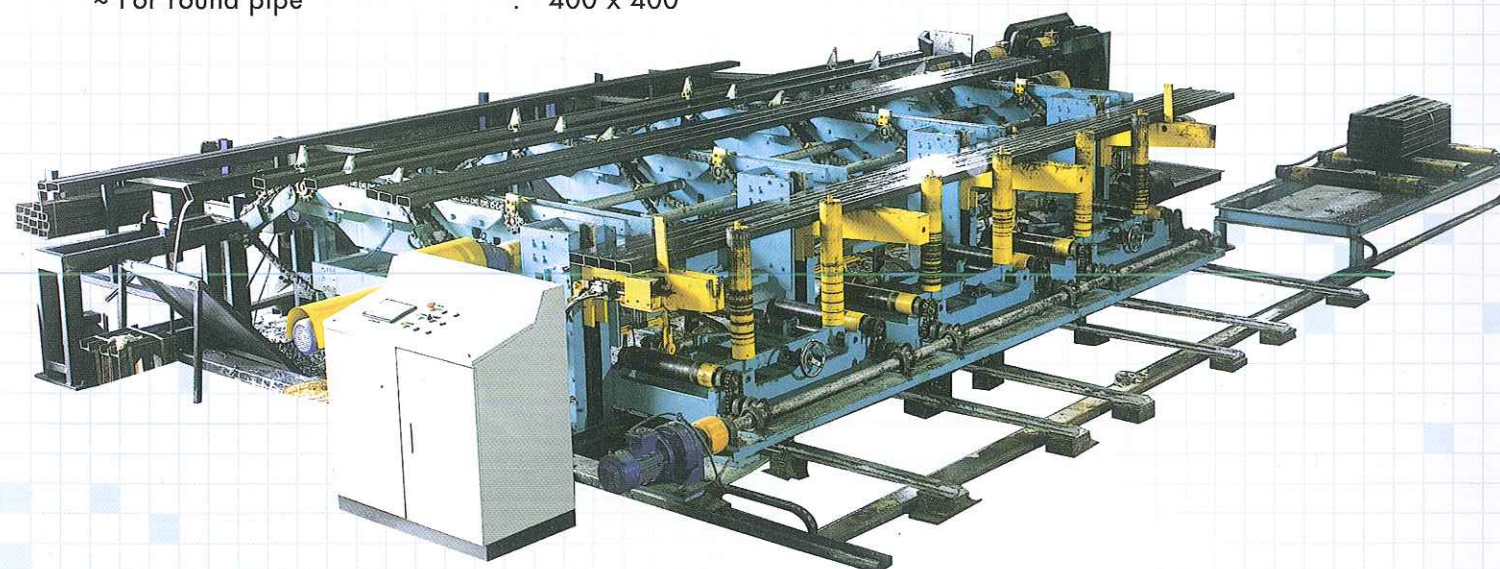
- A) Packing bundle able to manage for :
- Square Bars, Rectangular and Round type
 - Round Tubes, Square and Rectangular
 - Rectangulars bundle, Square and Hexagonals

B) MACHINE CAPACITY

Round Pipe	: Ø25 - Ø100mm
Square Pipe	: 25x25 - 100x100mm
Rectangular Pipe	: 25x50 - 50x100mm
Tube Thickness	: 1 - 5mm
Running Direction	: 4000 - 6000mm
Line Speed	: Left to right / Right to left max 100 m/mm

C) BUNDLE DIMENSION

Square (mm)	
~ For square & rectangular pipe	: 400 x 400
Hexagonal (mm)	
~ For round pipe	: 400 x 400



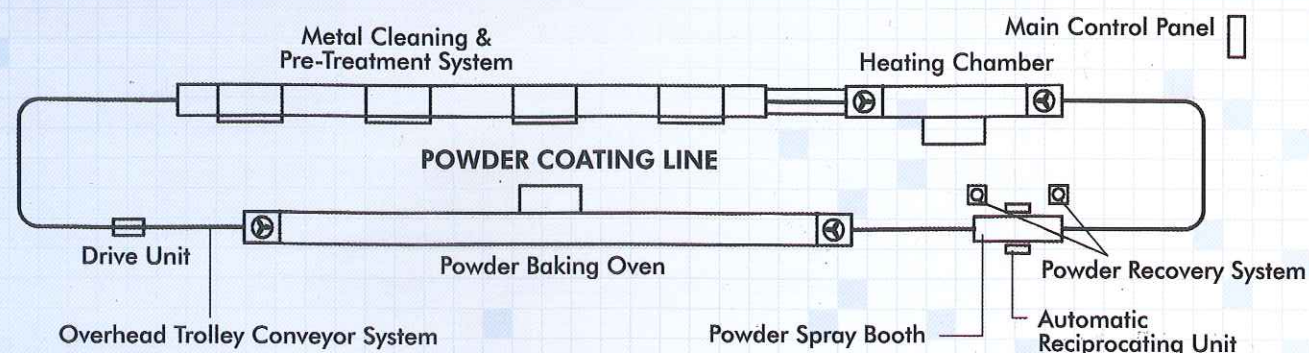
POWDER COATING LINE

POWDER COATING LINE

Machine Model	: PCL-10FPM
Type	: Closed Loop Overhead Conveyor
Raw Material	: Pre-fabricated Steel Metal, Furniture, Racking & etc.
Product Dimension (m x m)	: 1(W) x 3(H)
Line Built-UP Area (m x m x m)	: 20(W) x 63(L) x 10(H)
Colour Coating Technology	: Automatic Reciprocating Powder Spray Coating.
Colour Powder Material	: Epoxy powder
Powder Baking Oven Power	: LPG Gas Burner.
Overhead Chain Conveyor Drive	: AC Inverter Drive system.
Line Speed	: 2 ~ 6 m/min



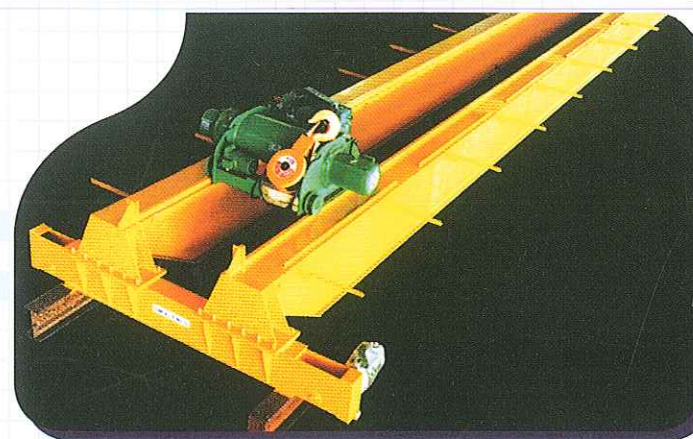
POWDER COATING LINE



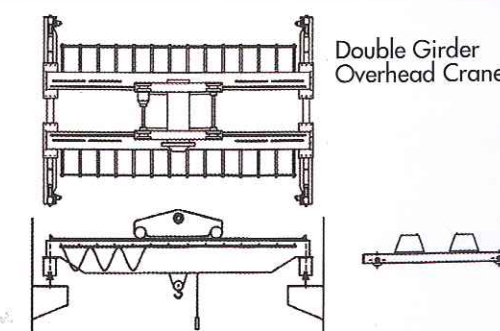
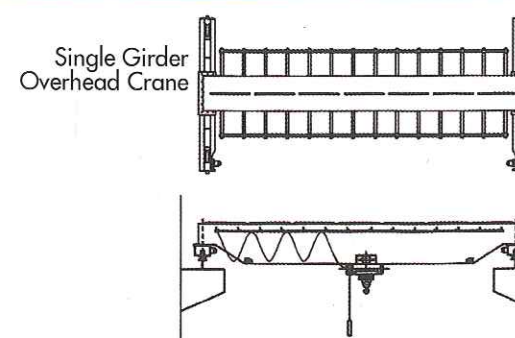
OVERHEAD CRANE

OVERHEAD CRANE

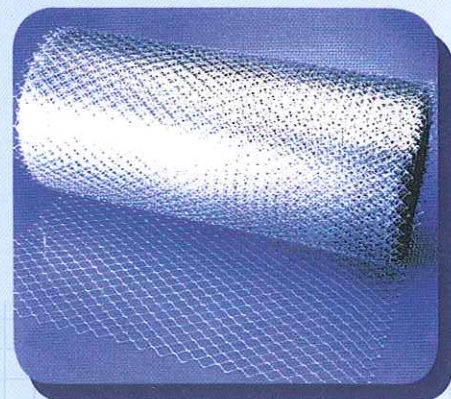
Machine Model	: CR-3S	CR-5S	CR-10D	CR-20D	CR-30D
Type	: Single Girder	Single Girder	Double Girder	Double Girder	Double Girder
Hoisting Speed (m/min)	: 7.5	4.7	5	3.6	2.3
Hoisting Motor (kW x p)	: 5.5 x 4	5.5 x 6	13 x 6	17	17 x 8
Wire Rop Diameter (mm)	: 12.5 x 2	16 x 2	16 x 4	24.4 x 4	22.4 x 6
Cross Travel Speed (m/min)	: 13.3 ~ 20	3.3 ~ 20	8.3 ~ 13.3	8.3 ~ 12.6	8.3 ~ 12.5
Long Travel Speed (m/min)	: 30	30	30	30 ~ 40	30 ~ 40
Traveling Motor (kW x p)	: 0.75 x 4	0.75 x 4	0.75 x 4	1.5 x 4	1.5 x 4 (2units)
Hoist Lifting Capacity (Ton)	: 3	5	10	20	30
Hoist Lifting Height (m)	: 6	6	6	6	6



OVERHEAD CRANE

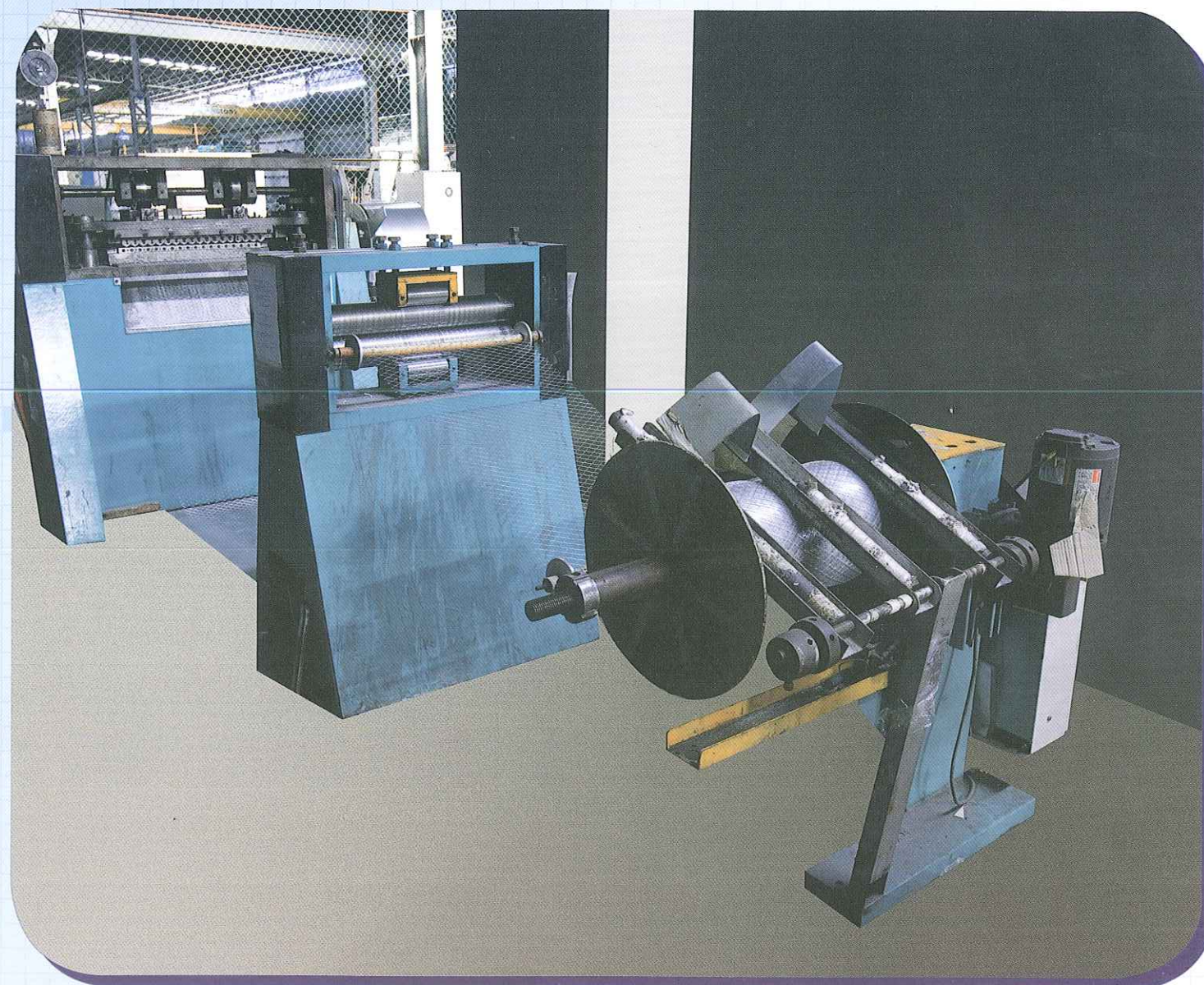


EXPANDED METAL MACHINE

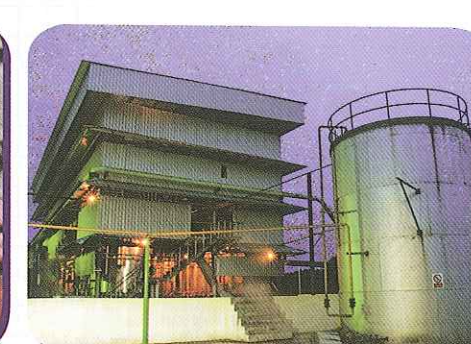
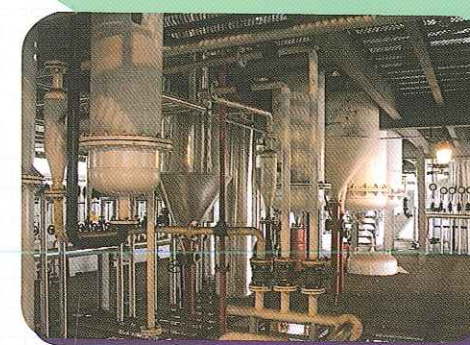


EXPANDED METAL MACHINE

Machine Model	: E-02-02 2 FT	E-04-02 4 FT	E-05-05 5 FT	E-08-05 8 FT	E-08-05 8 FT(NC)
Raw Material	: SPHT,08KP,08YU, SAE1008,SAE1006				
Coil Thickness (mm)	: 0.3 ~ 1.2	0.3 ~ 1.2	1.0 ~ 5.0	1.0 ~ 3.0	1.0 ~ 3.0
Width of Coil (mm)	: 600	1220	1550	2438	2438
Short Way Center (mm)	: 1 ~ 30	1 ~ 30	0 ~ 75	6 ~ 45	6 ~ 75
Distance of Mesh (SWD)					
Long Way Center (mm)	: 2 ~ 38	2 ~ 38	15 ~ 200	10 ~ 114	10 ~ 114
Distance of Mesh (LWD)					
Speed (stroke/min)	: 500	500	89	89	89



PALM FIBRE OIL EXTRACTION PLANT



Raw Material
Capacities
Final Oil Left In Deoiled Fibre
Solvent Consumption

Power Consumption

Steam Consumption
Water Consumption
Flash point of Oil Extracted

: Plam Pressed Fibre with 10%(max) oil content, 40%(max) moisture
: 5 / 7 / 9 / 12 / 14 / 16 / 18 TPH (depending on oil mill capacity)
: 0.5 - 1.0%(max) depending on input oil.
: 6 litres(max) per ton Fibre on Continuous operation
: 8 litres(max) per ton Fibre on 16 hrs per day operation
: 35 / 30 / 25 / 20 / 18 / 16 / 14 Kwh per ton
Fibre depending on capacity of plant
: 500kg per ton Fibre on continuous operation
: 400 litre per ton Fibre
: 180 C (min)