



Technical Systems

MARKET LEADER IN
FEED CONVEYING

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INTRODUCTION

Vision

To be the preferred manufacturer and supplier of feeding systems in the global OEM livestock industry

Mission

The company has obligations to the following parties:

Customers

To supply customers with high quality components for Poultry and Pig Feeding Systems, and to offer technical advice and recommendations to existing and potential clients.

Suppliers

To maintain a professional and ethical relationship with suppliers, contractors and consultants, as well as to source more efficient and cost effective raw materials from these & other suppliers.

Employees

To provide a safe, clean and healthy working environment for all employees, to assist them with training and education, and to encourage them to develop and realise their true potential.

Environment

To minimise the use of materials that are harmful to the environment, to ensure the correct disposal of these products and to assist in environmental programmes within the local community.

Company Philosophy

Technical Systems is a key manufacturer and world-wide distributor of livestock feeder equipment.

We realise that success can only be achieved by understanding the needs of our clients.

This is achieved by:

- continuous improvement of our products
- addressing our customers' needs accurately & timeously
- a professional team of employees, dedicated to customer service
- investment in modern technology and in our employees

GLOBAL MARKET SHARE

Since our inception in 1993, we have emerged as the market leader in feed conveying systems, driven by our commitment to excellence in products, quality, customer service, and supply chain efficiency. With over 30 years of experience, we proudly export to more than 58 countries, establishing a robust presence supported by strategically located warehouse worldwide.

COMPETITIVE ADVANTAGE

- **Technical Expertise**
In-depth knowledge and experience in the industry
- **High Quality Products**
Commitment to superior manufacturing standards
- **Competitive pricing**
Affordable solutions without compromising quality
- **10-year Guarantee**
Confidence in product durability and performances
- **Quick Lead Times**
Efficient processes for timely delivery
- **Customer service delivery**
Dedicated support for all customer inquiries and needs
- **Global Inventory Management**
Effective supply chain management for optimal product availability

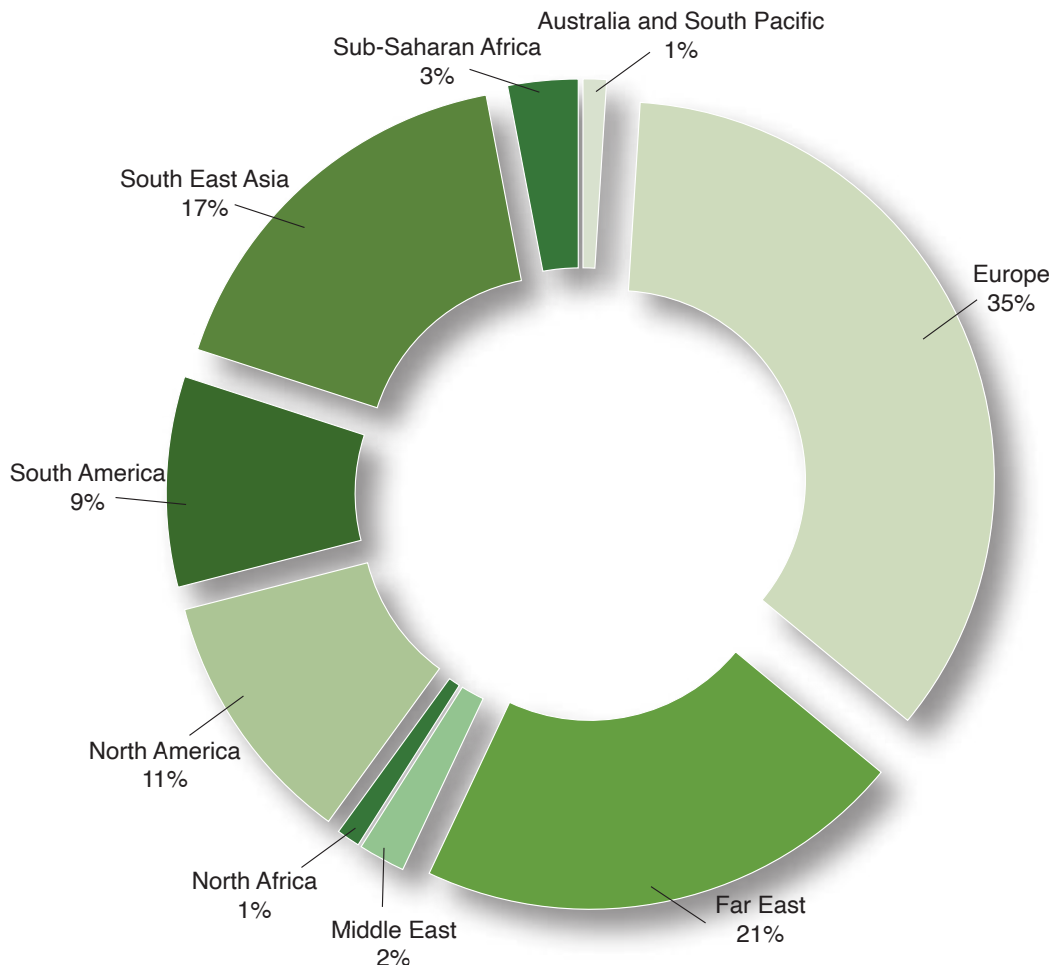
DISTRIBUTION NETWORK

- **Licensed Exporting Company**
Compliance and certification for international trade
- **Global Reach**
Operations in over 58 Countries
- **Warehouse Location**
Four main hubs in USA, South Africa, China and Europe ensure efficient supply
- **Stock Holding Efficiency**
High inventory levels across all warehouses to meet demand
- **Global ERP Systems**
Streamlined operations for better resource management
- **Goods in Transit Tracking**
Real-time tracking of products in transit for customer assurance

COMBINED PACKAGING SOLUTION

Our Combined packaging solutions are designed to maximize space efficiency and minimize freight costs, providing significant savings while ensuring product safety.

- Cost Efficiency
- Streamlined Logistics
- Sustainable Practices
- Reduce lead times



CHAIN FEEDING

Feed Chain

Feed Chain is Technical Systems' flagship product. By supplying the most reliable flat Feed Chain, you can rely on Technical Systems' Feed Chain to distribute feed evenly, rapidly and reliably throughout any feeding configuration.

Characteristics, dimensions and specifications:

- A minimum of 13.5kN tensile breaking load.
- No twisting, vibrating or "empty" spots.
- No elongation of material after installation.
- Hardness: 48 - 50 HRc
- Tensile strength: 1640 - 1760 MPa
- Links per 10 m: 236 links (+/- 2 links)
- Pitch: 42.4 mm (+/- 0.35 mm)
- Material Thickness: 2.5 mm
- Chain Width: 70 mm - Type S & C Models
42.86 mm - Type P Models

Packing

Standard Pallets - TYPE S & C

Metres

1 x 6 m container = 22 pallets
1 x pallet = 1,080 m
108 rolls x 10 m per pallet
Total of 23,760 m per 1 x 6 m container

Feet

1 x 20 ft container = 21 pallets
1 pallet = 3,600 ft
144 rolls x 25 ft per pallet
Total of 75,600 ft per 1 x 20 ft container

Mini Pallets - TYPE S & C

Combined with Auger models to maximise container loads

Metres

1 x 6 m container = 20 pallets
1 x pallet = 520 m
52 rolls x 10 m per pallet
Total of 10,400 m per 1x 6 m container

Feet

1 x 20 ft container = 20 pallets
1 x pallet = 1,200 ft
48 rolls x 25 ft per pallet
Total of 24,000 feet per 1 x 20 ft container

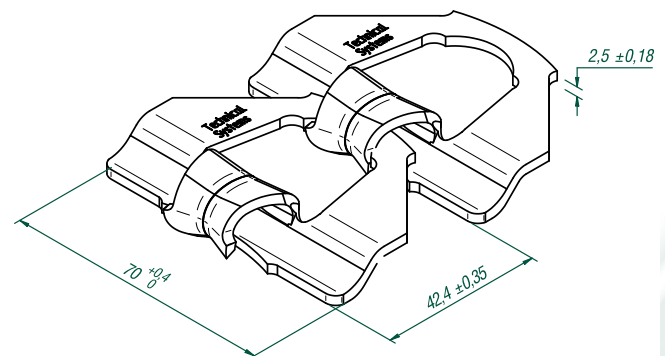
Please enquire about **TYPE P** packing configurations to optimise your shipping.

Combined Shipments of Feed Chain and Auger - a competitive advantage!

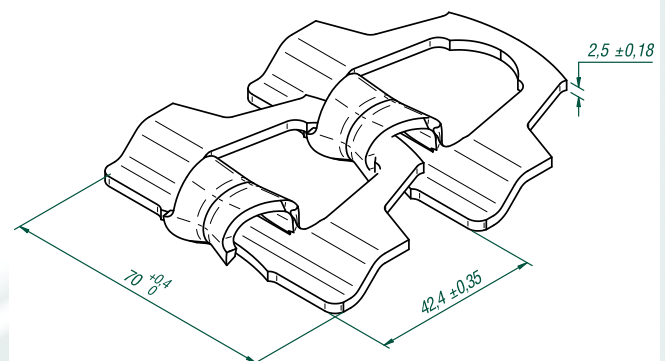
To maximise shipments and assist with your flexibility, "mini pallets" of Feed Chain can be packed inside the Auger Coils. This allows for full containers of Auger, combined with half containers of Feed Chain at no additional shipping costs, thus maximising utilisation and driving down unit costs.

Please enquire about packing combinations.

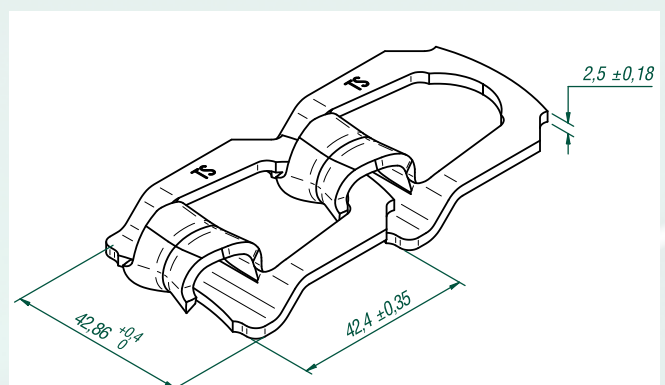
Visit www.technicalsys.com for more specifications.



TYPE S



TYPE C



TYPE P

CU-TS 90° STANDARD CORNER UNIT AND RAISED CORNER UNIT

CU-TS Corner unit

Technical Systems' Corner unit will provide a trouble-free operation in a feeding system, to distribute feed evenly, rapidly and reliably throughout any feeding configuration.

Technical Systems offers different unit sizes: Standard and Raised Corner Units.

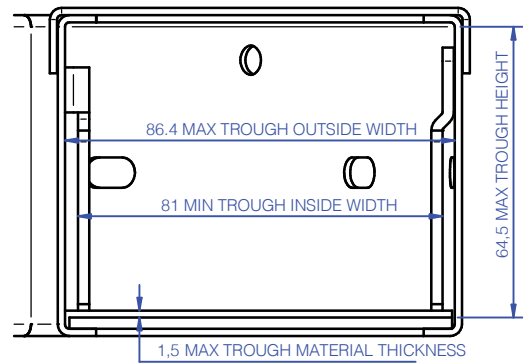
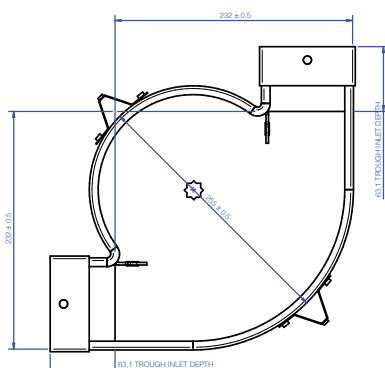
The CU-TS offers the following benefits to the user:

- Improved shaft, with square locator to eliminate the risk of the shaft unscrewing
- Hardened cast iron wheel
- Flange on bottom of the wheel to promote chain elevation, reducing wear on the base plate
- Self-lubricating PET bush
- No lubrication required
- Rust prevention layers on the shaft
- Rust prevention layers in the epoxy coating process
- Transparent lid for durability and improved visibility within the corner unit
- Improved link leveller rail system
- Customizable packing configurations i.e. can be added to our current product range by filling the space to maximize container space

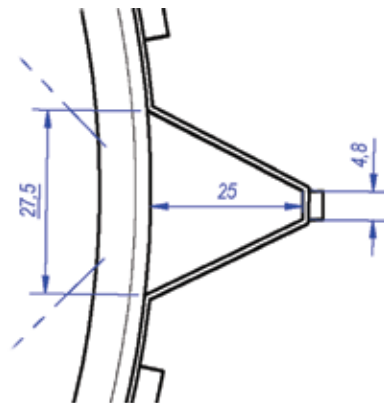
The corner unit integrates with most universally accepted trough systems.

Additional information

- Customizable to market requirements i.e. colour & logos per customer request
- Parts available to sell: Cover, Body, Wheel assembly (with wheel and shaft)



DETAIL TROUGH INLET



MAX LEGSTAND TO FIT UNIT

Packing on Standard CU-TS Corner Unit

Units Standard Pallets

Units

1 box = 2 units maximum

Palletising types

- 1 x mini pallet = 24 boxes of 48 units
- 1 x half pallet = 54 boxes of 108 units
- 1 x full pallet = 132 boxes of 264 units

1 x 20 ft (6 m) container = 10 pallets
Total of 2,640 units as maximum per 1 x 20 ft (6 m) container

Please enquire about packing combinations to maximise container loads, and raised Corner units.

Combined Shipments of Feed Chain, Corner units and Auger - a competitive advantage!

To optimise container space usage, and to reduce shipping cost per unit, we offer various methods of packaging.

Including MINI Pallets that can be inserted into Auger pallets, thus making the most of all available container space.

Please enquire about packing combinations.

Visit www.technicalsys.com for more specifications.

DRIVE UNIT

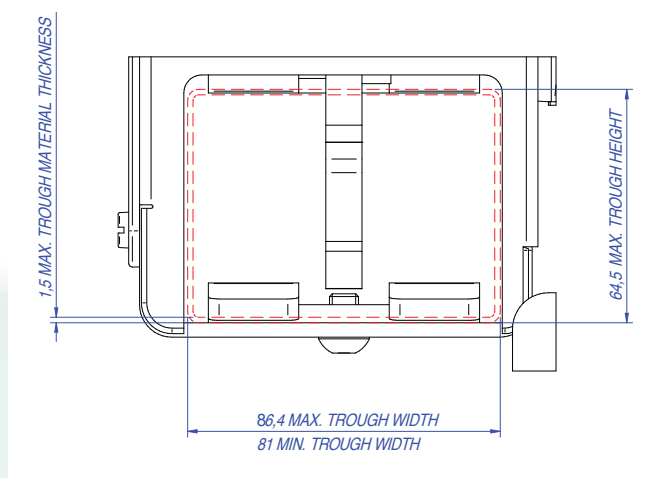
Technical Systems' Drive Unit will provide for a trouble-free operation in a feeding system, to distribute feed evenly, rapidly and reliably throughout any feeding configuration.



The New TS Drive Unit offers the following benefits to the user:

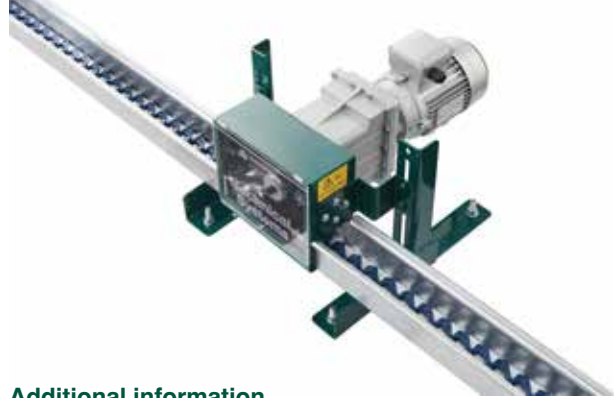
- Over 32 combinations of motors sizes and speeds.
- Custom combinations available as per request.
- Helical Inline as well as worm applications.
- Hardened steel Sprocket.
- Customisable drive unit box, accommodating motor brand of choice.
- Pre-treated and powder coated to prevent corrosion.

The drive unit integrates with most universally accepted through systems.



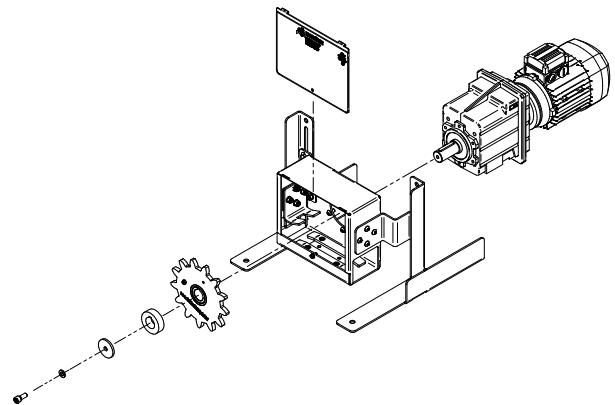
Trough inlet:

- 86.4 mm max trough outside width
- 81 mm min trough inside width
- 64.5 mm maximum trough height



Additional information

- Customisable packing configurations i.e. can be added to our current product range by filling the space and maximize container space
- Customizable to market requirements i.e. colour & logos
- Parts available to sell: Cover, Body, Sprocket, Gear motors, Stands, Shoes/Bottom Guides



Packing

Standard Pallet - 16 units

20 ft container

5.9 m (L) x 2.35 m (W) x 2.28 m (H)
12 pallets = 192 units

40 ft container

12.03 m (L) x 2.35 m (W) x 2.58 m (H)
24 pallets = 384 units

Please enquire about packing combinations to maximise container loads, weight and placement permitting.

Visit www.technicalsys.com for more specifications.



LINK CHAIN

Link Chain is a versatile product that can be used for various applications such as Egg Conveying belts and Disc Chain feeding within the conveying industry. Link Chain is a flexible, compact and modular feeding system.

Technical Systems is excited to offer a product as diverse and innovative as Link Chain, currently specialising in Disc Chain and Egg Conveying applications.

Disc chain is where plastic discs are moulded onto the chain and used to convey feed.

Egg conveying chain makes use of bars welded in between two sections of chain and is used to convey eggs in a straight-line around corners, inclines and declines.

Characteristics, dimensions and specifications:

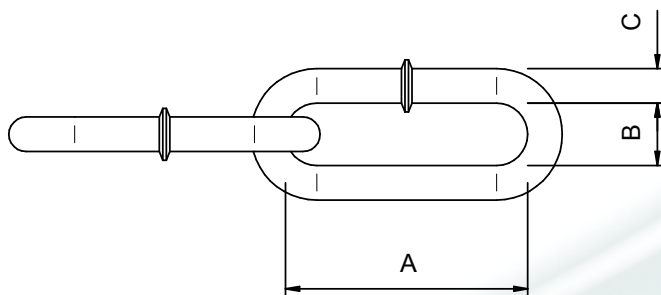
Technical Systems offers two sizes for the disc chain application but can develop different sizes if feasible (see 50-series).

- 5mm x 35 mm x 9 mm
- 5mm x 35.75 mm x 9 mm

Two sizes for the egg conveying application but can develop different sizes if feasible (see 60-series).

- 6 mm x 33 mm x 9 mm
- 6 mm x 27.45 mm x 9 mm

Both product types are tumbled and polished and offer sufficient wear and fatigue life for the application.



Packing

Link Chain

Packaged in bags and placed in crates

Meters

- Disc Chain

2,000 m packed in a crate

1 X 20 ft container = 10 Crates (Total: +/- 20,000 m Link Chain)

- Egg Conveying

1,600 m packed in a crate

1 X 20 ft container = 10 Crates (Total: +/- 16,000 m Link Chain)

Feet

- Disc Chain

1 Crate = +/- 6,560 ft

1 X 20 ft container = 10 Crates (Total: +/- 65,600 ft Link Chain)

- Egg Conveying

1 Crate = +/- 5,250 ft

1 X 20 ft container = 10 Crates (Total: +/- 52,500 ft Link Chain)

Welded link chain attributes:

- **High strength:** Welded link chains are made from heat-treated steel, which makes them extremely strong and able to withstand heavy loads.
- **Durability:** The welding process creates a continuous link that is less likely to fail or break under heavy loads.
- **Versatility:** Welded link chains are available in various sizes and designs.
- **Resistance to wear and tear:** Welded link chains have a smooth surface that reduces wear and tear caused by friction between links, increasing their lifespan.
- **Corrosion resistance:** Welded link chains are available with a corrosion-resistant coating, which makes them ideal for use in harsh environments.
- **Easy to repair:** Welded link chains can be easily repaired by replacing individual links, which makes them a cost-effective choice over the long term.

For more information and specifications etc, please visit www.technicalsys.com.

FORMING SPECIFICATION					HT SPECIFICATIONS	
SERIES	PITCH (A)	INSIDE (B)	THICKNESS (C)	BURR	HARDNESS METHOD	MIN TENSILE STRENGTH
50-SERIES MODELS	35.00 [+0.3 / -0.2]	9.0 [+0.3 / -0.2]	5 [±0.5]	7.5 [±0.5]	47 [±1.5] HRc Through	25 kN
	35.75 [+0.3 / -0.2]	9.0 [+0.3 / -0.2]	5 [±0.5]	7.5 [±0.5]	47 [±1.5] HRc Through	25 kN
60-SERIES MODELS	27.45 [+0.3 / -0.2]	8.9 [+0.3 / -0.2]	6 [±0.5]	Max 6.60	47 [±1.5] HRc Through	25 kN
	33.00 [+0.2 / -0.3]	9.0 [+0.5 / 0]	6 [±0.5]	Max 6.60	47 [±1.5] HRc Through	25 kN

SPECIALITY WIRE

Technical Systems has over 20 years of experience in flat wire production and heat treatment. We have recently expanded our market to produce high tolerance specification wire for different industries. An example would be mattress frame wire used in the furniture industry. If you want to challenge us with the production of your high-quality requirements please feel free to contact us

Technical specifications:

- Steel grade: As per product specification
- Tensile Strength: 1,100 – 1,800 MPa, or as requested.
- Standard Dimensions: 10 mm (+/- 0.2 mm) x 1.4 mm (+/- 0.02 mm) other sizes available
- Chemical analyses as per required specification.

Quality control:

- **Input raw material:**
Material acceptance inspections of rod diameter, ovality and physical defects, with material steel grade verification.
- **Width & thickness dimensions:**
Continuous measurements to ensure correct dimensions.
- **Wire heat treatment and Hardness:**
Electronic and computerized readings to continuously measure the line speed, quenching, soaking and temper temperatures. Hardness & tensile tests per coil and re-checked at final packing.
- **Application testing:**
Bending and welding test conducted to ensure wire functionality.
- **Visual:**
Checks for possible deforming of product.
- **Packing checks:**
ISPM fumigation certificate, wrapping strength, covered in cloth to absorb excess oil, and strapping.



Packing Configuration

Pallet Flat Wire Coil Dimensions

(depending on the weight of the coil):

Inside diameter: 500 mm,

Outside diameter: dependent on the coil weight.

Width: 80 mm – 300 mm

Weight: up to 1,000 kg per coil, as per requirement.

1 x 6 m (20 ft) container = maximum range from 19 – 25 tons, depending on allowable tonnage permitting per country.

Pallets are strapped, wrapped and covered with a cloth.



WIRE BENDING

We are able to provide our clients with flat wire, as well as offer the service of bending the wire in accordance to specifications provided.

Bread pan frames are available welded or non-welded.

A variety of input wire sizes can be accommodated.

Wire Bending Products are offered in the following ranges:

- Frame widths: 80 mm – 500 mm
- Frame lengths: 80 mm – 1,000 mm



FLATTENED WIRE

Technical Systems adds value by controlling the entire production process, from the flattening to the heat treatment stage ensuring a reliable and durable product.

Attributes & Dimensions

Material type: Heat treated Flat Wire

Quality control:

- **Input raw material:**
Material acceptance inspections of rod diameter, ovality and physical defects, with material steel grade verification.
- **Flat wire width & thickness dimensions:**
Continuous measurements to ensure correct dimensions.
- **Wire heat treatment and Hardness:**
Electronic and computerised readings to continuously measure the line speed, quenching, soaking and temper temperatures. Hardness tests per coil and re-checked at final packing.
- **Visual:**
Checks for possible deforming of product.
- **Packing checks:**
ISPM fumigation certificate, wrapping strength, covered in cloth to absorb excess oil, strapped.

Lubrication: To prevent corrosion.

Hardness:

TYPE	HRc
8.00 x 3.85 mm	40 ± 1.5
8.00 x 3.85 mm	43 ± 1.5
10.50 x 4.00 mm	
12.00 x 4.00 mm	
14.00 x 5.20 mm	

Other sizes and hardness are available. Please contact us for more information.

Dimensions:

TYPE 8.00 x 3.85 mm		Tolerances (mm)	Min (mm)	Max (mm)
FLAT WIRE WIDTH	8.00	[± 0.2]	7.80	8.20
FLAT WIRE THICKNESS	3.85	[± 0.1]	3.75	3.95

TYPE 10.50 x 4.00 mm		Tolerances (mm)	Min (mm)	Max (mm)
FLAT WIRE WIDTH	10.50	[± 0.2]	10.3	10.7
FLAT WIRE THICKNESS	4.00	[± 0.1]	3.9	4.1

TYPE 12.00 x 4.00 mm		Tolerances (mm)	Min (mm)	Max (mm)
FLAT WIRE WIDTH	12.00	[± 0.3]	11.7	12.3
FLAT WIRE THICKNESS	4.00	[± 0.15]	3.85	4.15

TYPE 14.00 x 5.20		Tolerances (mm)	Min (mm)	Max (mm)
FLAT WIRE WIDTH	14.00	[± 0.3]	13.7	14.3
FLAT WIRE THICKNESS	5.20	[± 0.15]	5.05	5.35



Packing Configuration

Pallet Flat Wire Coil Dimensions

(depending on weight of coil):

Inside diameter: min 900mm,

Outside diameter: max 1300 mm, Width: 360 – 425mm.

Weight: up to 2,000kg per coil. Packed eye to the sky.

1 x 6 m (20ft) container = maximum range from 19 – 25 tons, depending on allowable tonnage permitted per country.

Pallets are strapped, wrapped and covered with a cloth to prevent lubrication spilling.



Combined Shipments of Feed Chain, Auger, Corner units & Flat Wire - a competitive advantage!

Please enquire about packing combinations.

Visit www.technicalsys.com for more specifications.

AUGER FEEDING

Pan Feeder Auger Conveyor

Pan feeder auger for use in straight-line feeding conveying applications.

Technical Systems flattens and heat treats its own wire, thus monitoring all stages of the process and ensuring a correctly hardened, quality Pan Feeder Auger.

Characteristics, dimensions and specifications:

- Hardness 40 ± 1.5 HRc
- Feed distribution ranges from 250 – 450 kg / hour
- For use in Pipe with outside diameter: 45 mm & 55 mm
- Coil lengths: various on request
- Outside diameter, inside diameter, pitch and wire size: request or visit www.technicalsys.com

Packing

Auger is coiled, wrapped and palletised. One 20 ft (6 m) container can hold around 18 720 m of standard length (117 m) Pan Feeder Auger.

Please enquire about packing configurations to optimise your shipping.

FATIGLESS™ Flexible Cross Auger Conveyor

Fatigless™ Auger is excellent for use in silo to house feed conveying, pig and dairy feeding.

The internationally acclaimed **Fatigless™** Auger is the best Auger in the world, using an enhancing material treatment to deliver a virtually unbreakable Auger.

Characteristics, dimensions and specifications:

- Hardness 43 ± 1.5 HRc
- Fatigue capability outperforms other augers making it the best Auger in the world
- Unbreakable in fatigue oscillator tests. Outlasts 15 year simulation tests
- Surface oxidation resistant oiled finish
- Feed distribution ranges from 250 – 6600 kg / hour
- For use in Pipe with outside diameter: 45 mm, 55 mm, 75 mm, 90 mm, 108 mm, 125 mm
- Coil lengths: various on request
- Outside diameter, inside diameter, pitch and wire size: request or visit www.technicalsys.com

Packing

Auger is coiled, wrapped and palletised. Flexible Cross Auger is far bulkier and a 20 ft container can hold anything from 3 000 m to 12 000 m.

Managing your feed distribution with flexibility

Technical Systems has the ability to manufacture Auger to each customer's specific requirements, provided the volumes warrant it.



Infini-T™ Auger

Pan and **Fatigless™** Cross **Infini-T™** Auger:

- Coil size ranges from 570 m up to 4 800 m (2.05 pallet) - dependant on Auger models
- Auger spiral coils not welded or brazed
- Measure and cut lengths exactly as and when required
- Minimal waste & scrap

Benefits:

- No more investment in flat wire material
- Packing, handling and consumables costs reduced
- Maintenance of equipment and long set-up times reduced
- Reduced yield losses of flat wire material



Combined Shipments of Feed Chain and Auger - a competitive advantage!

To maximise shipments and assist with your flexibility, "mini pallets" of Feed Chain can be packed inside the Auger Coils. This allows for full containers of Auger, combined with half containers of Feed Chain at no additional shipping costs, thus maximising utilisation and driving down unit costs.

Please enquire about packing combinations.

Visit www.technicalsys.com for more specifications.

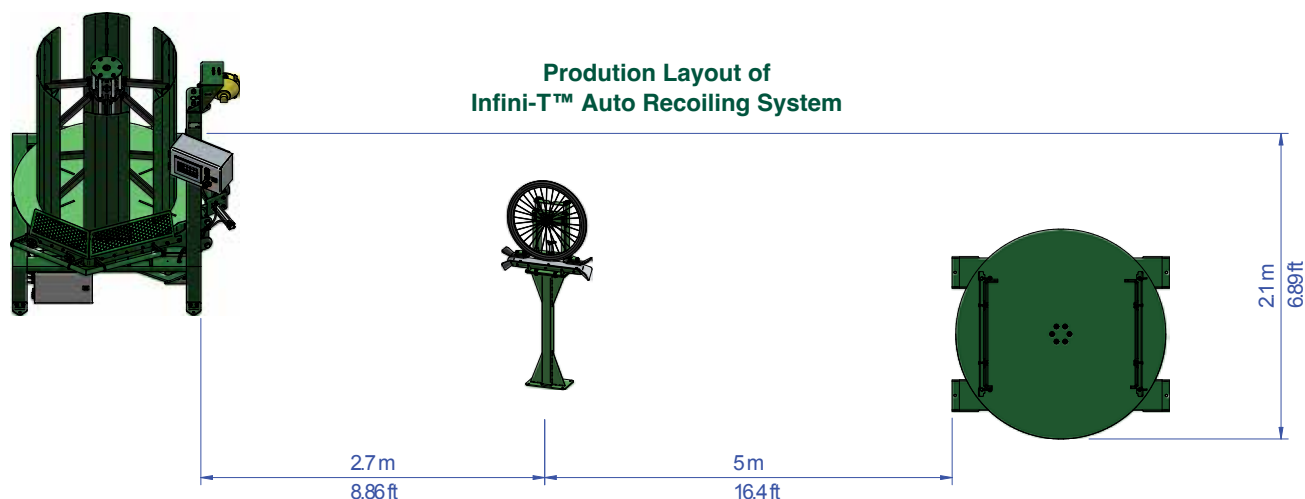
Infini-T™ RECOILING SYSTEM

Infini-T™ Automated Recoiling System Specifications

- **Floor Space:** (+/- 10.5m x +/-2.1m) 22m²
- **Labour:** 1 – 2 Operators
- **Measurement systems:** Inline Auger Length Counter (Measurement Accuracy of +/-0.5%)
- **Electrical Requirements:** 380V, 3 Phase Electricity
- **Production reference:** For a standard 120m (393ft) Coil Length



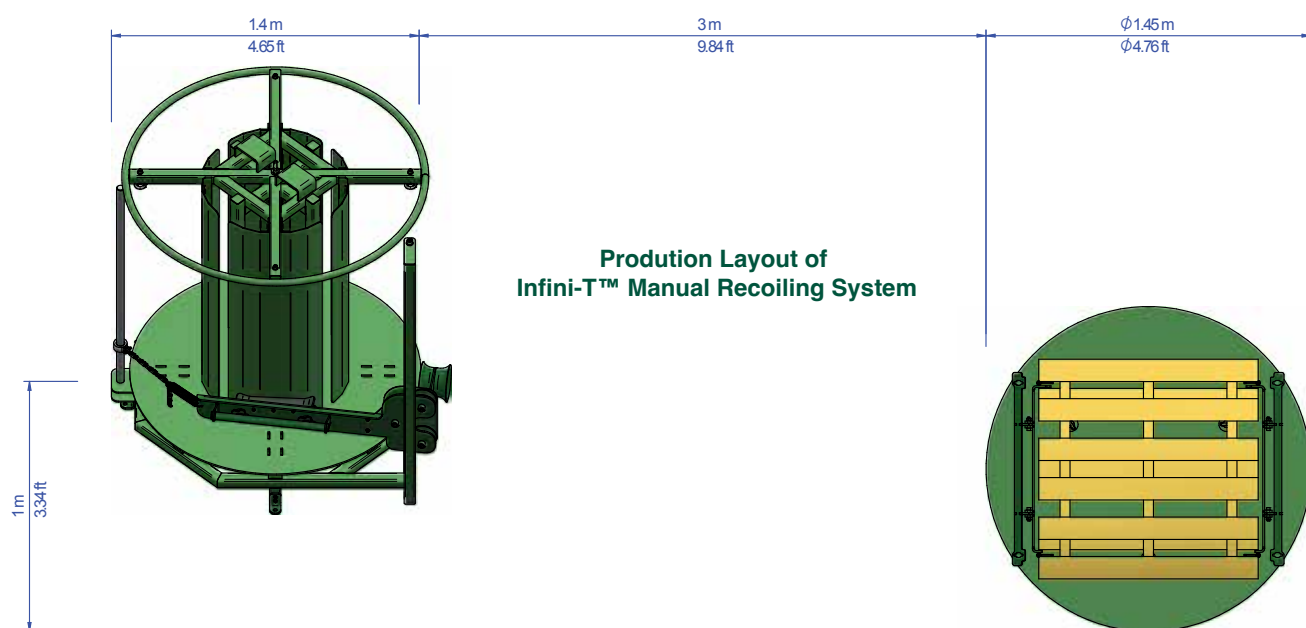
- **Maximum production Output:** 3.8-4.3 Coils per hour, 3500m - 4100m (11400ft -13400ft) per 8 hour shift
- **Product Handling Equipment:** Separated Coil Lifter (For Forklift or Overhead Crane use)



Infini-T™ Manual Recoiling System Specifications

- **Floor Space:** (+5.85m x +/-2.4m) 14 m²
- **Labour:** 1 – 2 Operators
- **Measurement systems:** None (Manual Calculation)
- **Electrical Requirements:** N/A (100% Manually operated)

- **Production reference:** For a standard 120m (393ft) Coil Length
- **Maximum production Output:** 2.8-3.3 Coils per hour, 2500m - 3100m (8200ft – 10200ft) per 8 hour shift
- **Product Handling Equipment:** Integrated Coil Lifter (For Forklift or Overhead Crane use)



Packing

Please enquire about packing.

Visit www.technicalsys.com for more specifications.

Technical Systems

MARKET LEADER IN
FEED CONVEYING



CONTACT INFORMATION

South Africa

Technical Systems (Pty) Ltd South Africa

Physical Address: Ampere Street
Stikland, Bellville
Cape Town, 7530
South Africa

Postal Address: PO Box 757
Sanlamhof
7532
South Africa

Telephone: +27 (0) 21 949 9191
Fax: +27 (0) 21 949 9195
Email: info@technicalsys.com
Website: www.technicalsys.com

International Warehousing

Technical Systems B.V.

ALC Warehousing
Ondernemingsweg 64-70
2400 AS Alphen aan den Rijn
The Netherlands, Europe

Technical Systems (Qingdao) Trading Co., Ltd

B1-North Shandong High-Way
Smart Logistics Industrial Park
No 169 Huaihe West Road, Huangdao District
Qingdao, Shandong, China

Technical Systems Inc

2500 W State Blvd
Fort Wayne
Indiana 46808, USA