



9373101948

STANDING TALL

for the Future





INDEX PAGE

1

About the
Brand

2

Introducing
AGRION
Fence Posts

3

Features
of the AGRION
Fence Posts

4

Product Design

5

Why
Choose
AGRION

6

The AGRION
Advantage

7

Usage and
Recommended
Applications

8

Product
Catalogue

ABOUT THE BRAND

- Operations in key business clusters
- Trading: Steel, Minerals, Agri
- Distribution: Auto and Allied, Parts, Support and Financial Services
- Worldwide presence along with sourcing and marketing competencies



INTRODUCING

AGRION FENCE POSTS

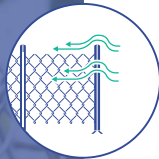
Agrion from the Farm Fence Product range, is the ideal solution for those who are looking for durable fencing. The posts keep intact the quality that is trademark to the brand. They are rust-proof and easy to install in all types of land with barbed wires, chain-link, knotted wires or any other kind of fencing provisions.

AGRION posts resonate the same trust, reliability and durability of every product that the brand has produced.



FEATURES OF THE AGRION FENCE

POSTS



Aerodynamic Y-fin Design

The fence posts have an aerodynamic Y-fin design to give strength and life to the fence, and a unique arrow-head design at the end that makes grouting easier.



Tested for Longevity

The posts are bitumen-coated and galvanised, to ensure maximum strength, durability, and longevity.



Value for Money

They are made of high-quality steel, which fetches higher resale value, reducing the lifetime cost.

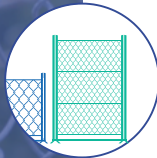
FEATURES OF THE AGRION FENCE

POSTS



Ease of handling

The logistics involved in installing AGRION fence posts are considerably lower - such as transportation costs and handling charges. This results in a lower cost of ownership.



Customisable

They can be customised for length and holes pattern while the bottom t-welding gives the post structure more adhesiveness. The bitumen-coated paint keeps the post rust-proof and is available in vibrant colour options, making it a ready-to-use product.

PRODUCT DESIGN

The AGRION posts' innovative Y-findesign is specifically made for fence posts, making it unique in the segment. The structural performance of the posts with design has been evaluated using numerical analysis with ABAQUS.



Delving deeper into the product design

Bending and torsional load are factors to consider in any fence post. The bending load refers to the load experienced when the wire is tied to the post and attached to an adjacent post. The torsional load refers to the force applied to the post, creating a twisting tension - such as wind, hail, and other external factors. The strength of any fence post is generally designed to be proportional to its mass, so it does not collapse over a period of time.



For instance, during events such as cyclones or heavy winds, or due to external disturbances like cattle grazing, fence posts typically begin to sway and move from their original position. To know how much external force the AGRION post can handle, deflection and angular deformation measurements were taken when under bending and torsional loads.

Material Properties & Load Bearing Capacity

Through rigorous R&D and internal assessments, we tested the structural performance, endurance and strength of the fence posts. One parameter to do this is the UTS, which was measured to be 667.61. Through multiple tests, it was proved SAGRION would retain its structural strength and integrity till about 600 N force. Further, the AGRION posts also show superior bending load-bearing capacity with comparable torsional rigidity compared to conventional products in the same application.

Design	Aerodynamic
Weight (Kg/m)	2.30 - With Tolerance
Bending Load	615 N
Torsional Load	45,600 N-mm

WHY CHOOSE AGRION ?



S. No	Category	STAMBH	Conventional Product (Concrete & Stone)	Conventional Product (Steel)
1	Design	Aerodynamic y-fin design	No design	L-angle
2	Hole pattern	Customized hole pattern	No hole pattern to tie fencing wire	Additional job work (extra cost)
3	Rustproof coating	Bitumen black coated paint (220gsm) / hot dipped galvanised	NA	Additional job work (extra cost)
4	After life	High resale value	No use after life	Lower resale value
5	Authenticity	AGRION FENCE POST	No embossing	No brand embossing
6	Life cycle cost	One time cost	Extra reinstallation cost after breakage	Re-work
7	Handling	Easy to transport and install	Difficult to transport and install due to heavy weight	Additional job work at site
8	Reliability	FARM FENCE trust	Local brand	Local brand
9	Appearance	Premium	Ordinary	Ordinary
10	Authentication	Quality assurance certificate	No certification	No certification

THE STAMB H ADVANTAG E



Better Specific Strength

AGRION posts have a higher strength-to-mass ratio, offering improved structural integrity. Cement has low tensile strength and is therefore reinforced with iron bars or wires to increase specific strength, albeit at the expense of added weight.



Resilient

The post can withstand impact from external forces without breaking.



Reliable And Durable

AGRION posts provide long-lasting performance and requires minimal maintenance.



Aerodynamic Y-shape Design

The unique Y-Fin design reduces wind resistance, enhancing stability. Additionally, the post's arrow-head design at the lower end makes grouting easier.



Ease Of Handling & Transportation

The post's optimum weight and ergonomic design make it easy to carry and transport.



Easy Installation

AGRION posts can be installed quickly and efficiently, saving time and labour costs.

THE STAMB H ADVANTAG E



Customisable

It can be tailored to fit specific fencing requirements and preferences.



Value For Money

They are made of high-quality steel, which fetches higher resale value, reducing the lifetime cost.



Enhanced Aesthetics

The modern design of AGRION significantly improves the overall appearance of the fence. Moreover, this also ensures that the fencing not only serves its functional purpose but also adds visual appeal to the surroundings.



Less Erection Time

Installing a AGRION post takes lesser time compared to traditional posts, specifically stone and cement fencing posts, improving project efficiency.



Long Life

AGRION posts are engineered with high-quality materials and advanced manufacturing processes, along with bitumen-coated and galvanized features, ensuring maximum strength, durability, and longevity, resulting in exceptional durability and a prolonged service life.

USAGE AND RECOMMENDED APPLICATIONS

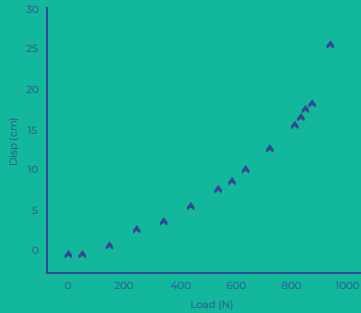
- a) Avoid drilling holes closer than 10 cm to the upper surface of grouting.
- b) Use a smaller lever while applying tension to the barbed wire with support from the AGRION post as a shorter lever length increases the twisting strength. It is recommended to use a 30-35 cm lever and support it over the shorter arm of the post.
- c) When installing the fence over the post, it is advisable to keep the fence parallel to the holes and supported over the two smaller arms. However, the tension in the wire should be provided by orienting the force in parallel to bigger arm of the post.
- d) Start fixing the wire on the post from bottom to top.
- e) Recommendations for grouting the post on maximum reaction forces are suggested as:

Length of SAGRION (in feet)	Prescribed Grouting length (in feet)
6.5 Ft	1.5
7-9 Ft	2
Greater than 9 Ft	2.5

Force Vs

Displacement plot for

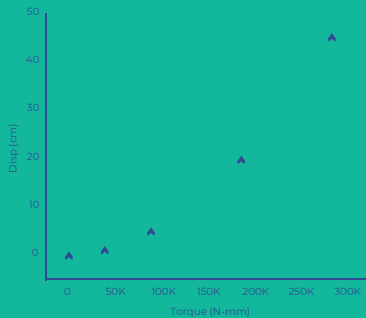
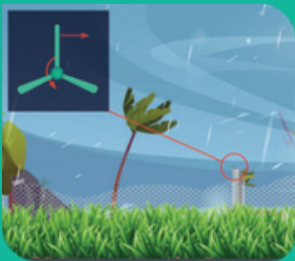
BENDING TEST



Moment Vs

Angular deformation plot for

TORSIONAL TEST



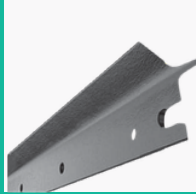
The graphs here indicate good ductility and strength showcased by the AGRION post under different loads. This helps understand the post's behaviour under bending and torsional loads and ensures that it meets the necessary performance criteria for its intended applications.

PRODUCT CATALOGUE

Features



Holes



Cross-Section



Corner Post



T-Welded



Notched

Customization available

Product Size

Bottom

T-welded / Notched

Hole Pattern

Coat

Bitumen/Galvanized

Main Posts (Feet)	Support Posts (Feet)
5.5	4.6
6	5.2
6.5	5.8
7	6.4
8	7.6

Pattern Key

Pattern-1

(Hole at every 6 Inches with slot on Top)

Pattern-2

(Hole at every 9 Inches with slot on Top)

Pattern-3

(Top to Bottom - Hole distance 12MM, 290 MM, 240 MM, 220 MM, 180 MM, 170 MM, 150 MM, 140 MM & 130 MM)

1. Other length ranging from 8.5 feet to 11 feet are available on MTO.
2. Bottom of the post is either notched (for hard soil) and T-welded (for soft soil).
3. Hole pattern can be customized based on fencing wire dimension.
4. Fluorescent painted posts are available for night vision (MTO).



Standing tall for the future

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