



winds of
proven
quality and
expertise



Safety regulations, adherence to international standards and state-of -the-art tower internals is what you get with Sagar Asia. We have a range of components, which can be made available to your customized requirements. Fixed ladders with fall arrester systems, wall mountings and intermediate platforms, platforms and railing system, tower doors and more. We have standardized fittings with relevant automation. Our contact programmes with customers ensure high levels of service and prompt delivery. Technology, safety, logistics and execution is what will make you consider Sagar Asia as a provider of choice.





Competence For Everything – Through And Through.

Sagar Asia for you

Wind power as a renewable energy source is of increasing importance – and this generates a need for innovation and constant further development.

Sagar Asia supports manufacturers of wind power plants worldwide, functioning both as a general contractor and consultant.



The Sagar Asia principle:

As our client, you get complete , state of the art tower internals in compliance with all relevant safety regulations and standards.

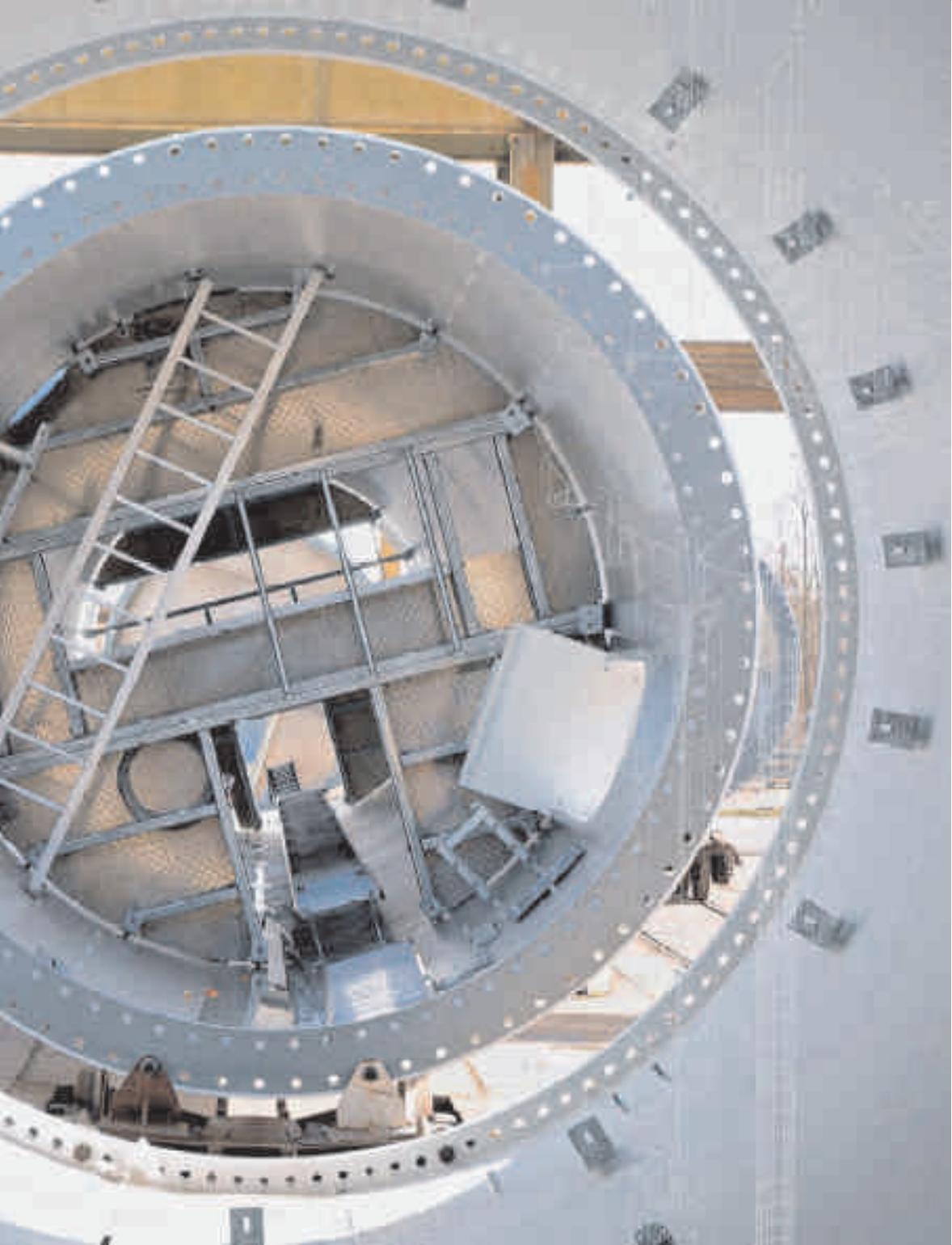
Our experts are there to support you every step of the way – from development and manufacture right up to installation. As a result , you don't have to worry about coordinating orders from several suppliers for individual components.



Sagar Asia can supply the entire range of components for wind turbine towers:

- Fixed ladders including fall arrester systems, wall mountings and intermediate platforms
- Service lift including control system
- Modular platform and railing systems
- Modular access steps and overhead walkways
- Tower Doors
- E-technology equipment
- Documentation
- Logistics
- Supervising or carrying out installation





Tower Internal Systems

The Sagar Asia Advantage

- High-quality, standardized system extension
- Standardized and tested solutions
- Flexible and economical through standardization
- Prefabricated, ready-to-install construction elements
- Low maintenance requirements through standardized installation
- The expertise of an experienced specialist supplier
- Only one interface between you and Sagar Asia
- Construction, production and installation as an all-in-one package
- Warranty for all trades from a single source





Fixed Ladders – Always The Best Way Up ...

The Sagar Asia Advantage

- A tested system offering a high degree of safety with static analysis (ladder holders, fixed ladders, fall arrester systems)
- Flexible and economical through the combination of standardized systems
- Special sizes also possible
- Fall arrestors: designed to customer standards
- Fixed ladders made of aluminum are corrosion- resistant, easy to install and extremely strong
- Ready to install, including wall mountings
- Optimum safety: Sagar Asia guarantees adherence to all standards and safety regulations
- Manufactured to comply with all relevant standards and safety regulations
- US standards: OSHA 1910.27 – Occupational Safety and Health Standards- Fixed Ladders, OSHA 1926.1053 – Safety and Health Regulations for Construction-Ladders
- EU standards: DIN EN 50 308, DIN EN ISO 14 122 T2 (access to mechanical units) DIN 18 800 T1 + T2 (steel constructions)



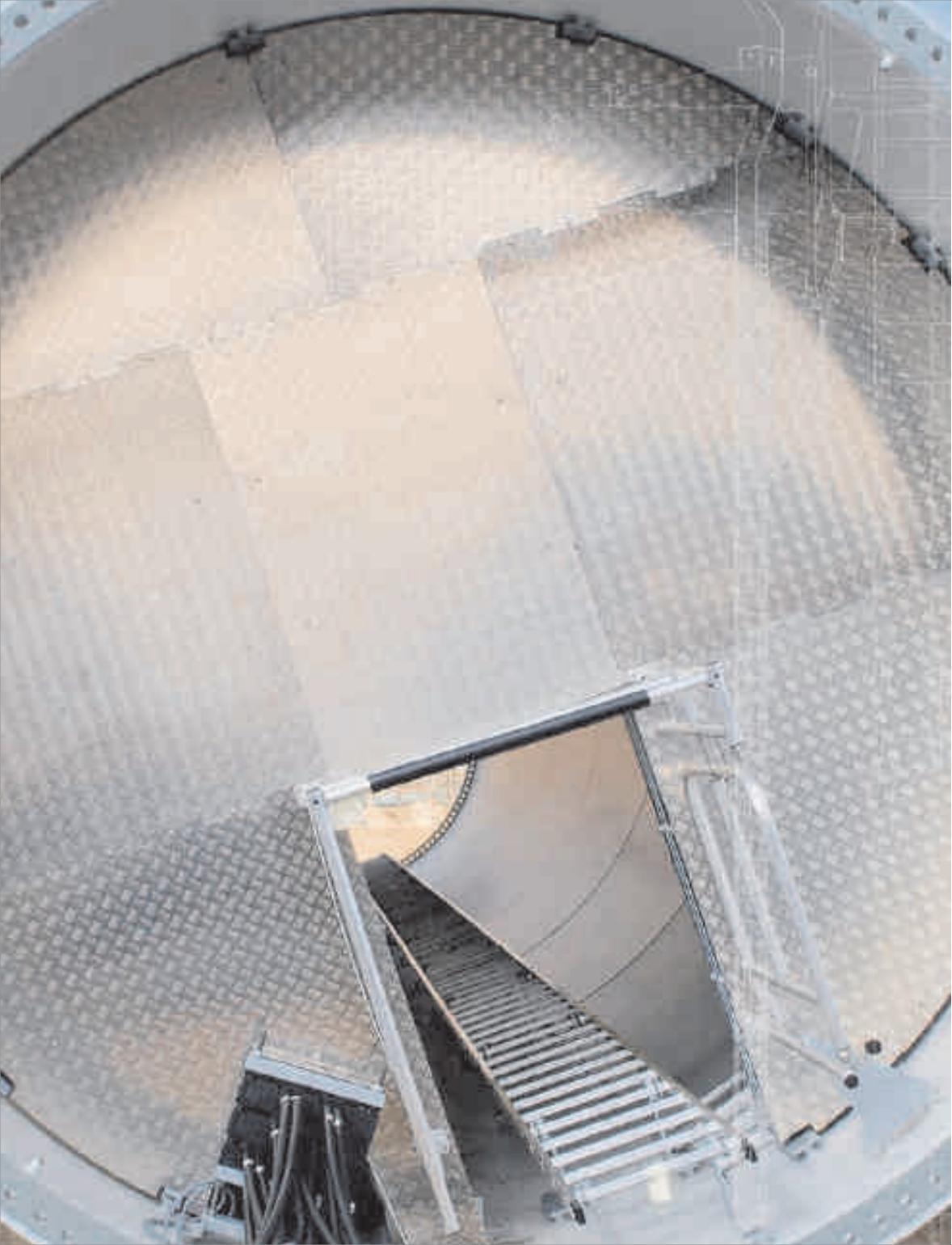


Service Lift – Quick & Safe

The Sagar Asia Advantage

- Tower access lift and fixed ladder form a complete, tested system
- Ascent or descent possible, important for assembly and in emergencies
- Simple assembly
- Quick maintenance as a result of faster ascent and descent
- Ability to transport heavy loads
- Technical data: Payload 240 kg
Dimensions: h x w x l = 90.55' x 28.74' x 36.61'
Operating speed: 11.81'/s
- Manufactured to comply with all relevant standards and safety regulations
- US standards: ASME A17.1 – Safety Code for Elevators and Escalators, ASME A17.7 – Performance-Based Safety Code for Elevators and Escalators, NEC 2008
- EU standards / tests:
DIN EN 1808
BetrSichV
Machinery directive 98/37/EG Appendix IIa
EU Structural Analysis



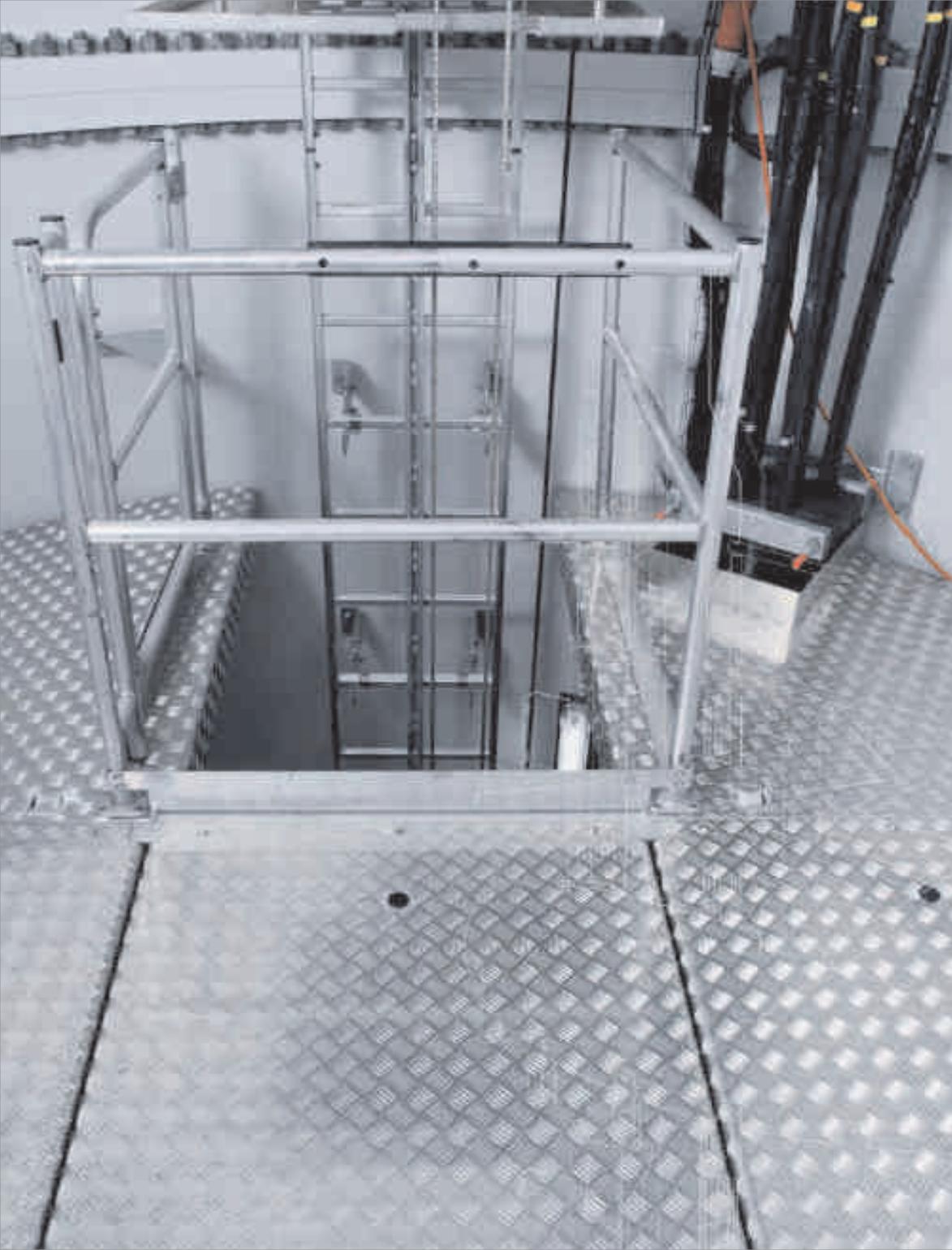


Platforms - Firm Ground Under Your Feet

The Sagar Asia Advantage

- Light alloy construction, aluminum
- Modular platform concept with variable diameter
- Easy to assemble, flexible and economical
- Maintenance via directly accessible wall joints above the platform
- Manufactured to comply with all relevant standards and safety regulations
- US standards: OSHA 1910.269 - Electrical Power Generation, Transmission and Distribution, and OSHA 1910.24 - Occupational Safety and Health Standards-Fixed Industrial Stairs
- EU standards: DIN EN 50 308, DIN EN ISO 14 122 T2 (access to mechanical units) DIN 18 800 T1 + T2 (steel constructions)





Railings - Safety You Can Hold On To

The Sagar Asia Advantage

- Modular design allows a wide variety of combinations
- Static analysis for the entire system
- No sharp edges: Sagar Asia railing design is a "well-rounded" concept
- Made of aluminum and therefore weatherproof
- Low weight for easy assembly
- High degree of safety ensured through adherence to all standards and safety regulations
- US standards: OSHA 1910.27 - Occupational Safety and Health Standards-Fixed Ladders, OSHA 1926.1053 - Safety and Health Regulations for Construction-Ladders and OSHA 1910.23 - Guarding floor, wall openings, and holes
- EU standards: DIN EN 50 308, DIN EN ISO 14 122 T3 (access to mechanical units) DIN 18 800 T1 + T2 (steel constructions)





Access Steps - Because First Impressions Count ...

The Sagar Asia Advantage

- Wide selection of standardized access solutions - modular design
- Economical, through the use of Sagar Asia standardized products
- Can be adapted to suit your individual requirements
- Long service life, weatherproof aluminum construction
- Static analysis for the entire system
- High degree of safety ensured through adherence to all standards and safety regulations
- US standards: OSHA 1910.24 - Occupational Safety and Health Standards-Fixed Industrial Stairs and OSHA 1910.23 - Guarding floor, wall openings, and holes
- EU standards: DIN EN 50 308, DIN EN ISO 14 122 T3 (access to mechanical units) DIN 18 800 T1 + T2(steel constructions)





Towers Doors

The Sagar Asia Advantage

- Tower door consisting of two parts, door frame and door leaf
- Tower door is fitted to the tower frame
- Tower door with CE certification
- Can be fitted to open on the left or right as required
- Proved facade construction profile system with corresponding rubber seals
- Optionally with/without ventilation louver
- Louvers can be selected to suit requirements
- Panic lock with various lock functions
- Optional: Panic push bar / panic bar handle / knob
- Top door provides resistance to wind and lock open with latch
- US standards: ANSI / BHMA A156.3-2001 Am. Nat. Standard for exit devices, OSHA 1910.36 (d) Design and Requirements for exit routes, NEC 110.26 (C) paragraph 3 (Panic bars require, IBC 1008.1.9.1 + 2International Building Code
- EU standards: EN ISO 50 308 wind power plants - protective measures, DIN EN 179 emergency exit locks with knob or push plate, DIN EN 1125 panic locks with horizontal actuating rod for doors along rescue routes





Documentation - All The Information At Your

The Sagar Asia Advantage

- High degree of transparency for all involved
- Complete overview of all system components and technical data such as:
 - Drawings of weld sockets
 - Technical drawings and parts lists
 - Delivery lists
 - Assembly instructions
 - Operating and maintenance instructions
 - Electrical circuit diagrams for the service lift
 - Data sheets
 - Static calculations
- Easy and precise identification of spare and wear parts
- Easy-to-follow instructions facilitate every step from assembly to maintenance
- Documentation of all relevant safety analyzes





Sagar Asia Standardized Tower Fittings Tailored To

The Sagar Asia Advantage

- Customer-specific solutions guaranteed to be identical
 - worldwide
- We can cater to your special requirements with solutions guaranteed to adhere to all safety regulations
- Standardized maintenance
- Individualization possible with a comprehensive range of accessories. e. g.:
 - Loop guides
 - Cable deflection
 - Cable brackets
 - Lamp brackets
 - Dividers
- Subsequent serial production tailored to your specific requirements





Logistics - Pack It, Send It Off, Set It Up ...

The Sagar Asia Advantage

- Profit from the competence and experience of our own logistics center
- Selection of packaging and containers depending on shape and size of the components
- Low costs
- Clarity through seamless documentation
- Packaging:
 - Main components by section
 - Long and large-size containers by section
 - Loose parts by section
 - Electrical equipment by tower
- Lorry or container freight lists
- Consignments packed and delivered as required
- Just in Time



Our plants,
our pride



A globally benchmarked manufacturing plant is what you have with us. Replicating internationally acclaimed standards of precision, research and work ethic, our plant is self-contained and comes with the inherent capabilities of meeting small to large requirements.

1. Plant with an advantage

Sagar Asia has set up manufacturing operations for its Access Technology Equipment in Hyderabad, thus taking the prime mover advantage in its sector. The plant is located in a campus of over 2 acre with machinery that replicates German Precision.

Manpower has been similarly trained to stay abreast of the rigid standards and specifications. To meet the ever increasing and new requirements of a growing economy, a Research & Development department will keep working to come up with more innovative solutions for the world. A Design Centre has also been set up for development and design of products which will meet customized needs.

2. Integration

Understanding needs, designing products with relevance, listening to customers, sourcing for the best raw material, manufacturing to international standards of production and quality control. This is our concept of 'integration'. Bringing together all that is needed to make access safe, easy and smart.

3. International Standards

No standards, no way. A simple philosophy at work at Sagar Asia. Our products subscribe to both European and US standards. OSHA and ANSI adherence goes hand in hand with our ISO certified plant.

4. Quality all the way

We use high quality structural high grade aluminum alloy. Our products are always harder, resilient and safer. Our welding technology Gas Tungsten Arc welding (GTAW) ensures superior quality fabrication resulting in unequalled strength, safety and durability of the finished product. All our products carry an unconditional guarantee against faulty workmanship - this includes welding, flanging components etc.



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