



andino
Tecnologia, inovação e experiência andam juntas.

Fender Systems

Technology, innovation and experience go together in Andino

ANDINO was founded on June 17, 1952. It has its own headquarters, in an area of 7000 m², in Contagem - MG.

ANDINO has a complete laboratory for physicochemical and elastomeric parts development and presses for tests of compression of up to 1000 tons, which few companies in the sector have.

In 1978, it initiated the development and nationalization of Port Fenders. The first supply occurred in 1982 and since then we have equipped the ports Brazilians with various types of fender systems, currently being the only Brazilian manufacturer.

Know-How and equipment for these activities developed in-house, which made it possible to the formation of a genuinely national technology and solution to numerous technical problems in the area of application.

The Company has expanded and developed more and more industrial engineering, which focuses mainly on in the development of specific formulas and innovation of design.

ANDINO guarantees its products through controls rigid, traceable to ISO standards 9001 and produces according to the ABNT, ASTM standards and PIANC recommendations.

Some supply certificates



Advantages of the ANDINO Fender Systems

- **Since 1952 develops and manufactures rubber goods.**
- **Since 1978 develops and manufactures fender systems.**
- **Proven know-how and expertise in countless supplies.**
- **Fenders with durability and quality attested by several customers.**
- **Excellent cost-benefit.**
- **Effective guarantee.**
- **The only Brazilian manufacturer of the fender elastic element.**



FENDER SYSTEMS

A fender system assembly consists of several components as listed below:

1. Rubber fender
2. Steel frontal frame
3. Pe-UHMW facing pads
4. Weight chain
5. Tension chain
6. Shear chain
7. Chain tensioner
8. Chain shackle
9. J anchors or chemical anchor
10. U anchors
11. Fixing bolts and washers

Of all these components the rubber element is the great technology involved in the system, where **ANDINO** is the only Brazilian manufacturer.

All elements are manufactured with the best materials and has a proven design.

The manufacturing process is monitored from end-to-end with the highest quality standard according to ISO9001.

All elements can be tested for performance and issued quality certificate according to ABNT, ASTM standards and PIANC recommendation.



FENDER MODELS

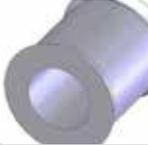
CONICAL FENDER - STC



AXIAL FLANGED FENDER - SCF



AXIAL FENDER - SCA



RADIAL FENDER - SCR



LEG FENDER - PI



V and SV FENDER



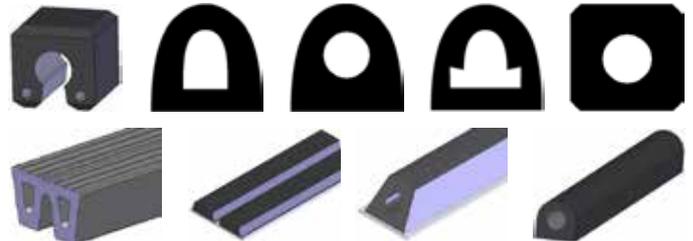
FLOATING FENDER - STS



ROLLER FENDER - RF



SHIP FENDERS



CONICAL FENDER - STC

The conical body of the STC fender has a very efficient, highly stable design with a deflection curve of 72.5%.



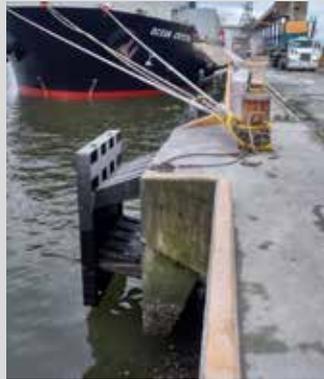
AXIAL FLANGED FENDER - SCF

It has a robust and highly resistant design, with a deflection curve of 52.5%.



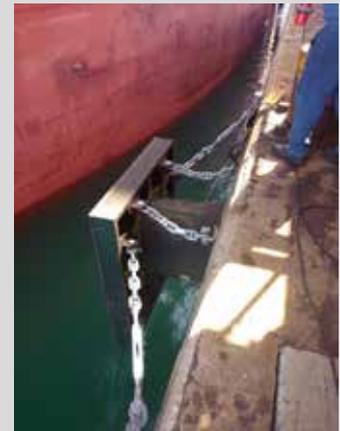
LEG FENDER - PI

The PI Leg Fender are modular and highly efficient, with a deflection curve of 57.5%.



AXIAL FENDER - SCA

They have similar characteristics the SCF fender, as they are not flanged, they have a lower maintenance cost. Deflection curve of 52.5%.



RADIAL FENDER - SCR

Radial fenders are low cost and easy to install, have high durability and low maintenance costs. It has a deflection curve of 50%.



V and SV Fenders

The V and SV fenders are simple and robust, can come with UHMW wear plates, have a deflection curve of 52.5%.



FLOATING FENDER - STC

Floating fenders may be pneumatic or closed-cell foam, easy to maintain and install.



ROLLER/WHEEL FENDER - RF/WF

The roller fender type fenders are ideal for docking.

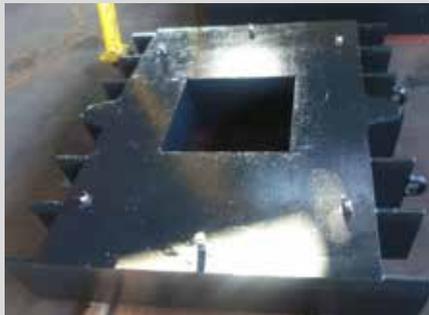


SHIP FENDERS



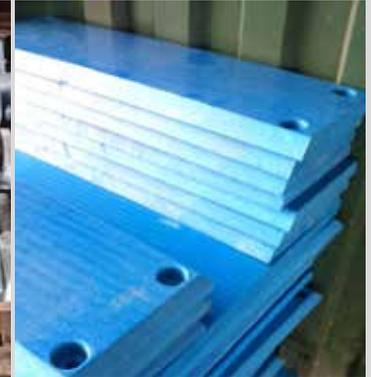
FENDER PANELS

The fender panels are manufactured according to design and developed in 3D programs, with finite element analysis. They are painted with high-strength paint and have facing pads in PE-UHMW.



ACCESSORIES

We supply bolts, chains and stretchers according to design or specification, made from hot-dip galvanized or stainless steel carbon, we also supply PE-UHMW pads according to specification.





ANDINO LTDA.

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