

Alloy Towers and Pump tanks

Noram SX™ is the trademark for the austenitic stainless steel, UNS S32615, which was developed by Sandvik in Sweden specifically for the use in hot concentrated Sulphuric Acid. SX steel is considered the benchmark in sulphuric acid service with over 25 years of unparalleled performance offering numerous advantages over other materials of construction.



Development of the SX high silicon alloy over 25 years ago introduced new possibilities for the design of sulphuric acid towers and pump tanks. The traditional brick lining could be avoided and the vessels could be made smaller and entirely out of stainless steel. The first decades were a learning period for the industry. It was recognized that merely relying on the excellent corrosion properties was not sufficient without paying attention to the detail design and operation of the vessels.



Noram has learned the lessons from the industry well. Utilising proven materials such as Noram SX™ and, with carefully improved designs, Noram SX™ towers and pump tanks offer a safe, reliable and overall cost effective solution.

The use of Noram's patented HP™ low pressure drop packing enhances the benefits of the Noram SX™ towers. The high performance packing allows for a further reduction of the tower diameter or provides increased capacity. Complemented with a Noram SX™ acid distributor and tower internals Noram provides a complete high performance tower solution.

Compared to traditional brick lined carbon steel, alloy vessels offer several advantages, particularly for replacement of towers and pump tanks.



The reduced tower diameter or optional increased capacity/ reduced pressure drop is an attractive benefit.

- Alloy vessels are considerably lighter, with smaller footprint reducing the cost for foundations and facilitating installation.
- Overall installation time is reduced circumventing the time required for brick lining.
- Small and medium size towers and tanks can be shop fabricated and shipped to site reducing installation work and shut down time to a minimum.
- Maintenance, service and inspection is made considerably easier.

The long experience of Noram together with the proven designs and materials makes Noram SX™ tower and pump tanks the most effective and reliable choice for new installations and replacement of old units.