



5101 Boone Avenue North, Minneapolis, MN 55428  
 Phone: 763-536-9132 \*866-536-0606 \*Fax: 763-536-9102  
[www.helicalanchorsinc.com](http://www.helicalanchorsinc.com)

**Project Overview:**

Project Name & Location:	Silos mortars Plant Henkel, Quilicura, South America
Project Date:	November 2020
Project Type:	<b>Industrial-New Construction.</b> Helical piles to support a foundation slab that will support 3 silos and equipment from an industrial plant.
Helical Pile Installation Contractor:	EMIN Sistemas Geotécnicos S.A.
Structural Engineer:	Roni S.p.A.
General Contractor:	
Helical Pile Specifications:	40 Helical piles model type RS2875. - Maximum working load in compression: <b>35.8 [tf]</b> . - Maximum working load in tension: <b>21.5 [tf]</b> .
Soils & Embedment Depth:	Fine soils composed mainly of clays and silty sands with low to medium consistency or compactness, water level was detected at a depth of about 28 meters.  - Embedment depth: 10m approx.
Project Timeline:	12 days total
Helical Pile Manufacturer:	Helical Anchors Inc. - MN

**Key Benefits:**

- **Feasibility of working in confined spaces:** the location of the foundation slab was surrounded by existing structures, therefore there was little space to work. The helical piles were installed through the use of a backhoe which gave the installer maneuverability to work in this confined space.



- **Speed of installation and use:** The use of helical piles allowed the client to continue with the construction of the foundation immediately after completing the installation of the piles, without having to wait for the setting times required by other traditional systems such as piles and micropiles.



- **Engineering and design support:** the client required permanent and rapid support in the development of an engineer design of helical piles, as a new engineering solution it had to be adapted to current overall design that was in place for the project.

- **Permanent field support and available stock material:** Having stock material in country and able to provide a workable engineering design, it allowed for an immediate response to end user. Another key factor, was the experience of EMIN S.G. In the design and installation of this system, it was possible to adapt and optimize the work during its execution as new challenge or requirements that came along during the project.

