



**TECHNICAL
DATASHEETS**

B.3 - AGI EMEA GRAIN LADDER SYSTEMS

AGI EMEA grain ladder is a common accessory used in silos mainly to prevent the breakage of fragile cereals such as soyabeans, rice or chickpeas while loading by reducing the free fall speed and collisions.

It reduces disaggregation by particle sizes of grains during the load and therefore it is also needful when top performance of the aeration system is targeted. This is because the grain ladder system provides homogeneity of the grains and fines distributions along the cylinder during the loading procedure, ensuring benefits in the airflow paths as well. Moreover, dust creation is minimized with consequently explosion hazard risk mitigation.

Specifically recommended for white rice and corn to minimize the development of mycotoxins infestations.

AGI EMEA grain ladders systems are available in two versions:

WELDED SOLUTION TO ACHIEVE MAXIMUM SENSITIVITY FOR HIGH-VALUED COMMODITIES

MAX CAPACITY	MAX SILO DIAMETER
60 m ³ /h	Model 8 (7,28 m)

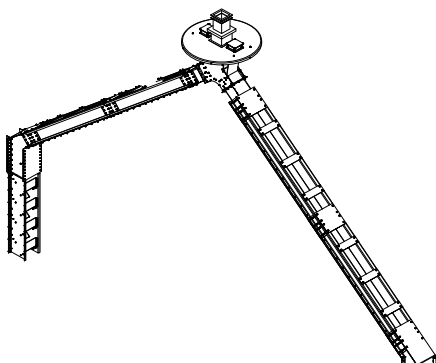
BOLTED SOLUTION TO ACHIEVE HIGHER FLOW CAPACITIES AND BIN SIZES

MAX CAPACITY (*)	MAX SILO DIAMETER (*)
150 m ³ /h	Model 18 (16,37 m)

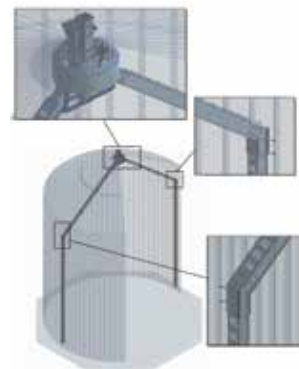
Both versions can be used on either flat bottom or hopper bottom silos.
 From silo model 19 and above the volume will be sacrificed due to lowering the filling limit.
 (*) Higher capacities and larger silo models can be evaluated upon request.

MAIN FEATURES

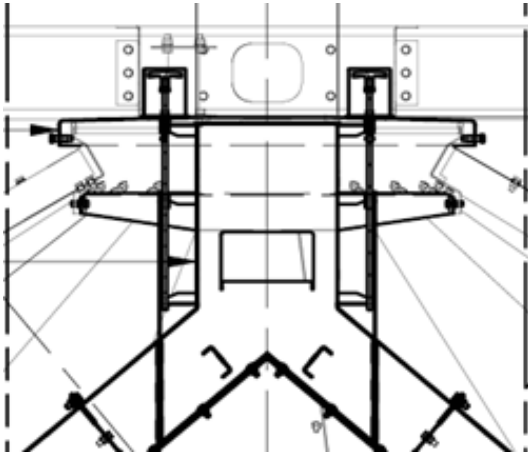
- Designed with No. 2 chutes (always orthogonal to loading line) to ensure a symmetrical filling of the silo
- An overfilling window is provided as standard at the top of the Y-section to prevent clogging and ensure the complete bin filling
- No manual operations are required, the window automatically switches to central filling when product reaches the maximum ladders filling level
- Flow regulation system accessible from the roof peak is provided as standard
- Complete self-supporting chutes drives the product toward sidewalls without overloads on the roof
- Grain buffers installed on silo's walls, for a smooth piling of the cereals
- Auxiliary center bypass can be provided from model 16 and above upon request
- It is advised to install inside ladders next to the vertical lines in case maintenance is required



— Dwg. of grain ladder



— Photo of grain ladder general assembly

B3. Grain ladder systems

— Dwg. of flow regulation system detail



— Photo of way valve detail for a complete and automatic switch to central filling when the maximum level has been reached



— Photo of bolted sidewall ladders versions



— Photo of the grain ladders welded version under operation



— Photo of a cylinder channel of the grain ladder



— Photo of welded grain ladder