

## MECHANICAL HANDLING L-LINE SPECIFICALLY DESIGNED

EM EA

A STATE

FOR AGRICULTURAL APPLICATION

4171

Ţ

#### INTRODUCTION

## About AGI

AGI is one of the world's leading manufacturer and solution provider in farm and commercial agriculture equipment. We're supplying the world's food infrastructure. We understand that feeding the world requires a global network of infrastructure and technology to store, blend, mix, convey, condition, process, and protect hundreds of millions of tons of agriculture inputs and crops flowing around the world daily. AGI products, equipment, and technology facilitates this global movement, from growing crops and moving them to market, to processing crops into feed for animals and food for people.

As a global leader in the planning, engineering and manufacturing of full solutions and systems, we operate across 5 platforms — Seed, Fertilizer, Grain, Feed, and Food — and we partner with our customers on 6 continents to leverage the AGI Advantage and engineer unique, market-specific systems.

These systems are delivered for farm and commercial applications and include Storage, Handling, Structural, Processing, and Technology all based on and brought together by Engineering and Project Management.

Over 35 AGI brands are among the most recognized equipment manufacturers in the global agriculture industry. Our AGI engineers and project managers deliver custom-designed farm and commercial systems for storage and conditioning, handling, structures, processing, and controls applications.

With over 160 years of combined history and our internationally-recognized products, services, and brands, the AGI Advantage has you covered.

## About AGI EMEA

AGI EMEA is the headquarters for Europe, the Middle East and Africa and is the result of FRAME and PTM amalgamation into a single legal entity.

With three updated state-of-the-art manufacturing facilities in Italy, AGI EMEA delivers custom systems and solutions across seven components: storage, handling, processing, structures, technology, project management and engineering.

With over 30 years of experience in grain storage and handling industry, AGI EMEA is one of Europe's largest and most respected manufactures of all types of grain storage and handling solutions for commercial and agricultural applications. AGI EMEA product portfolio includes silos and accessories, catwalks, towers, ladders, platforms, sweeps, temperature sensing, chain conveyors, bucket elevators, belt conveyors, dryers, weighing, cleaning and bagging solutions. From the first design to manufacturing and installation, customers trust AGI EMEA as the ideal partner on their projects around the world.

#### Contents

Introduction	2
Chain Conveyor	4
Chain Conveyor Technical Data	5
Bucket Elevator	6
Bucket Elevator Technical Data	7
Accessories	8

#### AGISEMEA MECHANICAL HANDLING L-LINE

### Made In Italy

The new L-line is designed and manufactured in Italy with the highest European standard. With its optimal operational performance, the L-line meets farmers' seasonal harvest demand. The cost-effective L-Line is the ideal solution for all agricultural handling applications.

## Plug & Play

Installation time is typically a bottleneck especially while approaching the harvest season. As a result, the L-Line is conceptually designed and optimized to reduce assembling time. The modular structure reduces the cost to assemble the machinery and to meet a client's deadline to have the plant fully commissioned.

## **Accessories Compatibility**

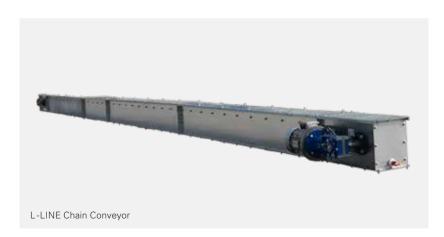
The AGI PTM L-line is designed to match with AGI FRAME silo and accessories, the design is conceived to easily fit into every catwalk and components used in the farm market. The AGI integrated solution consists of ladders and platforms to safely access the bucket elevator head for proper maintenance and inspection.

## Reliability

Similar to other products produced by AGI PTM, the L-Line is considered to be in the top-class for control and operational standards. Anti-clogging, rotation sensor and the belt alignment control system are standard accessories for the L-line machines. Visual inspection is always available through the windows placed at the bucket elevator foot and conveyor head.



L-LINE Elevator





# L-Line Chain Conveyor

AGI EMEA Mechanical Handling "L-Line" chain conveyor is designed to suit agricultural applications. With capacities up to 200 t/h, it's the best solution for operating during harvest period. Made with galvanized steel, the L-line modular and structured design delivers an efficient and cost effective solution for transporting materials from your storage silos.



### Designed specifically with farmers in mind: Easily mounted, and galvanized steel

#### MAIN FEATURES

- Direct drive gearmotor
- Chain tensioning system on the tail
- Intermediate trunking is easy to assemble
- Bent-link chain with UHMW scrapers
- CE certified
- 8° Maximum tilt
- Pregalvanized steel
- IE3 electric motor
- Anti-clogging sensor
- Rotation sensor

#### OPTIONAL

- Inlet/discharge hopper
- Longitudinal slide gate
- Side-inlet trunking
- Adjustable supporting legs
- ATEX certification Z22
- Bottom machine liner
- Connetions, hoppers and valves
- Return cups

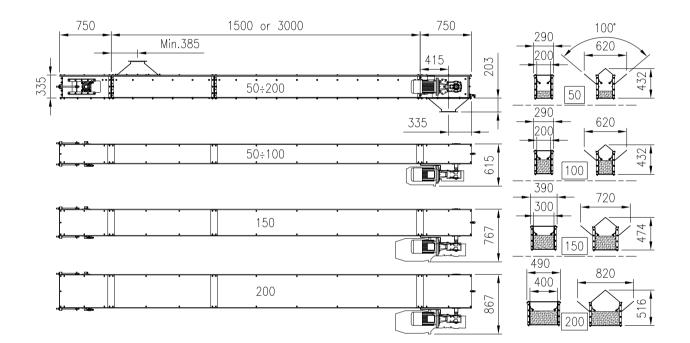




#### TECHNICAL DATA

CAPACITY

50 T/H	100 T/H	150 T/H	200 T/H	300 T/H	600 T/H	
STORAGE SIZE						
UNDER 10	,000 TONS	UNDER 30,000 TONS		OVER 30,000 TONS		
OPERATING TIME						
HEAVY DURING THE	HARVESTING PERIOD	FREQUENTLY DU	JRING THE YEAR	CONTINUOUSLY D	OURING THE YEAR	
				~		



#### SPECIFICATION

	UM	50 T/H	100 T/H	150 T/H	200 T/H	
CAPACITY FOR 750 KG/M3 *	t/h	50	100	150	200	
CAPACITY	m³/h	67	134	201	268	
SPEED	rpm	71	71	71	71	
CHAIN SPEED	m/s	0.93	0.93	0.93	0.93	
CONVEYOR CHAIN TYPE	M40 - ISO 1977 - DIN 8167					
SCRAPERS PITCH	mm	250	250	250	250	
SCRAPERS MATERIAL			UHMW			
DRIVING SPROCKET	n°teeth	6	6	6	6	
TRUNKING SECTION WXH	mm	200x330	200x330	300×330	400x330	
PLATE THICKNESS DRIVE, TAIL END	mm	2+2;2	2+2;2	2+2;2	2+2;2	
PLATE THICKNESS COVER	mm	2	2	2	2	
PLATE THICKNESS BOTTOM	mm	3	3	3	3	
PLATE THICKNESS INTERMEDIATE SECTION	mm	2	2	2	2	
MAXIMUM OVERALL LENGHT WITH 0°TILT	m	40	40	40	36	

\*Nominal capacity based on dry cereal (m.c. 14%) - bulk density 0,75 t/m<sup>3</sup> - impurities <4%

## **L-Line Bucket Elevator**

The AGI EMEA Mechanical Handling "L-Line" bucket elevator is designed to elevate grain from the lower to the upper part of the plant. Engineered for an efficient and cost-effective solution it is the ideal setup for capacities up to 200t/h. This solution is suited both for outdoor and indoor agricultural applications. The system is conceived as a modular design and is made of galvanized steel.

#### MAIN FEATURES

- Direct drive gearmotor
- Back stop
- Speed monitoring system
- Belt alignment control system
- Abrasion resistant liner at the hood
- Belt tensioning system on the boot
- Self-cleaning pulley at the tail
- Service hatch for product reload at the tail
- Intermediate legs easy to assemble
- Inspection leg
- HDPE buckets
- Anti-abrasion liner at the hood & inlet (Hardox 2 mm)
- Abrasion resistant & antistatic belt
- Pregalvanized steel
- CE certified
- IE3 electric motor





Tail with tensioning by screws

\*The plastic window is only for demonstration, not included in the standard product.

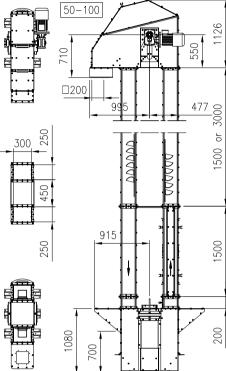


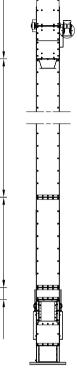
- Inlet/discharge hopper
- Extra (multiple) inlet(s) hopper at the tail
- ATEX certification Z22
- Anti-clogging sensor
- Inspection platform, ladder with safety cage and intermediate rest platform
- Telescopic arm
- Guy cables

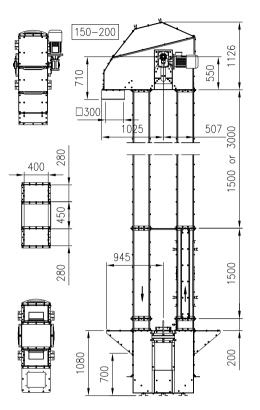


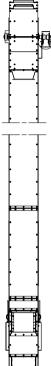
Bucket elevator\*

#### TECHNICAL DATA









#### SPECIFICATION

	UM	50 T/H	100 T/H	150 T/H	200 T/H
CAPACITY FOR 750 KG/M3*	t/h	50	100	150	200
CAPACITY	m3/h	68	134	201	269
SPEED	rpm		107 (2	2.8 m/s)	
PULLEY DIAMETER	mm	500	500	500	500
BUCKET MATERIAL			нс	DPE	
BUCKET SIZES	mm	130x146	150×205	175x282	185x316
BUCKETS M/BELT	pcs	7.7	7.3	5.3	5.8
BUCKET VOLUME, NET/GROS	litre	0.65/0.87	1.39 / 1.82	2.96/3.76	3.6/4.6
HEAD THICKNESS	mm	3	3	3	3
TAIL THICKNESS	mm	3	3	3	3
TROUGH THICKNESS	mm	2	2	2	2
BELT TYPE/WIDTH	N/mm - mm	400 / 170	400 / 230	400/310	400/340
LEG, WIDTH/DEPTH	mm	300/250	300/250	400 / 280	400/280
MAXIMUM OVERALL HEIGHT**	m	40	40	40	40

\*Nominal capacity based on dry cereal (m.c. 14%) - bulk density 0,75 t/m<sup>3</sup> - impurities <4% \*\*To be enclosed in a steel tower when height exceeds 28 m

## **L-Line Accessories**

### A. Ductworks

AGI EMEA offers a wide variety of ductworks in different sizes, geometry and capacities.



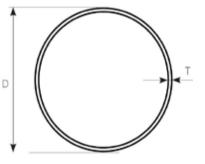
Round Duct

DUCTWORKS ROUND SECTION						
MODEL	CAPACITY	MAIN DIMEN	ISIONS			
UM	M³/H	D MM	T MM			
R.200	90	200	3			
R.250	140	250	3			

Square Duct

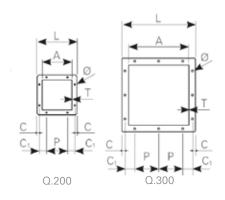
#### SPECIFICATIONS

- Galvanized steel
- Square or round duct available
- Maximum length for round section is 5800mm
- Maximum length of square section is 2000 mm



#### DUCTWORKS SQUARE SECTION

MODEL	CAPACITY	MAIN DIMENSIONS						
UM	M³/H	A MM	L MM	C MM	C1 MM	P MM	Ø MM	T MM
Q.200	120	200	266	15	48	140	10	2
Q.250	205	250	330	18	57	120	10	2
Q.300	295	300	390	20	65	110	12	2



### **B. Square slide gates**

Unloading of hopper silos can be assured with slide gates supplied with the appropriate transition from the circular hopper silo outlet into the square/rectangular slide gate inlet. Electrical and manual slide gates are available. The most common slides used for the hoppers are the square manual and electrical slides. Different outlet sizes are available depending on the unloading capacity required.

#### TRANSITION SLIDES DIMENSIONS AND RELATED CAPACITIES

SQUARE INLET SECTION (MM)	200 × 200	300 × 300
MAXIMUM CAPACITY (M <sup>3</sup> /H)	120	295

#### SLIDE GATES

- Galvanized steel
- Manual and electric control
- Blade position limit switches
- ATEX certification for installation in zone classified 22 as option
- CE certified



Slide gate electric control



Slide gate manual control

#### C. Hopper

AGI EMEA hopper connection system is designed to serve as junction between chain conveyor and various accessories such as silos, bucket elevator, chain conveyor and duct.

#### SPECIFICATIONS

- Pre-galvanized steel
- Junction to connect the chain conveyor or elevator to various accessories







## Agricultural Application Reference







#### AGI EMEA is an AGI Brand.

AGI is a leading provider of equipment solutions for agriculture bulk commodities including seed, fertilizer, grain, and feed systems with a growing platform in providing equipment and solutions for food processing facilities. AGI has manufacturing facilities in Canada, the United States, the United Kingdom, Brazil, India and Italy and distributes its products globally.



AGI EMEA S.R.L. (Head Office) - Via Bertella 2 - 40064, Ozzano dell'Emilia (BO) - Italy | **P** +39 051 789 107 | **F** +39 051 796 300 | **E** emea@aggrowth.com AGI FRAME Plant - Via Barbariga 7 - 30032 Fiesso d'Artico (VE) – Italy | **P** +39 051 798 107 | **F** +39 051 796 300 | **E** frame@aggrowth.com AGI PTM Plant - Via Mario Tognato, 10 - 35042 Este (PD) – Italy | **P** +39 0429 600 973 | **F** +39 0429 600 874 | **E** ptm@aggrowth.com

Share Capital: € 500.000,00 | VAT ID: IT03293161208 | Companies' register: BO03293161208