Grain Storage Silos

SILOPORT®
TAHIL DEPOLAMA SİSTEMLERİ
GRAIN STORAGE SYSTEMS

MYSİLO®
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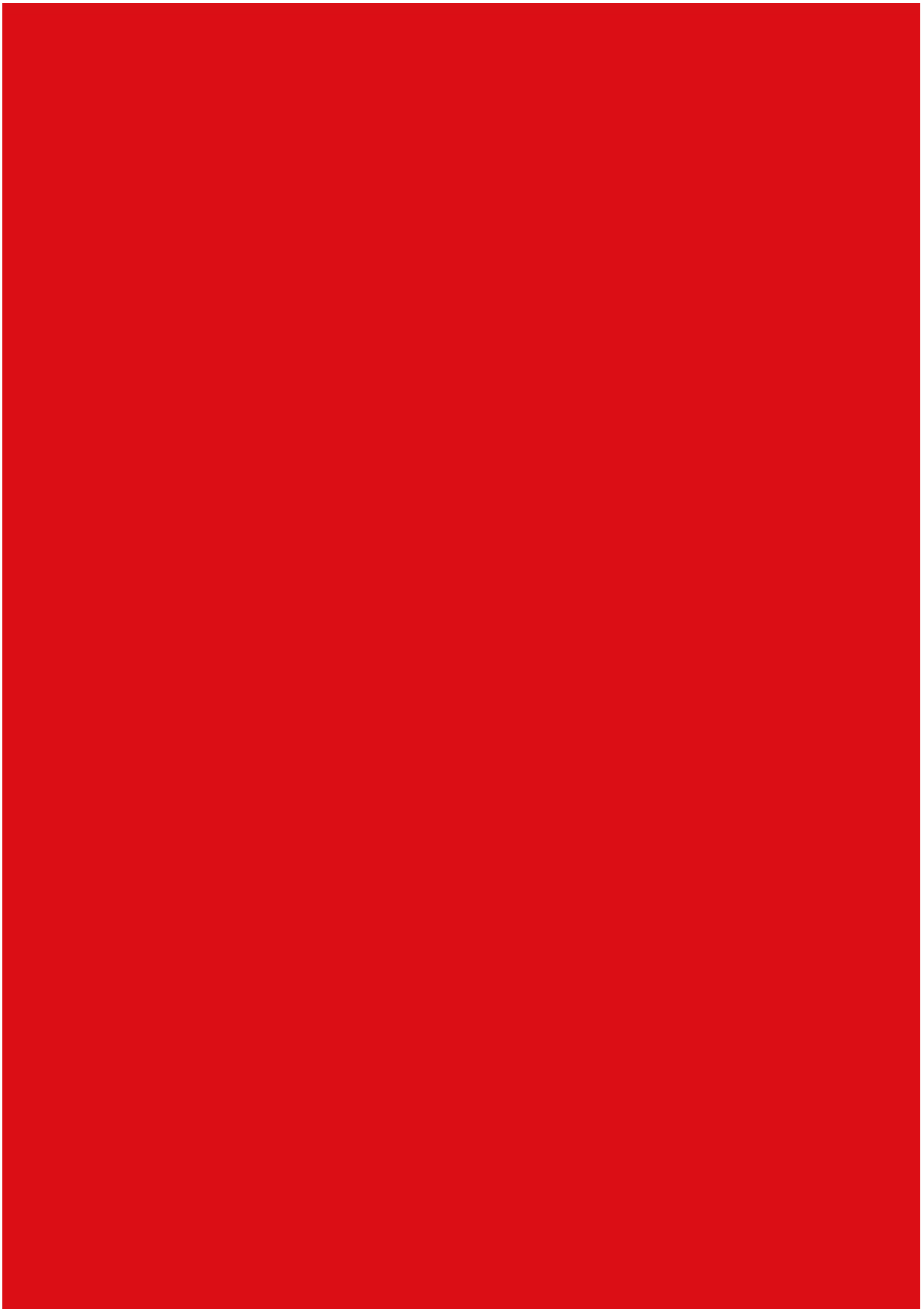

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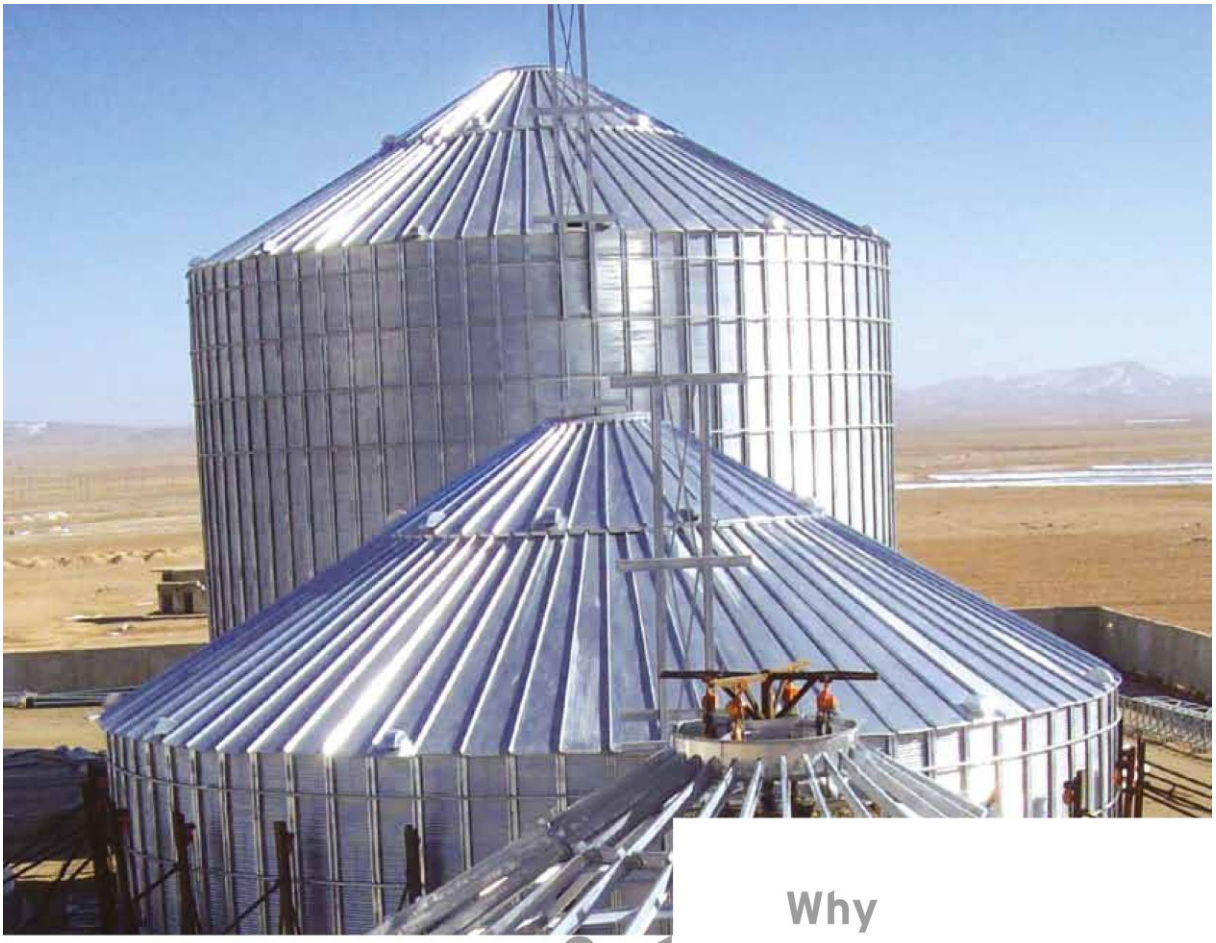
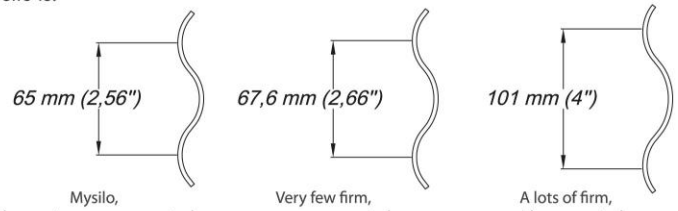


Why Mysilo?

2022 Model - 10 pcs 55.280 m³

- Guidance of an experience over 40 years in machinery manufacturing gives excellent results and minimal risk.
- Mysilo is proud of manufacturing silos from the most narrow corrugated sidewall sheet in the world, by having reduced the corrugation size of sidewall sheets appreciated by the World(65 mm. / 2,56") .When silo strength is calculated, corrugation width of sidewall sheets is always considered. The narrower corrugated sidewall sheets are, the stronger silo is.



Mysilo, the most narrow corrugated sidewall sheets in the world

Very few firm, narrow corrugated sidewall sheets

A lots of firm, wide corrugated sidewall sheets

- Beside designing our silos according to American standards, Mysilo optionally may design silos according to DIN standards as well.
- For different locations and customers' purposes; Mysilo extensive product range offers 3000 different silo models with capacities between; 64 m^3 – 24.500 m^3 and silo dimensions from 4.58 m. up to 32 m.
- Turn-key solutions includes erection, civil construction , mechanical and electrical engineering services along with inspection and administration of systems from project planning stage till installation and after sales technical support.
- Silos with the longest warranty in the industry for a period of 5 years.
- Improving and innovative solutions for the enrichment of the sector
- Professional and experienced staff provide the best solutions for grain storage, handling, cleaning, conditioning, temperature monitoring and automation systems.

- Competitors of Mysilo offer 600 gr./m² galvanized coating as an option mean while Mysilo offers this quality as a standard without any additional cost. Beside this our silos' life time is %120 longer in comparison with the competitors'standard quality galvanized coating rate 275-350 gr. / m².

American ASTM 525 A Norm		European UNE-EN 36130 Norm
Z600		600
Z450		450
G140	427	
Z350		350
G115	350	
Z270		270
G90	270	

+71 %

+120 %

The Total amount of galvanized coating for steel silos made in USA.

The Total amount of galvanized coating for steel silos made in EU.

The Total amount of standard galvanized coating for steel silos manufactured by Mysilo.

Note:

* Total galvanization coating amount of silo side wall sheet.

** The amount of galvanization on side wall sheet depends on the silo loading-unloading frequency and climate conditions such as snowing, sandstorm, wind speed and relative humidity. When there is more friction on the wall sheets more there durability of galvanized plating is lower.

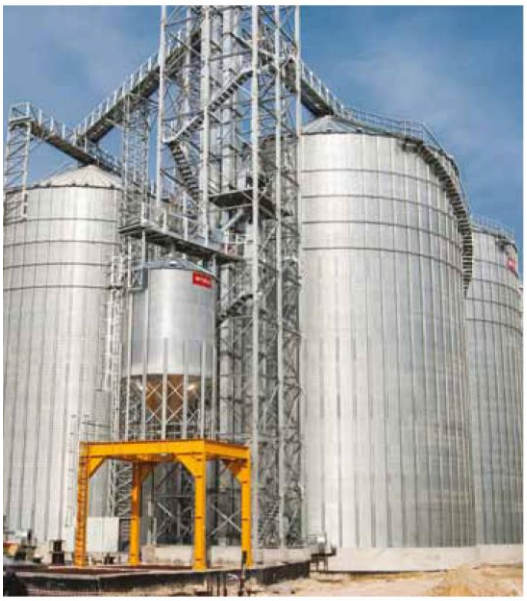
(2217 Model - 16 pcs 82.368 m³)

FLAT BOTTOMED SILOS

Mysilo Flat bottomed silos are used for long term and high capacity storage needs with diameters varying from 4.58 m to 32 m and capacities up to 24.500 m³. According to between 05-12 model silo's diameter and peak load, silo roofs are designed with or without rafters. In order to provide complete storage solutions, the silos are equipped with aeration systems, sweep augers, temperature monitoring systems, loading and unloading equipment. Up on request of the customers, turn-key solutions including construction and installation are also available.

3020 Model - 2 pcs 2x11471 m³

2620 Model - 6 pcs 6x8476 m³



2030 Model - 12 pcs 12x85.344 m³

2217 Model - 16 pcs 82.368 m³

121845 Model - 16 pcs 16x1668 m³ (TMO)

121845 Model - 24 pcs 24x1668 m³ (TMO)

SIDEWALL SHEETS

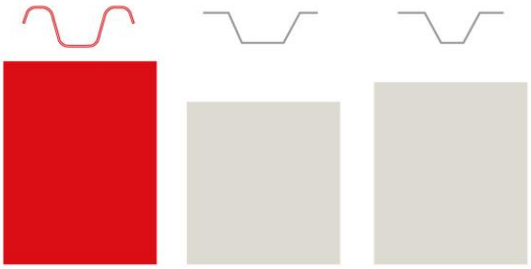
Mysilo uses S350GD + Z quality hot-dip galvanized steel provided from the world's top steel producers. Sidewall sheets have min. 350 N/mm² (51 000 psi) yield and 420 N/mm² (61 000 psi) tensile values and produced as 600 gr./m² standard or optional higher galvanize coating.

Mysilo also uses the world's narrowest corrugated sidewall sheets (65 mm. / 2.56 ") which is being made with full autometed productions lines and supported by unique engineering softwares which determines number of bolts, size, capacity and upcoming forces.

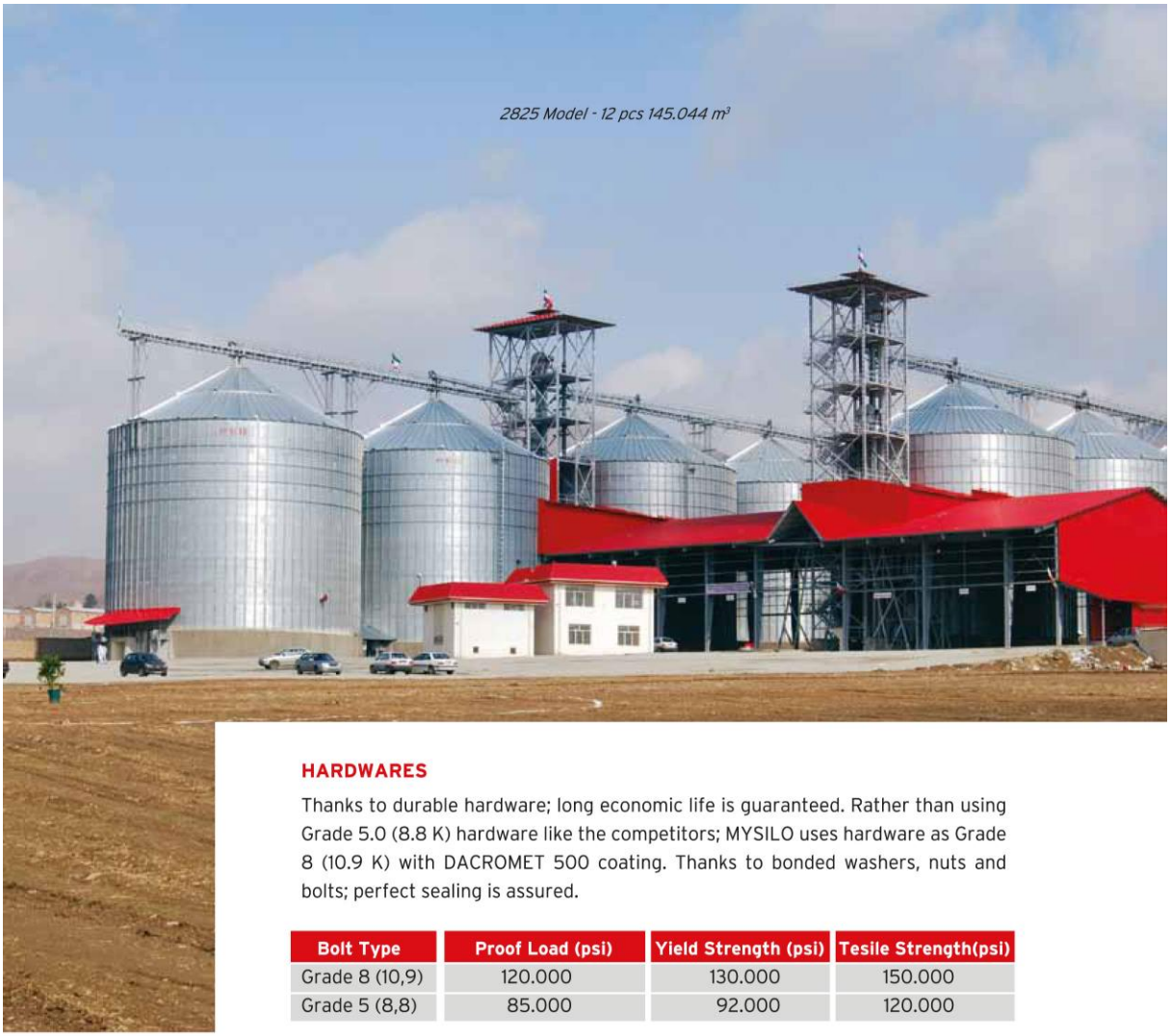
STIFFENERS

For producing stiffeners, Mysilo uses S350GD + Z quality hot-dip galvanized steel provided from the world's top steel producers. Stiffeners have min. 350 N/mm² (51 000 psi) yield and 420 N/mm² (61 000 psi) tensile values and produced as 600 gr./m² standard or optional higher galvanize coating.

Mysilo Stiffeners, as shown below, are produced with 7 bounding to provide more strength unlike other competitors.



Types Of Stiffener



2825 Model - 12 pcs 145.044 m³

HARDWARES

Thanks to durable hardware; long economic life is guaranteed. Rather than using Grade 5.0 (8.8 K) hardware like the competitors; MYSILO uses hardware as Grade 8 (10.9 K) with DACROMET 500 coating. Thanks to bonded washers, nuts and bolts; perfect sealing is assured.

Bolt Type	Proof Load (psi)	Yield Strength (psi)	Tesile Strength(psi)
Grade 8 (10,9)	120.000	130.000	150.000
Grade 5 (8,8)	85.000	92.000	120.000

• Mysilo uses JS 500 coating** on the bolts to increase the usage life of silos. Thanks to high quality coating, life of the bolts become up to 7 times longer compared with, electro galvanized bolts offered by other competitors.

Corrosion Protection	Hours to Red Rust
JS 500 (Mysilo)	500
Polyseal	240
Zinc Dichromate	108
Zinc	72

• In order to have fast installation and cost efficiency, Mysilo's engineers make analysis with special engineering software to determine the type, amount and row quantity of bolts.

3017 Model - 3 pcs 29.895 m³

ROOFS

Roof is one of the key components of silo for optimal usage and durableness. Mysilo roofs are offered with a standard galvanization of 600 gr/m² with 420 N/mm² (61.000 psi) quality sheets, which is an optional case for competitors which use 275 gr/m² galvanization on roofs.

Roofs designed according to different climate conditions and live and dead loads with a maximum peak load capacity 13,608 kg. (30,000 lb). All Mysilo roofs are presented with an access door with 64x45 cm dimension. All access doors are sealed against water and air.

MYSILO ROOF PEAK LOAD CAPACITIES

Silo Dia.		Roof Peak Load	
Feet	Meter	Pounds	Kilograms
48	14,66	10.000	4.536
54	16,50	10.000	4.536
60	18,33	10.000	4.536
72	20,16	10.000	4.536
78	23,84	10.000	4.536
90	27,50	10.000	4.536
105	32,00	25.000	11.340

* All temperature monitoring cables loads on the roof have been considered in the calculation.
* Roofs with beams are presented with a standard snow load design as 146 kg/m^2. Beyond this load the values shown above may vary.
*The roof design could be made according to maximum 209 km. /h. wind speed, 100 psf (488 kg/m^2) snow load and 13,608 kg. (30,000 lb) peak load capacity.

Silo Access Door

Circular Stair

Silo Inside Door

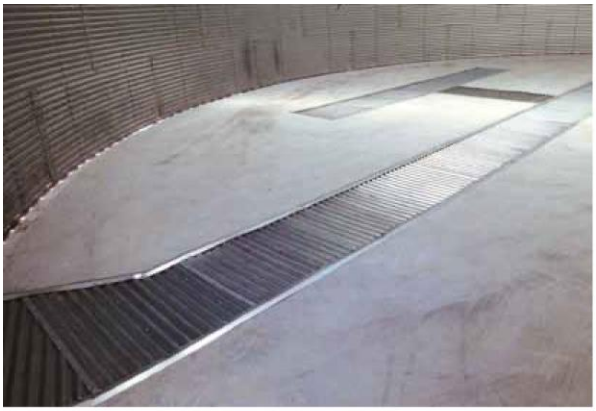
Standart Type Silo Outside Ladder

SIDEWALL ACCESS DOOR

The flat bottomed and commercial hopper silos are equipped with a special designed galvanized access door with 60x70 cm dimensions for an easy access into silos. Access doors have an independent mechanism to lock from inside and outside. Outside of the door is reinforced for an impermeable structure and inside of the door ensures high resistance against the grain pressure and sealing.

LADDER, SAFETY CAGE AND PLATFORMS

For a secured roof access, outside and roof ladders are provided. Spacing between the ladder and sidewall as well as embossing on the ladder rungs are specially designed for safety and prevent sliding. Resting platforms are located at certain levels according to related standards. Inside ladders are also available for maintenance and the controls inside of the silo. Mysilo also offers specially designed circular stair and roof ladders with hand-rails and stairs optionally which provides more safety to access.



Standart Channel Type Ventilation

Exhaust Fan

Locked System Channel Type Ventilation

Centrifugal Fan

TEMPERATURE MONITORING SYSTEM

The stored grain is always under danger of spoiling due to molding and insect occurring with the result of high temperature. Against this problem, Mysilo temperature monitoring system is presented with handhold unit or PC controlled options to contribute optimum grain storage in silos.

AERATION

The optimal solution for a comfortable storage perfect aeration is guaranteed thanks to special designed fans with different power and capacities and perforated sheets and supports. Aeration system varies according to specifications such as grain type to be stored, silo type and storage capacity.

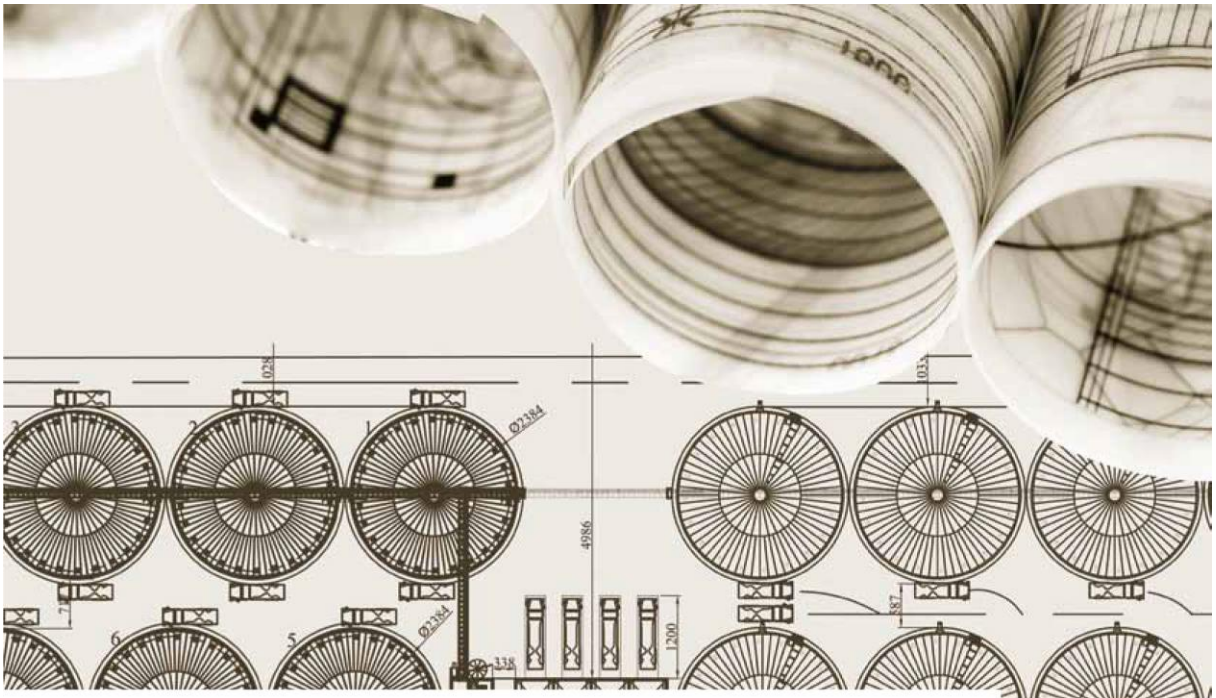
ROOF VENT

To secure the grain quality, there is a critical role of roof aeration vents. Mysilo roof vents are designed to allow maximum exhausting of the air and also prevent the insects and birds penetration. The roof vents are mounted to the roof with bolts with in required amount calculated by special aeration softwares.

- In accordance to the customer demand air vents are suitable to integrate for fumigation applications for extra sealing.
- Manuel and electrical as 2 hp exhausting roof vents are available.

AERATION- EXHAUST FAN

As a result of prolonged storage of grain, heat moisture and gases are concentrated ascendingly below the roof. This intensity has to be evacuated outward by way of exhaust fan. So that is provided longer and healthier protection to your grain. This product is presented as optional to our customers. According to silo capacity, grain type and location, its usage number can varies.



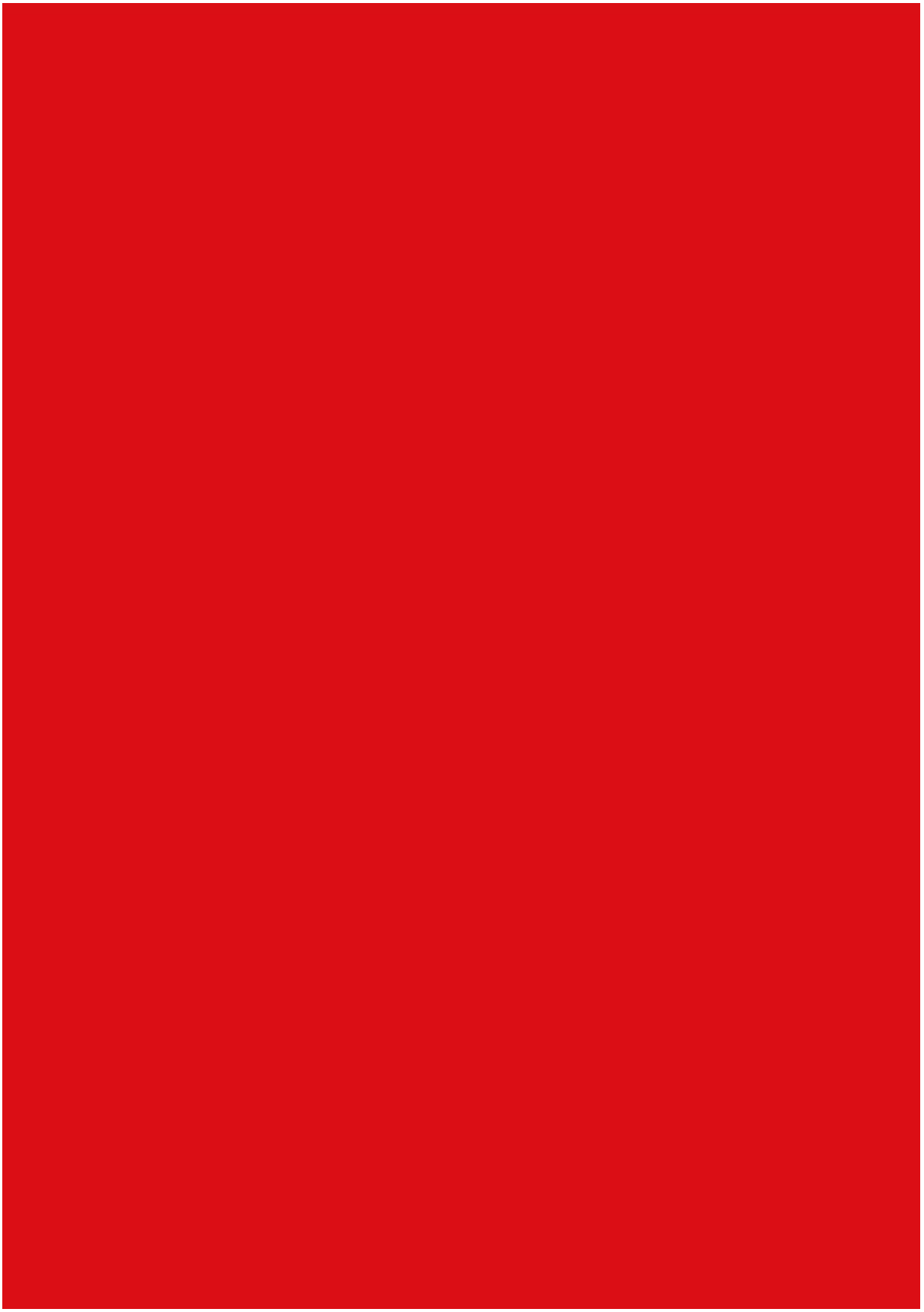
TURN-KEY SOLUTIONS

As Mysilo, we care exploration and project designing to get the best yield from our plants and to face minimal problem during the usage. We also discuss design and manufacturing processes in detail. The contractor process in a turn key plant field, we provide constuction, foundation, assembly and pavement services with our professional approach. The assembly service that has Mysilo guarantee is suitable with worker's health and safety standard and procedure.

NORMS FOR DESIGNING

Standards and norms are used by Mysilo for silo design;

- ASABE 2006 EP.433, 2004 AISI ColdFormed Steel Design
- 2005 AISC Steel Construction Manual 13rd Sd.,
- 2005 ACI 318-05 Building Code Requirements for Structural Concrete,
- UBC-97,
- ACE 7-05,
- IBC 2003,
- DIN 1055-6 Design Loads for Buildings and Silos,
- EN 1991-4 Actions on Structures – Part 4: Silos and Tanks,
- EN 1993-4-1 Design of Steel Structures



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MYSILO® TAHIL DEPOLAMA SİSTEMLERİ GRAIN STORAGE SYSTEMS

SILOPARK® TAHIL DEPOLAMA SİSTEMLERİ GRAIN STORAGE SYSTEMS

MAX PORTER® Tahıl Taşıma Sistemleri Grain Handling Systems

MYPORT® GRAIN STORAGE SYSTEMS

MYSILO®

TAHIL DEPOLAMA SİSTEMLERİ
GRAIN STORAGE SYSTEMS

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