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COMPLETE ELEVATOR SYSTEMS







Your Solutions Partner for Elevator System



Engineering





3D Design



Manufacturing











Complete Elevator Systems





























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All you need is in the package... Anything else?

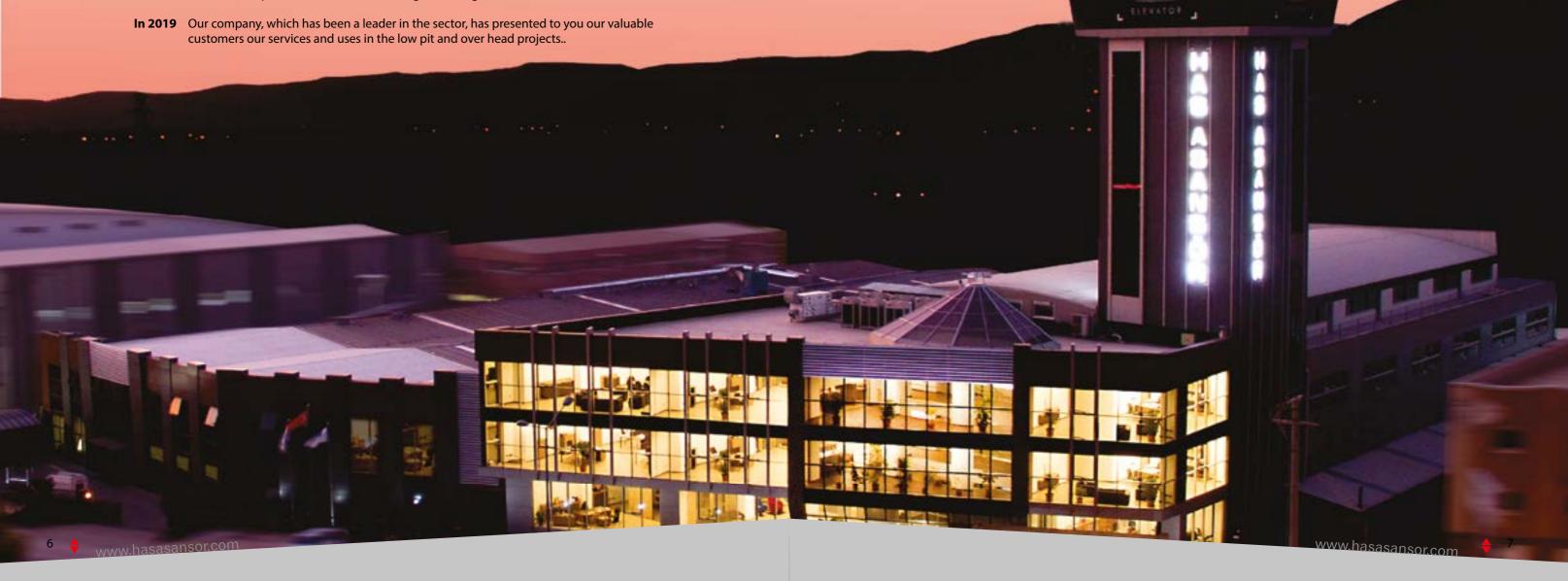






- **In 1980** HAS Elevator started its business journey by producing rubber and plastic components in a small workshop.
- **In 1987** HAS Elevator became pioneer manufacturer by producing first spring rubber buffers which have design belongs to HAS Elevator.
- **In 1994** HAS Elevator continued its business activities by producing cabin and cabin frame.
 - Besides the domestic market, we started to export our products abroad.
- In 1995
- We established our first factory which have 7200 square meter working place with expert
- **In 1997** staff, and increased both product range and production capacity.
- Has Elevator vocational high school was established in Bursa, Turkey as a first vocational school to educate students about elevators, the school still have 1000 students and fulfil needs of a qualified workforce of HAS Elevator and Turkish elevator industry as well.
- We moved to our new factory which have 17.000 square meter production plant with more than 150 expert staff, and international sales representatives, capacity to export more than 60 countries and became a company which have international standards, ISO 9001/2015 quality management system, ISO 14001 environment management system, and ISO 27001 information security system.
- **In 2016** We are honoured to be first R&D centre of Turkey which was established with 100% Turkish capital by Ministry of Science, Industry and Technology.
- **In 2018** Our R & D department has launched HAS Slim Panel and HAS Prewieded system Also we have presented to our customers goods designs for steel structures.

Since our foundation, we have been recognized as pioneer company for 37 years in elevator industry, we keep continue to serve you with our expert staff and to produce complete elevators and elevator components for domestic and international market within global standards.



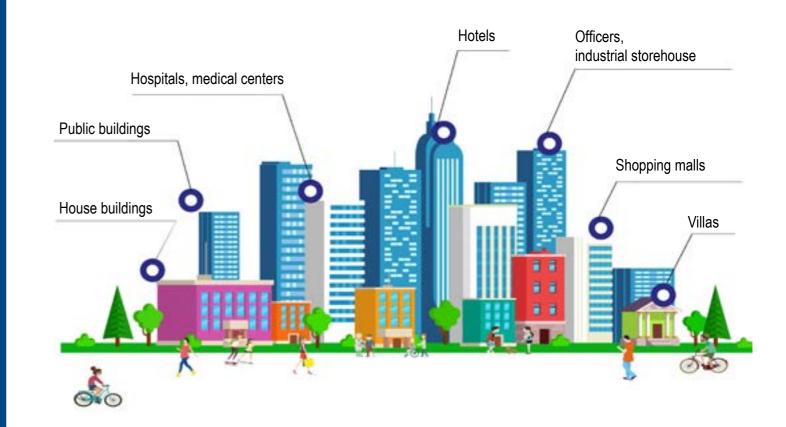




Our Skills

- **Since 1980**
- 17.500 m² Production Area
- **Export to** 75 Countries
- **85.000** pcs per year Semi Automatic Door
- 44.000 pcs per year Automatic Door
- **2.400** pcs per year Complete Elevator System
- 2.500 pcs per year Controller
- And **165** professionals work to make better for our clients

Our Solutions





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Because

We are a group of experts who work in first R&D center of Turkish elevator industry which have 100% Turkish capital, always with you to find innovative solutions and provide sufficient service.

We continue to provide best solutions by producing elevators which are suitable for every single shaft instead of providing shafts according to elevators.

We are always your solution partner with our 3D drawings which are designed for your shafts.

We always provide you complete elevators both economic and advanced technology.

We do not fulfill only your needs, we meet your special requests with our elevators which are in different design and color. You should know that we are able to supply any type of elevator components that you may need for a complete elevator with competitive prices.

All elevator safety components are manufactured according to TSE, EN, GOCT standards.



We make your work easier and faster by providing installation manuals and documents.

We respect humanity and nature by producing low energy consuming, quiet, and safe products.

We serve our customers in global standards with help of our multilingual customer services.

HAS Elevator is always ready to provide you technical support with its expert staff whenever you need.

Delivery time of HAS complete elevators.

We need only four weeks to prepare your orders.

Our warranty period.

HAS complete elevators and spare parts are covered by 2-year manufacturer's warranty.





Technical assistance

Our team multilingual engineers will assess your own technicals in how to install our elevator systems. Communication can by telephone, video conference, Skype or in situ.

Technical training

Among the services, we offer our expertise to train your Supervisors, Technical Directors, Operators e.t.c. We can supply deliver training plans tailored to your team at our headquarters by video conference or on location in your country.



Advantages of Complete Elevator Systems

- According to your shaft dimensions designed elevator type and size.
- Low En ergy Consumption
- Easy installation
- 7/24 Multilingual technical support
- Excellent travel comfort
- Silent, safety
- Eco efficient performance
- According to current standarts

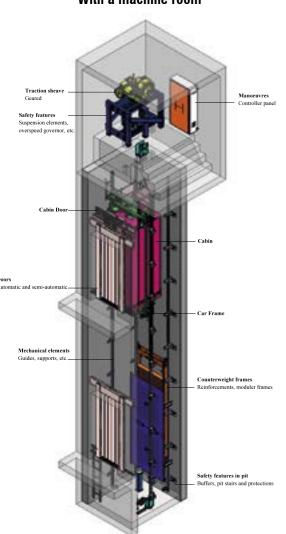




GENERAL CHARACTERISTICS									
Rated Load (kg)	320	450	630	800	1000	Up to 2000			
Passenger (max)	4	6	8	11	13	Up to 26 Pa	ssengers		
Rated Speed (m/s)			1 m/s			1,6 m/s -	2 m/s		
Maximum Travel			90 m			90 n	1		
Maximum Stops Number		30 30							
Car Entrances			Single / Double	Double Entrance (180°-90°)	Triple Entrance				
Drive System		Electrical							
Control	Low e	Low energy consumption ARKEL & Mikrolift e.t.c control, with CAN BUS and preweiring system communication VVVF							
Door Type		Automatic Side Opening / Automatic Central Opening / Semi Automatic							
Door Widht (mm)	600 - 700 - 800 - 900 - 1000 - 1100 - 1200 - 1300 - 1400 e.t.c Special								
Door Height (mm)		Up to 2300							
Car Dimensions (mm)	See on the drawings Special								
Car Height (mm)				2100			Up to 2400		

Note: Reference only, for detail information, please contact to HAS Elevator

With a machine room



Technical Specifications - MR

Traction equipment

- Geared machine with worm gear
- •1:1 and 2:1 confguration with lower suspension or in cantiliver

Control

• Closed and Open loop, variable frequency regenerative drive The Advantages of the With Machine Room Elevator

Systems

- With latest control techniques provides high sensitivity positioning
- This system easily mounted
- Lifting unit with superior performance provides quiet and comfortable movement
- Allows for fast and efficient installation
- Optimum performance
- Minimum Over Head size
- High capacity
- Manuel brake control

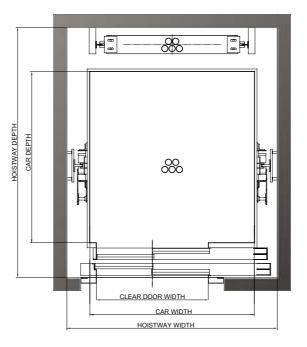


WITH MACHINE ROOM 1/1 CAPACITY / LOAD CAR SHAFT LOAD (kg) DOOR (mm) N° ENTRANCE PIT (mm) HEADROOM (mm) 320 3800 1050 900 1400 1500 1350 1000 1250 700 1350 1850 3400 450 1100 1100 1100 800 1450 3800 1700 1250 1300 900 1600 1900 630 1100 3400 800 10 1350 1400 900 1700 2000 1100 3400 1000 1600

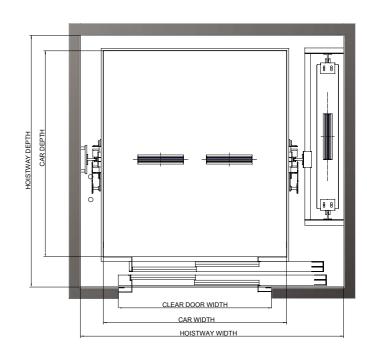
Note: Reference only, for detail information, please contact to HAS Elevator

WITH MACHINE ROOM 2/1											
CAPACITY ,	/ LOAD		CAI	R			SH	IAFT			
PEOPLE P	LOAD (kg)	WIDHT (mm) CW	DEPTH (mm) CD	DOOR (mm)	N° ENTRANCE	WIDHT (mm) SW	DEPTH (mm) SD	PIT (mm)	HEADROOM (mm)		
15	1125	1250	2100	1000	1	1	1900	2500			
15	1123	1500	1700	1200		2150	2100				
17	1275	1400	2100	1200	1	2100	2500				
1/	12/5	1600	1800	1200	1	1	2300	2200	1100	3400	
21	1600	1400	2400	1200		2100	2800	1100	3400		
21	1600	1600	2000	1300	1	1	2300	2400			
26	2000	1500	2700	1300		2300	3100				
26	2000	1700	2400	1400	1	2500	2800				

Note: Reference only, for detail information, please contact to HAS Elevator



1:1 Gear drawing Automatic side opening doors



2:1 Gear drawing





SH	IAFT				
H (mm) SD	PIT (mm)	HEADROOM (mm)			
1450	1250				
1600	1450	2400			
1650	1250				
1800	1400	3400 3450			
1800	1250				
1950	1300				
1900					
2050					
1800					
1950	1250	2450			
2500	1230	3430			
2650					
2000					
2150					

Note: Reference only, for detail information, please contact to HAS Elevator

WIDHT (mm) CW

900

1000

1100

1300

1400

1100

1400

Without a machine room

CAPACITY / LOAD

PEOPLE LOAD (kg

10

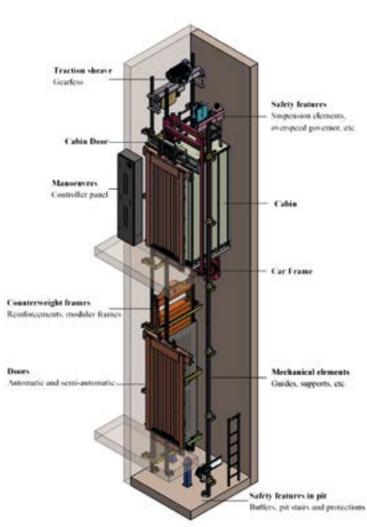
13

450

630

800

1000



Technical Specifications MRL

Traction equipment

WIDHT (mm)

1500

1500

1600

1600

1700

1700

1900

1900

2000

2000 1700

1700

2000

2000

MACHINE ROOM - LESS (MRL)

N° ENTRANCE

180°

180°

180°

180°

DOOR (mm)

800

1000

900

1100

900

900

CAR

DEPTH (mm) CD

1050

1250

1500

1400

2100

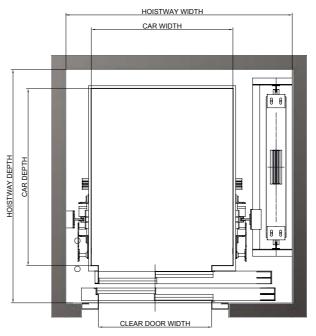
- Gearless machine with permanent magnet motor
- 2:1 confguration with lower suspension or in cantiliver Control
- · Closed loop, variable frequency regenerative drive

The Advantages of the Machine Roomless Elevator Systems

- With gearless motor's economic size provides save on the volume of the building
- With latest control techniques provides high sensitivity positioning
- This system easily mounted to all kinds of buldings
- Lifting unit with superior performace provides quiet and comfortable movement
- Consumes less energy and draws less starting current
- Allows for fast and efficient instalation
- Optimum performance

MACHINE ROOM - LESS (MRL - L) CAPACITY / LOAD CAR SHAFT LOAD (kg) DOOR (mm) N° ENTRANCE PIT (mm) HEADROOM (mm) 900 1050 1500 1450 320 800 1200 180° 1400 1750 700 900 1050 90° 1650 1450 1650 1600 1000 1250 180° 1800 1650 1750 1700 1200 3400 1700 1800 630 1100 1400 180° 1750 1950 90° 1800 1850 1900 1850 2000 1900

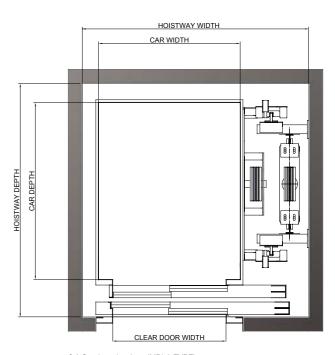
Note: Reference only, for detail information, please contact to HAS Elevator



2:1 Gearless drawings (MRL) Automatic side opening door

YPI

MR



2:1 Gearless drawings (MRL L TYPE) Automatic side opening door

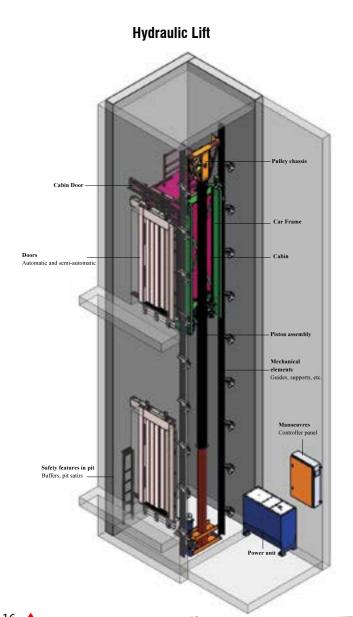
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GENERAL CHARACTERISTICS										
Rated Load (kg)	320	450	630	800	1000	Up to 5000				
Passenger (max)	4	6	8	11	13	U	p to 66 Pa	ssengers		
Rated Speed (m/s)					Up to 1					
Maximum Travel (m)					Up to 15					
Maximum Stops Number		6								
Car Entrances			Single			Double Entrance (180°-90°)		Triple Entrance		
Drive System	Hydraulic, mechanical valves Hydraulic,						rdraulic, low energy consumption electronic valves			
Control		Low ene	rgy consumption	on ARKEL & Mil	rolift e.t.c con	trol, with CAN BUS co	mmication	ı valves		
Door Type		Automatic S	ide Opening		Automatio	: Central Opening		Semi Automatic		
Door Widht (mm)		600 - 700 - 800 - 900 - 1000-1100-1200-1300 e.t.c. Special								
Door Height (mm)	2000 Up to 2300						Up to 2300			
Car Dimensions (mm)		See on the drawings Special								
Car Height (mm)				2100				Up to 2400		

Note : Reference only, for detail information, please contact to HAS Elevator



Technical Specifications Hydraulic Elevator

Traction equipment

• Pump unit with asynchrone motor

Control

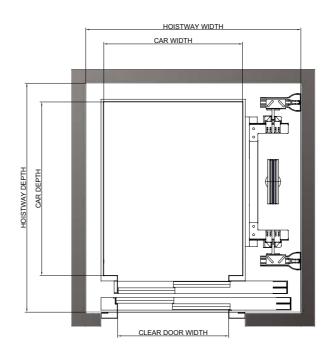
• Closed and Open loop, variable frequency regenerative drive

The Advantages of the Hydraulic Elevator Systems

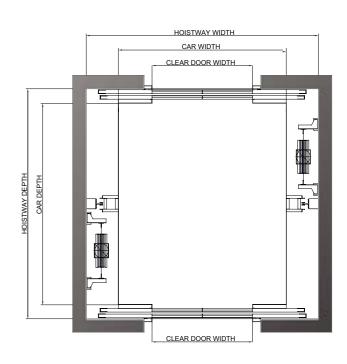
- With latest control techniques provides high sensitivity
- This system easily mounted to all kinds of buldings
- Lifting unit with superior performace provides quiet and comfortable movement
- Allows for fast and efficient instalation
- Optimum performance
- PIT and Over Head minimum
- High load capacity

HYDRAULIC LIFTS									
CAPACITY	/ LOAD		CAI		SHAFT				
PEOPLE P	LOAD (kg)	WIDHT (mm) CW	DEPTH (mm) CD	DOOR (mm)	N° ENTRANCE	WIDHT (mm) SW	DEPTH (mm) SD	PIT (mm)	HEADROOM (mm)
		900	1000		1	1450	1400		
4	320	300	1100	700	180°	1430	1650		
		900	1000		90°	1600	1400		
					1	1550	1650		
6	450	1000	1250	800	180°	1550	1800		
					90°	1700	1650		
		1100	1400	900	1	1650	1800	1100	3400
8	630 1				180°		1950		
					90°	1800	1800		
					1	1850	1900		
10	800	1300	1500	1000	180°	1830	2050		
					90°	2000	1900		
13	1000 -1	1100	2100	900	1	1650	2500		
13	1000-1	1100	2100	300	180°	1030	2650		
					1	1950	2000		
13	1000 -2	1400	1600	1100	180°	1930	2150		
					90°	2100	2000		

Note: Reference only, for detail information, please contact to HAS Elevator



Hydraulic lift drawing Automatic side opening doors



Hydraulic lift drawing double entrance 180 Automatic central opening doors





Bill of Materials

			MR	L Automat	ic Door		
	MF	RL SYSTI	EM SUPF	PLY PROD	UCT	COMPARTMENT	HAS ELEVATOR CONTROL
	Guide Rails	CW Rail Rails	Rail Clips	Guide Rail Brackets CW Brackets	Steel Wall Plug	RAIL GROUP	√
			Infrared Sensor	Landing Door (Mechanism + Panels)	Cabin Door (Operator + Panels)	DOOR GROUP	√
			Safety Gear	OSG	Machine + Machine Plate	MACHINE GROUP	/
				Revision Box	Controller	CONTROLLER GROUP	√
lectronik Over Load	Seperator	Cabin	Weights	CW Frame	Cabin Frame	CABIN & FRAMES GROUP	√
				Landing Operation Pane (LOP)	Cabin Operation Panel (COP)	OPERATING PANEL GROUP	√
		Rope Clips	Rope Bottles	Rope for CW	Rope for Cabin	ROPE GROUP	√
	Spiral Tube	Cable Ring	Cable Tube	NYAF Cable	Flexible	CABLE GROUP	√
	Illumination	Terminal Strip	Lubricator Oil Collecting Cup	Limit Switch Switch Link Rod	Buffer + Buffer Base	PIT GROUP	√
		Terminal Strip	Wood Plug	Handgloves	Isolation Band	SECONDARY ELEMENTS	√

	_				
MRI	Sen	ni-A	utor	natic	Door

	MI	RL SYSTI	EM SUPF	COMPARTMENT	HAS ELEVATOR CONTROL		
	Guide Rails	CW Rail Rails	Rail Clips	Guide Rail Brackets CW Brackets	Steel Wall Plug	RAIL GROUP	\checkmark
	Door Glass	Dashpot	Lirpomp	Landing Door (Mechanism + Panels)	Cabin Door (Operator + Panels)	DOOR GROUP	√
			Safety Gear	OSG	Machine + Machine Plate	MACHINE GROUP	√
				Revision Box	Controller	CONTROLLER GROUP	√
Electronik Over Load	Seperator	Cabin	Weights	CW Frame	Cabin Frame	CABIN & FRAMES GROUP	√
				Landing Operation Pane (LOP)	Cabin Operation Panel (COP)	OPERATING PANEL GROUP	√
		Rope Clips	Rope Bottles	Rope for CW	Rope for Cabin	ROPE GROUP	√
	Spiral Tube	Cable Ring	Cable Tube	NYAF Cable	Flexible	CABLE GROUP	√
	Illumination	Terminal Strip	Lubricator Oil Collecting Cup	Limit Switch Switch Link Rod	Buffer + Buffer Base	PIT GROUP	√
		Terminal Strip	Wood Plug	Handgloves	Isolation Band	SECONDARY ELEMENTS	\checkmark
Remarks :							



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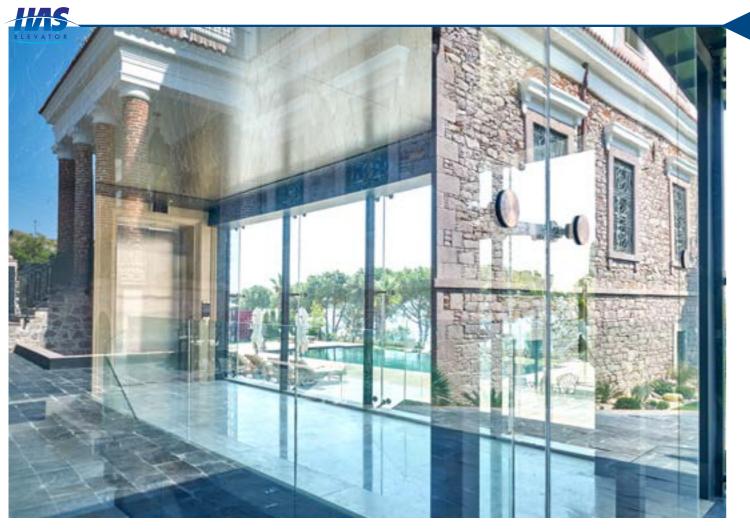


Other Elevator Systems











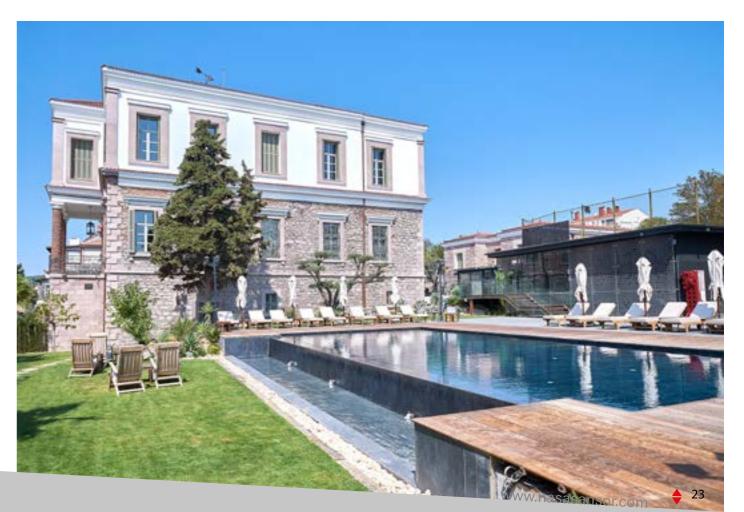




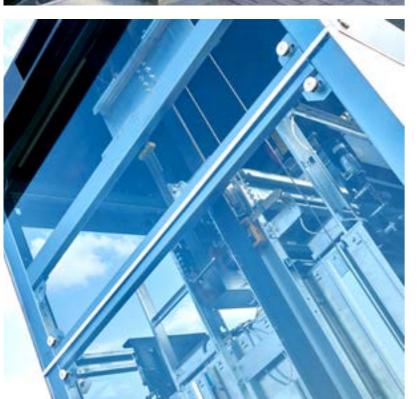
































"Feel the energy of Las Vegas"

- * Full- Lenght Mirror
- * Granite Floor
- * Laser Cut Ceiling
- * Hidden Lighting (Floor- Ceiling)
- * Handle A Single Row
- * EN81-20/50



"The intersection point of past and future"

- * Custom Design Glass
- * 4+4 Laminated
- * Granite Floor
- * Laser Cutting Panels
- * Panel Hidden Lighting
- * Handle A Single Row

HAS

* EN81-20/50







"The rhythm of life"

- * Panels A Special Form
- * Full- Lenght Mirror
- * Granite Floor
- * Laser Cut Ceiling
- * Hidden Lighting (Floor- Ceiling)
- * Handle A Single Row
- * EN81-20/50



"As the light of emotions that you miss"

- * Custom Painted Panels
- * Super Mirror Accessories
- * Granite Floor
- * Half Length Mirror
- * Laser Cut Ceiling
- * Handle A Single Row
- * EN81-20/50

HAS MOONL

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Postforming laminate panels & Satin stainless accessories Handle a single row Half-lenght mirror PVC floor Laser cut ceiling



Postforming laminate panels Satin stainless accessories Handle a single row Half-lenght mirror PVC floor Laser cut ceiling with spotlights



Laminate panels Satin stainless steel accessorries Handle a single row Half - lenght mirror PVC floor Laser cut ceiling



Stainless steel and laminated glass panel Handle a single row Natural granite floor Laser cut ceiling with spotlights EN 81-20/50



"Feeling above the clouds"

Granite Floor Full- Lenght Mirror Laser Cut Ceiling Design Handrail EN81-20/50

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CABINS



CABINS





Satin stainless panels &
Mirror stainless steel accessories
Handle a single row
Full-lenght mirror
Natural granite floor
Laser cut ceiling
EN 81-20/50



Satin stainless steel panels & accessories
Handle a single row
Half-lenght mirror
PVC floor
Laser cut ceiling
EN 81-20/50



M

Decorative wood panels &
Super mirror stainless steel
Handle a single row
Full-lenght mirror
Natural granite floor
Laser cut ceiling + with spotlights



CABINS

Satin stainless steel panels & accessories
Handle a single row
Half-lenght mirror
Natural granite floor
Ceiling with spotlights
EN 81-20/50



ESB painted sheet metal panels
Handle a single row
Half - lenght mirror
PVC floor
Panels a special form
Laser cut roof

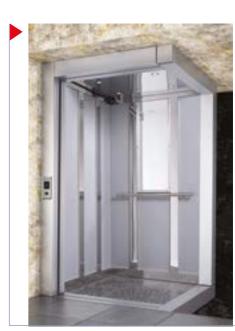
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ESB painted sheet metal panels
Aluminum checker plate floor
Laser cut ceiling
Emergency exit stairs (Fire Department)
Emergency trap door
EN 81-20/50



Decorative with painted wood panels
Gold mirror accessories
Handle a single row
Natural granite floor
Decorative wood ceiling with spotlights



ESB painted sheet metal panels
Super mirror stainless steel accessories
Handle a single row
Full-lenght mirror
Decorative PVC floor
Ceiling with spotlights
EN 81-20/50
WWW.hasasansor.com

DOORS







HAS STANDARD RAL 7032 Semi Auto Landing Door



HAS 20 Stainless Steel Hairline Automatic Landing Door



HAS 10 Copper Scrap Semi Auto Ferforge Landing Door



HAS 21 Stainless Steel Hairline Automatic Glass Landing Door





New Generation Machine Plate P12



Innovative Aspects

- Modular design suitable for many machines
- Providing all connections with bolts only
- Anti-vibration rubber
- Lightweight design
- Reduction of production times
- Reduction of the number of scrap parts
- Easy assembly
- Storable product group





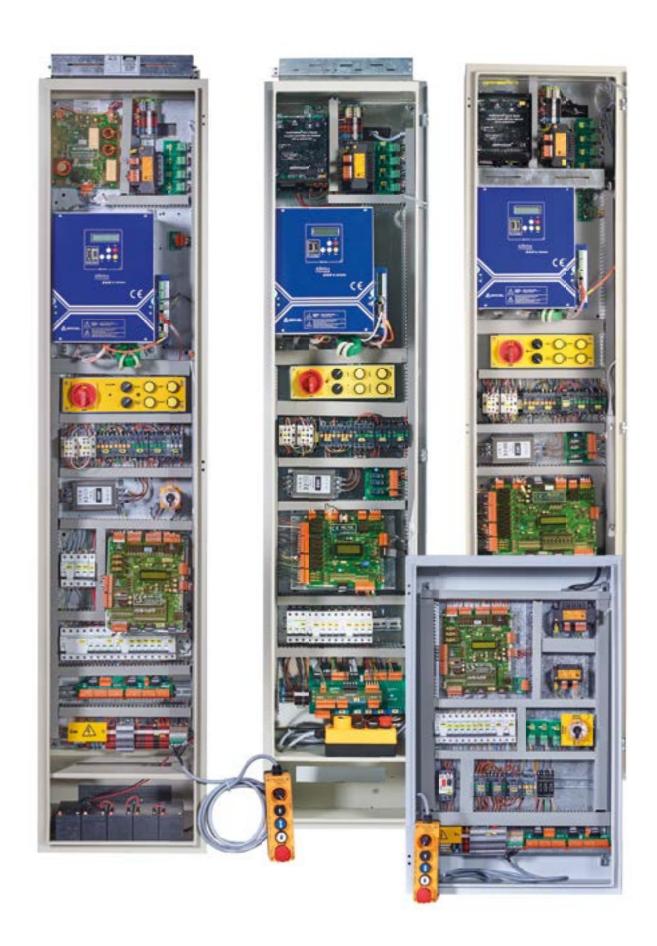
CONTROL PANELS











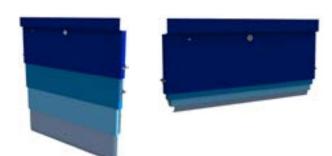
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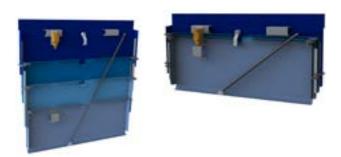


LOW PITS AND OVER HEAD SOLUTIONS









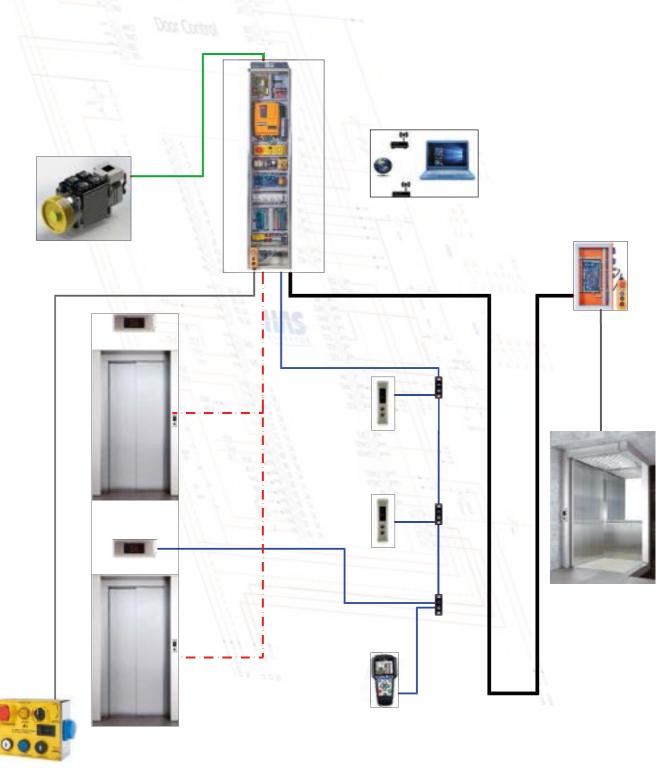








PRE-WIRED SYSTEM



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BUTTONS







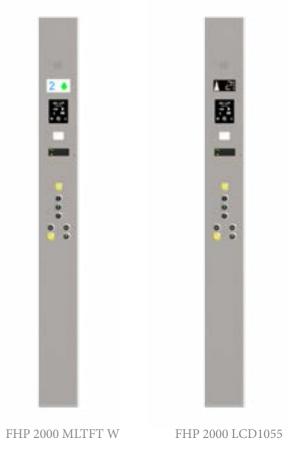


















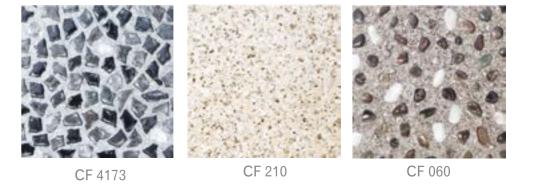


FLOORS

Granite Floors



PVC Floors



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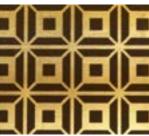




DECORATIVE STAINLESS

Decorative Stainless









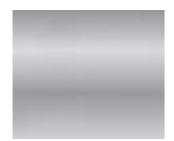
HS mirror ti-gold

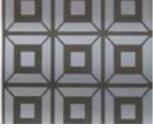
HS mirror ti-gold (cx41) HS mirror ti-gold (cx82) HS mirror ti-gold (cx26)





HS mirror ti-gold (cx37) HS mirror ti-gold (cx08)









HS mirror

HS mirror (cx41)

HS mirror (cx82)

HS mirror (cx26)











HS mirror (cx37)

HS mirror (cx03)

HS mirror (cx58)

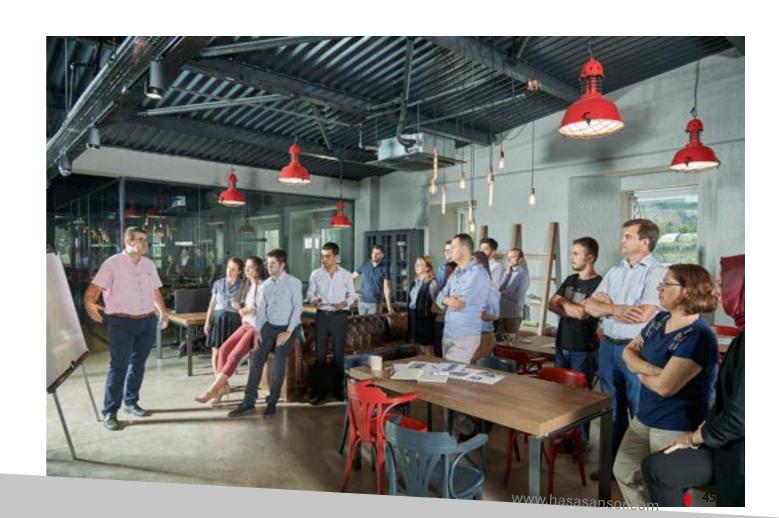
HS mirror (cx99)

Elevator R&D Centre

Since our foundation we keep continue to be pioneers in elevator industry for 37 years. In 2016, we established first R&D centre of Turkish Elevator industry with 100% Turkish capital with purpose of identifying unmet customers' needs and serving elevator sector.

Besides having more than 20 engineers in R&D centre, we are always striving to produce much better products with help of university and academic staff.

HAS Elevator R&D centre has only one goal; to offer best service than expected us for our customers.









Wis Elevator exports to 7 continents & 75 countries

All you need is in the package... **Anything else?**







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