

N:EX

H-BELT DRIVE SYSTEM



HYUNDAI
ELEVATOR CO., LTD.

N:EX

MR & MRL

New + Experience + X(Everything)

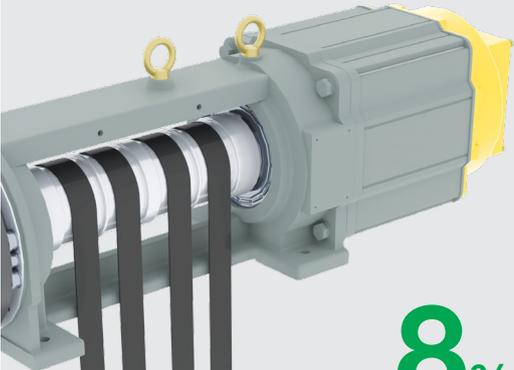
NEX FEATURES AN ECO-FRIENDLY BELT SYSTEM WITH THE MOST ADVANCED TECHNOLOGY.

Hyundai Elevator H-BELT DRIVE SYSTEM

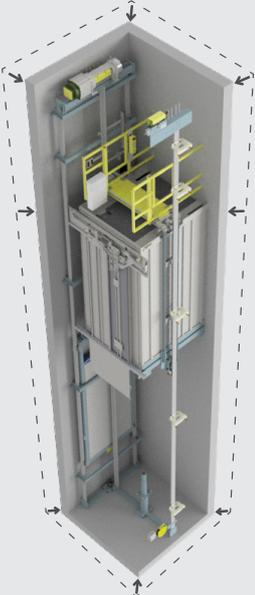
This highly advanced belt system is near silent with high space efficiency.



85% **Smaller**
Smaller and stronger traction machine



8% **Smaller**
Higher space utilization

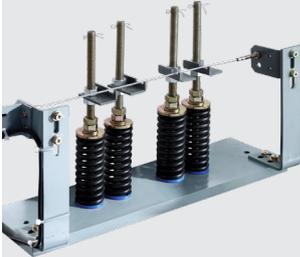


Oil Zero
H-Belt is eco-friendly

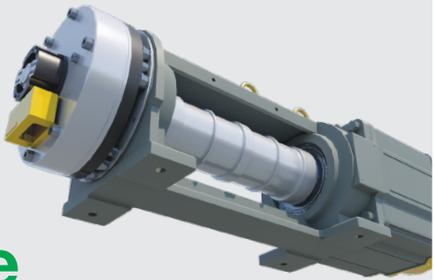


Life Time X3
H-Belt has 3 times longer life expectancy than the wire rope

Safe
Hyundai's Unique Mechanical Slack Switch System



Silence
Crowned sheave design is applied to mitigate the misalignment of belts, maximizing the passenger satisfaction with safe and smooth ride

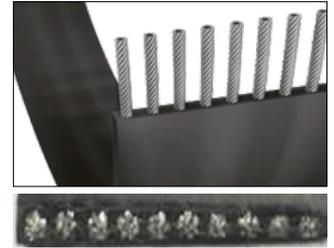


POINT OF H-BELT BENEFIT

Manufactured by an European maker

Item	Hyundai Elevator	VS	Industry Standard
Country of Origin	Europe (Italy)	>	China
Coating Material	Polyurethane + * TPU film	>	Polyurethane
Min. Breaking Strength	52kN	>	43kN

* TPU(Thermoplastic Polyurethane): non-toxic eco-friendly material that is highly elasticity and durable against abrasion. It shows very low deformation over time.



Self Belt Cleaning System

N:EX features a belt cleaning system that removes debris stick to the belt before going through the main sheave. It helps for easier maintenance than wire rope.

- a. Prevents sheave damage
- b. Easier maintenance
- c. Higher ride comfort



3 times longer life expectancy

H-BELT has up to 3 times longer life expectancy than the traditional wire rope. It also has 15years of replacement cycle, where else the wire rope's life cycle is 4 to 5 years(recommended replacement cycle).

Oil free system

H-Belt is eco-friendly. The conventional wire rope needs to be regularly greased. But, the belt system is semi-permanent and minimizes maintenance effort.

POINT OF MECHANICAL BENEFIT

Mechanical Slack Belt System

Mechanical Slack Belt System activates when the belt is damaged and it detects belt error.

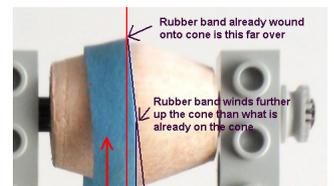
- a. Reducing number of Break down
- b. Minimizing trapped accident
- c. Reducing maintenance costs



Crown effect keeps belt to the center of the sheave pulley

Traction machine sheave is carefully designed in the shape to take advantage of the "Crown effect " keeping the belt at the center of the sheave.

- a. Reducing vibration and noise
- b. Smoother ride
- c. Increasing safety



85% smaller traction machine

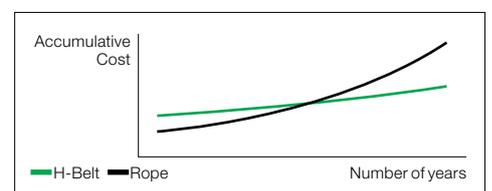
The size of traction machine has been reduced by 85% as a result of smaller radius of curvature compared to MR counter part. It allows for easier installation and higher space utilization.

COST SAVING

TCO (Total Cost of Ownership)

The top quality H-belt enables longer life span, low break down rates, quick and easy maintenance. **H-Belt in the long-run is the perfect choice**

Purchase Cost < **Maintenance Cost**



N:EX INTERIOR DESIGN

Design solution by theme

Hyundai Elevator put a new spin on the shared moving space. N:EX interior design is inspired from various spaces such as natural forest, luxury boutique, chic & modern urban.

Item	Option	Items	Option
Capacity (kg)	Refer to specification	Code	EN81-20
Speed (m/min)	Refer to specification	Fire Door (Only for STS or SPCC)	E60, E90, E120
Max. Rise (m)	80m		

FORET PLUS

NEX_WB2



Rear View (P13, 1000kg)



Front View (P13, 1000kg)

Car Wall Specification	Option
Stainless Hairline, Stainless Mirror, Multi Metal (SLH-BRZ), High Metal (SLH-BRZ)	

Entrance



200 Type



100 Type



50 Type

GLACIER PLUS

NEX_GW2



Rear View (P13, 1000kg)



Front View (P13, 1000kg)

Car Wall Specification	Option
VCM-PW, VCM-BDW, D-metal (PCM2-WD)	

Entrance



200 Type



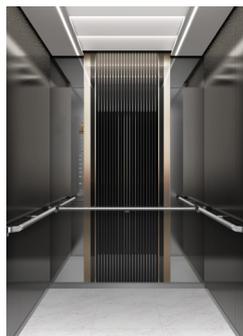
100 Type



50 Type

TERRACE

NEX_SB



Rear View (P13, 1000kg)



Front View (P13, 1000kg)

Car Wall Specification	Option
Multi Metal (SLH-BKST2)	

Entrance



200 Type



100 Type



50 Type

URBAN

NEX_PS



Rear View (P13, 1000kg)



Front View (P13, 1000kg)

Car Wall Specification	Option
Stainless Hairline, Stainless Mirror, Stainless Mirror Etching(SE-2302)	

Entrance



200 Type



100 Type



50 Type

MRL SPECIFICATION

Standard Dimension & Reactions

(Unit: mm)

Speed (m/min)	Capacity (Kg)	Passenger	Door Width	Door Height	Car Size	Hoistway Size	Reaction	
			OP	EH	CA x CB	X x Y	R1 (CAR)	R2 (CWT)
60 90 105	550	7	800	2100	1250x1150	1850x1480	6300	5180
	600	8	800	2100	1250x1240	1850x1570	6440	5180
	700	9	800	2100	1250x1350	1850x1680	6720	5320
	750	10	800	2100	1250x1450	1850x1780	7000	5460
	900	12	900	2100	1600x1350	2150x1680	7560	5600
	1000	13	900	2100	1600x1400	2150x1730	8820	6720
	1150	15	1000	2100	1800x1400	2350x1730	9240	6860

- ▲ Notes
1. The above dimensions of the N:EX as per EN81-20 standard. For other country specific standards and spec requirements, please contact us.
 2. The above dimensions are only for center opening door. For side opening door, please contact us.
 3. If the distance between the sills of consecutive floor is over 11m(In case of firefighter lift is 7m), please consult us. Emergency exits may be required.
 4. In case of duplex arrangement, please secure more than 500mm distance between the cars is required. If not, a middle partition is required in the hoistway.
 5. In case of steel structure, it needs steel members that have force over than R1 and R2.
 6. N:EX is not available for through type. Please consult us for further information.

Overhead & Pit Depth

(Unit: mm)

Speed (m/min)	Capacity (Kg)	Passenger	Overhead(OH)	Pit	Control Panel Width
			(BEST/GENERAL)		
60	550-1150	7-15	3750/4150	1100	400
90			3900/4300	1250	
105			3950/4350	1300	

- ▲ Notes
1. The above dimensions are for car height 2,500mm. If the car height is needed under 2,500mm, please consult us.
 2. The above dimensions are minimum standard. Design a building considering the standard error.
 3. The maximum travel height is 80m.(It is changeable according to speed. Please check with us)
 4. If you want an optimal dimensions for your project with the site conditions considered, please consult with us.
 5. In case of fire-fighter lift or applied emergency exit door on car top, the Overhead(OH) should be increased as below.
- EN81-20 : OH+50mm
 6. Best OH dimensions are only applicable if the hoistway size is matching with standard dimension as above.
 7. A capacity of 450kg is also available, please contact us if you need related specification.
 8. Capacities of 1350kg-1600kg with 60m/min are also available, please contact us if you need related specification.

MR SPECIFICATION

Standard Dimension & Reactions

(Unit: mm)

Speed (m/min)	Capacity (Kg)	Passenger	Door Width	Car Size		Hoistway Size				M/C Room				M/C Room Reaction		Pit Reaction	
				Internal	External	Simplex	Duplex	Triplex	Depth	Simplex	Duplex	Triplex	Depth	R1 (CWT)	R2 (CAR)	R3 (CAR)	R4 (CWT)
				OP	CA × CB	A × B	X	X2	X3	Y	MX	MX2	MX3	MY			
60 90 105	550	7	800	1250×1150	1310×1305	1750	3600	5450	1780	2000	4000	6000	3500	1769	1438	6300	5180
	600	8	800	1250×1240	1310×1395	1750	3600	5450	1870	2000	4000	6000	3600	1907	1445	6580	5320
	700	9	800	1250×1350	1310×1505	1750	3600	5450	1980	2000	4000	6000	3700	1733	1215	5880	4340
	750	10	800	1250×1450	1310×1605	1750	3600	5450	2080	2000	4000	6000	3800	2124	1481	7000	5460
	900	12	900	1600×1350	1660×1505	2000	4100	6200	1980	2300	4400	6500	3700	2244	1570	7560	5600
	1000	13	900	1600×1400	1660×1555	2000	4100	6200	2030	2300	4400	6500	3800	2629	1806	8820	6720
	1150	15	1000	1800×1400	1860×1555	2200	4500	6800	2030	2500	4800	7100	3850	2784	1869	9380	6860

- ▲ Notes
1. The above dimensions of the N:EX as per EN81-20 standard, For other country specific standards and spec requirements, please contact us.
 2. The above dimensions are only for center opening door. For side opening door, please contact us.
 3. If the distance between sills of consecutive floor is over 11m(In case of firefighter lift is 7m), please consult us as. Emergency exits may be required.
 4. In case of duplex arrangement, please secure more than 500mm distance between the cars is required. If not, a middle partition is required in the hoistway.
 5. In case of steel structure, it needs steel members that have force over than R1 and R2.
 6. N:EX is not available for through type. Please consult us for further information.
 7. Machine room temperature should be maintained below 40°C with ventilating fan and/or air conditioner(If necessary) and humidity below 90%
 8. Install cinder concrete below maximum 100mm.

Overhead & Pit Depth

(Unit: mm)

Speed (m/min)	Capacity (Kg)	Passenger	Overhead(OH)	Pit	M/C Room Height
			(BEST/GENERAL)		
60			4100/4500	1100	
90	550-1150	7-15	4250/4650	1250	2100
105			4350/4750	1300	

- ▲ Notes
1. The above dimensions are for car height 2,500mm. If the car height is needed under 2,500mm, please consult us.
 2. The above dimensions are minimum standard. Design a building considering the standard error.
 3. The maximum travel height is 80m. (It is changeable according to speed. Please check with us)
 4. If you want an optimal dimensions for your project with the site conditions considered, please consult with us.
 5. Best OH dimensions are only applicable if the hoistway size is matching with standard dimension as above.
 6. A capacity of 450kg is also available, please contact us if you need related specification.
 7. Capacities of 1350kg-1600kg with 60m/min are also available, please contact us if you need related specification.

ELECTRIC POWER REQUIREMENT

Building Power Facility

(380V)

Speed (m/min)	Capacity (Kg)	Passenger	Motor Capacity (kW)	MCCB Capacity (A)		Power Cable Size (mm ²)		Earth Wire Size (mm ²)		Power Supply Capacity (kVA)	
				Simplex	Duplex	Simplex	Duplex	Simplex	Duplex	Simplex	Duplex
60	550	7	4.4	20	30	4	6	4	6	9	17
90			6.5	20	40	4	10	4	10	12	23
105			7.6	30	50	6	16	6	16	13	26
60	600	8	4.8	20	30	4	6	4	6	9	18
90			7.1	20	40	4	10	4	10	13	25
105			8.3	30	50	6	16	6	16	14	28
60	700	9	5.5	20	40	4	10	4	10	10	20
90			8.3	30	50	6	16	6	16	15	29
105			9.7	30	60	6	16	6	16	17	33
60	750	10	5.9	20	40	4	10	4	10	11	22
90			8.9	30	50	6	16	6	16	16	31
105			10.3	30	60	6	16	6	16	18	36
60	900	12	7.1	20	50	4	16	4	16	13	26
90			10.6	30	60	6	16	6	16	18	36
105			12.4	40	75	10	25	10	16	21	42
60	1000	13	7.9	30	50	6	16	6	16	14	28
90			11.8	40	75	10	25	10	16	21	41
105			13.8	40	75	10	25	10	16	24	47
60	1150	15	8.7	30	50	6	16	6	16	15	29
90			13	40	75	10	25	10	16	22	44
105			15.2	40	100	10	35	10	16	26	51

- ▲ Notes
1. The above table is for lengths of electric wire to 50 meters from the machine room to the building transformer.
 2. The above power feeder thickness are based on copper wires use and metallic tubing.
 3. Over triplex, please contact us.