Comfortable ride
Enjoy city life

KOYO series escalator and moving walk accord with European standard EN115 and China standard GB16899-2011. It fully applies new materials and advanced domestic and overseas technology for design and manufacture. It has the advantages such as smooth running, low noise, safe and reliable, high structural strength, durable, convenient repair etc. The products feature as fine and exquisite structure, delicate stairway, attractive outline model by advantageous design concept, advanced production craft & technology.

KOYO series escalator and moving walk feature as complete specifications, beautiful model, flexible layout. The products are widely applicable for the shopping center, supermarket, subway, airport, exhibition center and so on.

ISO9001:2008 / ISO14001:2004 / OHSAS18001:2007
European certification / Energy-saving system

Intelligent control
It ensures safe travel

KOYO escalator control cabinet follows the requirements of modern industrial products' model design. It applies gold proportion to design the cabinet outline and cutting sizes. It brings about the elegant and attractive cabinet outline. It fully considers heat-radiation problem. It gets radiating slot in upper and lower cabinet. If electrical elements get heated, it radiates heat through upper slot, while cool air keeps filling the cabinet through lower slot. The sealed cabinet forms a natural air duct from bottom to top. It thus eliminates the heat.

KOYO escalator control cabinet is of sealed design. Through third party inspection institute certification, protection grade is IP54 with wide use environment range. KOYO escalator control cabinet door and circuit breaker or isolating switch operation handle set mechanical interlocking. Door opens only while handle is in breaking position. It thus enhances the safety coefficient of operators.

KYM08E301 Embedded type escalator control panel

KOYO Elevator Co., Ltd. Independently develops KYM08E301 embedded escalator control panel based upon ARM 32-digit micro-processor. Main panel is a high tech product with stable and reliable quality, strong anti-interference.

It has the following features and properties:

- ARM 32-digit embedded micro-processor;
- Basic points: 36-point input, 24-point output, it can extend to 68-point input;
- Press-key input, LED display, it can set parameters, it shows the historical records;
- Trouble self-diagnosis, it can store 1000 pieces of historical records;
- Long-distance communication interface (RS485 and CAN);
- Real-time clock with power-failure protection;

Relevant system of escalator programmable electronic safety (PESSRAE)

System satisfies European standard EN115-1:2008+A1:2010 and IEC61508 relating to corresponding requirements of relevant system to programmable electronic safety. System applies safety controller G9SP. Controller passes TUV certification. Safety protection capacity fulfills SIL3 classification. System applies the advanced monitor modes such as double-channel, self-diagnostic etc. It passes the test and certification from Rhine Technology (Shanghai) Co., Ltd. Safety protection capacity fulfills SIL2 classification. It also issues the related CE certificate.

System mainly gets the following features:

- It is designed as per SIL classification requirements;
- Multi-path redundancy, inter-monitor input point are applicable for various safety monitors (host speed-detection, step loss test, handrail speed detection etc.);
- Advantageous system self-inspection functions;
- It is compatible to various systems, PLC, micro-computer panel system etc;
- Sound EMC electro-magnetic compatibility;
- It is more outstanding for systematic solution plan to match with KOYO escalator control products;

Unique design
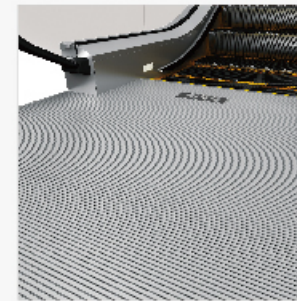# Aesthetic appreciation

Step

Stainless steel
with plastic side-frame
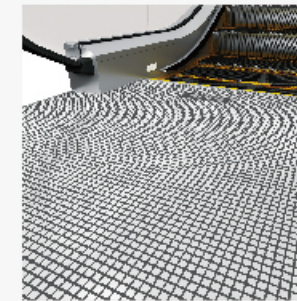
Aluminum alloy
with plastic side-frame

Step overall die-casting
aluminum band painted side-frame

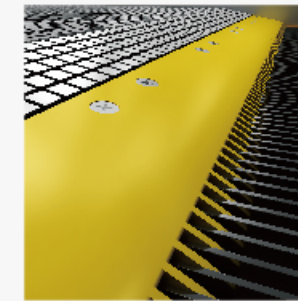## Anti-crawling device

Functional safety panel

Landing plate

Aluminum alloy

Stamped stainless steel

Comb

Synthetic resin

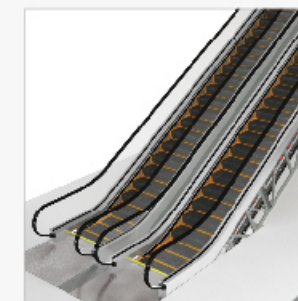Aluminum alloy
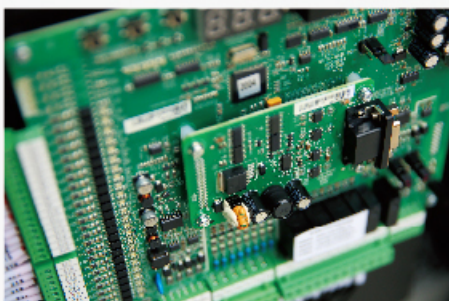
Truss material-selection

Painted angle-steel

Hot dip galvanizing angle-steel

Outer packing material-selection

Glass parallel escalator
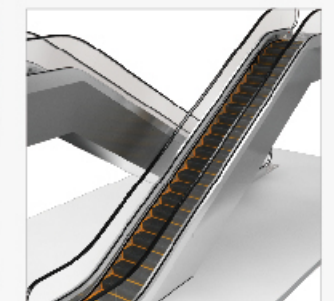
Stainless steel cross escalator

Tailor-made splendor under your feet

Handrail color

Black

Red

Blue

Grey

Handrail lighting

Skirt panel lighting

Comb lighting

White

Belt-shaped

White light

Yellow light

Handrail brackets

Skirting brush

Aluminum alloy

Stamped stainless steel

Single-row skirting brush

Double-row skirting brush

Safety device

No.	Safety function	Remarks
01	Electro-static brush	Step (tread) removal is static in running.
02	Emergency stop press-button	If you need emergency stop, please press emergency stop switch for protection.
03	Skirting protection	It protects when any foreign matter is clamped between step and skirting.
04	Handrail entry protection	It protects when any foreign matter is clamped in handrail entry.
05	Drive-chain broken-chain protection	It protects during broken or overlong drive-chain.
06	Over-speed, under-speed protection	It protects if speed exceeds or is less than the rated speed.
07	None operational reversal protection	It protects if running direction of escalator or handrail is opposite to the appointed direction.
08	Open phase, error-phase protection	It protects during open phase or error-phase of dynamic mains.
09	Electrical circuit protection	It protects during short-circuit of power loop.
10	Motor overload, overheat protection	If motor current is 120% higher than rated current, escalator then stops automatically.
11	Step (tread) sunken protection	It protects when step (tread) sinks because of damage.
12	Step (tread) broken-chain protection	It protects during broken or overlong step (tread) chain.
13	Comb-teeth safety protection	It protects when any foreign matter is clamped in comb-teeth.
14	Step gap lighting	Top and bottom of lighting escalator.
15	Trouble self-diagnosis	It can automatically diagnoses any error. Memory function is convenient for repair. It thus enhances the action efficiency.
16	Automatic lubrication	It can accurately, timely, quantificatively oil / lubricate the escalator / moving walk.
17	Alarm-bell start device	When escalator starts, it reminds the passengers and rings for 3 second, it then starts upward / downward running.
18	Handrail anti-electrostatic device	It removes any electrostatic during handrail running.
19	Handrail speed-detection function	It protects when handrail running speed is lower than the rated speed.
20	Step loss function	If it gets any upper / lower step loss, escalator stops immediately.
21	Anti-crawling device	It prevents from passengers' climbing to trigger any danger.
22	Functional safety protection device	Programmable electronic safety relevant system (PESSRAE) ensures safe running of escalator / moving walk.

No.	Safety function	Remarks
23	Skirting brush	It enables none touch of passengers' shoes, trousers from skirting. It thus enhances the passengers' safety. Meanwhile, it protects normal running of step and overall escalator.
24	Machine room guard-panel	During repair / maintenance, it prevents from touching the step. It thus enhances the safety of repair and maintenance staff.
25	Trouble display	It shows trouble code in screen. It is convenient for repairer in repair.
26	*Microwave / photo-electric / tread-circuit self-start	It stops or slows down the running condition in order to save the energy.
27	*Comb-teeth heating function	It avoids icy low-temperature.
28	*Truss heating function	It avoids icy step in low temperature.
29	* BMS long-distance control system	It executes long-distance monitor to single elevator. It carries out centralized monitor to multiple elevators.
30	*Oil / water separator	During outdoor escalator installation, it separates lubricant. It does not pollute the environment.
31	*Comb-teeth lighting	It enhances brightness when step enters into comb-teeth. It is more secure.
32	*Step up-skid function	If step jumps upward, switch acts to stop the escalator.
33	*Attached brake	If drive chain breaks or running speed is over-speed, escalator stops automatically.
34	*Mechanical anti-reversal function	It protects if escalator running direction is opposite to appointed direction.

*Optional function