A new game-changing transportation system

ACCEL: Shortening connecting times at Airports and Metros

It provides an efficient solution to the dominating global challenges of urbanization – alleviates traffic congestion by improving access to metro stations and attracting up to 30% additional passengers. In airport terminals it offers a reduction of connection times between gates by up to 70%.

Summary features

High-speed
• Max. speed of 2 m/s
• Time savings up to 70%

Easy to use
• Safe, comfortable ride
• No instructions required

High-capacity
• 7,300 pphpd
• (people per hour per direction)

Easy fit
• No major impact on the construction
• Clever layout

Continuous movement
• No waiting time/areas
• No stations

Product Range
• Services lengths of up to 1,500 m
• Applicable to medium distances more efficiently

Unique technology
• Proven pallet/handrail systems
• Transrapid technology

Future demands
• A metro station at less than 500 m to any citizen
• Improved public transport quality by extending the distance between train stop
Horizontal turnaround
Allows one-way or bi-directional traffic with only one ACCEL.

Overlapping pallet system
High-speed area: short and long pallets establish a continuous surface.

Pallet driving system
Pallets individually propelled by linear motors plus a mechanical safety chain.
ACCEL offers a cost effective solution to increase network connectivity without the need for major civil works.
A metro access on every corner of the city

A highly effective system with low maintenance costs. thyssenkrupp analysis shows that people at a distance of more than 500 metres from a metro station usually opt for other means of transport, despite the possibility of heavy traffic jams or significantly higher costs. Filling this gap in the transport landscape, ACCEL offers a cost effective solution to improve the reach of metro stations and increase network connectivity without the need for major infrastructural or civil works, in addition to attracting 30% additional passengers to a more environmentally friendly mode of transport.

Reducing trip times. Express metro lines can be built using ACCEL, reducing the number of stops for metro systems, and keeping or even increasing accessibility for passengers. The Fast Track concept will make public transport more attractive to users.
Connection within a terminal
A significant factor in smoother operations at airports

In airports, ACCEL is capable of improving airport traffic flow

Some of the most recent expansions at large airport hubs have significantly increased distances between gates, making transit difficult for some passengers, especially the elderly and those travelling with children. The increased distances also prove to be a major issue when there are last-minute gate changes or long lines to complete pre-boarding formalities, often resulting in some passengers missing their flights altogether.
ACCEL, the advantages of an innovative solution

Easier planning
ACCEL avoids the need for setting up stations and waiting areas as those needed for APM or shuttle buses. Besides, it does not require any independent control room.

Improving public transport
More efficient Metro systems with increased accessibility and faster trips for passengers.

Reduced life cycle costs
Easy to maintain, with lower energy per passenger requirements; and with a lower initial investment.
ACCEL Fostering urban mobility

Entrance

0.65 m/s

Acceleration
Consisting of a band of pallets, ACCEL is built using the overlapping pallet concept which allows each pallet to expand three times its original size. Each pallet is equipped with its own magnet propelled by linear motors installed in fixed positions.

In addition, the pallet band and the handrail are two separate systems that run precisely in sync. Sensors constantly focus on the position of the individual grips and pallets, ensuring that passengers always feel that these are moving at the same speed, which allows them to experience a smooth and safe ride.

<table>
<thead>
<tr>
<th>Speed</th>
<th>Up to 2 m/s (7.2 km/h)</th>
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</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>7,300 passengers/hour per direction</td>
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<tr>
<td>Length</td>
<td>Modules from 100 to 500 m</td>
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<tr>
<td>Pallet width</td>
<td>1,200 mm</td>
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<tr>
<td>Total width if bidirectional</td>
<td>4,860 mm</td>
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<tr>
<td>Pit depth</td>
<td>980 mm</td>
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<tr>
<td>Climate class</td>
<td>Indoor</td>
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