



VIKING Passenger

Marine Evacuation Systems

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VIKING Passenger **Marine Evacuation Systems**

Background for MES Systems



The three evacuation alternatives:

1. Life Boats
2. Davit Launched Liferrafts
3. MES systems

Development drivers:

1. Capacity requirements
2. Safety aspect – Crew and launch
3. Ship design



From year 2000 forward MES systems has become widely used on Cruise Liners and larger Ferries.

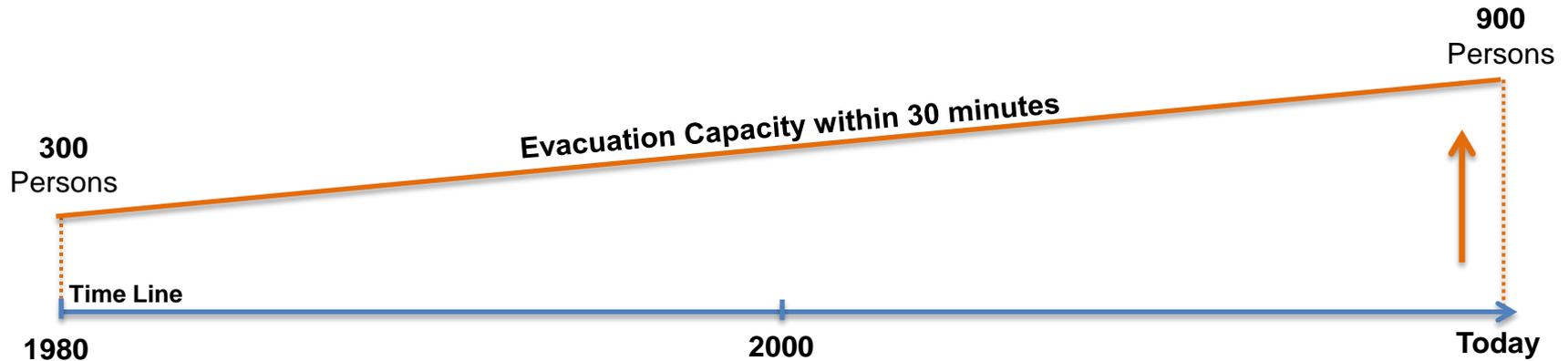
Approximately 2800 MES system are installed on around 860 passenger ships world wide.





VIKING Passenger Marine Evacuation Systems

MES development over time



1st Generation MES



- Evacuation with slide or chute via platform into the Liferrafts
- Raft sizes 25 to 50 persons
- 50 – 100 handling steps

2nd Generation MES



- Evacuation with slide or chute directly into the Liferrafts
- Raft sizes 100 to 158 persons
- 30 – 50 handling steps





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Two key aspects – 1st Functional Safety

Life Saving Equipment shall work under all conditions

Technical reliable

- **Tested and durable**
e.g. Heavy Weather Sea Trail
- **Designed lifetime**
- **Single Point of Failure**

Functional accessibility

“Ease of use”

- **Handling steps by initiating evacuation**
- **Handling steps under evacuation**
- **Intuitive**





Two key aspects – 2nd Crew Interface



The crews comfort zone

- Know the equipment's functionalities
- Trust the equipment in all situations



Crew training is vital

- Onboard training – mustering process
- Equipment training – deployments and tests with the systems onboard

Means of training

- The actual equipment
- Video and animation
- Manuals
- Tests for crew members – different levels





3rd Generation MES Systems



New Generation – New Focus

Technical Focus – Functionality

- Automatic Launch
- Redundancy – Back-up systems
- Single point of failure elimination
- Evacuation flow

Crew Focus – Human aspects

- Fewer steps in launch sequins
- No Crew handling after launch
- Crew can focus on the evacuation process – “Crowd Control”

Training programs – Knowledge

- Training launch setting on systems
- Interactive training programs
- Tests and follow-up training onboard the ship





All stakeholders in the industry share a common interest and responsibility in creating a safer environment at sea.

Thank you

