

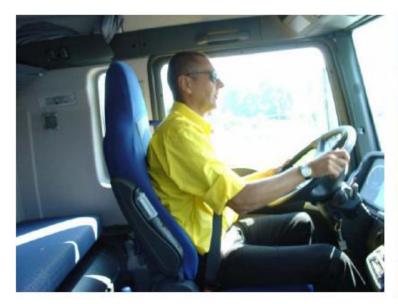
alpha DRIVING CENTER

- Standardised Training Modules
- Multifunctional usage
- Enhance skills and knowledge
- Influence drivers' behaviour
- Create safety awareness





Road Safety Training - Basics





Knowledge	Skills	Awareness
 Correct seating position (specific for HGVs or busses) due to active and passive safety Correct adjustment of the steering wheel and the mirrors Alternation of load (influences, consequences and dangers) Correct viewing and steering technique to drive in a smooth and safe way 	Participants learn to: ➤ Adjust the seat especially the height and the weight adjustment ➤ Apply correct viewing and steering techniques ➤ Steer in a smooth way and drive foresighted to be able to react to dangers very early ➤ Avoid hard alternations of load	Participants become aware of: Measures to increase active and passive safety The importance of the seat belt Dangers of a wrong seat position Importance of getting on and off the vehicle (the truck) in a safe way The influence of speed on centrifugal forces The advantages of a foresighted viewing technique and a smooth driving style



Road Safety Training – Emergency Braking





Knowledge	Skills	Awareness
 How to optimize the braking distance (with the respective vehicle) Influence of speed on the reaction and braking distance Influences of weight, tires, road surface and other factors on braking distances Possible behavior of the vehicle in emergency braking situations in respect to the technical equipment (electronic systems, transmission system) Functionality of ABS Correct emergency braking behavior with and without ABS 	Participants learn to: Apply the correct sequence of actions to achieve the shortest braking distance that is possible with the respective vehicle Use the correct braking method due to their vehicle	Participants become aware of: > The influence of speed on stopping distances > The influence of weight, tires and other factors on braking distances > The fact that with a heavy vehicle the braking distance will be longer than with a passenger car or a motorbike > The possible behavior of the vehicle and the reasons for unwanted vehicles' behavior



Road Safety Training – Brake and Avoid





Knowledge	Skills	Awareness
 The correct sequence of actions for a braking and avoiding maneuver due to the vehicle (with and without ABS) The correct viewing and steering technique in emergency braking situations Possible reactions of the vehicle in braking and steering situations and correct countermeasures Influence of the vehicle's weight and of load alternations on the vehicle's behavior 	Participants learn to: Apply the correct sequence of actions in emergency braking and steering situations due to their vehicle Use the correct viewing and steering technique Recognize undesired behavior of the vehicle and respond correctly Make decisions in stressful situations	Participants become aware of: The complexity of emergency braking and steering situations (many factors influence the situation) The influence of speed on the possibility to handle such maneuver The importance of electronically supporting systems (ABS) The difficulty to overview emergency situations and find the best way of acting The effects and dangers of driving mistakes and false estimations in such situations

Road Safety Training - Cornering





Knowledge	Skills	Awareness
 Reasons for unwanted reactions of the vehicle (understeering, oversteering or rolling over) due to centrifugal forces and alternation of load Counter measures when the vehicle shows unwanted reactions due to centrifugal forces and alternation of load Correct viewing and steering technique Influence of load and of electronic and technical equipment 	Participants learn to: ➤ Use the correct viewing and steering techniques ➤ Recognize unwanted behavior of the vehicle very early ➤ Apply the correct sequence of actions when the vehicle starts to understeer or oversteer ➤ Recognize the danger to roll over and react properly	Participants become aware of: ➤ The influence of speed on centrifugal forces ➤ The causes of unwanted behavior of the vehicle, especially the effects and dangers of driving mistakes ➤ The fact that speed requires space (which normally is limited in traffic) ➤ The difficulty to assess such driving situations and to chose the best sequence of actions



Road Safety Training – Driving with a Trailer





Knowledge	Skills	Awareness
 Influence of the trailer on the behavior of the vehicle Influence of the combination of truck and trailer; different types of trailers Counter measures when the vehicle shows unwanted reactions due to centrifugal forces and alternation of load Correct viewing and steering technique Electronic and technical equipment in connection with the trailer 	Participants learn to: > Use the correct viewing and steering techniques when driving with a trailer /an articulated truck > Recognize unwanted behavior of the vehicle and/or the trailer very early > Apply the correct sequence of actions when the vehicle starts to understeer or oversteer > Recognize the danger to roll over and react properly	Participants become aware of: > The influence of speed on centrifugal forces > The causes of unwanted behavior of the vehicle, especially the effects and dangers of driving mistakes > The fact that speed requires space (which normally is limited in traffic) > The difficulty to assess driving situations and to chose the best sequence of actions



Tanker Training - Roll Over Prevention





Knowledge	Skills	Awareness
 Reasons for roll over s (load distribution, steering behavior) Counter measures when the vehicle shows unwanted reactions due to centrifugal forces and alternation of load Behavior to avoid roll over Influence of load and of electronic and technical equipment 	Participants learn to: Use the correct viewing and steering techniques Recognize unwanted behavior of the vehicle very early Apply the correct sequence of actions when the vehicle starts to tilt Recognize the danger to roll over and react properly	Participants become aware of: ➤ The influence of speed on centrifugal forces ➤ The causes of unwanted behavior of the vehicle, especially the effects and dangers of driving mistakes ➤ The fact that speed requires space (which normally is limited in traffic) ➤ The difficulty to assess driving situations and to chose the best sequence of actions

HGV – Eco Driving Training





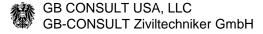
Knowledge	Skills	Awareness
 Influence of driving style on fuel consumption Reduction of air resistance, rolling resistance, and acceleration resistance Planning the trip Torque and power progress, combustion and the influence on fuel consumption Accerleration, driving, braking and stopping in a fuel saving way 	Participants learn to: Drive in a foresighted and eco friendly way Recognize traffic situations early and react to them Use the correct gear and shift gear at the optimal moment Use the rolling energy and avoid unnecessary braking and stopping	Participants become aware of: The advantages of a foresighted and fuel saving driving style Their personal benefit of a foresighted and anticipatory driving style The possibility to reduce fuel consumption and become faster

HGV – Load Safety Training





Knowledge	Skills	Awareness
 Legal background Forces on the load and friction values Load securing equipment and correct usage Securing methods (blocking, top over lashing, direct lashing) Calculation of securing forces and use of tables 	Participants learn to: > Find the best securing method for the respective cargo > Assess the vehicle and the securing equipment > Use the lashing equipment correctly > Determine the required number of lashings according to the chosen securing method	Participants become aware of: > The forces on the load during driving > The load securing possibilities of different HGV's > The influence of friction and how to increase it > The advantages/disadvantages of the available load securing methods







Prooven Success

- "The trainings have significantly reduced the accident rate by 65%.",
 F. Hensel (CEO, REWE International AG, food & drug retailing industry with 40,000 employees)
- "Our accident rate reduced by 95% within the last 15 years of training.",
 P. Klacska (Managing Director, Klacska Austria Groupd, logistical solutions in the distribution of petroleum products)
- "Rollover incidents decreased dramatically by the synergies of a high quality training in relationship with top truck technologies on board.",
 T. Bütow (Safety Advisor, BP Europe SE, internationally active oil and energy company)
- "12% less accident rate with the last 3 years and a significant reduction of costs for fuel.",
 P. Blaguss (CEO, Blaguss Reisen GmbH, bus company and travel agency with 600 connections within Europe)





Safety Training (Tanker Driver)





- > Started 1990
- ➤ Integrated in BP HSSE System
- Special training with "Anti-Rollover Vehicle"
- Modular Training
 - Road Safety
 - Defensive Driving, Video Feedback
 - > Economy Driving, Loading Safety
 - > Healthcare, etc.

Results (after 1.5 years):

- ➤ Rollover accidents: reduced by 80%
- ➤ Rear-end collisions on wet roads: reduced by 60%

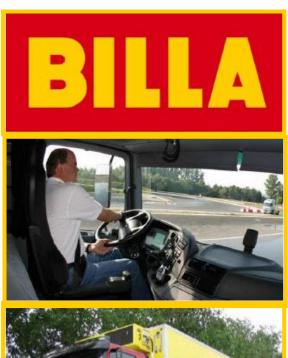
Consequence:

Every driver has to receive special selection, education and further education programs annually.





Safety Training (Fleet Management)



- ➤ BILLA is a member of REWE Group Germany (an international supermarket chain)
- ➤ They maintain a fleet of 550 vehicles
- ➤ On average, there are 1.7 accidents caused by each of their drivers annually.
- ➤ The average cost per accident is € 2,400 / \$ 3,000 (not including consequential costs)
- ➤ Approximately € 2.2 mio / \$ 2.8 mio of the costs involved with these accidents are borne by the insurance company annually
- ➤ The insurance company committed BILLA drivers to attend Testing and Training programs.
- ➤ This training consisted of specialized training and real life situations with video analysis

Results (after 1.5 years):

- ➤ Accident rate was reduced from 935 to 605 annually
- ➤ Reduction of accident costs by € 792,000 / \$ 1 mio annually



Training on Fuel Training (Bus Driver)







- ➤ 140 busses in use, 80 drivers participated in the training
- ➤ 2 day training (combination of driving safety and economy training)
- ➤ Investment approx. € 600 / \$ 760 per participant (incl. working time)
- ➤ Each bus covers a distance of approx. 80,000 km / 50,000 miles per year and uses up 30-32 liters / 8 gallons of fuel per 100 km / 62miles
- ➤ This is a saving of 72,000 liters / 19,000 gallons diesel fuel per year for 60 busses

Short-term result:

> Approx. 10% reduction of fuel consumption

Long-term result:

> A consistent reduction of 5%



