



# **Volvo Winter tests 2014**

## **Modular Vehicle Combinations**

MVC Informal Group #4  
2015-06-30 and 07-01 in Oslo  
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# Tested combination

- 75t GCW
- Rigid truck + dolly + link semi-trailer + semi-trailer



# Test conditions & Main results

- Test conditions
  - 75t GCW
  - Rigid truck + dolly + link semi-trailer + semi-trailer
  - 60-70km/h emergency braking (full brake application) in a curve on icy track
  - No electric control line (ISO 11992); only pneumatic control (yellow coupling head)
- Main results

Test #	Truck	Dolly	Link semi-trailer	Semi-trailer	Result
EW8	EBS	EBS	EBS	EBS	Stable braking
EW14	EBS	EBS	ABS	ABS	Stable braking
EW11	EBS	EBS	No ABS	No ABS	Unstable braking
EW79	EBS	No ABS	No ABS	No ABS	Unstable braking

- Conclusions:
  - Braking stability is ensured if ABS is present and operational on all trailers
  - A pneumatic control is sufficient to ensure good braking stability
  - An electric control line improves failure modes (e.g. fault detection by towing vehicle)