

# Benchmark-test

## of towing ball couplings and stabilising gear

### "The winner in the comparative tests is the WINTERHOFF WS 3000 ..."

The RWTÜV Essen, as an objective, independent organisation carried out detailed comparative tests of all towing ball couplings and stabilising gear on the market during July and August 2004. These tests included criteria such as safety during towing, construction type related limit values, handling and

maintenance of each system with a variety of weights. The comparative investigations were carried out at the Institute for vehicle technology in Essen and on the test area at Trier-Föhren Airfield, owned by Flugplatz GmbH.



WINTERHOFF WS 3000



WESTFALIA SSK 3



AL-KO AKS 1300



AL-KO AKS 3004

<b>Benchmark test</b> of towing ball couplings and stabilising equipment		Maximum points	WINTERHOFF WS 3000	WESTFALIA SSK 3	AL-KO AKS 1300	AL-KO AKS 3004	Weighting as %
<b>Safety during towing</b>							
Damping of snaking motions (test stand)	4	4	3	1	4	35%	
Damping of pitching motions (test stand)	4	4	3	1	2	15%	
Damping of snaking motions (driving)	4	4	3	1	4	50%	
<b>Interim result 1</b>	<b>65%</b>	<b>4</b>	<b>4,0</b>	<b>3,0</b>	<b>1,0</b>	<b>3,7</b>	
<b>Construction type related limit values</b>							
Free space tests	4	4	3	2	2	50%	
Angular mobility	4	3	3	3	1	50%	
<b>Interim result 2</b>	<b>10%</b>	<b>4</b>	<b>3,5</b>	<b>3,0</b>	<b>2,5</b>	<b>1,5</b>	
<b>Handling and maintenance</b>							
Coupling – stabilising – destabilising - uncoupling	4	4	2	3	3	30%	
Impact protection	4	3	3	1	3	15%	
Wear indicator	4	4	3	2	2	10%	
Replacement of friction pads	4	4	4	2	2	10%	
Anti theft measures	4	4	2	2	2	25%	
Fitting	4	4	4	4	4	10%	
<b>Interim result 3</b>	<b>25%</b>	<b>4</b>	<b>3,9</b>	<b>2,7</b>	<b>2,4</b>	<b>2,7</b>	
<b>Overall score</b>	<b>100%</b>	<b>4</b>	<b>3,9</b>	<b>2,9</b>	<b>1,5</b>	<b>3,2</b>	
<b>Position</b>			<b>1.</b>	<b>3.</b>	<b>4.</b>	<b>2.</b>	
			<b>TEST WINNER</b>				