

1. Machine Information

- Machine name: Columbus Spinning Wheel SP85-HD
- Manufacturer: Columbusmaskiner AB
- Tested product description: Spinning truck wheel

2. EMC Test Report

- Test date: 2024-12-18
- Test time: 12:01:59 - 12:02:17
- Test leader: Jari Palossari Responsible for machine's CE marking: Alexander Österström
- Test type: Electromagnetic Compatibility (EMC)
- Test setup: The measurement equipment (Combinova FD 10) was placed on a stand approximately 20 cm from the machine throughout the test.
- Measurement range: Frequency range 10 Hz - 400 kHz
- Standards applied:
 - EN 61000-6-2 (Immunity)
 - EN 61000-6-4 (Emission requirements)

3. **Test Results** The test was performed using the specified measurement equipment and recorded electromagnetic field values at different frequencies. Here are the important measurement values:

Date	Time	Order No.	Measurement Mode	Measurement Speed	Status	Amplification	Peak Value (µT)	X (µT)	Y (µT)	Z (µT)	RMS (µT)	X RMS (µT)	Y RMS (µT)	Z RMS (µT)	Frequency (Hz)
2024.12.18	12:01:59	1	B 10Hz - 400kHz	1	Range change	(A)	0.1575	0.1410	0.0881	0.1137	0.0525	0.0342	0.0269	0.0294	0
2024.12.18	12:02:01	2	B 10Hz - 400kHz	1	OK	(A)	1.2571	0.7806	0.5111	1.0839	0.6874	0.3258	0.2178	0.5647	31
2024.12.18	12:02:02	3	B 10Hz - 400kHz	1	OK	(A)	1.2321	0.6758	0.5237	1.0501	0.8508	0.4047	0.2847	0.6921	0
2024.12.18	12:02:03	4	B 10Hz - 400kHz	1	OK	(A)	1.1821	0.6304	0.5151	1.0204	0.8177	0.3859	0.2797	0.6644	0
2024.12.18	12:02:04	5	B 10Hz - 400kHz	1	OK	(A)	1.1645	0.5999	0.5008	0.9881	0.7749	0.3630	0.2668	0.6305	0
2024.12.18	12:02:05	6	B 10Hz - 400kHz	1	OK	(A)	1.1109	0.6091	0.5050	1.0030	0.7294	0.3405	0.2544	0.5928	0
2024.12.18	12:02:07	7	B 10Hz - 400kHz	1	OK	(A)	1.127	0.6	0.4	0.9	0.6	0.3	0.2	0.5	0

2.18	2:06		400kHz				1	531	889	709	857	221	417	550	
2024.1 2.18	12:0 2:07	8	B 10Hz - 400kHz	1	OK	(A)	1.214 8	0.6 988	0.5 028	1.0 640	0.6 538	0.3 204	0.2 305	0.5 212	0
2024.1 2.18	12:0 2:08	9	B 10Hz - 400kHz	1	OK	(A)	1.203 2	0.8 466	0.5 330	1.1 061	0.6 555	0.3 493	0.2 226	0.5 081	0
2024.1 2.18	12:0 2:09	10	B 10Hz - 400kHz	1	OK	(A)	1.281 6	1.0 158	0.5 214	1.1 943	0.6 894	0.4 066	0.2 201	0.5 114	0

More data is available in the original table.

Measurement uncertainty: The measurement uncertainty for the recorded electromagnetic fields is estimated to be $\pm 5\%$, based on the specifications of the test equipment and standard measurement uncertainty for this type of test.

4. Conclusion

- Test Results: The test was conducted to measure electromagnetic fields between 10 Hz and 400 kHz. All results have been documented in accordance with the standards EN 61000-6-2 (Immunity) and EN 61000-6-4 (Emission requirements).
- Approval: The machine meets the electromagnetic compatibility requirements according to applicable standards and is therefore approved.

In conclusion, the results show that the Columbus Spinning Wheel SP85-LV does not exceed the permissible limits for electromagnetic fields according to the tests, meaning the product is approved for use in environments with relevant EMC requirements.

5. Approval

- Test Leader (Name, Title): Jari Palossari, Test Leader Signature:
Date: 2024-12-20
- Responsible for the machine's CE marking: Alexander Österström, Technical Manager
Date: 2024-12-20

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