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**Requested by** Avant Tecno Oy  
Ylötie 1  
33470 Ylöjärvi

**Order** 192830

**Contact person** Eurofins Expert Services Oy  
expert Lauri Tuunanen  
Vakolantie 55  
03400 Vihti  
mob. 050 551 9124  
E-mail LauriTuunanen@eurofins.fi

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**Assignment** Exterior noise emitted by earth-moving machinery  
ISO 6395:2008 and  
Noise at the operator's position ISO 6396:2008

**Name and address of the manufacturer of the machine:** Avant Tecno Oy  
Ylötie 1  
33470 Ylöjärvi

**Identification of the tested machine**

**Make:** Avant 860i  
**Type:** Loader  
**Serial number:** 946921916

**Engine:**  
**Make and model:** Kohler KDI 1903 TCR Stage V  
**Net Power:** 42 kW  
**Engine speed, rpm**  
   - nominal 2600  
   - maximum 2730 (high idle)

**Cooling system**  
**make and model:** Avant no: 66451 (390 mm)  
**Fan speed, rpm** 1,3 x engine speed

**Power transmission**  
**Type** Hydrostatic  
**Number of gears** 2

**Machine arrangement**

The machine was equipped with bucket. During the test the engine speed was 2700 rpm for loading and driving mode and 2 200 rpm for loading mode.

**Test site** Asphalt

**Method** Noise was measured according to ISO 6395:2008 for ambient noise and ISO 6996:2008 for driver perceived noise. On loading phase engine speed was 2 200 rpm representing typical loading mode situation.

**Test result**

Ambient temperature, °C:	10
Diameter of measurement surface, m:	10
Area of the measurement surface, m <sup>2</sup> :	628,32
Test place and date:	Vihti 24.10.2019
Sound power level for combined travel and stationary hydraulic mode L <sub>WA</sub> :	101 dB(A)
Combined A-weighted sound pressure level at the operator's position:	87,0 dB(A)
Measurements' uncertainty is	1,5 dB(A)

Vihti, 25.10.2019

Lauri Tuunanen  
expert

**Annexes**

Sound pressures on measurement places

**Distribution**

Customer	electronically approved
Archive	electronically approved

**Annex Averages of measured sound pressure levels, 10 m diameter**
**Drive mode, forward**

Measurement point	Sound pressure $A_{eq}$ dB
Front left low	71,6
Rear left low	76,3
Rear right low	76,5
Front rear low	71,5
Rear left high	74,1
Front right high	73,0

**Drive mode, rearward**

Measurement point	Sound pressure $A_{eq}$ dB
Front left low	70,9
Rear left low	76,2
Rear right low	76,2
Front rear low	70,3
Rear left high	74,2
Front right high	72,0

**Stationary mode, loading**

Measurement point	Sound pressure $A_{eq}$ dB
Front left low	66,2
Rear left low	73,1
Rear right low	73,0
Front rear low	67,0
Rear left high	69,3
Front right high	67,7