

## **STUDY OF THE AIR VELOCITY FIELD IN THE COMBINE HARVESTING CLEANING SYSTEM**

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### **Abstract**

This paper describes how a stand for measuring the air flow generated by the fan of combine harvesters for cereals and technical plants was realised. The air flow velocity at the top of the sieve and the velocity profile over the entire sieve surface are important for the design and construction of a cleaning system fan fitted to combine harvesters. The experimental results show the velocity profile of the New Holland TC5050 combine measured with the anemometer at 52 points on the upper sieve surface for different fan rotations, fan deflector positions, upper sieve positions and lower sieve positions.

**Key words:** centrifugal fan, cleaning system, combine harvesters, air flow