

Have you heard about UFO on slurry?

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Field test assessed that UFO speed disc can manage slurry incorporation, corn residue and seedbed preparation in one fast effective pass.

The collection of dairy manure as a semi-liquid slurry is a common practice in the USA. Farm N budgets indicate that a **large proportion of N consumed by intensively managed dairy cattle is contained in collected manure**. Generally, 40 to 50% of N in cattle slurry is in the labile form (ammonium N), the remainder is organic compounds, much less labile. **Slurry ammonium N represents a valuable N source** that, if used effectively, could appreciably **reduce mineral N fertilizer requirements** for crop production. **Large and variable N loss by ammonia volatilization occurs following land application** of slurry. Commonly, up to 70% of slurry ammonium N is lost within a week of application. These large N losses are an agronomic problem because of uncertainty as to the amount of slurry N retained in soil for crop–forage production. They can also create environmental problems by contributing to N enrichment of nearby surface waters.

*Various methods have been shown to reduce N loss following slurry application to soils. However, one of the most practical methods for U.S. livestock farms, where corn is commonly grown, may be incorporation into arable soil following conventional surface application. Since much of the emission occurs in the first few hours after spreading, **rapid incorporation must be carried out as soon as possible to minimize N loss.***

Maschio Gaspardo North America Inc. field specialists assessed the feasibility to manage slurry incorporation, corn residue and seedbed preparation in one fast effective pass. Near Fairchild (WI) the compact speed disc UFO 500 (16-foot wide) equipped with 24-inch notched discs (22° inclination) and double cage roller (ext. Ø 16-inch) run on slurry 17 hours later the spreading operations. The slurry was mixed at 8.5 mph to a depth of about 4 ½ -inch in a loamy flat ground with corn residues. The large diameter discs with their special concavity **guaranteed an extremely consistent slurry incorporation and residue management all across the working width**. The **high clearance 28-inch and the narrow 40-inch gang spacing avoided clogging issues** and improved seedbed leveling, firming and consolidation. The **double cage roller guarantees a perfect incorporation and residues mixing**. The pendulum hinge system allowed the roller to follow soil contours ensuring uniform weight distribution and accurate depth control. **Soil was blackened and warmed up faster, so it was possible to advance sowing operations and fitted the optimal planting window even after the application of thousand gallons of slurry.**

Source: MASCHIO DEUTSCHLAND GmbH; MASCHIO GASPARDINO S.p.A.