



Ceres Turf, Inc.

# CTI Technical Information Bulletin

February 20, 2009

## The Look of the Future



For some time, CTI has been working on coming up with a shape or design for all solid rods that would enhance longevity. We have long known that many superintendents prefer a tapered or cone shaped tip on their solid tines as opposed to a 70° bevel cut that has become so prevalent.



CTI engineers have been analyzing the 'life' on various solid tine shapes. It would seem that a very sharp cut on a solid tine would be best since it would have less resistance and penetrate better. However, things are not always as they might seem. Consider the USS GHW Bush which has just



Bulbous Nose



**Ceres Turf, Inc.**

been launched. For years we have known that there was less resistance in the water if a ship has a large 'bulbous' nose. As late as the second world war all naval ships has a sharp bow. Today, all newly launched ships of any size have the characteristic 'bulbous' nose because it has far less resistance as it goes through the water. In fact, the same is true for soil. A blunt nose allows soil to flow around it and results in reduced overall wear and therefore longer life for a solid tine.

We will be converting all solid tine tips to the new 'rounded' shape as we deplete current existing inventories.

How to handle this with customers? We are releasing this TIB at this time because we are about to start shipping the new design. It is possible that some customers will actually complain with the belief that the blunt nose is a problem.