

D3 Detectable Needles™

Patented
Technology
Patent No. 6,488,668



Durable. Detectable. Dependable.



**From inside the farm gate
to the dinner plate,
one needle is too many.**

Broken needles are a major concern of the pork and beef industries. The National Pork Producers Council, in cooperation with the National Pork Board developed a needle use awareness campaign called "ONE is too many". While even a single needle could cause severe consequences if it were to reach the dinner table, producers must balance that concern with cost-effectively injecting animals.

Ideal Instruments has the producers' solution—D3 Detectable Needles. D3 Needles are the first designed with strength and detectability. Strength and detectability help ensure zero tolerance by keeping needles out of meat products to begin with, and easily detecting needles if they are present. In addition, the D3 Needles' strength provides durability, and thus a cost-effective utilization rate.

D3 Detectable Needles are specifically designed for production animal use and processing plant detectability. In addition, they address packer HACCP and quality assurance programs.

Key Features & Benefits:

Detectability:

Ideal has developed and added a detectable alloy to the cannula of the D3 Needles. This patented alloy allows D3 Needles to be as much as 100% detectable in metal detection systems, while maintaining their stainless steel classification.

Strength:

D3 Needles have thick-walled cannulas, which are crimped and pressed into sturdy, plated brass hubs. These stronger sidewalls increase load strength. Bending and breaking is reduced more than 6-fold over some conventional needles, and needle tips stay sharp longer. These superior features make the D3 Needles last longer than conventional injection needles.

Sharpness:

D3 Needles are ultrasharp with three-point precision ground tips for sharper cuts and easier penetration. Sharpness increases the possible number of injections per needle, and reduces the risk of injection site abscesses.

Identification:

Each D3 Needle has its comparable gauge size followed by the letter D stamped into the brass hub. This allows users to easily distinguish detectable needles from conventional needles.

Packaging:

D3 Needles are packed in color-coded cartridges for safety and convenience while transporting. Cartridge labels are tamper evident and identify needle length and gauge.



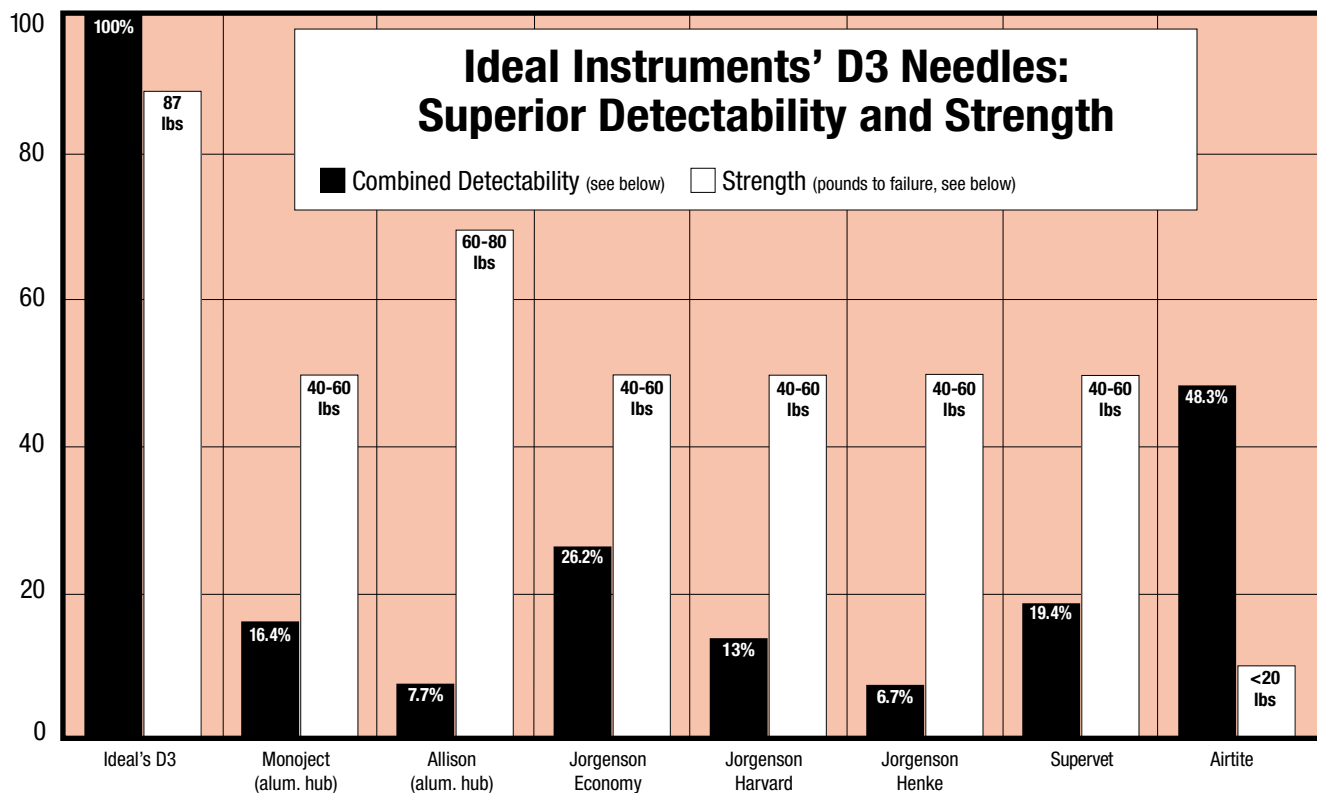
D3 Detectable Needles™



- Ultra sharp tri-beveled tip
- Detectable thick wall stainless steel cannula
- Sturdy, plated brass hubs for increased strength

Available Sizes 100 per box	
Product No.	Size
9418AL*	14 x 1"
9419AL*	14 x 1½"
9415	16 x ⅝"
9416	16 x ¾"
9420	16 x 1"
9417	16 x 1½"
9421	18 x ¾"
9422	18 x ⅝"
9423	18 x 1"
9424	18 x 1½"
9412AL*	20 x ½"
9411AL*	20 x 1"

*These D3 needles have regular wall detectable cannulas and aluminum hubs



The above chart reflects data from studies on veterinary needle strength and detectability performed by Dr. Steven Hoff of Iowa State University's Department of Agricultural and Biosystems Engineering.

COMBINED DETECTABILITY: This percentage combines the needles' detectability as measured in three different positions in a meat sample when passed through a standard meat industry metal detector. The three positions were horizontal back (HB), horizontal side (HS), and vertical center (VC). The raw numbers used in the combinations were (in %): Ideal D3: HB-100, HS-100, VC-100; Monoject: HB-36.7, HS-4.4, VC-8; Allison: HB-23, HS-0, VC-0; Jorgenson Economy: HB-35.7, HS-21.4, VC-21.4; Jorgenson Harvard: HB-33.3, HS-2.8, VC-2.8; Jorgenson Henke: HB-20, HS-0, VC-0; Supervet: HB-33.3, HS-8.3, VC-16.7; Airtite: HB-76.3, HS-31.3, VC-37.5.

Note: Ideal's D3 Needles were the only needles tested and found to be 100% detectable.

STRENGTH: This measures, in pounds, the strength to failure during full-embedment testing using 16-gauge needles. Testing of 18-gauge needles produced similar results. The strength of needle brands, other than Ideal, appear as ranges as reported by Dr. Hoff in the study results.

Full reports of Dr. Hoff's needle strength (December 22, 2002) and detectability studies (November 19, 2002) are available upon request. For more information, contact Neogen via the information below.