

Subsurface Drip Irrigation (SDI)

Conversion From
Center Pivot



LOCATION
Sauk Center, Minnesota



CROPS
Silage Corn



Precision
Agriculture



/ SDI System Details

- 220 gallons per minute (GPM)
- 40" line spacing
- 25,117 evenly spaced emitters over the field
- 678,167 feet of drip line
- Installed in 10 days



/ The results

- 41% increase in farmable acres when utilizing the whole field through SDI verses center pivot.
- Saved 2,000,000 gallons in the first season.
- 36% increase in yield - Even though 2023 was significantly drier than average, they were able to improve upon typical yields.

Farmable acres



Increased farmable acres



Center Pivot
37 Acres

vs.



SDI
52.3 Acres

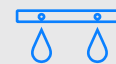


Reduced water usage



Center Pivot
440GPM

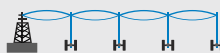
vs.



SDI
220GPM



Improved yield



Pivot Whole Field Average
Including Dryland Corners
19 Tons/Acre

vs.



Post SDI Whole Field Average
25.89 Tons/Acre