



## School humidifies new band room to keep musical instruments preserved and in tune

### RESULTS

- Protects expensive musical instruments from warping and cracking
- Prevents woodwinds from suffering altered tone and timbre
- Improves thermal comfort for musicians without raising the room temperature
- Provides musicians with air that is healthier to breathe than dry air



### THE JOB

Minnesota Independent School District 423 initiated a Hutchinson High School Remodel to address the need for new plumbing, electrical, and HVAC systems. Having stepped back to assess the need for new systems, administrators became concerned about the longevity of the whole building. The more they looked, the more obvious it became that the footprint and layout were dated.<sup>1</sup>

With enthusiastic support from the community, the Hutchinson High School Remodel lasted through parts of two school years. Students returning from Christmas break in 2018 were treated to a taller building with improved hallway traffic flow and expansive, modern common areas.

The new and larger spaces in the building positioned the district to join a trend in education in which the arts are being added to the science, technology, engineering, and math (STEM) curriculum.

While the STEM/STEAM discussion gains momentum, school districts are upgrading their arts infrastructure and curriculum. Hutchinson High School has done just that with a vastly improved auditorium and new choir and band rooms. The auditorium is "one of the better auditoriums, if not the best auditorium, in the area," according to Thayne Johnson, Hutchinson High School activities director.<sup>2</sup> Adjacent to the auditorium is a spacious, new band room with three concentric arcs of musical instruments ready to pick up and play.

### THE CHALLENGE

Musical instruments containing wood or reeds are vulnerable to environmental changes. Swings in temperature and humidity can cause the instruments to warp and crack. While warping can change the sound, cracking is likely to ruin the instrument. "The band director insisted on humidification for the new band room," explains Dave Jahn, the building supervisor, "with a set point of 40% relative humidity."

### THE SOLUTION

The design engineer for the school project was familiar with DriSteem humidifiers from previous projects and contacted Midwest Mechanical Solutions (MMS), DriSteem's rep for Minnesota. After assessing the

Piano soundboards are wood. If the soundboard on our Yamaha grand cracked from dryness, the repair or replacement would cost thousands of dollars.



— Dave Jahn  
Building Supervisor | Hutchinson Public Schools



Shutdown requirement for XT series humidifiers is short, as all that's required is replacement of the steam cylinder.

1. Jones, Jeremy. *Narrower, newer, taller*. Hutchinson Leader, October 9, 2018: [https://www.crowrivermedia.com/hutchinsonleader/news/narrower-newer-taller/article\\_b8aa2d44-e4b3-5aff-b13a-e9d979d7cfc7.html](https://www.crowrivermedia.com/hutchinsonleader/news/narrower-newer-taller/article_b8aa2d44-e4b3-5aff-b13a-e9d979d7cfc7.html)
2. Johnson, T. [HCVNOnline]. (2018, October 26). *Hutchinson High School Tour October 15th, 2018*. Quoted from [https://www.youtube.com/watch?v=1oBf070190&feature=youtu.be&fbclid=IwAR2hF\\_o9UdZ-LsvXFZiOYS7KRUjpbzblSwHDtp9Q3aTveNd\\_x0cW094HSII](https://www.youtube.com/watch?v=1oBf070190&feature=youtu.be&fbclid=IwAR2hF_o9UdZ-LsvXFZiOYS7KRUjpbzblSwHDtp9Q3aTveNd_x0cW094HSII)

### DRI-STEEM Corporation

A subsidiary of Research Products Corporation. DriSteem U.S. operations are ISO 9001:2015 certified.

[www.dristeem.com](http://www.dristeem.com)

U.S. Headquarters:  
14949 Technology Drive  
Eden Prairie, MN 55344  
800-328-4447 or 952-949-2415  
952-229-3200 (fax)  
Email: [inquiries@dristeem.com](mailto:inquiries@dristeem.com)

European office:  
Grote Hellekensstraat 54 b  
B-3520 Zonhoven  
Belgium  
+3211823595  
Email: [dristeem-europe@dristeem.com](mailto:dristeem-europe@dristeem.com)

© 2019 Research Products Corporation  
Form No. HutchHS-XT-series-1119

desired space conditions, layout of the space, and utility access, MMS recommended an XT series electrode steam humidifier for its ability to mount on the wall with a steam blower. The band room would require 33 pounds per hour of steam to maintain 40% RH, and the XT humidifier would provide easy access and direct control within the space where it was critical.

Furthering the case for XT series was the fact that the room would be very busy. When prompted by the display to replace the steam cylinder, maintenance could be easily completed with a very short shutdown, a ladder, and screwdriver.

After more than a year of humidifying the band room, the system ensures consistent relative humidity in the band room all year long. DriSteem is proud to be protecting the instruments and the lungs of the next generation of musicians.



DriSteem XT series electrode steam humidifier installed unobtrusively above the exit doorway in the Hutchinson High School band room

### RESOURCES AT DRISTEEM.COM

DriSteem's XT series humidifiers: [XT series electrode humidifier](#)

DriCalc®, DriSteem's free sizing and selection software: [Register for DriCalc](#)

Find your local DriSteem representative: [Find-a-rep](#)