



HYDRA

FOR CEREALS



WHAT IS IT

HYDRA FOR CEREALS IS AN INNOVATIVE DEVICE, EQUIPPED WITH INTELLIGENCE AND ARTIFICIAL VISION, ABLE TO ACQUIRE THE SPECTRUM OF DECORTICATION WASTES IN REAL TIME, OPTIMIZING PRODUCTION.

HYDRA, INSTALLED ONLINE, ALLOWS THE ANALYSIS OF DECORTICATION WASTES. IT MEASURES LOST STARCH, AND, IN CONTINUOUS TIME, ADJUSTS THE SET POINTS OF THE DECORTICATORS REDUCING THE ENERGY CONSUMPTION, OPTIMIZING WASTES AND INCREASE THE YIELD.

HOW DOES IT WORK

HYDRA COMPARES THE SPECTRUM OF THE PRODUCED WASTE WITH THE SPECTRUM OF THE IDEAL WASTE. IT ADJUSTS THE PARAMETERS OF THE DECORTICATORS TO OPTIMIZE THE SEPARATION BETWEEN STARCH AND BRAN.

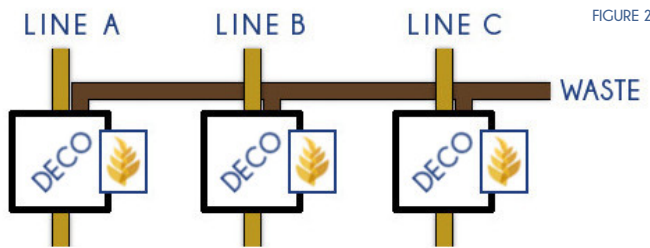
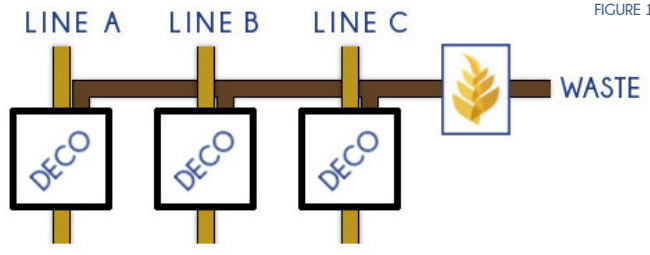
HYDRA WORKS WITHIN THE INTERNET OF THINGS (IOT) WITH EXISTING AUTOMATION SYSTEMS AND IS AN INDUSTRY 4.0 INVESTMENT.

SOFTWARE

HYDRA IS EQUIPPED WITH A SOFTWARE ANALYZING OVER 50 SPECTRAL CURVES, IDENTIFYING THE MAIN COMPONENTS IN THE DECORTICATION WASTE.

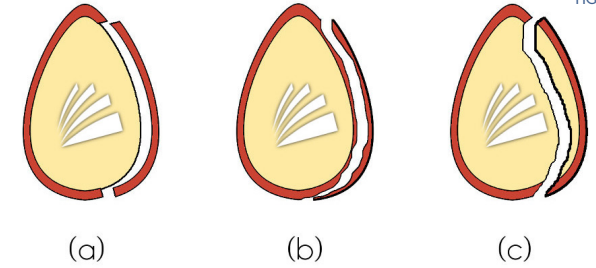
APPLICATIONS

HYDRA CAN BE INSTALLED IN THE DECORTICATION PROCESS:
 - FOR SINGLE PASSAGE DECO (FIGURE 1)
 - FOR SINGLE DECO MACHINE (FIGURE 2) - IDEAL SOLUTION.



ADVANTAGES

FIGURE 3



WITH HYDRA THE WHEAT BEAN IS PERFECTLY DECORTICATED (a), AVOIDING THE IPO (b) OR THE HYPER DECORTICATION (c).

THE OPTIMAL SEPARATION BETWEEN BRAN AND ENDOSPERMA, ALLOWS THE REDUCTION OF BROKEN GRAINS AND LESS STARCH IN THE DECORTICATED WASTE (FIGURE 4).

RESULTS

THE REAL TIME CALIBRATION OF THE SET POINT OF DECORTICATING MACHINES ALLOWS A REDUCTION OF ENERGY CONSUMPTION, THE STABILIZATION OF THE PRODUCTION PROCESS AND THE REDUCTION OF OUT OF STANDARDS OF THE SEMOLINA ASHES.

FIGURE 4

