

## Colruyt / Retail – IVG4-CT CoolWater skid

### Type of industry

Cooling type and cooling towers:

Evaporative condensers

### Before IVG installation

Evaporative capacity in MW	3
Water evaporation	4,6m <sup>3</sup> /uhr
Water consumption	6,5 m <sup>3</sup> /hr
Cooling water thickening	3,5
Chemical consumption	1200 kg a year
Discharge waste water on:	sewer

### After IVG installation

Evaporative capacity in MW	3 MW
Water evaporation in m <sup>3</sup> / hr	4,6 m <sup>3</sup> /hr
Water consumption in m <sup>3</sup> / hr	5,5 m <sup>3</sup> /hr (100% regenwater)
Decrease water consumption in%	-6,5 %
Cooling water thickening (COC)	6,5
Chemical consumption	0 kg
Decrease chemical consumption in%	100%
Return on Investment	2,3

### IVG technology

Absorbed power

1,5 KW

Discharge water to

Internal water buffer truck wash area



## About Colruyt

Colruyt is originally a Belgian supermarket chain that wants to distinguish itself from the competition through its no-nonsense approach. Nowadays Colruyt has grown into the Colruyt Group, a multinational that is active in retail, wholesale and web shops, among other things. Sustainability has been a common thread through their activities for more than fifty years. The ambitions in this area go far, because the Colruyt Group wants to be a reference point for sustainable entrepreneurship in Belgium. It is therefore not surprising that Colruyt and Pathema have found each other. Both are proud of what they do, but at the same time they realize that progress and innovation can only be achieved by continuing to move and by daring to innovate. Step-by-step.

## Colruyt's motivation to work together

Already in 2013, a consortium between Vlakwa (the Flemish Knowledge Center for Water), the University of Leuven and a number of Belgian companies started an on-site experiment at a food manufacturer. In the applied research, the employability of Pathema's IVG-CT was used in the fight against the prevention of lime scale, corrosion and biological growth in the evaporative condenser.

The results of this project were abundantly clear. Because after a test period of 8 months, it could be concluded that after using Pathema technology, the evaporative condenser worked 100% without chemicals. Without limescale or corrosion on the essential parts. Even a reduction of microbial germs in the cooling water was realized. This completed the project convincingly and successfully.

## Rainwater as a source

One of the participants in this consortium was Colruyt. Because the results of the project were so good and because of the social, circular and financial benefits that the use of the IVG-CT provides, the decision to work together with Pathema was made in no time.

Colruyt decided to rent the IVG4-CT in the first year for their distribution center in Dassenveld. The cooling that Colruyt needs is used for the storage of all frozen and cooled food. After a test period of one year, Colruyt decided to purchase the IVG4-CT. The installation runs entirely on rainwater and has been running successfully for over 4 years.