

## Reference list: Large projects using Vapor Quality Sensor

### Large projects and demonstration projects

Project name	Year	Refrigerant	Location	Application	Sensor type	Saving or SEC*	Charge	Contractor	
Bidvest, Melbourne	2014	R717	Melbourne, Australia	DX Cold store, 42600 m <sup>3</sup>	rod style	25,8	450 kg	Scantec Refrigeration Technologies	
NXTCOLD	2014	R717	L.A. USA	Cold stores	rod style	50%		LA cold stores	
Bidvest Gillman	2015	R717	Adelaide, Australia	DX Cold Store, 39,749 m <sup>3</sup>	rod style	19		Scantec Refrigeration Technologies	
Bidvest, Townsville	2015	R717	Townsville, Australia	DX Cold store, 31,344 m <sup>3</sup>	rod style	22,2		Scantec Refrigeration Technologies	
Lite N Easy, Banyo	2015	R717	Brisbane, Australia	Food Processing Facility	rod style	-		Scantec Refrigeration Technologies	
Bidvest, Yatala	2016	R717	Brisbane, Australia	DX Cold Store, 60,543 m <sup>3</sup>	rod style	19	385 kg	Scantec Refrigeration Technologies	Includes blast freezer and office A/C with NH <sub>3</sub>
Mutual logistics	2016	R717	Bourg-en-Bresse	Extension of cold store by 8000 m <sup>2</sup> - pump system	rod style	-	-	Clauger	6X150 kW evaporators
Claus Soerensen	2016	R717	Vejle Denmark	CR control in cold store	rod style			Danish technology institute	
Bidvest, Port Melbourne	2016	R717	Melbourne, Australia	DX Cold Store, 23,173 m <sup>3</sup>	rod style	-	280 kg	Scantec Refrigeration Technologies	ScanPAC
Havi, Dongguan	2017	R717	Dongguan, China	DX Cold Store, 36,600 m <sup>3</sup> expandable by a factor of two	rod style	-	850 kg	Scantec Refrigeration Technologies	
Bidvest, Banksmeadow	2017	R717	Sydney, Australia	DX Cold Store, 29,294 m <sup>3</sup>	rod style	25	285 kg	Scantec Refrigeration Technologies	ScanPAC
Ingham's	2018	R717	Brisbane, Australia	Distribution centre for poultry, 114,140 m <sup>3</sup>	rod style		750 kg	Scantec Refrigeration Technologies	
Transavia	2018	R717	Transavia, Romania	Chilling line, poultry industry, CR 1.1 30 evaporators	rod style		-	AB Tehnic	
Test Chiller	2018	R717	Karlsruhe, Germany	Industrial chiller DX equipped for testing	Strainer, type	46%	4 kg	Fischer Kaelte Klima	Vapor quality versus superheat measurement
Bidfood, Richlands	2018	R717	Brisbane, Australia	DX Cold Store, 31,094 m <sup>3</sup>	rod style	18	350 kg	Scantec Refrigeration Technologies	
Bidfood, Cairns	2019	R717	Cairns, Australia	DX Cold Store, 41,258 m <sup>3</sup>	rod style	17	370 kg	Scantec Refrigeration Technologies	

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Bidfood, MacKay	2018	R717	Mackay, Australia	DX Cold store, 5,245 m <sup>3</sup>	rod style	71% (HFC to R717)	250 kg	Scantec Refrigeration Technologies	
Blenners Transport	2019	R717	Brisbane, Australia	DX Cold store, 45,324 m <sup>3</sup> expandable to 61,000 m <sup>3</sup>	rod style	23	450 kg	Scantec Refrigeration Technologies	
Howe Farming Enterprises	2019	R717	Walkamin, Australia	Vegetable Processing facility, 31,183 m <sup>3</sup>	rod style	-	480 kg	Scantec Refrigeration Technologies	
Bidfood, Dandenong	2019	R717	Melbourne, Australia	DX Cold Store, 32,799 m <sup>3</sup>	rod style	19	300 kg	Scantec Refrigeration Technologies	DX Shell & Tube glycol/NH <sup>3</sup> heat exchanger
Bidfood, Colmslie	2020	R717	Brisbane, Australia	DX Cold Store, 30,457 m <sup>3</sup>	rod style	-	350 kg	Scantec Refrigeration Technologies	
Godden Foods	2020	R717	Ormeau, Australia	DX Cold Store, 27,000 m <sup>3</sup>	rod style	-	320 kg	Scantec Refrigeration Technologies	
Blenners Transport	2020	R717	Brisbane, Australia	DX Cold Store Extension, 18,648 m <sup>3</sup>	rod style	-		Scantec Refrigeration Technologies	
Fernhurst	2020	R717	Melbourne	DX Cold Store with blast freezing, 70,135 m <sup>3</sup>	rod style	-	450 kg	Scantec Refrigeration Technologies	Isolierkühler with automatic ambient air defrost, cold lake air distribution, in-rack blast freezers
TFC	2020	R717	Emstek, Germany	DX cold store, 34 evaporators	rod style	15%	2200 kg	Kältetechnik Dresden + Bremen GmbH	
Quality Food Services	2018	R717	Brisbane Australia	DX Ammonia Cold Store, 54,646 m <sup>3</sup>	5 x Rod style	-	1,100 Kg	Tri Tech Refrigeration Queensland Pty Ltd	
Lago Cold Stores	2018	R717	Brisbane Australia	DX Ammonia Cold Store, 80,770 m <sup>3</sup>	32 x Rod style	40%	4000 kg	Tri Tech Refrigeration Queensland Pty Ltd	
Lago Cold Stores	2019	R717	Brisbane Australia	DX Ammonia Cold Store Expansion, added 27,066 m <sup>3</sup>	18 x Strainer Style	40%	Added 230 kg	Tri Tech Refrigeration Queensland Pty Ltd	Includes Carton Blast Freezer
Lindsay Transport	2020	R717	Sydney Australia	DX Ammonia Cold Store, 29,000 m <sup>3</sup>	3 x Strainer Style	-	470 kg	Tri Tech Refrigeration Queensland Pty Ltd	
John Dee	2020	R717	Warwick Australia	ASRS Cold store	1 x Strainer Style	-	-	Tri Tech Refrigeration Queensland Pty Ltd	DX Ammonia/Ammonia PHE for HP Liquid Subcooling
Halchui	2020	R717	Halchui, Romania	Freezing storage 250 kW 7 evaporators	7 strainer style	43%		AB tehnic Romania	43% achieved when switching from SH to vapor quality

\*SEC is Specific Energy Consumption defined as the annual energy consumption measured in kWh per cubic meter cold store per year