Hypercool

Water Cooled Aftercooler

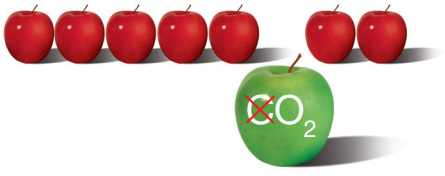
Compressed air and gases contain high levels of liquid water vapour. Effective water removal leads to reduced maintenance costs, enhanced system operation and improved product quality. Hypercool represents the vital first step in this process, eliminating over 80% of the water present within compressed air and gas systems.
Many industrial applications require controlled compressed air or gas temperature for efficient operation, a requirement for which Hypercool is perfectly suited.
Hypercool has been specifically designed to achieve maximum cooling at minimum cost, within a package designed to withstand the rigors of modern industry.
The ribbed tubing design offers high heat exchange efficiency with minimal pressure drops. An endless range of models includes fixed and removable aftercoolers, high pressure configurations and versions with special materials for any gas and water quality requirement.

Product Features:

- Permits significant energy and capital investment savings
- Optimises the compressed air system performance or gas treatment station
- Reduces maintenance and improves product quality
- Designed to ensure reliable continuous operation
- Very low pressure drops with optimum cooling performances

Philosophy

Parker Hiross specialises in cooling, purification, and separation technologies, where compressed air and gas purity, product quality, technological excellence and global support are paramount.
We design and manufacture compressed air treatment products and cooling equipment for many key industries where ease of integration, low cost of ownership and energy saving can make the difference.
Parker Hiross has been supplying industry with high efficiency products with low lifetime costs and reduced CO_2 emissions since 1964.
Our philosophy 'to stand out from the crowd' is our credo, encouraging our employees to achieve continuous improvement and satisfy customer expectations.



Parker Hiross

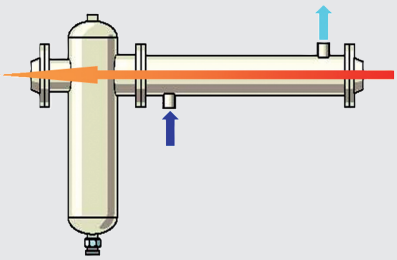
ENGINEERING YOUR SUCCESS.

Aftercoolers can be installed immediately downstream of compressors or blowers in order to remove over 80% of the condensate.
Their function is to protect the entire compressed air system or production process. They control the air or gas temperature, which can be very high at the compressor outlet.
A high quality aftercooler properly sized is an excellent investment that can help ensure that the compressed air or gas system works properly thereby guaranteeing the quality of the finished product.

Fixed configuration
with stainless ribbed tubes

Removable version with ribbed tubes ensures high performance with low pressure drops, designed for easy maintenance

Operation



Compressed air or gas passes through the cooler tubes. Cooling water passes around the tubes in counterflow.
The air or gas is cooled down to a temperature which can be as little as 5 °C above the water inlet temperature.

Water condensate is created and efficiently removed by the separator installed at the cooler outlet.

Models:
WFN/WRN
steel shell and copper tubes
WFC/WRC
completely in cupro-nickel
WFS/WRS
steel shell and stainless tubes
WFA/WRA
completely stainless steel

Versions:
- fixed or removable tube bundles
- carbon steel shell and copper tubes for standard applications
- completely in cupro-nickel for sea water use
- completely in stainless steel for aggressive gas and/or water
- carbon steel shell and stainless steel tubes for aggressive air or gas
- high pressures up to 40 barg and low pressures down to 1 barg (on request models for pressures up to 80 barg are available)
- stainless steel centrifugal water separators are available on request

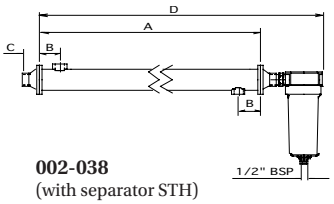
Accessories:
- Centrifugal separator
- Demister separator
- Flanges and counterflanges kit
  PED approval is offered as standard for all models

Other international pressure vessel approvals available on request.
(carbon steel separators are CE simple pressure vessel certified)

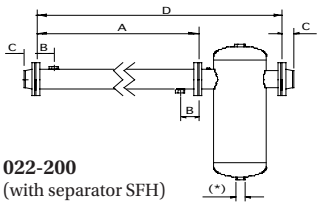
Technical data

Model	technical data					dimensions (mm)				
	air flow		max press.	cooler connections						weight
	m^3/h	m^3/min	barg	air*	water	A	B	C	D	(kg)
Standard version										
WFN002	72	1,2	16	3/4"	3/8"	720	78	-	827	2,5
WFN004	210	3,5	16	1½"	1/2"	980	85	-	1110	5,5
WFN007	390	6,5	16	1½"	3/4"	1000	95	-	1.130	9
WFN009	540	9	16	2"	3/4"	1020	105	-	1191	10,5
WFN013	810	13	16	2"	3/4"	1050	120	-	1.221	15
WFN018	1080	18	12	DN80	1"	900	95	52	1.179	13
WFN027	1.620	27	12	DN100	1¼"	900	115	54	1.221	18
WFN036	2.160	36	12	DN100	1¼"	900	115	54	1.221	24
WFN050	3.000	50	12	DN125	1¼"	1.300	100	58	1.963	71
WFN060	3.600	60	12	DN150	1¼"	1.300	100	58	1.963	89
WFN090	5.400	90	12	DN200	1¼"	1.300	100	65	1.990	121
Removable tube-bundle										
WRN003	180	3	16	DN 50	1/2"	850	72	77	1.057	18
WRN007	420	7	16	DN 50	1/2"	1.050	72	77	1.257	20
WRN011	660	11	16	DN 65	3/4"	1.300	122	82	1.553	27
WRN016	960	16	16	DN 80	3/4"	1.300	122	92	1.563	37
WRN022	1.320	22	12	DN 100	1"	1.300	122	55	1.568	50
WRN022	1.320	22	12	DN 100	1"	1.300	122	55	1.703	50
WRN028	1.680	28	12	DN 100	1"	1.300	122	55	1.568	54
WRN028	1.680	28	12	DN 100	1"	1.300	122	55	1.703	54
WRN038	2.280	38	12	DN 125	1¼"	1.300	123	58	1.571	69
WRN038	2.280	38	12	DN 125	1¼"	1.300	123	58	1.763	69
WRN050	3.000	50	12	DN 125	1¼"	1.300	123	58	1.853	71
WRN060	3.600	60	12	DN 150	1¼"	1.300	115	58	1.853	92
WRN090	5.400	90	12	DN 200	1¼"	1.300	117	65	1.873	161
WRN130	7.800	130	10	DN 250	1½"	1.300	116	71	1.983	194
WRN170	10.200	170	10	DN 300	2"	1.300	116	71	2.053	244
WRN200	12.000	200	10	DN 350	2"	1.300	143	71	2.133	321
WRN250	15.000	250	10	DN 350	DN 65	1.500	196,5	71	2.503	351
WRN350	21.000	350	10	DN 450	DN 80	1.500	148,5	75	2.703	400
WRN450	27.000	450	10	DN 500	DN 100	1.500	199,5	78	3.436	609
WRN550	33.000	550	10	DN 600	DN 100	1.515	200	83	3.606	931

Performances refer to clean Cooler conditions with air at FAD 20°C / 1 bar A, and at the following working conditions: air suction 25°C / 60%RH, 7 barg working pressure, 120°C compressed air inlet temperature, temperature approach between air outlet and water inlet of ca. 10°C. Maximum air inlet temperature: 200°C (for higher temperatures and other gases contact Parker Sales Companies).



002-038
(with separator STH)



022-200
(with separator SFH)

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EMEA Product Information Centre
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