

# ВТЦ

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Управление „Търговско”  
[E-mail:commercial@npp.bg](mailto:commercial@npp.bg)

**Относно: Пазарна консултация № 47423 / 04.08.2021 г. по чл. 44 от ЗОП**

*Уважаеми Дами и Господа,*

Приложено Ви изпращаме **ПРЕДЛОЖЕНИЕ № 227 / 25.08.2021 г.** за  
**„Доставка на охладители за първа и трета степен за въздушни компресори NEA 4V2“**

Оставаме на Ваше разположение.

С уважение,

Михаил Михайлов - Управител  
Въздушен Технически Център ООД  
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София, 25.08.2021

**ПРЕДЛОЖЕНИЕ № 227/25.08.2021 г.**

**за „Доставка на охладители за първа и трета степен за въздушни компресори NEA 4V2“  
съгл. Техническа спецификация**

№	ИД по BAAN	Наименование	Технически характеристики	Мярка/ мерна единица	К-во	Стандарт, нормативен документ, каталожен номер и др.	Др. изисквания	Един.цена без ДДС, BGN	Обща стойност без ДДС, BGN
1		2	3	4	5	6	7	8	9
1.	103922	Охладител вода/въздух за NEA 4V2	Охладител 1-ва и 2-ра степен Parker Hiross тип WCA-008X/SP / (нов тип WFN009Y11078 - 14 bar) -10 +180°C/PED Със спирални тръби без контра- фланци СПЕЦИАЛНО ИЗПЪЛНЕНИЕ	бр.	3	ДИРЕКТИВА 97/23/ЕО за съоръжения под налягане M1 Регламент (ЕО) № 1882/2003 M2 Регламент (ЕС) № 1025/2012 C1 Поправка, ОВ L 93, 7.4.2011	Съгласно изисква- нията на произво- дителите на ком- пресорите	13 195,00	39585,00
2.	103924	Охладител вода/въздух за NEA 4V2	Охладител 3-та степен Parker Hiross тип WCA-005X/30-SP / (нов тип WFP007Y11078A-30 bar) -10 +150°C/PED Със спирални тръби без контра- фланци СПЕЦИАЛНО ИЗПЪЛНЕНИЕ	бр.	1	ДИРЕКТИВА 97/23/ЕО за съоръжения под налягане M1 Регламент (ЕО) № 1882/2003 M2 Регламент (ЕС) № 1025/2012 C1 Поправка, ОВ L 93, 7.4.2011	Съгласно изисква- нията на произво- дителите на ком- пресорите	15 314,00	15 314,00
<b>Обща стойност без ДДС BGN</b>									<b>54 899,00</b>
(словом: петдесет и четири хиляди осемстотин деветдесет и девет лева без ДДС)									

- Подробно описание, съгласно приложената техническа спецификация	Приложен Проспект
- Обща стойност в лева без ДДС (Единичните цени са посочени в таблицата по-горе)	<b>BGN 54 899,00 без ДДС</b> <b>Словом: петдесет и четири хиляди осемстотин деветдесет и девет лева без ДДС</b>
- Информация за срок и условия на доставка, гаранционен срок/ срок на годност	Срок на доставка - до 112 календарни дни DDP „АЕЦ КОЗЛОДУЙ” ЕАД Гаранционен срок – 24 месеца от монтажа и не по-вече от 30 месеца от датата на доставка Срок на годност – 60 месеца
- Съпроводителна документация при доставка на стоката	- Декларация за произход - Декларация за съответствие - Инструкция за съхранение
- Точен адрес и лице за контакт  Телефон, факс,  e-mail Интернет адрес	гр.София, 1619, Бул.Цар Борис III 293 Михаил Станиславов Михайлов – управител 02 9544408 02 9552320 0888 402 681 <a href="mailto:wtc@engineer.bg">wtc@engineer.bg</a> <a href="mailto:wtc.sofia@mail.bg">wtc.sofia@mail.bg</a> <a href="http://www.wtc-sofia.com">www.wtc-sofia.com</a>
- Документ за представителство /оторизация/ дистрибуция от производителя	Оторизационно писмо PARKER

### Михаил Михайлов - Управител

Въздушен Технически Център ООД

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E-mail: [wtc@engineer.bg](mailto:wtc@engineer.bg)

София, 25.08.2021 г.



**ENGINEERING YOUR SUCCESS.**

**PARKER HANNIFIN GES.M.B.H. – REPRESENTANTA**  
Municipiul Bucuresti, SECTOR 2  
Bld. Pierre de Coubertin, Nr. 7, Et. 4, Ap.5

Tel: 021/252.13.82 Fax: 031/424.37.92  
Email: [parker.romania@parker.com](mailto:parker.romania@parker.com)

Cont: UniCredit Tiriac Bank - RO16BACX0000000883658001  
Cod inregistrare fiscala (CIF) : 31059679

To NPP Kozloduy  
3321 Kozloduy  
Bulgaria

### **Letter of Authority,**

**To whom it may concern.**

This Letter of Authority is to certify that WTC WAS. TECH. Center Ltd, 293 Tzar Boris III Bul., 1619 Sofia, Bulgaria is authorized to participate tenders and to offer quotations to NPP Kozloduy, 3321 Kozloduy, Bulgaria for delivery of Parker Hannifin Gas Separation and Filtration Division Europe products (incl. Balston, Domnick Hunter, Hiross and Zander brands).

The quotations, as well as aftersales support, service and maintenance will be executed by WTC WAS. TECH. Center Ltd on its account and responsibility.

Okan Ozturk  
Key Account Manager - Parker Sales Company CEE  
Gas Separation & Filtration - Balkans, Hungary, Turkey  
[www.parker.com/gsf](http://www.parker.com/gsf)



**Заличено на основание ЗЗЛД**

Valid to: 31.12.2021

**PARKER**  
**ENGINEERING YOUR SUCCESS.**  
**ПАРКЕР**  
**ИНЖЕНЕРИНГ НА ВАШИЯ УСПЕХ.**

Превод от английски език

PARKER HANNIFIN GES.M.B.H.

Паркър Ханифин Дружество с ограничена отговорност  
Община Букурещ, Сектор 2  
Minicipiul Bucuresti, SECTOR 2  
Bld.Pierre de Coubertin, No.7, Et.4, Ap.5

Тел. 021/252.13.82 Факс: 0316424.37.92

Email: [parker.romania@parker.com](mailto:parker.romania@parker.com)

Cont: UniCredit Tiriac Bank - RO16BACX0000000883658001

Cod inregistrare fiscala (CIF)/ Фискален регистрационен код: 31059679

До: АЕЦ Козлодуй  
3321 Козлодуй  
България

## ОТОРИЗАЦИОННО ПИСМО

До всички , за които се отнася

Това Оторизационно писмо удостоверява, че ВТЦ „Въздушен Технически Център” ООД, бул. „Цар Борис III” № 293, 1619 София, България, е оторизиран да участва в търгове и да подава оферти на АЕЦ Козлодуй, 3321 Козлодуй, България за доставка на продукти на Паркър Ханифин Дивизия Разделяне на газове и Филтрация Европа, (вкл. брандовете Balston, Domnick Hunter, Hiross и Zander) .

Оферирането, както и след-продажбената поддръжка , сервиз и техническо обслужване, ще се извършва от Въздушен Технически Център ООД, за негова сметка и отговорност.

Okan Ozturk

Мениджър на ключови акаунти - Parker Sales Company CEE  
Разделяне и филтриране на газ - Балкани, България, Турция  
[www.parker.com/gsfе](http://www.parker.com/gsfе)

Подпис: /не се чете/

Валиден до: 31.12.2021

# Hypercool

air & water-cooled aftercoolers



domnick hunter hiross SpA

**HIROSS**

Compressed Air Treatment



# HYPERCOOL: TAILOR MADE AFTERCOOLING

The compressed air and gas market is becoming ever more diverse, with new niche applications and a drive towards the need for ever higher quality standards.

It is no longer possible to offer a standardised solution to every customer need.

What is needed is individual solutions for a whole range of specific market segments.

Hypercool represents the most extensive range of Water and Air-cooled Aftercoolers, fruit of 40 years experience in the Aftercooler market.

The comprehensive standard range is complemented by models with special materials, as well as high temperature and high pressure versions.

Beyond this, Hiross offers personalised solutions covering all individual customer requirements.

And all this with the levels of performance and quality traditionally offered by the Hiross product range.

Hypercool continues Hiross' tradition for innovative

solutions, allowing its users to achieve

the maximum from their

Compressed Air systems.



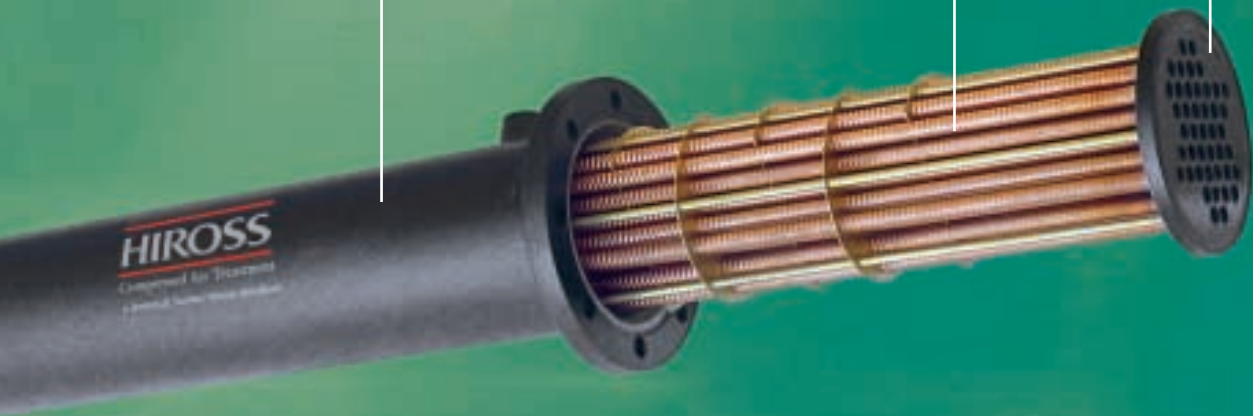
## **BENEFITS**

- significant energy and capital investment savings
- optimises compressed air system performance
- reduces maintenance and improves product quality
- ensures reliable continuous operation

versions available for compact vertical installation

ribbed tubing design guarantees high performance together with low pressure drop

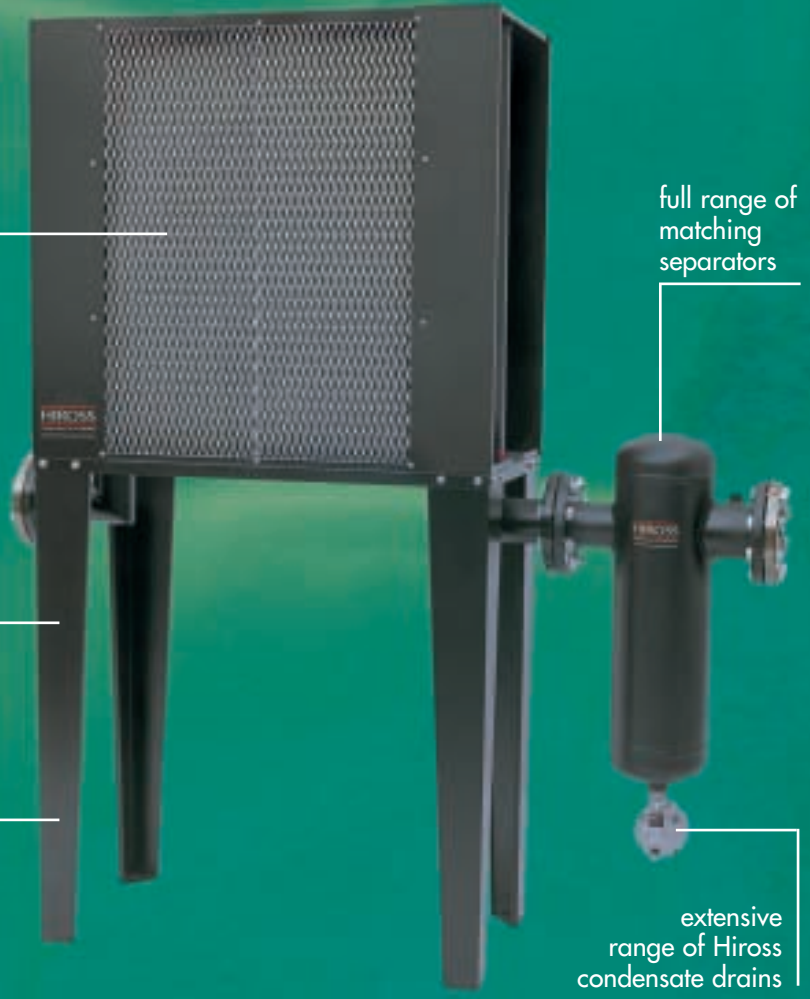
Aftercoolers offered with both fixed and removable tube bundles



low pressure drop configuration offers minimal energy consumption

selection software allows Aftercooler to be personalised to all customer needs

heavy duty construction withstands the rigors of industry



full range of matching separators

extensive range of Hiross condensate drains



## WATER-COOLED RANGE



ribbed tubing

Models up to 200 m<sup>3</sup>/min. (higher air flows on request) are offered in the following configurations:

- WFN / WRN (steel shell, copper tubes): for standard applications.
- WFC / WRC (completely in cupronickel): for sea water.
- WFS / WRS (steel shell, stainless steel tubes): for aggressive air.
- WFA / WRA (completely in stainless steel): for aggressive air and/or water.

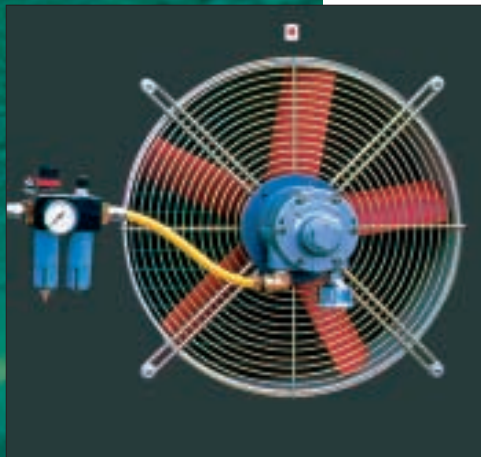
## WATER-COOLED MODELS & OPTIONS



counterflanges kit

All models can be specified with fixed or removable tube bundles, with or without a centrifugal Separator, and with matching counterflanges. A vast array of special versions can be offered. These include intercooler models, high pressure versions, very low pressure drop configurations and high temperature models. PED approval is offered as standard, with other international pressure vessel approvals available on request.

## AIR-COOLED RANGE

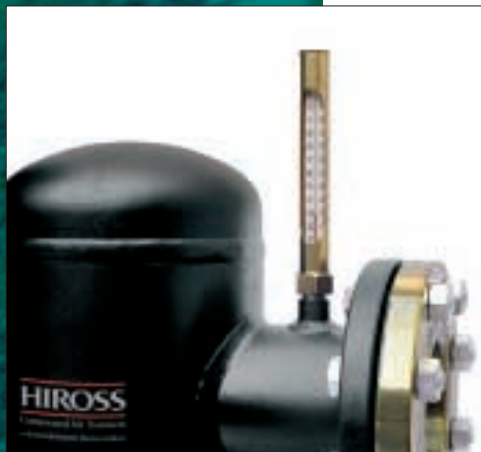


pneumatic version

The air-cooled range of Aftercoolers, which covers air flows in the range 0,6-75 m<sup>3</sup>/min., is available in the following configurations:

- standard (aluminium fins, copper tubes): for standard applications.
- all copper (copper fins and tubes): for maritime applications.

## AIR-COOLED MODELS & OPTIONS



optional outlet thermometer

All models can be specified with or without a centrifugal Separator and with matching counterflanges. Modular versions are offered, without legs or without fan motor. Models with very low pressure drops, pneumatic versions (for operation without electrical power) and Aftercoolers with IP55 electrical protection are also available. PED approval is offered as standard, with other international pressure vessel approvals available on request.

# AFTERCoolERS: THE HEART OF A COMPRESSED AIR NETWORK

When contemplating a quality Compressed Air Treatment system, the Aftercooler is oft overlooked. Which is a surprise, as typically over 80% of the condensate within the system is removed by the Aftercooler.

Being installed straight after the Air Compressor, the Aftercooler is subjected to significantly higher levels of moisture than other components downstream. Furthermore, as they are installed before any filtration stages Aftercoolers are subjected to extreme operating conditions, which must be overcome to ensure optimum operation.

An undersized or incorrectly operating Aftercooler will compromise the whole compressed air station: the consequences are increased maintenance, higher operating costs and damaged finished goods. Furthermore, a generously dimensioned Aftercooler allows the installation of smaller Refrigeration and Adsorption Dryers, offering savings in capital investment and energy consumption.



## HOW HYPERCOOL REMOVES UPTO 80% OF YOUR CONDENSATE

### **water-cooled models**

Hot compressed air passes through the Aftercooler tubes. Cooling water passes around the tubes in counterflow, the internal baffles forcing it to make several passes for increased efficiency. The air is cooled to a temperature which can be as little as 5°C above the cooling water inlet temperature. As the compressed air cools, so liquid condensate is created; this is efficiently removed by a centrifugal separator installed at the Aftercooler outlet.

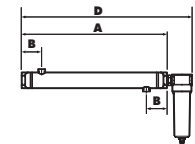
### **air-cooled models**

Hot compressed air passes through the Aftercooler tubes. Ambient cooling air is forced across these tubes by the fan, with fins on the tubes increasing the cooling efficiency. The air is cooled to a temperature which can be as little as 5°C above the ambient temperature. As the compressed air cools, so liquid condensate is created; this is efficiently removed by a centrifugal separator installed at the Aftercooler outlet.

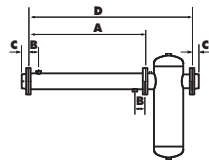
# SELECT YOUR TAILOR MADE AFTERCOOLER

MODEL	Air flow		Connections		Max. press. (bar g)	Dimensions (mm)				Weight (kg) Cooler only	
	m <sup>3</sup> /min.	cfm	air	water		A	B	C	D		
<b>WATER-COOLED MODELS WITH FIXED TUBE-BUNDLE</b>											
WFN002	1,2	42	3/4"	3/8"	16	720	78	-	827	2,5	
WFN004	3,5	124	1 1/2"	1/2"	16	980	85	-	1110	5,5	
WFN007	6,5	230	1 1/2"	3/4"	16	1000	95	-	1130	8,5	
WFN009	9	318	2"	3/4"	16	1020	105	-	1191	10,5	
WFN013	13	459	2"	3/4"	16	1050	120	-	1221	15	
WFN018	18	636	DN 80	1"	12	900	95	52	1300	22	
WFN027	27	953	DN 100	1 1/4"	12	900	115	54	1300	28	
WFN036	36	1271	DN 100	1 1/4"	12	900	115	54	1300	34	
WFN050	50	1766	DN 125	1 1/4"	12	1300	100	58	1792	84	
WFN060	60	2119	DN 150	1 1/4"	12	1300	100	58	1792	105	
WFN090	90	3178	DN 200	1 1/4"	12	1300	100	65	1870	143	
<b>WATER-COOLED MODELS WITH REMOVABLE TUBE-BUNDLE</b>											
WRN003	3	106	1 1/2"	1/2"	16	849	72	77	1056	16	
WRN007	7	247	1 1/2"	1/2"	16	1049	72	77	1256	18	
WRN011	11	388	2"	3/4"	16	1299	122	82	1552	22	
WRN016	16	565	2"	3/4"	16	1299	122	92	1562	31	
WRN022	22	777	DN 100	1"	12	1299	122	55	1699	40	
WRN028	28	989	DN 100	1"	12	1299	122	55	1699	42	
WRN038	38	1342	DN 125	1 1/4"	12	1299	123	58	1759	61	
WRN050	50	1766	DN 125	1 1/4"	12	1299	123	58	1849	66	
WRN060	60	2119	DN 150	1 1/4"	12	1299	115	58	1849	82	
WRN090	90	3178	DN 200	1 1/4"	12	1299	117	65	1869	129	
WRN130	130	4591	DN 250	1 1/2"	10	1299	116	71	1979	192	
WRN170	170	6003	DN 300	2"	10	1299	116	71	1049	245	
WRN200	200	7063	DN 350	2"	10	1299	118	71	1129	330	
<b>AIR-COOLED MODELS</b>											
MODEL	Air flow		Air conn.	Max. press. (bar g)	Dimensions (mm)						Weight (kg) Cooler only
	m <sup>3</sup> /min.	cfm			A	B	C	D	E	F	
ANS000	0,6	21	3/4"	16	360	794	216	457	522	476	7,5
ANS001	1,2	42	3/4"	16	430	895	277	545	522	476	11
ANS/T003	2,5	88	1 1/2"	16	550	1140	403	715	657	567	22
ANS/T004	3,5	124	1 1/2"	16	550	1140	403	715	657	567	28
ANT006	6	212	1 1/2"	16	610	1336	453	775	753	663	30
ANT009	9	318	2"	16	702	1361	445	908	751	694	41
ANT014	14	494	2"	16	890	1523	500	1075	815	756	75
ANT018	18	636	DN 80	12	1114	1857	560	1516	892	892	85
ANT028	28	989	DN 100	12	1418	1807	560	1820	892	892	134
ANT036	36	1271	DN 100	12	1518	2075	580	1980	960	960	190
ANT040	40	1412	DN 150	9	1424	1983	1013	1980	1780	1080	323
ANT048	48	1695	DN 150	9	2550	1983	1013	3102	1730	1130	478
ANT064	64	2260	DN 200	9	2550	1983	1040	3122	1730	1130	494
ANT075	75	2649	DN 200	9	2550	1983	1040	3122	1730	1130	514

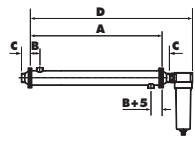
WFN 002-013



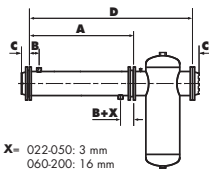
WFN 018-090



WRN 003-016

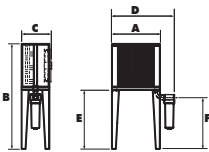


WRN 022-200

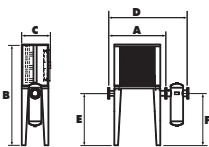


X= 022-050: 3 mm  
060-200: 16 mm

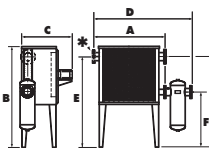
ANS/T 000-014



ANT 018-036



ANT 040-075



\* For 040: Air inlet is on opposite side to air outlet.  
For 048/075: Air inlet and outlet are both on the Separator side.

Performances refer to models with standard materials operating with 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 bar g working pressure, 120°C compressed air inlet temperature, temperature approach between air outlet and water (water-cooled models) or cooling air (air-cooled models) inlet of ca. 10°C. Performance for models with non-standard materials may differ from those above. Power supply for air-cooled models: ANS are single-phase, ANT are 3-phase. For models with matching separator, air outlet may differ from above.



The Quality and Environment Management Systems of domnick hunter hiross S.p.A. have been approved by Lloyd's Register Quality Assurance to the following Quality and Environment Management System standards: ISO9001:2000 (Certificate LRC160001) and ISO14001:1996 (Certificate LRC160001/14).

Data contained in this publication is to be considered as indicative only. The manufacturer reserves the right to modify data without prior notice.

The Hiross product range: Aftercoolers, Separators, Filters, Refrigeration Dryers, Adsorption Dryers, Condensate Drains, Oil/Water Separators, Water Chillers, Dry Coolers.

domnick hunter hiross SpA  
**HIROSS**  
Compressed Air Treatment