

FAMILY BROCHURE / 09 LINES / 22 SERIES

Heat Rejection & Heat Recovery

Cooling towers, dry coolers, condensers, adiabatic and hybrid systems for site-scale heat rejection and recovery.

EQUIPMENT FAMILY

Heat Rejection & Heat Recovery

PRODUCT LINES

9

SERIES ENTRIES

22

CORE STANDARDS

ASME VIII Div. 1 · API 661 · CTI ATC-105 · PED 2014/68/EU

MATERIAL SCOPE

Hot-dip galvanised steel · Stainless steel · Aluminium fins · CuNi tube · C5-M coating

REVISION

Rev. 04 · 2026-10-01

HEAT REJECTION & HEAT RECOVERY BROCHURE

FAMILY

Heat Rejection & Heat Recovery

Cooling towers, dry coolers, condensers, adiabatic and hybrid systems for site-scale heat rejection and recovery.



ROOFTOP COOLING TOWER INSTALLATION

A site-scale range for rejecting, recovering or reusing heat across data centres, refrigeration plants, industry, power and district energy. Selection balances ambient design conditions, water availability, noise, plume, plot space and annual energy use.

Product lines
9

Design standards
ASME VIII Div. 1 · API 661 · CTI ATC-105 · PED 2014/68/EU

Material scope
Hot-dip galvanised steel · Stainless steel · Aluminium fins ·
CuNi tube · C5-M coating

Application scope
Data centres · District energy · Power · HVAC-R · Industrial
cooling · Hydrogen

Selection route

Start with the duty point, then confirm the family, line, series and equipment envelope. The project datasheet replaces the representative planning values.

HEAT REJECTION & HEAT RECOVERY BROCHURE

RANGE

9 product lines.

Each line carries its own duty envelope and series depth. The line pages hold the detailed selection data.

PRODUCT LINE	FOCUS	KICKER	SERIES
Adiabatic Systems	Spray and pad adiabatic systems that increase outdoor cooling performance during high ambient conditions while controlling water use.	Evaporative assist / hot ambient resilience	2
Air Cooled Condensers	Air-cooled condenser systems for steam condensation and process services where water consumption, plot plan, and vacuum performance matter.	Steam condensation / A-frame	3
Air Fin Coolers	Air-cooled finned-tube exchangers for heavy industrial sites that need durable process cooling under demanding ambient conditions.	Finned-tube bundles / major industry	2
Cascade Cooling	Hybrid cooling architecture that switches between dry, wet, and mixed modes to balance energy use, water use, and peak capacity.	Dry, wet, and mixed mode	1
Cooling Towers	Modular and field-erected cooling towers for rejecting industrial, building, power, and data-center heat through evaporative water circuits.	Evaporative rejection / modular towers	2
Flatbed Condenser / Drycooler	Flatbed condensers, gas coolers, and drycoolers for outdoor installations that need high power density and flexible configuration.	Horizontal outdoor cooler range	4
Hybrid Coolers	Hybrid coolers that combine dry operation with evaporative support for sites balancing energy efficiency, water use, and peak-day capacity.	Dry and evaporative cooling in one unit	2
Mega-Bay & Giga-Bay Cooling	Large pre-engineered and site-engineered cooling bays for data centers and heavy infrastructure with multi-megawatt modules.	Modular heat rejection at hyperscale	2
V-Shape Condenser / Drycooler	V-bank condensers, gas coolers, and drycoolers for narrow footprints, high capacity density, and outdoor cooling loads.	High-density V-bank outdoor cooling	4



HEAT REJECTION & HEAT RECOVERY



REPRESENTATIVE EQUIPMENT

Range note

Series and variant values are representative planning data. Certified performance and dimensions are issued against the project duty point.

HEAT REJECTION & HEAT RECOVERY BROCHURE

SERIES

Family series ledger

Configuration routes inside this line. Series codes are Novaryn references; project-specific model codes are confirmed on the order.

CODE	SERIES	RANGE / APPLICATION	CONFIGURATION
NX-HR-038	Spray	Spray nozzle assist	Direct evaporative support · Hot-day capacity boost
NX-HR-039	Pad	Pad assist	Controlled pre-cooling · Water-use planning
NX-HR-040	MASH	A-frame vacuum condenser	Steam duct and manifold design · Deflegmation row planning
NX-HR-041	Single Row	Low steam-side pressure drop	Freeze-resistant planning · Uniform surface use
NX-HR-042	A-Tube	Corrosion-protected tube platform	Hot-dip galvanized transfer path · Pressure condenser option
NX-HR-043	Diesta	Heavy industrial AFC	Demanding ambient conditions · Robust fan and bundle arrangement
NX-HR-044	Advanced Fin	High-performance fin platform	Revamp-ready · Optimized air-side performance
NX-HR-045	Hybrid	Site-scale modules	Dry and wet cooling combination · Annualized utility balance
NX-HR-046	Frigate	Up to 25 MW unit class	Modular and stackable · Short on-site assembly
NX-HR-047	Field	Up to 100 MW unit class	Large manufacturing and energy sites · Field-erected tower format
NX-HR-048	LF Drycooler	21-1290 kW class	Long coil support · Low-noise controls
NX-HR-049	LF-S Drycooler	8-125 kW class	Versatile legs · Compact installation
NX-HR-050	RF/GF-S	6.4-183 kW class	Small condenser and gas cooler duties
NX-HR-051	RF/GF/NF	11-1424 kW class	Large condenser, gas cooler, and ammonia duties
NX-HR-052	DryAssist	Drycooler with evaporative assist	Hot-day performance support · Water-managed operation
NX-HR-053	Process	Industrial hybrid cooling	Large outdoor duty · Noise and plume planning
NX-HR-054	MB Pre-Engineered	1.5-4 MW module class	Rapid project delivery · Factory-site assembly
NX-HR-055	GB Tailored Bay	4-8 MW module class	Large fan geometry · Built for massive sites
NX-HR-056	RV/NV/GV T-L	12.5-2805 kW class	Large V-bank platform · Condenser, ammonia, and gas cooler variants
NX-HR-057	RV/NV/GV M	7-527 kW class	Medium V-bank family · Commercial and industrial duty
NX-HR-058	LV-M Drycooler	6-395 kW class	Small footprint · Adiabatic option
NX-HR-059	LV-TL Drycooler	10-2140 kW class	High-capacity dry cooling · V-angle airflow

Representative planning data. Certified ratings, dimensions, connection details and material schedules are issued against the project duty point.

HEAT REJECTION & HEAT RECOVERY BROCHURE

APPLICATION

Where the family belongs.

Typical sectors and equipment routes. Project suitability is confirmed against the site conditions and specification.

Applications

- Data centres
- District energy
- Power
- HVAC-R
- Industrial cooling
- Hydrogen

STANDARDS & MATERIALS

The engineering framework.

Design standards

ASME VIII Div. 1 · API 661 · CTI ATC-105 · PED 2014/68/EU

Material scope

Hot-dip galvanised steel · Stainless steel · Aluminium fins · CuNi tube · C5-M coating

Industry routes

Data Centre · Power & Energy · HVAC-R · Heavy & Light Industry · Chemicals · Oil & Gas

Documentation

Brochure · datasheets · drawings · manual

DOCUMENTATION

Family documents

Public documents are downloadable from the product library. Certificates and material reports are issued against the order.

DOCUMENT	TYPE	REV.	PAGES	ACCESS
Heat Rejection & Heat Recovery Brochure	Family brochure	Rev. 04	6	Download
Heat Rejection & Heat Recovery — Installation and Maintenance	Installation manual	Rev. 02	8	Download
Heat Rejection & Heat Recovery — Certificate of Conformity	Certificate	Issued per order	1	On request
Heat Rejection & Heat Recovery — Material Test Report	Material test report	Issued per order	1	On request

HEAT REJECTION & HEAT RECOVERY BROCHURE

LIFECYCLE

The family does not end at dispatch.

Spares, inspection, cleaning and retrofit use the same serial record as the original selection.

- Serial-matched spare parts and consumables
- Inspection, cleaning and performance review
- Retrofit, capacity uplift and refrigerant transition
- Commissioning and field service through the partner network
- Installation and maintenance manuals from the product library



HEAT REJECTION & HEAT RECOVERY



REPRESENTATIVE EQUIPMENT

SERVICE ROUTE	TYPICAL SCOPE	ENTRY POINT
Spares	Gaskets, plates, coils, fans, motors	Serial number
Inspection	Leaks, fouling, performance, condition	Operating data
Retrofit	Capacity, media, refrigerant, envelope	Duty review
Field service	Commissioning, repair, replacement	Partner / Houston

HEAT REJECTION & HEAT RECOVERY ENGINEERING

Send the duty point.

Media, flow, temperatures, pressure, ambient conditions, plot and access constraints, and the document requirement. If the duty is still forming, send what you have and we will frame the questions.

Engineering engineering@novarynindustrial.com
Sales sales@novarynindustrial.com
Telephone +1 (713) 555-0186
Address 4800 Federal Road, Houston, TX 77032, United States
Web www.novarynindustrial.com