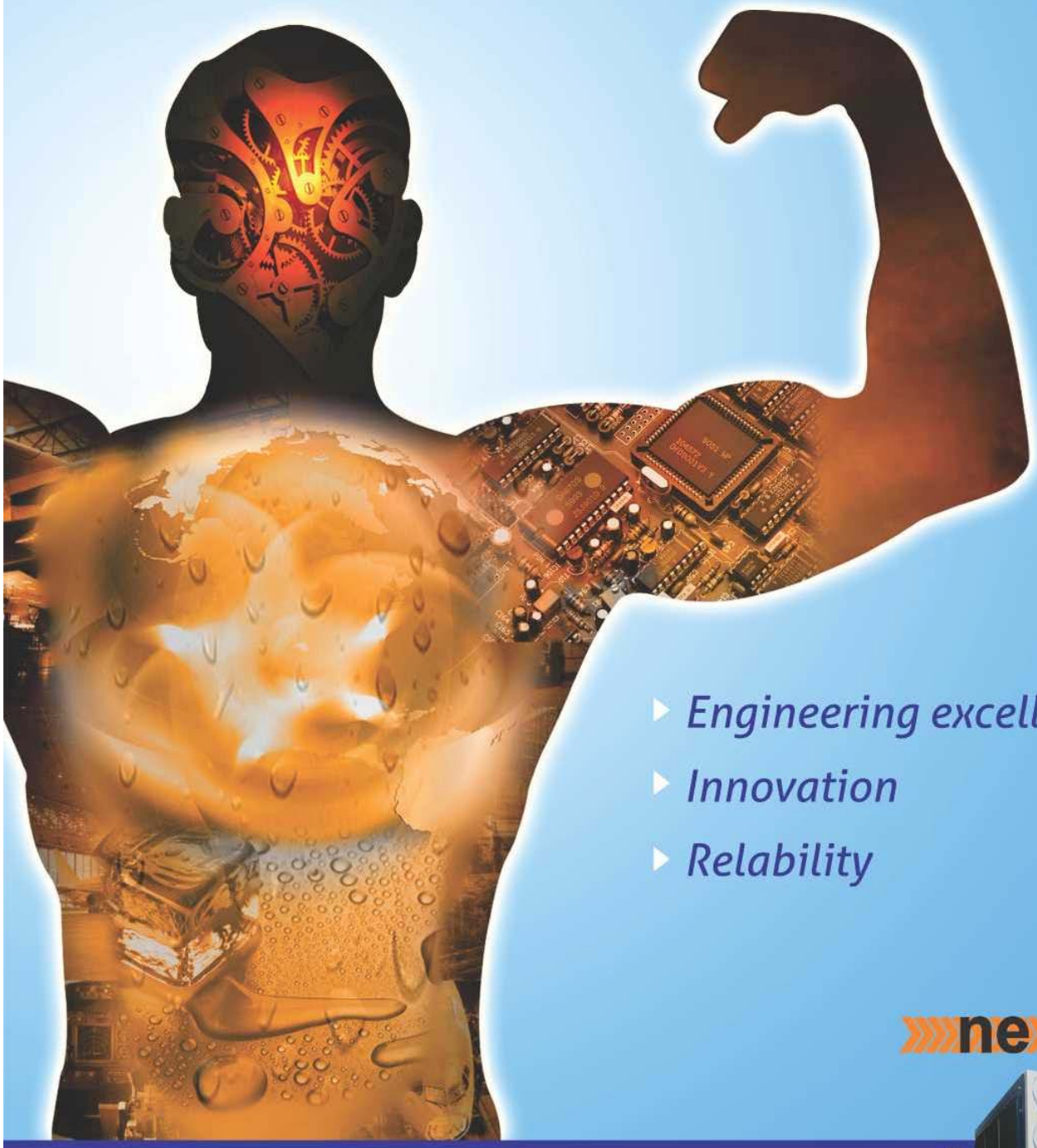
GEM

1984 - 2014



- Engineering excellence
- Innovation
- Relability

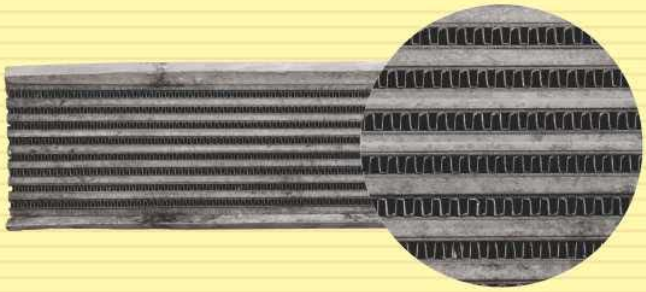
nexgen

Your trust
Our technology

Introducing

Technology

GEM



HIGH PERFORMANCE
HEAT EXCHANGER

Our heat exchangers are designed to provide you worry-free, highly efficient heat transfer whether you are processing simple fluids, viscous solutions, or particulates . It features honey comb construction of aluminum fins, true cross flow for greater effective temperature differences, non clogging larger cross sectional area for air flow, integral air - air and air - refrigerant exchanges, with stainless steel demister moisture separator, robust non corrosive grade aluminum, larger heat transfer area for higher efficiency.

CONTROL PANEL

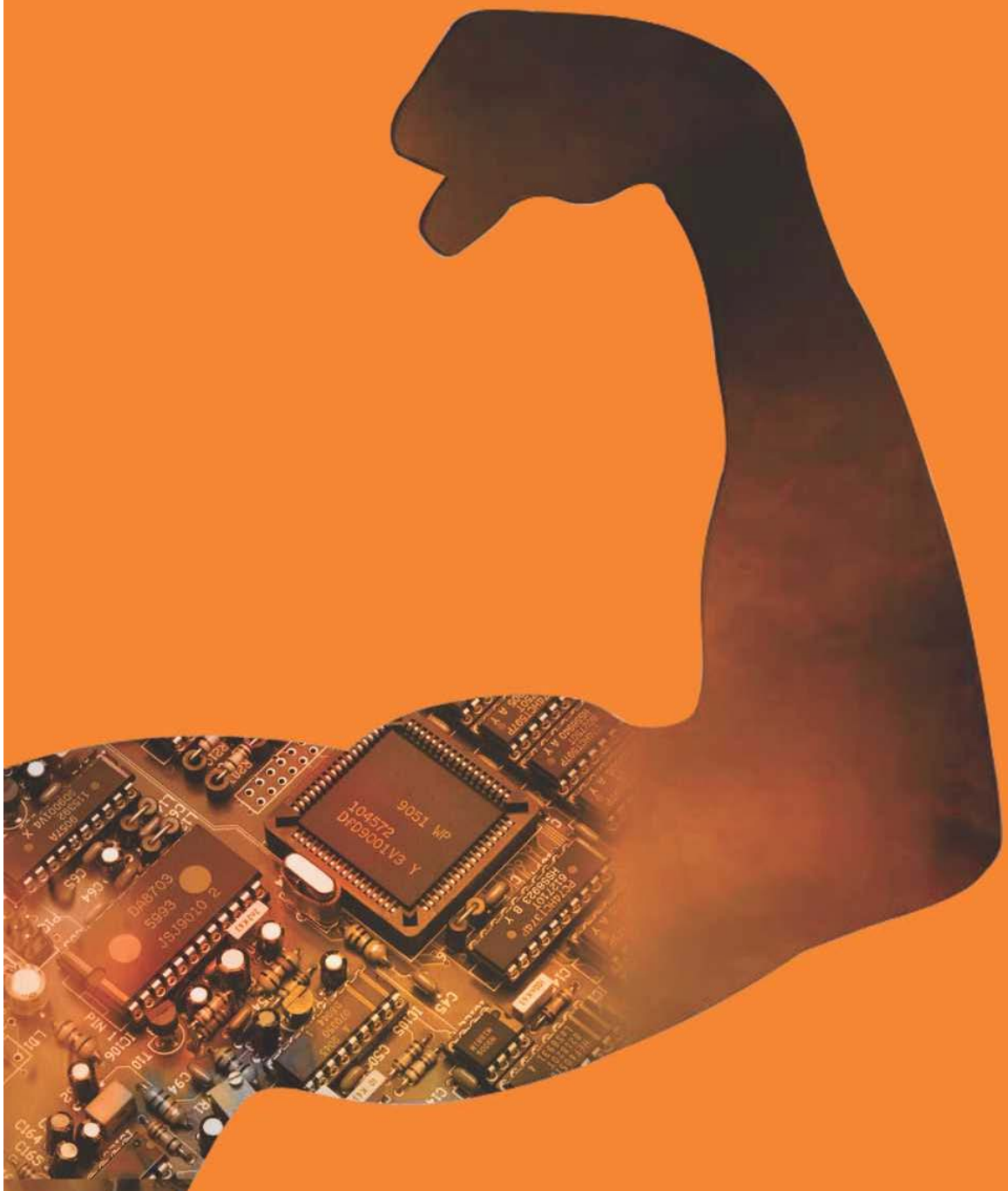
Rugged electronic panels display both inlet and dew point temperature. Tripper module with alarm for compressed high discharge pressure, compressed low suction pressure, expansion valve malfunction, auto drain valve function and fan motor cycling.

VARIABLE FREQUENCY DRIVE COMPRESSOR

The introduction of speed control is one of the major developments towards the optimization of refrigeration systems based on average load. For periods of high cooling demand, the compressor speed can be increased which results in a higher refrigerant flow and thus higher cooling capacity. And vice versa during periods of low cooling demand

Energy saving | Precision cooling | Cooling process optimization

RELIABILITY



Compressed air purification equipment must deliver uncompromising performance and reliability while providing the right balance of air quality with the lowest cost of operation.

As a quality centric group we ensure that our dryers are tested in each stage of assembly as per ISO 7183 or relevant standards. We maintain stringent engineering practices throughout the production process to achieve higher reliability. Exclusive testing is done on the machine on partial load to check compliance of critical parameters before delivery.

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Hydro & Pressure Testing

We are the first Indian air dryer manufacturer to become ISO 9001 certified company in 1997(QMS). Currently we are ISO 9001 :2008 certified by DNV. We have a dedicated and experienced team. They play a significant role in our production process as quality is inbuilt into the production system with each employee taking part in its perfection. Our state-of-the-art manufacturing line is equipped with instruments, work instructions, quality plans to assure quality at each stage of production / manufacturing.

CE marking for refrigerated and desiccant air dryers.

Leak Detection

Air Flow Testing

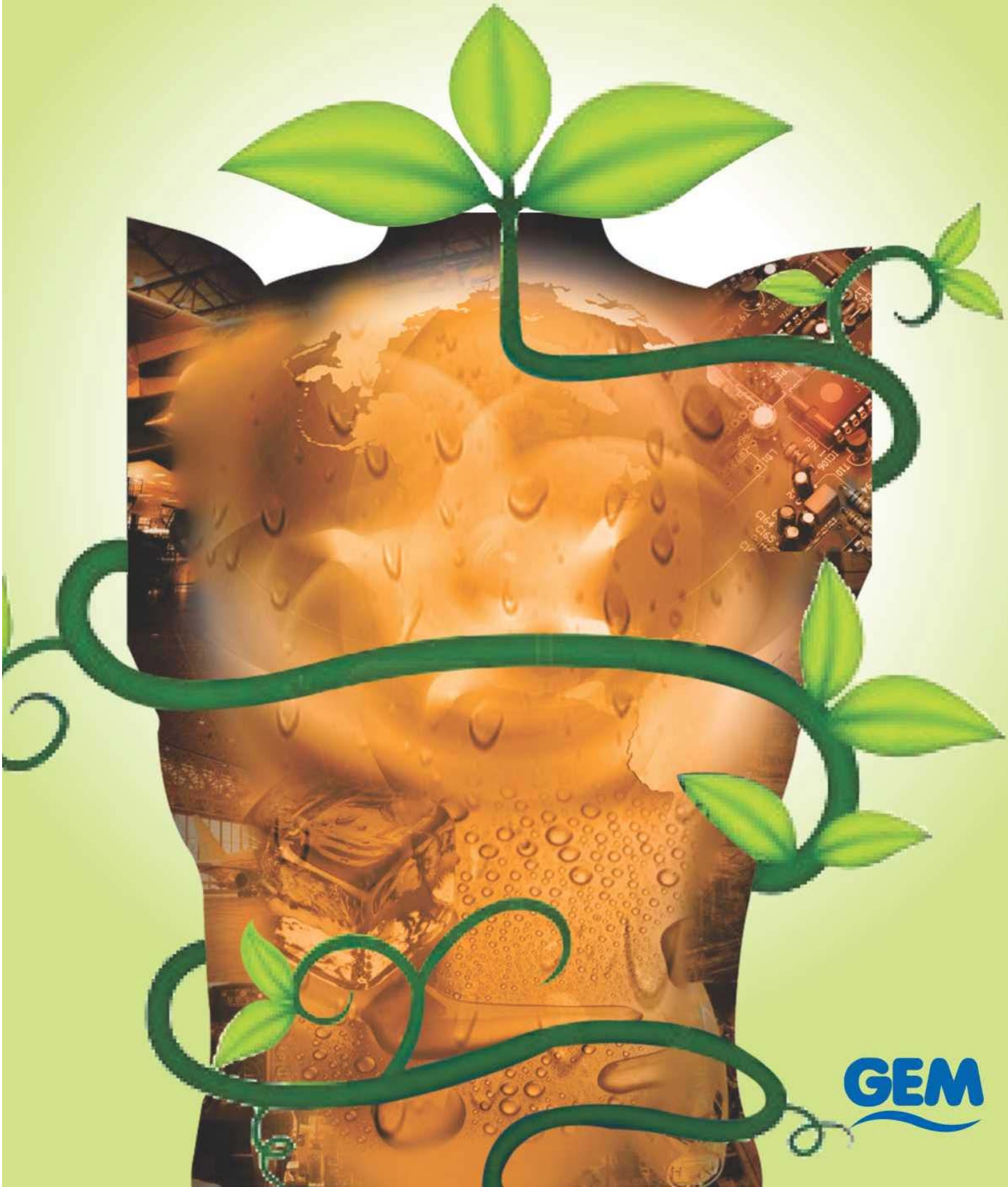
Gas Charging & Vaccum Testing

Dew Point Testing

Scratch Hardness Testing

ECO FRIENDLY

ECO FRIENDLY



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R404A

Noise Free

R134a

OZONE FRIENDLY

Ozone Friendly Refrigerants

	R134a	R404A
Ozone Depletion Potential	NIL	NIL
Global Warming Potential	1300	3300

ADV

Fan

SIZING CONVERSION FACTORS :

Operating condition		Rated / Ideal	Maximum
Inlet Temperature	:	45°C	60°C
Ambient Temperature	:	40°C	50°C
Inlet Pressure	:	7bar(g)	16bar(g)
Pressure Dew Point	:	3°C	

$$\text{Dryer Nominal Capacity} = \frac{\text{Compressor Actual Capacity}}{C1 \times C2 \times C3 \times C4}$$

Inlet Temperature : (C1)

Inlet Temperature °C	30	35	40	45	50	55	60
Conversion Factor	1.2	1.15	1.05	1.0	0.85	0.8	0.7

Ambient Temperature : (C2)

Ambient Temperature °C	25	30	35	40	45	50
Conversion Factor	1.2	1.14	1.1	1.0	0.9	0.8

Inlet Pressure : (C3)

Inlet Pressure	bar g	4	5	6	7	8	9	10.5	11	12.5	13	14	15	16
	psi g	58	73	87	100	116	131	150	160	180	189	200	218	232
Conversion Factor		0.75	0.85	0.95	1.00	1.06	1.11	1.15	1.18	1.20	1.22	1.23	1.25	1.28

Pressure Dew Point : (C4)

Pressure Dew Point,°C	3	7	10
Conversion Factor	1.0	1.15	1.3

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Refrigerated Air Dryer

SPECIFICATIONS

Model	Nominal Capacity		Maximum Pressure		Electrical Connection		Refrigerant	Air Connection	Rated Power	Dimensions (in mm)		
	cfm	m3/hr	bar	psi	220V/1ϕ/50Hz	415V/3ϕ/50Hz		Inlet / Outlet	Air Cooled	Length	Width	Height
NXG 006	60	102	16	232	√		R134a	1"BSP(F)	0.4	400	600	1125
NXG 008	80	136	16	232	√		R134a	1"BSP(F)	0.5	400	600	1125
NXG 010	100	170	16	232	√		R134a	1"BSP(F)	0.6	400	600	1200
NXG 015	150	255	16	232		√	R134a	1 1/2"BSP(F)	0.9	400	600	1200
NXG 020	200	340	16	232		√	R134a	1 1/2"BSP(F)	1.2	400	600	1200
NXG 025	250	425	16	232		√	R404a	2"BSP(F)	1.38	500	900	1200
NXG 030	300	510	16	232		√	R404a	2 1/2:BSP(F)	1.38	500	900	1200
NXG 040	400	680	16	232		√	R404a	2 1/2:BSP(F)	2.32	500	900	1400
NXG 050	500	850	16	232		√	R404a	2 1/2:BSP(F)	2.6	500	900	1400
NXG 060	600	1020	16	232		√	R404a	2 1/2:BSP(F)	2.6	750	1250	1650
NXG 075	750	1295	16	232		√	R407c	3"BSP(F)	4.12	750	1250	1650
NXG 100	1000	1700	16	232		√	R407c	3"BSP(F)	5.6	750	1250	1650

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