

HIGH PRESSURE COMPRESSOR SYSTEMS FOR INDUSTRIAL APPLICATIONS

# Perfect Pressure Solutions





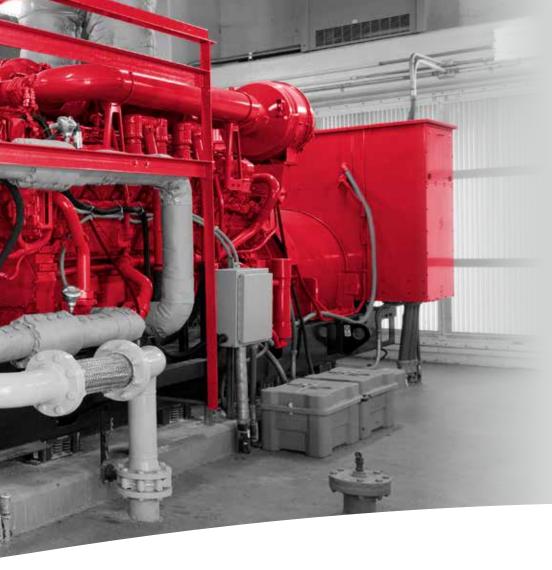
UNPARALLELED SYSTEM FLEXIBILITY, RELIABILITY & MAINTAINABILITY

#### Perfect Your Pressure Solutions with Reavell

Building on a 120 year heritage, Reavell continues to maintain its position at the leading edge of compressed air technology. The engineers behind the first Scott-Reavell steam engine, patented in 1894, probably wouldn't recognize our current high pressure compressor range, but they would certainly identify with our relentless drive for technical excellence and quality customer service.

As part of the global Gardner Denver High Pressure Division, Reavell continually invests in research and development, with the goal of continuously improving the reliability and efficiency of our machines.

Our compact compressor solutions are designed to offer market leading, maximum output with minimum size and weight. They deliver unrivalled performance and peace of mind for customers operating in some of the world's most demanding environments - at sea, on land and underground.



Many industries rely on compressed air and gas.
With unparalleled system flexibility, reliability and maintainability, Reavell is the perfect partner for your compressed air and gas systems.

# Air & Gas Systems You Can Rely On

Reavell is a world renowned name in industrial compressor supply. It's a name built on over 120 years of supplying the most reliable compressors on the market. From the pioneering compressors supplied to the world's navies since 1905, to today's compressors that support the most critical industrial applications, Reavell compressors are set apart by their reliability and longevity.

Not only are Reavell compressors reliable, our engineers have ensured that when preventative maintenance is required it can be carried out in the most cost effective way possible. Whether it's single tool high pressure valve replacements or replaceable cooler stacks, our compressors can be maintained quickly and easily, ensuring a longer service life.

Offering a flexible, reliable and maintainable source of compressed air and gas, Reavell compressors are used across a range of industrial markets.

- Aerospace
- Automotive
- Building Products
- Power Generation & Distribution
- Component Testing
- Electronics
- Universities & Research



Reavell

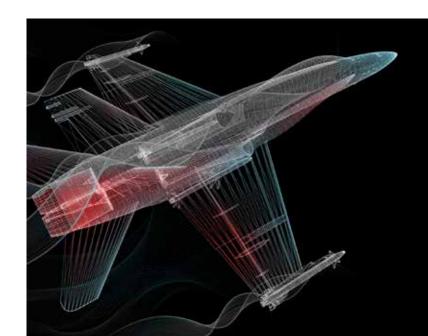


#### Reliable Beyond Limits

Reavell has been supplying compressors to critical industrial applications for over 120 years. Originally operating from the Ranelagh Road factory in Ipswich, Reavell is proud to play an integral part in the modernization of the City of London, with backup generator starting compressors providing the backbone of the London Stock Exchange and the Bank of England, and train braking compressors offering extreme reliability on the revolutionary London Underground.

Now a truly global company, Reavell compressors are specified anywhere reliability really matters. Air compressors for emergency flood control pumping systems protect homes and businesses in the USA, hydrogen compressors for turbine cooling and air boosters supporting large scale metal manufacture keep China's economy growing, and turbine control and air blast switch gear compressors support renewable energy applications in every corner of the globe.

It's testament to the reliability and longevity of our compressor systems that throughout this time we have built and maintained relationships with some of the world's leading companies and organizations.





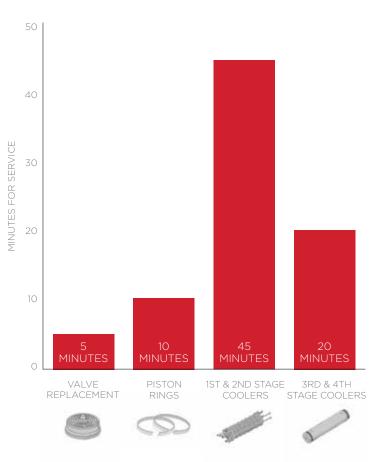
# Minimum Downtime

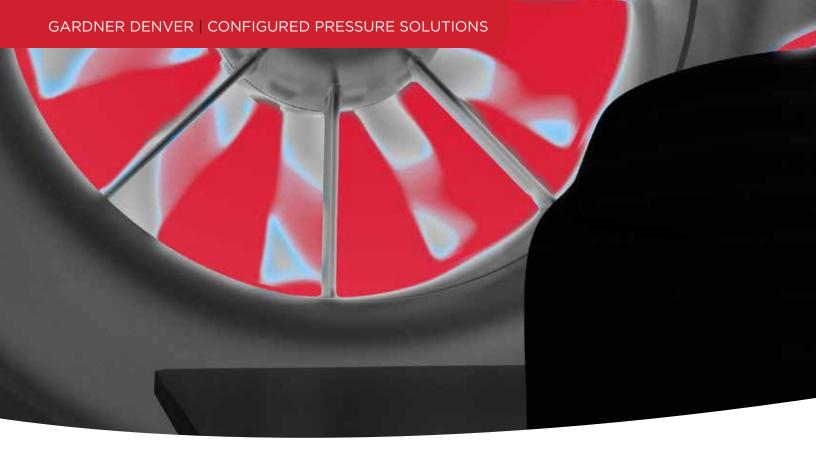
Reavell's dedicated engineering team ensure that our compressor designs have the ideal balance of a compact footprint, while ensuring that critical components are easily accessible. This guarantees that downtime during servicing and maintenance is kept to a minimum, as illustrated in the graph on the right.

#### 1,500 Hour Service Intervals

Reavell compressors come with market leading service intervals of up to 1,500 hours. We provide preventative maintenance kits that are specifically designed to minimize costs, that cover everything from minor air end servicing down to running gear overhauls. Not only will your machine run longer between services, but it will also be running long after competitor machines have had to be replaced.

# **Outstanding Accessibility**





# **Configured Projects**

Through our configured product offering we can satisfy many industrial air and gas requirements. Our comprehensive product offering combines air and water cooled compressor technology with market leading ancillaries to give you a total compressor solution.



#### Flexibility, Reliability, Maintainability

The Reavell 5437 offers performance flexibility, reliability and ease of maintenance. Shown here configured as a belt drive – exactly matching flow rate to customer request, and with an air blast radiator – offering water cooled performance and reliability without the need for an external cooling water system, this configured package offers durability where it matters most.



Offering a robust frame for air cooled machines the HAI configuration includes an ergonomically mounted gauge panel to simplify daily checks. With anti-vibration mounts as standard no dynamic loads are transferred through the floor, meaning there are no special foundation requirements. Additional lifting lugs and the ability to move on a suitable forklift make installation and servicing of these units as simple as possible.



#### Quiet, Controlled, Flexible

With all the benefits of the HAI range, the HQI offers an additional sound attenuated enclosure to allow installation in any workspace. The standard controller allows configuration of running parameters, giving service interval information and relevant warnings. An underslung, belt driven motor ensures the customers flow rate can be matched exactly and an integrated pressure maintaining valve and drain system ensures your compressor block runs reliably throughout its life.

# Reavell Range Performance Data

With a wide range of performance options, ensuring integration with a variety of systems, you can be sure that Reavell have the industrial solutions to fit your requirements.

#### LOW PRESSURE

(5)		DEI	DELIVERY PRESSURE				FLOW RATE								λX.	ELEVATED COMPRESSOR INLET						MAXIMUM	
COOLING	MODEL	MINIMUM		MAXIMUM		MINIMUM DELIVERY PRESSURE			JRE	MAXIMUM DELIVERY PRESSURE				MOTOR POWER		MAX. INLET PRESSURE			FLOW RATE @ MAX. DELIVERY PRESSURE			BOOSTER INLET PRESSURE *	
		BARG	PSIG	BARG	PSIG	M <sup>3</sup> /	HR/	CF	M	M <sup>3</sup> ,	/HR	CI	=M	KW	HP	BARG	PSIG	M <sup>3</sup> /	HR/	CF	M	BARG	PSIG
	5204	16	232	40	580	2.9	6.8	1.7	4.0	2.7	7	1.6	4.1	2.2	3	0.14	2	3.1	8	1.8	4.7	n/a	n/a
	5205	16	232	40	580	6.5	15.5	3.8	9.1	5.8	14.2	3.4	8.4	4	5	0.14	2	6.6	16.2	3.9	9.5	n/a	n/a
Air	5207	16	232	40	580	12.5	26	7.4	15.3	11.5	24.4	6.8	14.4	7.5	10	0.03	0	11.8	25.1	6.9	14.8	n/a	n/a
⋖	5209	16	232	40	580	26	43.5	15.3	25.6	24.1	40.7	14.2	24.0	11	15	0.03	0	24.8	41.9	14.6	24.7	6	87
	5211	20	290	45	653	26	62	15.3	36.5	24	57.1	14.1	33.6	15	20	0.03	0	24.7	58.8	14.5	34.6	n/a	n/a
	5213	16	232	31	450	27.9	66.5	16.4	39.1	26.5	64	15.6	37.7	15	20	0.03	0	27.3	65.9	16.1	38.8	n/a	n/a
	5212	10	145	35	508	25.1	63.7	14.8	37.5	22.3	57.9	13.1	34.1	15	20	0.14	2	25.4	65.9	14.9	38.8	n/a	n/a
Water	5217	10	145	40	580	57.5	136	33.8	80.0	50.5	125.6	29.7	73.9	30	40	0.14	2	57.5	143	33.8	84.2	7	102
×	5236	10	145	40	580	135	313	79.5	184.2	125	291	73.6	171.3	75	100	0.14	2	142.3	331.2	83.8	194.9	7	102
	5242**	17	247	35	508	171.5	285	100.9	167.7	170	282.5	100.1	166.3	110	150	1	15	337.8	561.4	198.8	330.4	10	145

#### INTERMEDIATE PRESSURE

(2)	MODEL	DELIVERY PRESSURE					FLOW RATE								MAX.		ELEVATED COMPRESSOR INLET						IMUM
COOLING		MINIMUM		MAXIMUM		MINIMUM DELIVERY PRESSURI			JRE	MAXIMUM DELIVERY PRESS			JRE	MOTOR POWER		MAX. INLET PRESSURE		FLOW RATE @ MAX. DELIVERY PRESSURE			₹Y	BOOSTEF INLET PRESSURE	
		BARG	PSIG	BARG	PSIG	M³,	/HR	CI	FM	M³,	/HR	CI	=M	KW	HP	BARG	PSIG	M <sup>3</sup> /	HR)	CI	=M	BARG	PSIG
Ā	5307	40	580	80	1160	15.6	28	9.2	16.5	14.7	26.5	8.7	15.6	11	15	0.03	0	15.1	27.3	8.9	16.1	6	87
∢	5309	40	580	80	1160	24.2	43.5	14.2	25.6	23.3	42	13.7	24.7	18.5	25	0.03	0	24	43.2	14.1	25.4	4	58
_	5317	40	580	85	1233	27.8	67.1	16.4	39.5	26.7	64.6	15.7	38.0	18.5	25	1	15	53.1	128.4	31.3	75.6	6	87
Water	5337	40	580	85	1233	68	159.7	40.0	94.0	66.3	156.5	39.0	92.1	55	75	1	15	131.7	311	77.5	183.0	6	87
	5342**	17	247	80	1160	152	292.9	89.5	172.4	146.2	281.8	86.1	165.9	75	100	1	15	290.5	560	171.0	329.6	10	145

# Tailored, Reliable, Efficient

The Reavell 5470 has been a staple of the Reavell range for over 20 years. Having been through several enhancements during this time it is one of the most reliable and proven configurable compressor air ends on the market. With the performance data shown in the performance table, and designed for use with most gases, the baseplate mounted direct drive system not only offers maximum reliability but also optimum system efficiency.

#### HIGH PRESSURE

(5)		DEI	LIVERY	PRESSU	JRE				FLOW	RATE				MA	7 X	Е	LEVAT	ED COM	PRESSC	R INLE	Т	MAXIMUM	
COOLING	MODEL	MINI	MUM	MAX	MAXIMUM		MINIM DELIVERY P				MAXI LIVERY		JRE	MOTOR POWER		MAX. INLET PRESSURE		FLOW RATE @ MAX. DELIVERY PRESSURE			ŀΥ	Y BOOSTER INLET PRESSURE *	
		BARG	PSIG	BARG	PSIG	M <sup>3</sup> ,	/HR	CF	FM	M <sup>3</sup> ,	/HR	CF	™	KW	HP	BARG	PSIG	M <sup>3</sup> /	HR	CF	M	BARG	PSIG
	5404	85	1233	350	5076	6.4	8.3	3.8	4.9	5.4	7.3	3.2	4.3	4	5	0.07	1	5.8	7.8	3.4	4.6	n/a	n/a
	5405	85	1233	350	5076	9.3	12.2	5.5	7.2	8.1	11	4.8	6.5	5	7	0.03	0	8.3	11.3	4.9	6.7	n/a	n/a
	5405E	85	1233	350	5076	9.2	16.4	5.4	9.7	8.3	15	4.9	8.8	7.5	10	0.03	0	8.5	15.4	5.0	9.1	n/a	n/a
Ą	5407	160	2321	350	5076	12.4	26.8	7.3	15.8	11.8	25.5	6.9	15.0	15	20	0.4	6	16.5	35.6	9.7	21.0	5	73
	5407H	160	2321	414	6005	12.4	26.8	7.3	15.8	11.8	20.8	6.9	12.2	15	20	0.03	0	12.1	21.4	7.1	12.6	5	73
	5409***	150	2176	350	5076	19.9	44	11.7	25.9	19.2	42.5	11.3	25.0	22	30	0.4	6	26.8	59.3	15.8	34.9	4	58
	5409H	160	2321	414	6005	19.9	43.3	11.7	25.5	19.2	41.8	11.3	24.6	22	30	0.03	0	19.8	43	11.7	25.3	4	58
	5417	140	2031	350	5076	27	67.6	15.9	39.8	25	65.5	14.7	38.6	30	40	1	15	49.7	130.2	29.3	76.6	6	87
Water	5437	140	2031	350	5076	65	159.2	38.3	93.7	64.1	156.9	37.7	92.3	90	125	1	15	127.4	311.8	75.0	183.5	6.5	94
×	5437H	160	2321	414	6005	75.8	157.3	44.6	92.6	64.1	133	37.7	78.3	75	100	1	15	127.4	264.3	75.0	155.6	6.5	94
	5442**	100	1450	350	5076	153.6	369.7	90.4	217.6	144	346.7	84.8	204.1	150	200	1	15	286.2	689	168.5	405.5	10	145

#### CUSTOM ENGINEERED

SOOLING		DE	DELIVERY PRESSURE				FLOW RATE							MAX.		ELEVATED COMPRESSOR INLET						MAXIMUM BOOSTER	
	MODEL	MIN	IMUM	MAXIMUM		MINIMUM DELIVERY PRESSURE		JRE	MAXIMUM DELIVERY PRESSURE			JRE	MOTOR POWER		MAX. INLET PRESSURE		FLOW RATE @ MAX. DELIVERY PRESSURE			RY	BOO! INL PRESS	_ET	
		BARG	PSIG	BARG	PSIG	M³,	/HR	CF	=M	M <sup>3</sup> /	HR/	CF	M	KW	HP	BARG	PSIG	M³,	/HR	CI	=M	BARG	PSIG
Δir	5450**	2.5	36	414	6005	437.5	874.4	257.5	514.7	143	285.8	84.2	168.2	185	250	1	15	284.2	567.9	167.3	334.3	18	261
٥	5470**	2	29	414	6005	638.4	1276.8	375.7	751.5	273.2	546.4	160.8	321.6	250	350	1	15	542.9	1085.8	319.5	639.1	18	261
Water	5460**	2	29	414	6005	866.9	1719.2	510.2	1011.9	194.9	386.5	114.7	227.5	250	350	1	15	387.3	768	228.0	452.0	18	261





# **Custom Engineered Projects**

At Reavell we realize your application is unique, with its own challenges and requirements. We pride ourselves on understanding the complex solutions our customers require, and custom build machines, tailored direct to your specific requirements.

# Water-Cooled, Compact

The Reavell 5460 is a truly customizable and reliable water cooled compressor system. Rated at 250 kW (335 hp), with 6 cylinder lines and a choice of 18 cylinders for each, it offers final delivery pressures from 2-414 barg (29-6000 psi), flow rates from 195-1720 m<sup>3</sup>/hr (114-1012 cfm) and can run as a zero loss booster up to 18 barg (261 psi) inlet pressure. Designed for use with most industrial gases, and with ultra-compact cooler separators installed on a common baseplate, this compressor system offers a remarkably small footprint with Reavell's customary reliability and maintainability.





The Reavell 5213 is our largest medium pressure air cooled machine, rated at 31 barg and 15 kW (449 psi and 20 hp). Shown here specified as a 20 barg, 66 m³/hr air (290 psi, 39 cfm) compressor used for component testing, with integrated forklift slots, a 3°C (37.4°F) dew point dryer, control panel and 500 litre (528 qt) storage vessel. All of the equipment is installed on a common baseplate, which combined with the integrated forklift slots and common control panel for all components make this a truly 'plug and play' solution that can be installed, commissioned and moved with minimum effort.

# Durable, Maintainable, ATEX Certified

The Reavell 5337 offers all of the flexibility, reliability and maintainability of the market leading 5437, but with a reduced pressure rating of 85 barg (1232 psi). Shown here engineered to a specific customer request for a spent caustic oxidization application to be installed within a hazardous area of a refinery. The package was designed to fit into an existing space, including footprint and existing electrical, delivery air and cooling water connections. The Reavell solution offered the additional benefit of a closed circuit plate heat exchanger allowing 70% of the absorbed power to be recovered.





# Quality: When It Matters Most

At Reavell we aren't like other industrial compressor manufacturers, we support specialist compressed air and gas requirements across industry, and that means we can offer you more.

All of our compressors are designed and manufactured in our factory in the UK, meaning we don't purchase 3rd party compressor components or sub-assemblies.

Because we design and specify every component to our exacting standards we know the limits of our machines, and we're happy to take our nitrogen boosters further than anyone else - whether it's explosive environments, sub-zero temperatures, or any other critical application, you can be sure that with a Reavell booster, we've got you covered.

#### **ATEX Certified**

All compressor designs have been ATEX assessed, and can be supplied with ATEX certification and a temperature rating of T2

#### 3.1 Material Certificates

For critical applications, 3.1 material certificates are available on pressure retaining parts across the range, giving complete material traceability

# Operation Below O°C (32°F)Ambient

All compressors can operate at ambient temperatures down to -10°C (14°F), with sump heaters available on all models rated above 5 kW (6 hp)



# Servicing & Maintenance

Maintaining your investment is an important consideration, and with a Reavell compressor you can be sure you've got the edge over the competition.

Our compressors come with service kits designed to minimize costs, covering minor air end servicing, right down to running gear overhauls.

			RUI	NNING H	OURS/ S	ERVICE	KIT	
		100	1500	3000	4500	6000	7500	9000
OR	5236	HSK2283	HSK2291	HSK2305	HSK2313	HSK2321	HSK2291	HSK2356
ESS	5317	HSK3883	HSK3891	HSK3905	HSK3913	HSK3921	HSK3948	HSK3956
COMPRESSOR	5342	HSK1015	HSK5711	HSK5754	HSK5746	HSK5754	HSK5711	HSK5762
0	5437	HSK1201	HSK1228	HSK1236	HSK1252	HSK1244	HSK1228	HSK1260

For more information on our service kits, visit www.gardnerdenver.com/highpressure/parts-and-service



#### Reavell: Your Specialist Partner

At Reavell we value our partners, and we know that every successful partnership is unique.

Speak to your local Reavell sales representative about the industrial solutions available within the Gardner Denver family.

### Reavell Training Days

Reavell has supplied high pressure piston compressors for over 100 years. And not only that, throughout our history we have offered solutions at every level of industry, supplying air ends to OEMs, semi complete packages to integrators, and complete turnkey packages to end users.

This unique position means we understand the market requirements and challenges faced at every level. So our unique industrial compressors offer you the flexibility to develop a system unique to your brand, but with all of the reliability of a premium industrial machine built in - that's why all of our boosters can be delivered with extra or modified equipment to ensure they fit into your system as efficiently as possible.

What's more, our engineers have minimized the module footprint, giving you maximum freedom to ensure your system is lightweight, compact, and includes plenty of space for maintenance.

Speak to your local Reavell sales representative today to find out more about our range of world class industrial compressors.

#### Factory Refurbishment Center

Depending on the planned lifetime of your systems, replacing compressor units is not always a suitable option. Our factory refurbishment center has supported key customers across industry and military applications for decades, so you can be sure that with Reavell – your total system will be supported for it's life.



## Perfect with Pressure

Unparalleled system flexibility, reliability and maintainability. Perfect your pressure solutions with Reavell.

#### Maximum Piston Efficiency

- Low pressure stage design ensures maximum efficiency, minimum nitrogen loss, and extreme reliability.
- High pressure stage design ensures minimum blow-by and oil consumption, maximum reliability, fewer wearing parts and extreme ease of maintenance.

#### Specialist Support

- Additional products available to enhance your nitrogen systems.
- Tailored training packages.

#### **Industry Leading Expertise**

 ATEX certified, 3.1 Material certificates, operation below 0°C ambient.

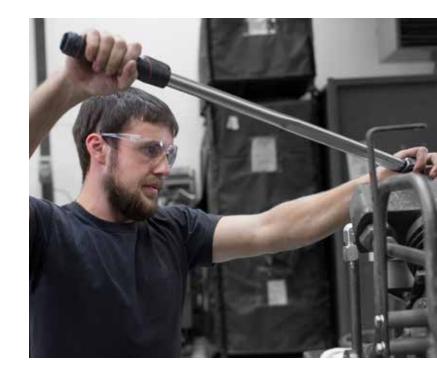
# Reavell Training Days

At Reavell we're proud of our products - and we like to show them off!

Our range of factory training days cover everything from important health and safety requirements and industrial basics right up to in depth machine maintenance training and market and application focussed sales training.

What's more, because we value our partners we can design a tailored training course around your requirements. So whether it's sales training centered on technical features and USPs or handson maintenance training for your engineers, we can offer the course for you.

All supported by our brand new factory training center, opened in 2017, and available at a time and place that suits you, speak to your local Reavell sales representative today to book your place.



The leader in every market we serve by continuously improving all business processes with a focus on innovation and velocity



Gardner Denver, Inc.

1800 Gardner Expressway Quincy, IL 62305 866-440-6241 www.gardnerdenver.com/gdproducts







©2019 Gardner Denver, Inc. Printed in U.S.A. GDHP-R-PPS 1st Ed. 5/19

