POWER GENERATION
OUR EXPERTISE

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Altronic has long been regarded as the world’s leading manufacturer of ignition and control systems for original equipment as a standard for most major gas engine manufacturers, packagers and end users around the world. Small, large, natural, biogas or other alternative fuel fired engines, Hatraco offers you the perfect ignition system for it.

Main features:
- Up to 20 cylinders
- Capacitor-discharge high spark energy
- Up to 2500 us spark duration
- Mod bus, rs-485 communication
- Windows based terminal software
- Camshaft, ring gear triggered
- User programmable
- Comprehensive diagnostics.
IGNITION
HATRACO PLUG AND PLAY IGNITION SYSTEM

“plug and play” IGNITION SYSTEM PACKAGES

Hatraco ignition rail systems are practically hand-made. Dedicated people are building the systems by hand and every wire and connection is carefully checked on quality and linkage. Finally all ignition rail systems are being tested in detail to make sure that all wires are properly connected, mounted in the correct order and can easily be installed as a “plug and play” system.
Hatraco ignition systems are manufactured for nearly any engine brand and model, for in-line and V engines. There are standard ranges for various engines available. Besides the standard ranges Hatraco’s ignition system can be custom made according to specific wishes and applications, also for small quantities.
Hatraco offers a large program of standard spark plug cables, based on a high quality PTFE (Teflon®) spark plug extension. In house production provides short lead times and a high grade of flexibility with respect to quantities, sizes, configurations and connector types. Extensions can be fitted with RFI reducing resistorized inserts. All extensions are being checked 100% on electrical conductivity and resistance value.
A new series of Bosch industrial spark plugs utilizes the latest spark plug technology to extend service life in the most demanding applications.

With the IRIDIUM SAVER Denso developed a high performance, durable, high quality spark plug for gas engines.

FLASHGUARD® industrial spark plugs are designed to increase effective spark plug service life by reducing flashover and electrode erosion while optimizing combustion and minimizing radio frequency interference (RFI).

Champion Industrial Spark Plugs cover the widest range of possible applications.
STITT spark plugs for industrial gas engines in compressor and generator application.

Igniters & Flame Rods - Reliable performance in applications that demand nothing less

High-performance spark plugs for stationary gas-powered industrial engines.

BG manufactures high performance iridium electrode spark plugs for industrial engines.

Prechamber spark plugs - designed specifically for gas engines. Accessories/tools: Spark plug socket, sealing rings, spark plug cleaning, spark plug grease.
Retrofit OEM solutions

The majority of the large industrial gas engines (>500kW) are standard equipped with OEM ignition systems. Many of these systems include engine specific coil rail- or coil-on-plug assemblies. Some of the OEM designs have proven to be unreliable and are typically expensive to replace. Hatraco has developed numerous solutions to retrofit these special setups into more simple and straightforward installations. We offer retrofits based on standard, well-proven products such as Altronic ignition coils for Jenbacher 300 & 600 series, Cummins QSK, Deutz MWM TBG/TCG series and more.
Modern natural gas fueled engines in CHP applications are high efficiency engines with high BMEP. In order to minimize gas consumption and maximize the power output, these engines are designed to run close to the detonation limit. They are set up for operation on natural gas with a specific heating value and methane number.

Natural gas suppliers can supply different gas compositions with similar heating value’s and different methane numbers. Safe operation is no longer ensured when the methane number of the gas is lower than what the engine is setup for.

Altronic has developed a detonation detection system that can be used to protect a gas engine against detonation damage. This DET-1600 is available for engines up to 16 cylinders. When detonation is detected, the DET-1600 can reduce engine load, retard ignition timing or shut down the engine.
The GTI Bi-Fuel System from Altronic.

- Allow diesel engines to safely operate on gas percentages up to a maximum of 70% of the total fuel requirement.
- Save on operating fuel costs by using natural gas with return to 100% diesel operation at any time.
- Allows the use of available or interruptible gas supplies.
- No modification to internal engine components is required.
- Cleaner burning natural gas reduces exhaust emissions.
- Reduces requirements for on-site fuel storage.
- Unique, patented design ensures no loss of power or efficiency.
Altronic offers a wide range of digital instruments that can be mounted in panels by the Altronic Controls department. A complete line of digital monitoring devices is available for integration into Altronic annunciator systems, for stand-alone service, or for use in conjunction with other non-Altronic monitoring and control systems. A partial list includes single and multipoint digital temperature gauges and scanners, pyrometers, pressure gauges and monitors, tachometers, and overspeed, and hourmeter devices. Many of these products are suitable for use in environmentally harsh or hazardous areas.
TDI AIR STARTERS
At Sea, Underground or on Rails, anything less than a TDI TURBOTWIN™ is a compromise.
- Low pressure turbine starter
- More efficient than any other
- No need for messy lubricators > cleaner and less maintenance
- High quality technology based on aviation > reliable
- Fewer moving parts
- Unique open air path allows contaminants pass through
- Lightest in its class
- Greased for life
- Aerodynamic speed control
- Max torque at zero RPM
- Easy installation.
START SYSTEMS

TECH DEVELOPMENT INC.

### TDI AIR STARTERS

<table>
<thead>
<tr>
<th>Engine range:</th>
<th>Suitable TDI:</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 6 litre</td>
<td>T20</td>
</tr>
<tr>
<td>up to 16 litre</td>
<td>T25</td>
</tr>
<tr>
<td>up to 20 litre</td>
<td>T30, 45M</td>
</tr>
<tr>
<td>20 to 70 litre</td>
<td>T50</td>
</tr>
<tr>
<td>70 to 300 litre</td>
<td>T100</td>
</tr>
<tr>
<td>&gt; 300 litre</td>
<td>Multiple T100’s.</td>
</tr>
</tbody>
</table>

- Aerodynamically self-limiting turbine rotors won’t overspeed.
- Vane-less design requires no lubrication of the drive air, eliminating oily, messy and hazardous emissions.
- Stable pre-engaged pinion gear.
- Indexing pre-engaged drive uses materials resistant to oils and fluids found in many wet sump applications.
- Large open air passages resist erosion and tolerate contaminants that could destroy other starters.
- A grease packed planetary gear set efficiently delivers the power and ensures maintenance-free operation.
- Heavy duty nose bearing.
- Vane-less design requires no lubrication of the drive air, eliminating oily, messy and hazardous emissions.
Hatraco’s air start package

AIR START PACKAGE

Standard and custom air starting systems
Hatraco calculates, designs and provides complete standard and custom made air starting packages that provides sufficient capacity for the required cranking time to start one or more engines. Hatraco starting packages are fully adapted according to your application and include compressors, air receivers, pressure regulator, control panel and starters. All Hatraco air starting systems can be certified according to customer specifications and various industrial standards.
SOOT & CATALYTIC CONVERTERS

**DCL International Inc.** is a leader in the design and manufacture of catalytic converters, catalytic mufflers, diesel particulate filters and stock mufflers for the air pollution control of off-highway vehicles, stationary engines, industrial processes and specialized on-highway vehicles. DCL supplies to world leading engine manufacturers, original equipment manufacturers and aftermarket retrofit.
**OIL LEVEL CONTROLLERS & LEVEL GAUGES**

**Electronic Level Measurement:** Advanced Electronic Instrumentation Solutions for Process Media Measurement.  
**Mechanical Level Measurement:** Versatile and Robust Mechanical Level Indication Solutions for Storage Tanks.  
**Sight Flow Indication:** Reliably and Efficiently Monitor Fluid Flow in Process Piping Systems.  
**Chemical Process Equipment:** Precise and Accurate Solutions for Monitoring the Performance of Chemical Injection Systems.  
**Engine & Gas Compressor Equipment:** Safety and Control Devices for Engine and Gas Compressor Applications.
For major Oil & Gas companies throughout the whole of Europe, Hatraco has supplied many Sophisticated Fuel Control-, Ignition- and Starting systems. The same people that have sold the products will also be there to assist with installation and help out with configuration, programming and finally starting up the engines. Training and instruction can be given on-site at the engine or inhouse by means of demonstration devices that will show all features of the systems. All products will be supplied with required product certificates and installation drawings.
Altronic
Hatraco is the only authorized Altronic service centre outside of the Altronic factory in Ohio USA. A number of special designed test benches enable us to provide service on the vast majority of the Altronic ignition program including the Deutz TEM and Waukesha CEC ignition systems.

TDI
To assure proper customer back-up, Hatraco also provides test and repair services on the Tech Development air starter program.

Engineering
In close cooperation with the customer, skilled Hatraco engineers and a direct access to a range products of well known manufactures enable us to develop tailor made systems or controls for virtually any engine application. Ignition, fuel control, interfacing, process visualization - many wishes can be fulfilled.

Service & Inventory
In addition to regular sales, Hatraco offers full service on the ignition systems within the Altronic program and TDI air starters. Because of our wide range of parts stock we are able to react fast in order to enable the customer’s proces in an appropriate period of time and reduce system downtime to a minimum.
COMPRESSOR MARKET

PRODUCT LINE

Compression- & Hazardous environments
For applications in hazardous/explosion endangered environments special products are required.
Our “compressor minded brochure” provides an overview of the following products:

- Ignition systems built in ex-proof enclosures,
- shielded coils, cables and sparkplugs.
- Fuel control products
- Wear control products
- Engine start products
- and more...

WEAR CONTROL
ABOUT US

Activities
Hatraco is an independent trading company specialized in ignition, governing and control products for industrial (spark ignited) reciprocating engines. 25 Years experience has lead to a situation where Hatraco can be a good partner in the upgrade of any engine making use of the best products that the market offers in order to create a custom made solution for both end users as well as packagers or OEM’s.

History
Hatraco (Hasselaar Trading Company) was founded in 1984 by Co Hasselaar as a one-man trading company in Zevenaar, a small city on the eastern border of the Netherlands. He quit his job being a sales engineer and started off on his own trading business in products for industrial reciprocating engines.

In the following years, business grew and Hatraco became European distributor for Altronic Inc. The company built up a dealer network throughout Europe and through this network its main goals are to establish a solid and reliable European source for products of well known world wide manufacturers.

Representation
Hatraco is authorized European distributor for
Altronic LLC - Ignition and engine control products
Tech Development Inc. - Engine air starters
Kenco Engineering Co. Inc. - Level control products
The BG Service Co. Inc. - Ignition accessories
Denso - Industrial spark plugs
Bosch - Industrial spark plugs
Stitt - Industrial spark plugs
Champion - Industrial spark plugs
DCL Inc. - Catalytic converters, diesel particulate filters

Manufacturing
Spark plug leads
for the after market as well as for the OEM market.
Pre-wired ignition systems
for a wide variety of engines, standard or shielded

Russia
In 2008, Hatraco BV established a daughter company (Hatraco OOO) in the South Moscow Region, from where we are covering Russia for all manufactures that are also represented by Hatraco BV in Europe.

ХАТРАКО ООО

Russia
In 2008, Hatraco BV established a daughter company (Hatraco OOO) in the South Moscow Region, from where we are covering Russia for all manufactures that are also represented by Hatraco BV in Europe.

Company founder - Co Hasselaar
Head Office in Duiven
Sales and Production facility in Duiven
REPRESENTATIVES

France
Seiser-pro.com
Mr. Martin Seiser
Z.A. Champs Casselin
F-89000 ST. GEORGES/Baulche
Tel : (+33) 386462881
Cell : (+33) 688882332
Fax : (+33) 386483958
E-mail : seiser@seiser-pro.com
Internet: www.seiser-pro.com

Spain
Seifer Representaciones SL
Mr. Enrique Bernardo
Colada de Pozuelo 2B
Polg. Ind. Ventorro el Cano
(Antigua Ctra. Boadilla del Monte)
28925 Alcorcon (Madrid)
Tel : (+34) 916327153
Mobile : (+34) 629305699
Fax : (+34) 916324028
E-mail : ebl@seyber.com
Internet: www.seyber.com

Estonia, Latvia, Lithuania
SIA I-con
Mr. Edzus Kašs
Ausekja 3-63
LV-1010 Riga, Latvia
Tel : (+371) 26176130
E-mail : sales@icon.lv
Internet: www.icon.lv

Germany
BHKW Systeme Weigelt GmbH
Service & Vertrieb
Mr. Lutz Weigelt
Bahnhofsplatz 2
86459 Gessertshausen
Tel : (+49) (0) 8238964770
Mobile : (+49) (0) 1717728584
Fax : (+49) (0) 82389647746
E-mail : info@bs-weigelt.de
Internet: www.bs-weigelt.de

Italy
Forte Engineering Srl
Forniture e Tecnologie per l’Energia
Mr. Maurizio Zemiti
Via Lombardia, 3
26015 Soresina (CR)
Tel : (+39) 0374341399
Mobile : (+39) 3358393336
Fax : (+39) 0347341399
E-mail : info@forte-engineering.it
Internet: www.forte-engineering.it

Hungary
Euroturbo Kft.
Mr. Zsolt Pál
Cankö tér 8.
1223. Budapest
Tel : (+36) 14248365
Fax : (+36) 14248366
E-mail : sales@euroturbo.hu

Poland
Zamtech Sp. z.o.o
Mr. Marek Klos
ul. Sw. Huberta 3
09-408 Plock
Tel : (+48) 242648398
Mobile : (+48) 604088770
Fax : (+48) 242648822
E-mail : biuro@zamtech.com.pl
Internet: www.zamtech.com.pl

Turkey
Lara Limited
Mr. Ahmet B. Simsek
Deniz Mahallesi, Konyaalti Caddesi
Gündüz Apt. No: 19 D: 12
Muratpaşa / ANTALYA
Tel : (+90) 2422440302
Mobile : (+90) 5331423696
Fax : (+90) 2422440545
E-mail : simsek@laralimited.com
Internet: www.laralimited.com

Romania
IR cat-co s.r.l.
Mr. M. Nestor
Sos. Bucureşti, nr. 10
077055, Clorogăria
Bucharest
Tel : (+40) 0213170190
Fax : (+40) 0213170196
E-mail : office@ircat.ro
Internet: www.ircat.ro

United Kingdom
R & M Walsh Ltd.
Mr. Richard Walsh
22 Bridle Path
Ash Bank
Stoke on Trent ST2 9EG
Tel : (+44) 1782858769
Fax : (+44) 1782858769
E-mail : richard@rmwalshtld.co.uk
Internet: www.rmwalshtld.co.uk