



NITROSource NEWS



JUNE 2021

Hello and welcome to the 9th edition of NITROSource News. We hope you are all keeping well and staying safe.

Parker is fortunate to have a large number of top gas generation distribution partners throughout the world, and we believe they are the best in the business.

Quite often we see orders for generators being installed for applications that are a terrific win in the first place. As time progresses, and the customer's business grows, they come back to Parker and purchase our latest gas generator models.

This is testament to both the product reliability and also how the solution is specified, presented, installed and cared for by you, our local specialists.

Sharing knowledge of applications and the benefits customers experience is key, and we always welcome the opportunity to learn about these successes.

This publication focusses on the country of Turkey. DHE Industrial Compressed Air and Gas Solutions Ltd., based in Istanbul, is one of Parker's long-standing partners and they have kindly provided information about their organisation and shared a few application details.

New Brochures and White Papers available!

See the full list of new literature on the last page.









REPUBLIC OF TURKEY

Turkey is a fascinating country straddling both Asia (95%), and Europe (5%). It's the 6th most popular tourist destination on the planet.

Now with a population of approximately 84 million people, the Anatolian (Asian) region of Turkey is thought to be one of the early seats of civilisation. With human habitation dating back to the Palaeolithic period, starting some 3.3 million years ago.

The Turkish Republic came into existence on 29th October 1923, with the dissolution of the Ottoman Empire that ruled as an absolute monarchy from the late 1200s.

Turkey has huge cultural diversity and is very much a multi-ethnic and multi-religious

base covering everything from traditional metal manufacturing to food production and packaging, it is certainly a region that benefits onsite nitrogen gas generation applications.

Mr Bashar Momani, Director of DHE explains
- "We have been a loyal partner of Parker and
previously domnick hunter since our foundation
in 2003. Our company ethos is very much
"right products for the right application", fully
supported by expert technical and after sales
personnel to provide a service aimed to always
exceed our customer's expectations. We invest
heavily in our 30 staff to ensure the right mix of
abilities and skills to undertake gas generation
projects no matter how large or small, from
concept to commissioning and hand-over, with
on-going support for the life of the equipment."

"I firmly believe that this approach has enabled DHE not only to grow the Parker gas generation business in Turkey, but also to retain customers and become their gas generation supplier of choice. Once we have convinced a prospect to ditch their traditional bulk liquid or cylinder method of nitrogen gas delivery, they stay with us"

"To reinforce this, I would like to share with you the following application details, demonstrating that once a company has experienced the benefits of installing a Parker nitrogen generator system through DHE, they never go back to a traditional gas company supply."



NITROSOURCE NEWS

JUNE 2021 ISSUE #09

Modified Atmosphere Packaging for Kurukahveci Mehmet Efendi Coffee



Produced from the finest Arabica beans, Kurukahveci Mehmet Efendi coffee is modified atmosphere packed to extend its shelf life and preserve its special aroma and taste, guaranteeing quality and customer satisfaction.

Whether drinking at the conclusion of a formal meal, or just on its own, Turkish coffee is a lot more than just a beverage, it is a cultural tradition going back centuries. The coffee is generally very finely ground and boiled in a special vessel, called a "cezve", to create a froth. The grounds are left in the coffee when it is served, and it is accompanied by a glass of water to cleanse the palate before drinking, and to give time for the grounds to settle to the bottom of the cup, or "kahve fincani".

Back in 2006, DHE entered discussions with Kurukahveci Mehmet Efendi to configure a nitrogen generation system for MAP of their coffee. Subsequently a MAXIPLUS116 and DME040 pre-treatment system with a capacity of 24.5 m³/h @ 0.1% MROC was ordered and installed.

In 2009 the decision was made to use nitrogen gas partially for product transfer. Based on the positive experience with DHE, and the first system, a second Parker nitrogen generator was installed. This time the new MAXIGAS120 was supplied, complete with MXS102C/DS pre-treatment package, to produce $148 \text{ m}^3/\text{h} \otimes 5\% \text{ MROC}$.

In 2011 the success of using nitrogen for part of the product transfer operation, led to the installation of a second MAXIGAS120 to convert the whole product transfer process to gas generation.

In 2017 product demand meant that Kurukahveci Mehmet Efendihad needed to double their production capacity and expand into a new additional building. The MAXIPLUS116 was retired and 2 x N2-80Ps, with MXS102C/DS pre-treatment, was proposed and supplied by DHE.

At present the 2 older MAXIGAS 120s and 2 new N2-80Ps provide the factory's total demand for nitrogen.











NITROSOURCE NEWS JUNE 2021 ISSUE #09

Galvanised Wire Production at Ozyasar



Özyaşar is the biggest galvanized wire manufacturer in Turkey. They originally used nitrogen gas evaporated from bulk liquid, but in 2013 they explored the concept to produce nitrogen onsite, to reduce their production costs. After several studies and calculations of projected cost savings with DHE, they decided to specify and invest in a system with a capacity of 150 m³/h. As a result, they placed an order for 3 x MAXIGAS120 @ 0.1% MROC purity, trusting DHE's capabilities and the Parker brand.

In 2015 when the company's domestic and international sales increased, they had to establish a new galvanizing line and their nitrogen consumption consequently doubled to 300 m³/h. DHE proposed a system with the newly launched

2 x new NITROSource N2-80P units operating alongside 3 x MAXIGAS120s.



Ozvasar's factory

NITROSource PSA nitrogen generators, consisting of 2 x N2-80P @ 0.1% MROC, to align with the existing 3 x MAXIGAS120 nitrogen generators.

Galvanized wire is used in garden and fence systems, electrical cables and many other areas.



Bright, galvanised wire, protected by inert nitrogen during its manufacturing process.

Nitrogen for Laser Cutting at Inkosan

iN•XS

Inoksan is one of the largest stainless steel kitchen and catering equipment manufacturers in Turkey. Founded in 1980 in a small workshop, they now operate in a 20,000m2 factory, investing heavily in the latest technologies and exporting their products to five continents.

One of their technology investments was a Salvagnini laser cutting machine, but using nitrogen assist gas from manifolded cylinder packs was proving costly and troublesome.

In 2012 DHE proposed nitrogen generation as a solution to replace the MCPs, and subsequently a MAXIGAS116 with a 40 barg booster system was proposed and ordered, to produce up to 20.9m³/h @ 100ppm MROC. Enabling the Salvagnini laser to cut up to 6mm thick stainless steel, quickly, continuously and with a clean edge.

Inoksan's CEO Vehbi Varlik's vision to invest in technology to increase quality and lower cost, ensured the company grew and very soon another laser was needed to meet the demand. This time a new fibre technology laser was purchased in 2015. Based upon the very positive experience with DHE, and the MAXIGAS116, there was no hesitation in consulting DHE about the requirements for the new laser's assist gas requirements.

To cope with the higher nitrogen gas demand a new NITROSource N2-80P was selected @ 100 ppm MROC.



The MAXIGAS and NITROSource operate side by side in a purpose-built plant room annex to protect them from the heat of the Turkish sun. They provide a continuous supply of nitrogen, without the need to stop the lasers to change manifolded cylinder packs, or all the hassle of managing this costly supply method.

Standing from left to right: Uğur TOKATÇIOĞLU, Fikret İSABETLİ, İlker ERSOY, Yusuf Onur CATALBAS, Başar MOMANİ, (Owner), Burak YÜCE, (Sales Director), Ali Rıza ÇINAR, Veli Cihangir ÖZYAR, Burak Duran GÜZEL, Bayram ÖZKOL, Sinan YORGANCI, Haluk KUZU.

> Kneeling from left to right: Doğan DEBRE, Metin ÇELİK.

Thanks to Bashar and DHE for sharing a few examples of applications where customers remained with DHE and Parker as their business grew and required more nitrogen gas. We're certain this information will be valuable in conveying the message that great products, supported by great distributors ensure great success and very happy customers!

Do you have details of successes you would like to share? Promoting your hard work and business ethics amongst our trusted partners? Your knowledge and input is extremely valuable to help us grow around the world. Please let us know a few details, and we can report the information in an upcoming issue of NITROSource News, that we can all benefit from.





NITROSOURCE NEWS

JUNE 2021 ISSUE #09

The marketing team at Parker GSFE have been busy compiling information to publish documentation and brochures, that you may find useful in your pursuit of industrial gas generation sales?



NEW WHITE PAPER

This white paper explains how the NITROSource PSA Energy Saving Technology (EST) operates, and why comparing air to nitrogen ratios isn't always an accurate method of determining nitrogen generator productivity and efficiency.



BROCHURE UPDATE

An updated Aerospace brochure explaing the advantages of Parker nitrogen gas technologies for fuel tank inerting, as well as high pressure systems for tyre, oleo strut and escape slide inflation.



NEW WHITE PAPER

This white paper covers the use of nitrogen in the brewing industry, and how Parker generated supplies can be very cost effective against traditional bulk liquid/cylinders, as well as replacing CO_2 in some applications. It also includes details of a brewery customers trial and report on using Parker gas generation. Along with gas purity vs beer dissolved oxygen information.



SIZING GUIDE UPDATE

The sizing guide has been updated and now includes 50ppm, 250ppm and 500ppm nitrogen gas output flow rates for the NITROSource Compact range. As well as the latest refrigerant dryer models and sizing data for units using the low GWP, (Global Warming Potential), R513A refrigerants.

New Fact Sheets

A series of information sheets are now available that explain in a little more detail some of the features and advantages employed on the NITROSource and NITROSource Compact models. They have been produced in response to frequently asked questions, and provide answers to the most popular topics requested.



Snowstorm Filling for CMS (Carbon Molecular Sieve) - What is it, how does it work and what are the advantages.



NS-PSA and NSc for Pharmaceutical Applications – What is pharmaceutical grade nitrogen? What about the assay with regards to argon? Gas company specifications for Pharmaceutical N2?



What does a Mass Flow Controller (MFC) do? - All Parker NS-PSA and NSc nitrogen generators are fitted with an internal MFC. What is it and what are the benefits?



Why do we need a buffer vessel for every generator bank?

These are available to download from TechNet. If you have any suggestions for subject matter regarding fact sheets, white papers or general brochures to help you sell Parker nitrogen gas generators, please let me know and I will do my very best to accommodate your requests.

Thanks for reading!

And thanks to those that have contributed article details for this edition

If you have an application to share, please let me know and I will help develop an article. I just need the basic information and I can then work with you to expand upon the detail.

Send to phil.r.green@parker.com Cell +44 (0) 7768 317040

For more information contact:



FILCO_®, spol. s r.o. Dvorská 464/103 CZ-503 11 Hradec Králové tel.: +420 495 436 233 info@filco.cz, www.filco.cz