

### THE AXCES GROUP

The Axces Group consists of several Axces divisions working closely together to bring you the best possible solution in exhaust systems. Each Axces division has profound knowledge and experience in its own specialty and is equipped with the best tools to apply that knowledge.

All focussed and highly specialized around the design, engineering, production and fitting of exhaust gas systems for use in the Marine, Industrial and Energy markets. Whether you choose complete Fully- Integrated Exhaust Systems, Water Injected Exhaust Systems, Emission Control or more limited solutions, you will always benefit of Axces' competence and knowledge!

Because Axces is present worldwide, the Axces Group through cooperation between the different parts, has always quick access to the latest technologies. This means Axces can deliver the best possible exhaust system for every conceivable situation for the lowest price possible and at the best conditions.

## ACOUSTICAL XCELLENCE IN COMPETENT EXHAUST SYSTEMS

Axces represents: Acoustical Xcellence in competent Exhaust Systems. Added value is provided by translating the results of extensive scientific research into practical, cost- and time-saving solutions. Combining intelligence with clarity. It is a philosophy that has proven to be very successful.

In just a few years, literally thousands of exhaust silencers have been installed in both inland and seagoing vessels, which sail all over the world on a daily basis. Within Axces, high-level scientists work together with field experts to develop exhaust silencers and a complete exhaust system for diesel engines that helps our customers outperform the competition.



# FULLY INTEGRATED EXHAUST SYSTEMS

**THE SCOPE OF AXCES** is defined in the context of everything that is installed after the exhaust of an internal combustion engine. Delivery of fully integrated exhaust systems customized to the individual ship is our key.

#### **DESIGN**

Axces is guaranteed to meet every noise requirement with tailor-made silencer solutions. With strong expertise in both acoustics and physics, Axces specialises in custom engineering.

#### MANUFACTURING

The knowledge centre, sales and distribution of Axces is located in the Netherlands. The Axces production in Poland produces top quality solutions at a very competitive price.

#### **SUPPLY**

Axces can provide you with everything you need. Axces can deliver the most commonly used accessories within 24 hours. Each part or system comes with full service and full technical support.

## AXCES STEAM AND FLOW **CONTROL**

Q.E. International B.V. was established in 1979. In April 2019, Q.E. International B.V. was acquired by The Axces Group. The official company name after this point will become Axces Steam and Flow Control B.V. while the trade name will remain Q.E. International.

Axces Steam and Flow Control (ASFC) is the expert on working towards a guieter and safer industrial environment. With innovative solutions in the field of noise, vibration and pulsation, ASFC sets a higher standard than the competition. Solving



a broad range of noise pollution issues worldwide built the reputation suitable for an international organisation. Custom products ensure that the noise pollution problems are dealt with in an adequate manner. Our knowledge is broad and safety is important. ASFC helps your company with handling precision equipment, calculations, legal requirements and mandatory approval.





### **VENT SILENCERS**

Safety and control valves abound in process industries. Whenever these operate to release steam or gas to the atmosphere there is noise generation. This may form a danger to personnel and a nuisance to neighbours. By fitting vent silencers the noise is appreciably reduced. For many years ASFC has been a leading designer and supplier of vent silencers all over the world. In addition to a standardised range ASFC engineers have specialised in designs to comply with the stringent specifications of clients.



## DIFFUSERS

Pressure reduction in gas or steam pipelines is often achieved by control valves, accompanied by the generation of high noise levels. To reduce this noise ASFC has developed an excellent device: the noise reducing diffuser. Installing one of these downstream the control valve the apportionment of pressure drop is altered and, too, the noise generated. An additional advantage is an increase in the life of the valve because of reduced loading. Our diffusers have demonstrated their benefits in many piping systems and are fitted as standard equipment by renowned valve manufacturers.





## **PULSATION DAMPENERS**

Most of the compressors installed in process plants generate noise. This may be low-frequency noise propagating over large distances. Low frequency pulsations produced by the compressor often induce vibrations that, over time, can damage the piping system and its adjuncts; damage requiring expensive repairs. Installing pulsation dampeners reduces these unwanted effects by attenuating the pulse levels entering the piping network so contributing to an extended plant life and reducing noise radiated from the piping. Many compressor manufacturers have taken advantage of standardised systems in addition to custom-built dampers found in the service of completely satisfied clients all over the world.

## **IN-LINE DAMPENERS**

The process industry uses many regulating and control valves to control pressures and flows. Noise can be an unwanted by-product when using valves. ASFC has been at the forefront of the design, fabrication and supply of high quality in-line noise dampeners for many years. In addition to a standard range of dampeners, ASFC has an engineering group specialised in producing solutions for each specific application. We are able to help you apply the optimum solution to your problem. Individually designed and fabricated to meet the specific requirements of the plant. The expertise that we have gathered has contributed to the leading position of ASFC within the industry. Our motto is

#### "TO GO BEYOND THE POINT WHERE OTHERS STOP"

and this has been demonstrated many times.

## **BAFFLE SILENCERS**

Baffle silencers, housed in rectangular or cylindrical enclosures, include one or more acoustic absorbent baffles. Constructed as a cassette, each baffle contains the absorbent material that converts noise energy into friction heat. Different types of absorbent materials are used dependent upon specifications and noise attenuation. The baffle thickness (spacing and length) has two different functions, the amount of noise attenuation and the frequencies treated. Our baffle silencers are used in a wide variety of applications heating- and airconditioning ducting.



## **EXHAUST SILENCERS**

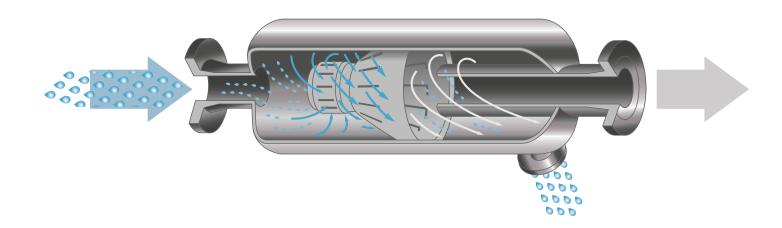
Maritime vessels and power generators are amongst the users of high capacity diesel and gas engines. The unsilenced noise levels produced by these machines are markedly greater than the permissible levels under existing regulations. In addition to the low frequencies middle and high frequency noise is present in the exhaust and it is this that requires especial treatment.

An ideal silencer will combine compact proportions with optimum attenuation over the widest possible frequency spectrum with the lowest possible pressure drop. ASFC has a long tradition in the design, fabrication and supply of such exhaust silencers and counts many of the leading motor manufacturers amongst its circle of clients. For those applications where no standard silencer is suitable, custom-built silencers can be supplied to meet space limitations or especially demanding noise specifications



## **SEPARATORS**

Separators are to be found in the (petro)chemical, paper, food and pharmaceutical industries and are principally designed for efficient removal of particulates from gas or vapour streams. Applications include protection of down-stream equipment from moisture droplets in steam lines, elimination of oil droplets from gas lines, or cleansing of exhausting vapours before being vented to atmosphere. Our separators are very reliable and ideally suited to high or low temperatures and pressures. Custom-built silencers can be supplied to meet space limitations or especially demanding noise specifications.





## THE AXCES GROUP



## THE AXCES GROUP

The Axces Group designs and manufactures industrial exhaust systems, silencers and chimneys including flue gas cleaning systems as well as acoustic enclosures, steel structures and steel products.

#### AXCES STEAM AND FLOW CONTROL B.V.

Langesteijn 134 3342 LH Hendrik-Ido-Ambacht The Netherlands

+31(0)172 619 246 sales@axces.com www.steam.axces.com

Formerly known as Q.E. International BV

#### AXCES INDUSTRIAL STACKS B.V.

Visiting address: Veersedijk 59 3341 LL Hendrik Ido Ambacht The Netherlands +31 (0)786 459 822

#### AXCES B.V.

4691 SL Tholen The Netherlands +31(0)166 603 285 info@axces.com www.axces.com

Ondernemersweg 12

Axces BV includes: Axces Wet Exhaust Systems, Axces Emission Technology, Axces Industrial Stacks, Axces Exhaust Systems

#### $AXCES\ PRODUCTION\ SP.\ Z\ O.O.$

Młyny 16B 37-550 Radymno Poland +48(0)603 676 903 axces@axces.pl www.axces.pl

## AXCES ASIA (SINGAPORE)

No. 7 , Toh Guan Road East #07-07 Alpha Ind. Building Singapore +65 6569 0570 info@axces.sg

