



**VENT  
SILENCERS**



**AXCES**

*Steam and Flow Control*

## **THE SOUND OF SILENCE BECOMING 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 quieter 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 a reputation suitable for an international organisation. Custom products ensure that the noise pollution problems are dealt with adequately.



The knowledge is broad and safety is important. ASFC helps your company with handling precision equipment, calculations, legal requirements, and mandatory approval.

### **MISSION**

Strive to be the expert in the field of noise, vibration, and pulsation. More than 35 years of experience has evolved into more innovative solutions and raising the bar of the competitors. We are providing the best results through custom-made products.

### **VISION**

Our goal is to create a carefree, helpful, and understanding environment for our customers. Expect nothing less than the best quality, attention, and expertise. Our motivation is to deliver excellence through our experience. We thrive to establish a long-term relationship with all of our customers.

## SUPPLIERS

We always select our suppliers carefully therefore, we only work with the best in the industry. Our suppliers are encouraged to be creative and innovative and to work on building a long-term relationship with us. That is why we can ensure quality and dedication to our customers.

## ENVIRONMENT

The environment is one of our most important responsibilities. A safer and healthier environment is our goal and we are working towards that on a daily base. Therefore, we committed ourselves to the strict environmental rules of ISO 14001.



## QUALITY

Quality means a lot to us. We are proud that we hold various certificates, which demonstrate how important quality standards are for Axces Steam and Flow Control. A result of this is that we are considered a pioneer in the market.

## CUSTOM DESIGNS

ASFC has also specialized in the designs of silencers to comply with customer specifications. The extended experience is at your disposal in solving complex noise problems and in the translation of extreme demands into practical solutions and our continuing drive to be leaders in our chosen fields is evidenced by the successes that they have demonstrated. ASFC produces various industrial silencers and provides advice according to the customer's wishes.

# **VENT SILENCERS**

## **A RESOUNDING REPUTATION IN NOISE ABATEMENT**



## **INTRODUCTION**

In process industries, countless safety valves and control valves are to be found as in petrochemical, chemical plants, and electric power generating stations. Opening of these valves to vent steam, gas, or vapor is accompanied by very high levels of noise; 150 to 160 dB(A) is not uncommon. Potentially a great risk of operator hearing damage in addition to the burden upon the environment especially through venting during the night hours. Stringent limitations on noise production are imposed. Fitting Vent Silencers can reduce accidents arising from shock reactions, eliminate noise-induced hearing damage of personnel and prevent complaints from neighbors.

## **ASFC VENT SILENCERS WITH A GUARANTEED NOISE REDUCTION**

ASFC has been, for many years, a leader in the design, production, and supply of the best in Vent Silencers – throughout the world. In addition to standardized silencers. ASFC design engineers have specialized in providing solutions to unique situations Irrespective of the difficulty of the problem ASFC will find the best solution for you. Quality Equipment with guaranteed performance. And ASFC selects the most favorable location for fabrication, a further advantage in the pricing of the silencers.

## **PRINCIPLE OF OPERATION**

Each ASFC Vent Silencer comprises a diffuser, an expansion chamber and, an absorption section. In the diffuser and expansion chamber, the pressure of the venting vapor is reduced in stages to atmospheric pressure – even from 100 bar. At the same time, the vapor velocity is reduced. A shift in the noise spectrum towards higher frequencies is achieved so that absorption at these frequencies is more easily made. The venting vapor is led through vapor channels in the absorption section where sound energy is converted to friction heat.

## AVAILABLE AS

### STANDARD SILENCERS

ASFC standard silencers are economically priced in carbon steel (internally and externally) with absorption material is mineral wool. The exterior is particle-blasted to SA 2 ½ and coated with 40 micron DFT of zinc-rich prime paint.

### CUSTOM DESIGNS

ASFC has also specialized in the designs of silencers to comply with customer specifications. Our extended experience is at your disposal in solving complex noise problems and in the translation of extreme demands into practical solutions and our continuing drive to be leaders in our chosen fields is evidenced by the successes that we have demonstrated.

## CALCULATION

All components exposed to internal pressure are calculated and constructed to comply with the ruling Pressure Vessel Code for the district or industry in which the silencer is to operate.

Examples of such codes are ASME VIII Division 1, National PV Codes of France, The Netherlands, Italy, Germany, United Kingdom, Australia and, RSA. The final design will be based upon:

- ✓ *Fluid properties*
- ✓ *Mass flow*
- ✓ *Fluid temperature*
- ✓ *The fluid pressure upstream and downstream from the valve*
- ✓ *Required (or permitted) noise level*
- ✓ *Nozzle connection size*

## ASFC YOUR PARTNER IN INDUSTRIAL NOISE ABATEMENT

In short, with more than 40 years of experience ASFC has demonstrated to its loyal and satisfied clients that it is the partner in solving industrial noise problems and we can perform the same services for your organization. Our advisors will be pleased to confer with you to find the most effective and economical approach to your problem.

Vent Silencer at Piesteritz Plant





## 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  
[www.steam.axces.com](http://www.steam.axces.com)  
[sales@axces](mailto:sales@axces)

Formerly known as Q.E. International BV

### **AXCES INDUSTRIAL STACKS B.V.**

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

### **AXCES B.V.**

Langesteijn 134  
3342 LH Hendrik-Ido-Ambacht  
The Netherlands  
+31(0)166 603 285  
[www.axces.com](http://www.axces.com)  
[info@axces.com](mailto:info@axces.com)

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

### **AXCES PRODUCTION SP. Z O.O.**

Młyn 16B  
37-550 Radymno  
Poland  
+48(0)603 676 903  
[info@axces.pl](mailto:info@axces.pl)  
[www.axces.pl](http://www.axces.pl)

### **AXCES ASIA (SINGAPORE)**

No. 7 , Toh Guan Road East  
#07-07 Alpha Ind. Building  
Singapore  
+65 6569 0570  
[info@axces.sg](mailto:info@axces.sg)

