







### Rotek Energy & Chimney Systems founded in 1993.

Rotek is engaged with production of stainless steel prefabricated and free standing chimney systems, refuse chutes, linen chutes, pneumatic conveying piping products, kitchen hood and industrial hood exhaust ducts, ventilation ducts, air supply and vent towers, flue gas purification filters, chimney damper, silencer, fan and special designed chimney terminals as well as rotary cap for residence building, business and shopping center, hotels, hospitals, factories and industrial plants.

Rotek, provides comprehensive solutions to its customers, is the leader company of the sector in Turkey with its experienced, computer systems supported staff, European standard products and after sales service.



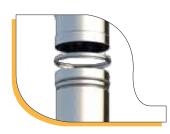
### **ROTEK CHIMNEY SYSTEMS**



Rotek chimney systems are designed for use in all gas, liquid or solid fueled heating systems (negative and positive condensation or without condensation), diesel generators or co-generation systems and hood exhaust systems.

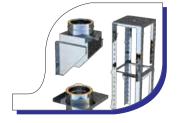
The standard products are made of high-grade, corrosion resistant AISI 316L and 316Ti stainless steel with thicknesses of between 0.40 mm and 3.00 mm in accordance with the diameters of the chimneys.





The modules have 50 mm male - female connection. For a smooth connection and good transition, the diameter of one end of the module is enlarged in automatic machine. A perfect leak proofing is achieved, thanks to precise joining, use of high temperature sealant at the joints and tightening with external clamp. The chimneys are specially designed to compensate the thermal expansions themselves.

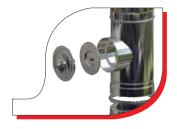
Also, the telescopic supports that are anchored to the concrete shaft in the vertical axes between 3 m and 50 m spacing according to the diameters, compensate the thermal expansions and bear the static loads of the chimney at the same time.

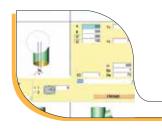




Specially designed chimney terminals and caps, which prevent back draft and increase draft, are used according to the place, altitude and weather conditions of the site, where the chimney will be installed.

The chimney cleaning hole covers, measuring and draining ports are made of stainless steel, with a leakproof design. These are used at suitable place of the chimney and enable the cleaning of the chimney and draining the condensation water.





ROTEK chimneys are designed with the help of computer aided design tools with great care, to provide you with the optimal solutions.

ROTEK chimneys are manufactured at automatic workbenches with TIG or PLASMA welding, using protective gases for welding, with homogeneous and smooth results. This way, the acids in the waste gases can not do any harm to the welding joints.



We, as Rotek, offer you advice and solutions for high-performance stainless chimney applications and solutions to chimney problems, and present you with technological developments and devices in these matters.



CE CERTIFICATE (EN 1856-1:2009, TZUS, a.a. 1020), (EN 1856-2 2009, TZUS, a.a 1020),



CE CERTIFICATE (EN 13084-7:2005 / AC 2009 TZUS, a.a 1020, 4



Sales through dealers in 30 provinces across Turkey, exports to 20 countries.



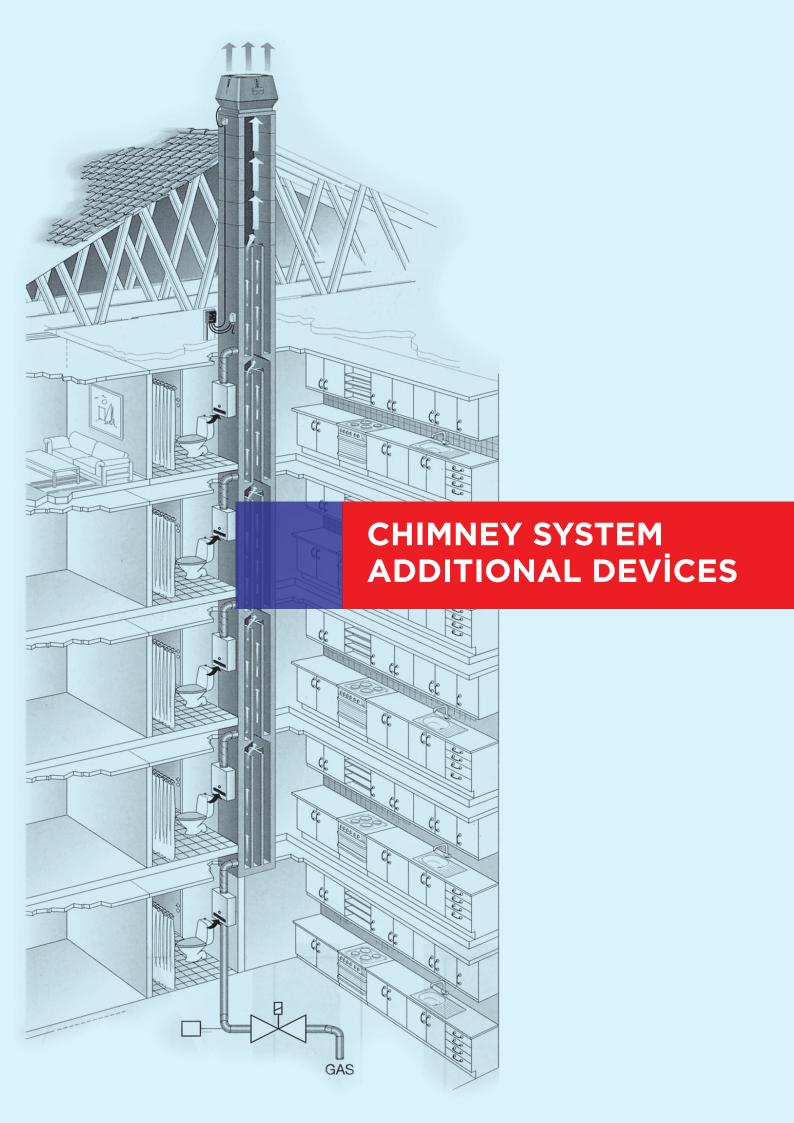
Free standing chimney calculation and design according to CICIND,



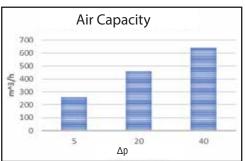
30 years of experience and expert engineers with appropriate solutions

Appropriate for use in negative and positive draft systems, Leak proof and safe use under 5000 Pa pressure, H1 class and T600 chimney gas temperature, 20 years of experience and convenient solutions with expert engineering, Chimney projects in accordance with EN 13384-1, Self-standing chimney calculations in accordance with CICIND, Centralized solutions for all chimney problems and equipment, Flexibility of custom design for required places and wide range of products, Sales through distributors in 30 cities of Turkey, exports to 20 countries.









The main factor in chimney sizing in exhaust systems is the boiler, fireplace, etc. combustion system. However, the efficiency of the exhaust system is affected by temperature changes between seasons and weather conditions, causing fluctuations in chimney traction.

In order to ensure safe operation of the chimney system, the system is designed with an outside temperature of 15 °C (according to EN 13384). However, combustion systems are generally used when the outside air temperature is much lower. This causes a pressure drop in the external environment and an excessive negative pressure in the system.

Excessive negative pressure reduces efficiency and increases energy consumption. The traction regulator regulates the negative pressure and helps the system to operate optimally at all times.

#### **Technical Data**

Maximum operating temp.	400 °C
Δp Air flow rate	260 at 5 Pa
Δp Air flow rate	480 at 20 Pa
Δp Air flow rate at	40 Pa 640
Adjustment range	5-40 Pa
Drain Cover activation	>350 Pa.
Drain Cover Area	160 cm^2
Classification DIN 4795	6
DIN Reg. Nr NL	101
Weight	25.2 kg

Rotek S350 is necessary and suitable for use in chimney systems with a diameter range of Ø300-Ø1200 and a vertical height of more than 20m.

### **EXHAUST FAN**

Why Exhaust Fan should be used?

R150

**Problem;** Air draft problems can occur in the chimney due to unfavourable weather conditions, improper positioning of the chimney, a cold flue gas system during start-up or improper design of the flue gas system. In this case, the flue gases cannot be reliably removed and affect the operational safety of the flue gas system and the heating system.

**Solution:** If the natural draft is too weak, the ROTEK chimney fan ensures reliable and optimum draft in the chimney again. It must be designed so that the negative pressure required for the safe removal of flue gases from

flue systems is always available.



 Max. Flow pressure
 : 55 Pa

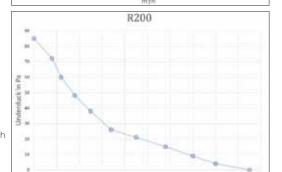
 Flow rate
 : 1000 m³/h

 Power
 : 230 W

 Current
 : 1.1 A

 Overall height
 : 400 mm

 Weight
 : 11 kg



m³/h

 Max. Flow pressure
 : 85 Pa

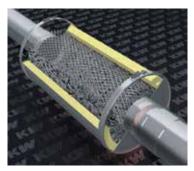
 Flow rate
 : 1500 m³/

 Power
 : 300 W

 Current
 : 1.4 A

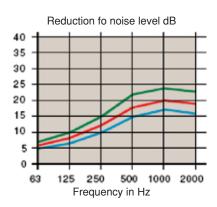
 Overall height
 : 500 mm

 Weight
 : 14 kg



#### **Passive Silencer**

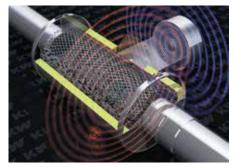
Passive 66 cm Passive 84 cm Passive 102 cm



The burning noises may multiply due to resonance effects, because the chimney gas column forms a system that can transfer vibrations together with the boiler and combustion chamber.

It is advisable that, at the planning stage, the architect, the building owner, planning expert and the heating system manufacturer cooperates and takes the necessary measures to cut the noises.

Brand: K+W

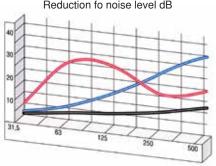


**Aktive Silencer** 

Passive 400 cm Active +.36 cm Passive Passive 48 cm ■



Reduction fo noise level dB



Frequency in Hz

### **INDUSTRIAL FLAPS**

Rotek manufactures single and bypass valves for chimney systems. It realises special designs in flexible dimensions in line with customer demands and project requirements. Other advantages of Rotek Flaps offers

- With flanges to clamp between DIN or ANSI flanges
- DN 40 up to DN 2000 (other sizes available separately)
- For flue gas, exhaust gas and air
- Operating temperatures up to 1050°C
- Corrosion protection includes in the standard design
- Actuators by hand lever, worm gear, electric, pneumatic, etc.
- 100% air tight





Ford Otosan Gölcük Fabrikası - Kocaeli	Chimney
Ford Otosan Eskişehir Fabrikası – Eskişehir	Chimney
Hyundai İzmit - Kocaeli	Chimney
Unilever Algida Fabrikası - Konya	Free Standing Chimney
Hospital Nobo Otrobanda - Curaçao, Carribean	HVAC
Cargill Gıda - Balıkesir	Free Standing Chimney
TC Moldova Büyükelçilik Binası - Moldova	Free Standing Chimney
Tekko Toyotetsu Otomotiv Gebze İzmit	Chimney
Toyota sa İzmit	Chimney
Unilever Algida Fabrikası - Çorlu	Free Standing Chimney
Roche a.ş. İlaç İstanbul	Chimney
Glaxowellcome a.ş. Gebze İzmit	Chimney Automation System
Sandoz Syntek İlaç fabrikası Tuzla İstanbul	Chimney
Thyssen Krupp Eurinox Servis Merkezi Gebze İzmit	Chimney
Procter & Gamble Fabrikası – Romanya	Chimney
Procter & Gamble Fabrikası İstanbul	Chimney
Jotun Boya Fabrikası Çerkezköy Tekirdağ	Proses Chimney
Basf Kimya Gebze İzmit	Chimney
Basf Elastogran Gebze İzmit	Chimney
Sika Yapı Kimyasalları Fabrikası Tuzla İstanbul	Chimney
Bosch Siemens a.ş. Fabrikası Çerkezköy Tekirdag	Free Standing Chimney
Bosch a.ş. Tesisleri Bursa	Chimney
Bosch Rexroth Tesisleri Bursa	Chimney
Beko Elektronik a.ş. Beylikdüzü İstanbul	Chimney
Johnson Control Fabrikası - Romanya	Chimney
Sew Eurodrive Grup Gebze	Chimney
Westminster Park Plaza Bridge Hotel Londra - İngiltere	Chimney
Kommetzbank Merkez Binası Almaty - Kazakistan	Refuse Chute
Frans Maas Lojistik - Romanya	Chimney
Renault Mais Bursa	Chimney
Fritolay Cips Fabrikası Tarsus	Chimney
Schattdecor Fabrikası Gebze İzmit	Chimney
İstanbul havalimanı İstanbul	Chimney
Türkiye Finans Merkezi İstanbul	Chimney
Westminster Park Plaza Bridge Hotel London - England	Chimney
Zwitina P.P. Plant - Libya	Free Standing Chimney
Agip Kco Kashagan Petrochemical Comp. Aytrau - Kazakhistan	Chimney, Hvac
Aioc Central Azeri CWP Platform - Azerbaijan / Chimney	Chimney
Chevroil Refinery Plant IB MOA Tengiz - Kazakhistan	Free Standing Chimney
Sewerage and Drainage Basrah AAT Plant - Iraq	Chimney
Monaco Towers - Romania	Chimney
Al Tadamon Twin Towars - Libya	Hyac

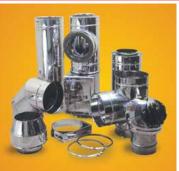
Hvac

Al Tadamon Twin Towers - Libya

Presidential Palace - Azerbaijan	Chimney, Fan Automation
Haydar Aliyev Cultural Center - Azerbaijan	Chimney
Tripoli Convention Center - Libya	Chimney
Kommetzbank Center Almaty - Kazakhistan	Refuse Chute With Separator
Astana University - Kazakhistan	Chimney
Bosch Siemens A.Ş. Factory Çerkezköy Tekirdağ	Free Standing Chimney
Procter & Gamble Factory - Romania	Chimney
Mardan Palace Hotel Antalya	Chimney, Linen Chute
Atikpaşa Four Seasons Hotel İstanbul	Chimney, Linen Chute, Fan Automation
Hilton Hotel Sophia - Bulgaria	Chimney
Atatürk Airport Yeşilköy İstanbul	Refuse Chute, Diesel Generator Chimney
Ashgabat Airport - Turkmenistan	Chimney
Turkmenbashi Airport - Turkmenistan	Chimney
Cairo Airport - Egypt	Free Standing Chimney
Tbilisi Airport - Georgia	Chimney
Batumi Airport - Georgia	Chimney
Erbil Airport - Iraq	Chimney
Sulaimaniya Airport - Iraq	Chimney
Esenboğa Airport Ankara	Chimney
S.G. Airport Old and New Terminal Kurtköy İstanbul	Free Standing Chimney
Adnan Menderes Airport İzmir	Chimney
Antalya Airport Antalya	Chimney
VRP Vatsal Train Station - Turkmenistan	Chimney
Rusal Office Buildings - Kazakhistan	Free Standing Chimney
32 Hectare Residence Project - Kazakhistan	Free Standing Chimney
Esentai Park Almaty - Kazakhistan	Refuse Chute With Separator
Oran Sonatrach - Alger	Chimney, Refuse Chute
Harbiye Convention Center İstanbul	Chimney
Siberbank Center - Turkmenistan	Chimney
Liberty Mall Avm - Romania	Chimney
Ruse Mall Avm - Romania	Chimney
Cpm Constanta Avm - Romania	Chimney
Carretour Avm - Romania	Chimney
Brucesti Mall Avm - Romania	Chimney
Mall Dova Avm - Romania	Chimney
City Mall Avm - Romania	Chimney
Maksima Avm Almaty - Kazakhistan	Chimney
Innova Bulvar Avm - Azerbaijan	Chimney, Fan Automation
Kanyon Eczbş. Avm Levent İstanbul	Diesel Generator and Hood Chimney, Refuse Chute
212 Avm Yenibosna İstanbul	Chimney, Ventilation Towers
Port Residence Baku - Azerbaijan	Chimney
Landmark 3 Baku - Azerbaijan	Chimney

Gara Herastrau Office Building - Romania	Chimney
Head Offices Victoriei Ester Auto Center - Romania	Chimney
Energy Ministry Building Ashgabat - Turkmenistan	Chimney
Health Ministry Building Ashgabat - Turkmenistan	Chimney
Ashgabat Theater Complex - Turkmenistan	Chimney
Middle East Technical University - Cyprus	Chimney
Near East University - Cyprus	Chimney
Durres Hospital - Albania	Chimney
Child Birth Hospital - Turkmenistan	Chimney
Oncology Hospital - Turkmenistan	Chimney
Four Seasons Hotel St. Petersburg - Rusia	Linen Chute
Noah's Arc Resort Hotel - Cyprus	Chimney
Jasmin Court Hotel - Cyprus	Chimney
Tashkent Friendship Hotel - Uzbekistan	Chimney
Bucharest Hotel - Romania	Chimney
Dushambe Hotel - Tajikistan	Free Standing Chimney
Hyatt Hotel - Azerbaijan	Linen Chute
Marriot Hotel Tbilisi - Georgia	Chimney
Park Hyatt Hotel Baku - Azerbaijan	Linen Chute
Intourist Hotel Batumi - Georgia	Chimney
Grand Vicory Hotel - Kazakhistan	Chimney, Linen Chute
Divan Hotel Tuzla İstanbul	Chimney
Pera Palas Hotel Taksim İstanbul	Chimney, Linen Chute
Aries 2 Factory Tashkent - Uzbekistan	Chimney
Johnson Control Factory - Romania	Chimney
Jonson Matthey Skopje - Macedonia	Free Standing Chimney
YKK Zippers Factory - Romania	Chimney
Namet Entegre Factory Çayırova İstanbul	Chimney, Refuse and Bone Chute
Milk Factory Baku - Azerbaijan	Chimney
Flipper Commeimpex Sri. Cips Factory - Romania	Chimney
Gourmat Olive Oil factory - Romania	Chimney
Euronut Gıda San. A.Ş. Nuts Factory - Romania	Chimney
Frans Maas Logistics - Romania	Chimney
Nissa Hotel - Turkmenistan	Chimney
Golden Plaza Hotel - Turkmenistan	Chimney
Delta Hotel - Turkmenistan	Chimney
Watanchy Hotel - Turkmenistan	Chimney
Kuwwat Hotel - Turkmenistan	Chimney
Kerwen Hotel - Turkmenistan	Chimney
Serene Hotel Dushambe - Tajikistan	Chimney







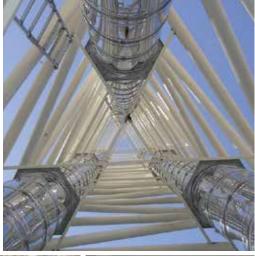


































#### Single and double wall stainless steel chimney systems

Applications inside the building Applications outside the building Self Standing chimney systems Use in fuel-oil / gas / solid fuel

Negative pressure systems (max. 400 °C) Positive pressure cascade systems (max. 160 °C) Generator and cogeneration chimneys (max. 600 °C)

Both for wet and dry applications Leak proofing with or without sealing

Equipments to solve chimney problems Filter systems tor gas cleaning Refuse chutes Linen chutes



### **ROTEK ENERGY & CHIMNEY SYSTEMS**

#### **Head Office**

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