



## Tailor-made Rubber Extrusion



Lines for the Processing  
of Silicone Rubber

EN

# Lines for the Processing of Silicone Rubber

For the production of silicone hoses and profiles rubicon manufactures especially adapted machinery and extrusion lines.



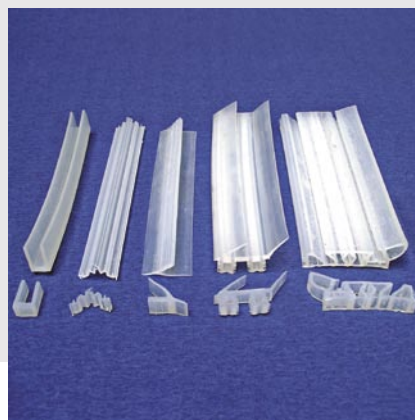
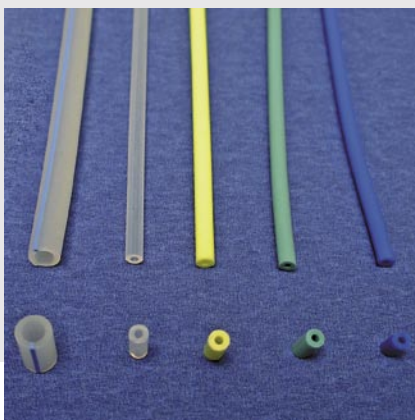
Due to its unique characteristics silicone rubber is used in the most different industry branches.

The good temperature and aging resistance as well as the excellent elasticity make it a popular material for seals and absorption construction units.

In the medicine and food technology silicone is used, because it is sterilizable and taste- and odourless.



Just as variously as its applications, is the processing and with it the requirements at manufacturing lines. rubicon offers for this most diverse solutions - individually adapted to your requirements.



## rubicon Post-Vulcanization Oven

The post-vulcanization oven is used for the warming up of vulcanized products made of peroxide cured silicones.

### Characteristics

- Horizontal temperature distribution by powerful recirculating fans
- Low energy losses by high-quality insulation
- Short heating time
- High safety standard
- Simple operation



### Performance

- Heating by electric air heaters
- Inner and outer housing completely made of stainless steel
- Equipped with five removable stainless steel plates for easy loading
- Equipped with door safety switch
- Removing of emerging gases by an exhaust fan
- Permanent fresh air supply with pressure monitoring by fresh air fan



### Technical Data Post-Vulcanization Oven

Heating power	2 x 30 kW
Temperature control	electrically, up to 200 °C
Exhaust air quantity	1100 m <sup>3</sup> /h
Fresh air quantity	600 m <sup>3</sup> /h
Batch weight	100 kg

# rubicon Small Scale Silicone Extrusion Line

The Small Scale Silicone Extrusion Line is used for the vulcanization of silicone rubber for medical applications in clean room as well as for the industrial production.



Small Scale Silicon Extrusion Line

## Characteristics

- Compact design
- Wide range of application
- Suitable for clean room application
- Suitable for the production of silicone hoses and profiles
- Also suitable for soft and sticky compounds
- Easy cleaning
- Ideal for getting started in the production of silicone products

## Silicone Extruder

- Screw and barrel design suited to the processing of silicone rubber
- Special feed roll design allowing easy cleaning during the change of material
- Water cooling with temperature control for screw, barrel and head
- High dimensional accuracy and stability

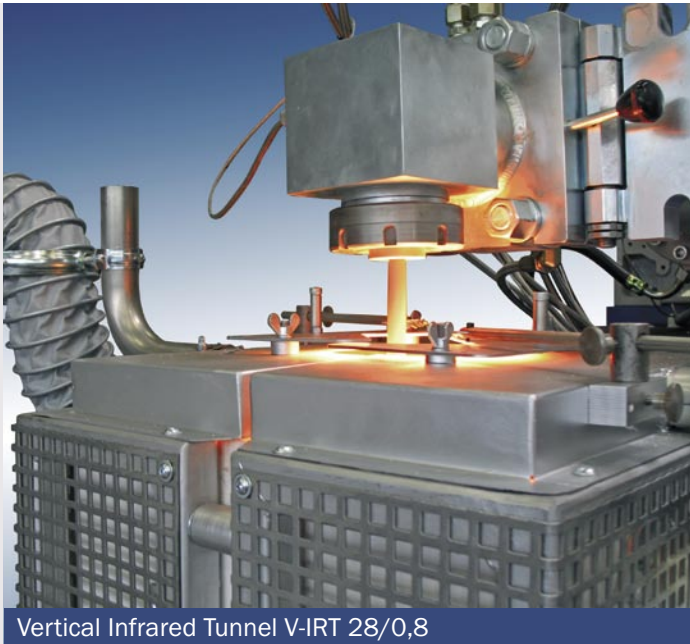


Silicone Extruder EEK 45

The silicone extrusion line is particularly suitable for the processing of peroxide and platinum cured silicones.

### Infrared Vulcanization Tunnel

- For the shock vulcanization of the products
- Internal heating by penetration of the radiation into the material
- Accurate dimensional accuracy even with low viscosity and consistent surfaces
- The high power density of the infrared radiation makes the complete vulcanization of products with a middle wall thickness possible



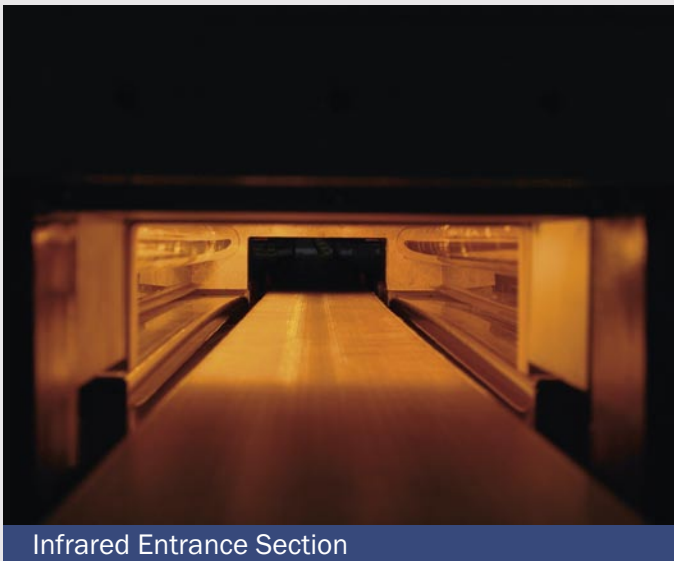
Vertical Infrared Tunnel V-IRT 28/0,8

		<b>Technical Data</b>	
<b>Extruder</b>	Screw diameter		45 mm
	Screw length L/D		12 D, effective
	Screw speed		3...70 min <sup>-1</sup>
	Max. output		45 - 65 kg/h
	Max. power		7 kW
<b>Infrared Tunnel</b>	Heating		shortwave IR-emitters
	Power		28.8 kW

# rubicon High Performance Infrared/Hot-air Vulcanization Tunnel H-IRT 8000

The horizontal Infrared/Hot-air Vulcanization Tunnel is used for the vulcanization of silicone rubber.

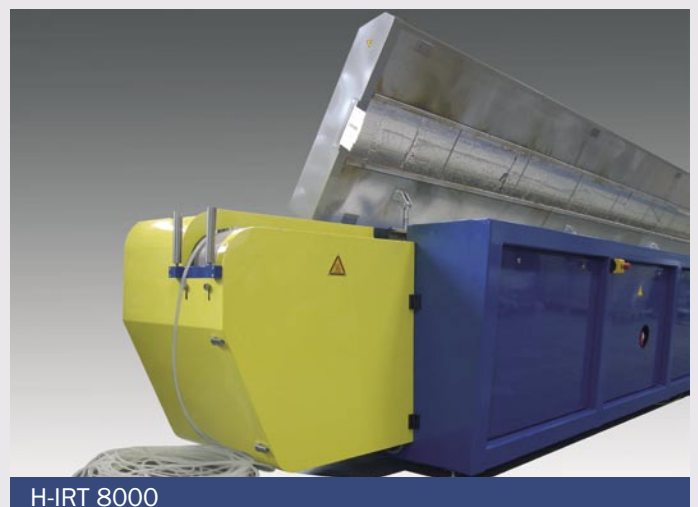
## Infrared Section



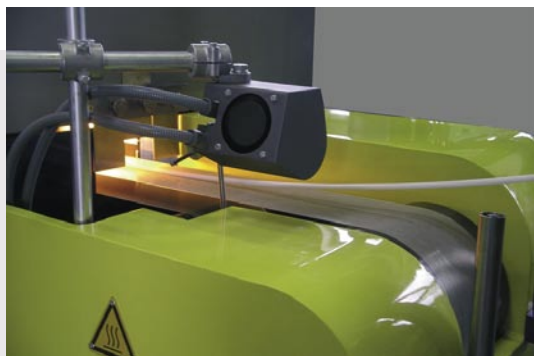
- 1.5 m long entrance section with short wave infrared emitters for the shock-vulcanization of the product
- Radiation capacity max. 24 kW
- Variable radiation intensity
- The high energy infrared radiation goes deep into the material and stabilizes the product very quickly
- High product quality with a high line speed at the same time

## Hot-air Section

- 6.5 m long hot-air section for the complete vulcanization
- Efficient heat transmission by reverse flow method
- High air speed by variable hot-air fan
- Optimal energy efficiency by re-circulating-air operation



This vulcanization method is particularly suitable for the processing of transparent and coloured silicone rubbers.



The tunnel is equipped with an automatic belt control unit for a straight run of the steel or woven wire belt.

The product is set by a biaxial laser measuring device.

This diameter regulation allows the production of products with small tolerances.



#### Technical Data H-IRT 8000

Infrared capacity	24 kW
Length infrared section	1500 mm
Hot-air capacity	55 kW
Air speed	3 - 20 m/s
Length hot-air section	6500 mm
Belt speed	1 - 50 m/min

## Contact

rubicon Gummitechnik und Maschinenbau GmbH  
Hans-Dittmar-Straße 3  
06118 Halle/Saale  
GERMANY

Tel. +49 345 5 30 15 - 0  
Fax +49 345 5 30 15 - 15  
E-mail [info@rubicon-halle.de](mailto:info@rubicon-halle.de)  
Internet [www.rubicon-halle.de](http://www.rubicon-halle.de)

