

Technical data of rubbex® system II

| Gear pump series extrex® RV/RB/RQ |                                |
|-----------------------------------|--------------------------------|
| Speed in rev/min                  | 25 to 45                       |
| Housing tempering, liquid in °C   | < 140                          |
| Shaft tempering, liquid in °C     | < 140                          |
| Gear shaft design                 | helical/spur/herringbone       |
| Bearing design                    | hydrodynamic with compound     |
| Shaft-bearing-sealing             | mechanic, leakage selectable   |
| Opening mechanic (only RQ serie)  | manual, six retractable screws |
| Gear pump protection (optional)   | breaker plate 6 to 12mm        |
| Drive motor                       | AC                             |
| Drive performance in kW           | 11 to 77                       |
| Drive gearbox                     | helical/bevel helical          |
| Drive torque in Nm                | 1,362 to 9,832                 |
| Extruder                          |                                |
| L/D relation                      | 10 to 16                       |
| Feed roller FRQ in mm             | 80 to 250                      |
| Drive feed roller                 | direct/hydraulic               |
| Drive motor                       | AC                             |
| Drive performance in kW           | 11 to 110                      |
| Drive gearbox                     | pin / spur                     |
| Speed in rev/min                  | 12 to 72                       |
| Heating zones                     | 2 to 7                         |
| Strainer                          |                                |
| Opening mechanic                  | manual, C-clamp                |
| Breaker plate in mm               | DN 150/180/210                 |
| Cutter                            |                                |
| Drive performance in kW           | 3.2                            |
| Granulate performance in cuts/min | 50 to 500                      |

| Gear pump sizes   | extrex® RB-Q | extrex® RV-Q               |
|---|--------------|----------------------------|
| Throughput range in kg/h  | 50 to 1,000  | 50 to 1,500                |
| Counter pressure p <sub>2</sub> in bar                          | < 500        | < 350                      |
| Inlet pressure p <sub>1</sub> in bar                            | 10 to 120    | 10 to 120                  |
| Differential pressure (p <sub>2</sub> - p <sub>1</sub> ) in bar | 100 to 450   | 100 to 250                 |
| Pump sizes  | 56 to 140    | 56 to 140                  |
| Specific volume in cm <sup>3</sup> /rev                         | 56 to 874    | 92 to 1,432                |
| Extruder sizes in mm  | DN 60 to 150 | DN 70 to 150<br>Pin barrel |

design values, application range may differ depending on product



# rubbex® system II



### A range of typical pumping media:

- Silicone rubber
- Adhesive and sticky elastomere
- Butadiene rubber
- Chloroprene rubber
- Ethylene-propylene-terpolymer rubber
- Nitril-butadiene rubber
- Styrene-butadiene rubber
- Natural rubber
- TPE, PVC on request
- Others upon request

### Highest Flexibility

#### modular processing system for elastomeric applications

The rubbex® system II enables customers to lower their costs and increase their speed of innovation. It supports a broad range of rubber compounds from tough to soft.

- precision preform and pellet manufacturing
- profile and hose/pipe production
- straining applications

The system design combines the performance characteristics of a power fed roll charged single screw extruder (accurate feeding and mastication) and gear pump (constant mass throughput and pressure build up) in combination with die head assembly, integrated strainer unit and famous control system.

Your benefits:

- Cost saving
- Continuous production
- Improved accuracy
- Improved product quality
- Quick color change

### There are several execution of interchangeable machine settings available:

- basic:** Extruder - gear pump mounted on robust main frame incl. power cabinet
- easy to clean:** Quick to open gear pump - extruder combination
- high output :** 40% more capacity thanks to high volume gear pump
- high pressure:** 500 bar strainer head counter pressure capability
- advanced:** Extruder - gear pump comes with cutter or strainer device

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**quick release die head**

- hinged, for easy access and quick clean-out of rubber compound
- as well change of strainer plate or die plate
- to be combine with cutter device (optional)



**gear pump series extrex® RV, RB, RQ**

**RV-type**

- minimum tolerance control
- constant material flow rate at high output rates

**RB-type**

- enables operating counter pressures up to 500 bar
- high degree of mastication
- flexibility due to selectable
- suction pressure settings

**RQ-type**

- high self-cleaning performance due
- quick open of pump housing



**Strainer and Preformer**



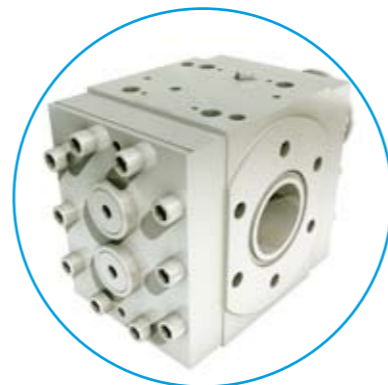
**Multi - Strainerhead**



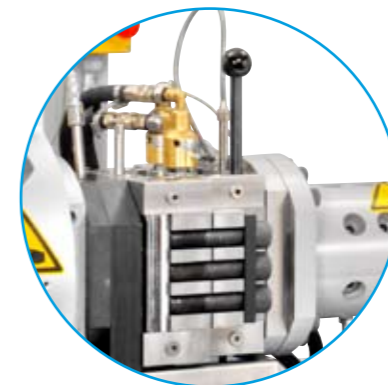
**gear pump extrex® RB-Q with herringbone gearing**



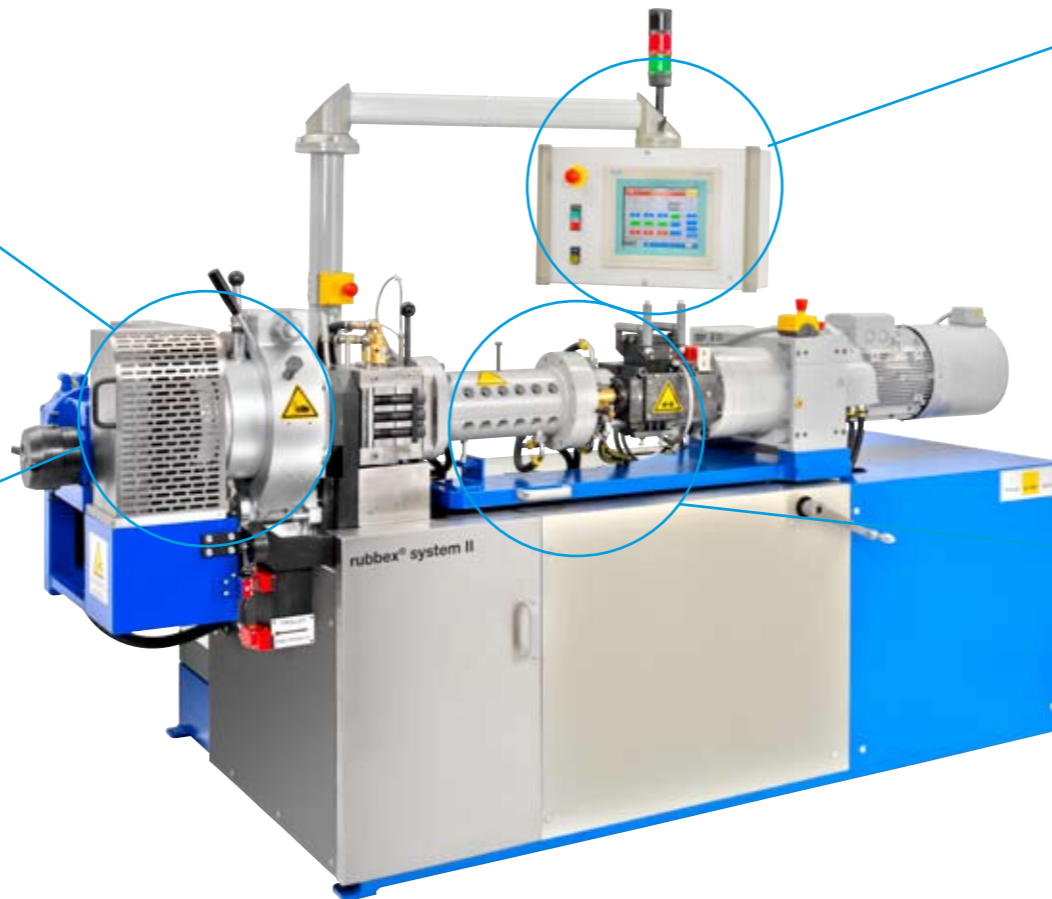
**quick release drive connection**



**gear pump extrex® RB (optional)**



**gear pump extrex® RB-Q**



**PLC control unit**

- user-friendly touch screen interface
- "one-button" processing control
- easy setting of operation data
- manual and automatic extruder control

**operation and visualization**

**Mastication and Pressure build - up**



**shortruder®**



**gear pump extrex® for elastomer**

- application specific shaft design helical (or spur, herringbone)
- modular construction to meet product specific requirements
- no O-Ring seals
- heavy duty construction for ultimate high pressure (up to 450 bar counter pressure)
- easy to maintain one tool (shaft+bearing) disassembly, valid for extrex® RQ series