

# PERFECT THERMAL SOLUTIONS IN PLASTIC EXTRUSION PROCESSES

In extrusion, plastically deformable to viscous masses are continuously pressed out of a shaping opening under pressure. The resulting rather elongated two-dimensional "extrudate" then hardens by cooling or chemical reaction. In the plastics industry, materials such as PVC, PE, PP, PUR, etc. are extruded for a wide variety of applications, e.g. into pipes, films, profiles, sheets, sheathing, seals.

Direct drives or torque motors that are water-cooled or induction motors that are air-cooled are used for extrusion machines. Often a to cool frequency converter is connected upstream of the motors to generate a variable output frequency and voltage as required. In addition to the **machine drives, control & switch cabinets** also require thermal management solution components to ensure that the extrusion processes run smoothly.

Pfannenberg realizes the temperature control required for this, in addition to the use of **filter fans**, by means of **energy-efficient cooling units** or **air/water heat exchangers**. The latter find an ideal field of application in plastics extrusion, as the machines there are already cooled with temperature-controlled water. The main advantage compared to other options is also their maintenance-free operation.



You can find the entire product portfolio on our website: thermal management and liquid cooling solutions.



# **Pfannenberg Solutions**

## Why Pfannenberg



#### **Filterfans**

Simple installation EMC variants High protection class Restrained Design

Patented "click and fit" mechanism without screws No interference from electromagnetic waves IP55 with flueted filter mat in stressed environment. Without flashy logo, also in black



#### Side and Door Mounted Cooling

Operational Safety Easy maintenace Outdoor ready Flexible Design

Machine downtime is reduced No filter exchange, long-term functionality Special series with heating and made of stainless steel Compact devices for installation in confined spaces, Cut-out compatible across many performance classes



#### **Top Mounted Cooling**

100% condensate safety Operational Safety Space-saving

Due to patented condensate management system Cold air reaches the ground safely without aids Integration into existing halls & plants



#### Heater, Thermo-/Hygrostats and Fans

Operational safety Condensate and frost prevention Control variants Thermostats and hygrostats also as combination

Avoidance of hotspots by internal fans



#### Air/Water Heat Exchangers (Side and Top Mounting)

Cost-saving If water already provided High flexibility Cutouts compatible with the active cooling devices

Hot environment Cools independently of the environment



#### Chiller

High lifetime

Flexible application Cools water for machine drives System solution Ideal complement to air/water cooling

From 1.1kW to 150kW Broad power range

### Service and Contacts



#### Global technical Service

24/7 worldwide presence commissioning, repair and mainternance | F-GAS leakage tests spare part kits | service trainings | PSS - Pfannenberg Sizing Software



Simply scan the QR code and find the nearest Pfannenberg branch office