

## PNEUMATIC TRANSPORT



## **PNEUMATIC TRANSPORT**



PNEUMATIC TRANSPORT REFERS TO
A METHOD OF CONVEYING LOOSE MATERIALS
WHERE THE CARRYING MEDIUM IS AIR OR
OTHER GAS (E.G., NITROGEN). PNEUMATIC
TRANSPORT IS DIVIDED PRIMARILY INTO
MOBILE AND STATIONARY TRANSPORT.

ZVVZ-Enven Engineering a.s. supplies equipment for both mobile pneumatic transport (e.g., containers or transporters) and stationary pneumatic transport. The equipment is supplied either as turnkey solutions or as separate components depending on the customer's requirements.

#### **PNEUMATIC TRANSPORT APPLICATIONS**

As standalone pneumatic transport equipment used for transporting loose materials in various work processes.





Particularly when transporting non-sticky, dusty or finegrained materials such as cement, fly ash, limestone, kaolin, foundry sand, etc.

As a complement to exhaust air-handling systems, used for removal of trapped solid particles.

#### **TYPES OF STATIONARY PNEUMATIC TRANSPORT**

- > Low-pressure and medium-pressure pneumatic transport ejectors or blenders.
- High-pressure pneumatic transport chamber feeding devices.
- > Pneumatic chute transport.

ZVVZ-Enven Engineering a.s. deals primarily with designing and supplying high-pressure pneumatic transport equipment and pneumatic transport chutes.

### **CHAMBER FEEDING DEVICES**



Chamber feeding devices are used in equipment for transporting larger amounts of loose materials over long distances. The throughput of equipment with chamber feeding devices may be (depending on the feeding device size) over a hundred tonnes per hour, with transport distances in the order of hundreds of metres.

Chamber feeding devices offered by ZVVZ-Enven Engineering a.s.:

**PKA chamber feeding device** – device with aerated bed and bottom transport pipeline outlet.

Feeding device sizes: PKA1, PKA3.15, PKA8.

**PKJ chamber feeding device** – device with aerated bed and top transport pipeline outlet (suitable for parallel feeding device setups).

Feeding device sizes: PKJ0.16, PKJ0.42, PKJ0.63, PKJ1.

**PKS chamber feeding device** – device with direct bottom transport pipeline outlet (suitable for serial feeding device setups).

Feeding device sizes: PKS0.16, PKS0.7, PKS1.2, PKS2.9.

**KPB12 chamber feeding device** – device with aerated bed and bottom transport pipeline outlet.





## **PNEUMATIC CHUTE TRANSPORT**



Pneumatic chute transport is suitable for high transport throughput rates (up to 400 t/h) over shorter distances, where room for the necessary slope is available. A transport chute is a modular structure, which enables various transport line setup designs: material input from several places, branches, Y-branches and material outfall, including inspection openings, transport air inlet and bleeding.

Transport chutes offered by ZVVZ-Enven Engineering a.s.: 160, 250, 400 and 500mm.





6

# ADDITION COMPONENTS FOR STATIONARY PNEUMATIC TRANSPORT



#### PNEUMATIC TANK UNLOADER

Throughput up to 200 t/h
Transported material temperature max. + 200°C

#### **PRESSURE AERATION CHUTES**

Throughput 60 to 250 t/h Transported material temperature max. +250°C Sizes DN 200, DN 400

#### TRANSPORT PIPELINE BUTTERFLY GATES

Transported material temperature max. +200°C Sizes DN 50, 65, 80, 100, 125 and 150

#### TRANSPORT PIPELINE Y-BRANCHES AND COLLECTORS

Transported material temperature max. +200°C Sizes DN 50, 80, 100, 125 and 150

#### **AERATING BOXES**

Transported material temperature max. +250°C Sizes from 560 mm to 3000 mm

#### **AERATING CABINETS**

Aerated material temperature max. +200°C Size 375×375 mm

#### **VORTEX SEPARATORS**

Transported material temperature max. +200°C



BASED ON SPECIFIC REQUIREMENTS, ZVVZ-ENVEN ENGINEERING, A.S. WILL DESIGN AND SUPPLY SPECIAL EQUIPMENT FOR HANDLING AND STORAGE OF LOOSE MATERIALS.



Czech





70 years tradition

#### COMPLETE SUPPLIER PROGRAM

- > Equipment for flue gas cleaning from solid and gaseous pollutants
- > Equipment for pneumatic transport of bulk materials
- > Equipment for air conditioning and ventilation of nuclear power plants
- Equipment for building air conditioning and ventilation of industrial buildings, mines, tunnels and subways



#### ZVVZ-Enven Engineering, a.s.



Sažinova 1339, Milevsko, 399 01



pneumaticka.doprava@zvvz.cz



+420 382 551 111



www.zvvz.cz



