Stove and Blast Furnace Valve Technology
Paul Wurth’s advantage in carrying out large-scale projects is that the latest technologies and requested services for the construction and modernisation of complete blast furnace plants are all found under the one roof.

Paul Wurth has a tradition of leadership in blast furnace engineering. Practical designs, systems and equipment have been the product of a dedicated and experienced team interacting with plant operators.

The gas produced in the blast furnace is an important energy source in the efficient operation of an integrated steel plant. The primary purpose of the gas cleaning system is to produce a clean gas that can be burned in the hot blast stoves, coke ovens, mills reheat furnaces and power stations.

The Paul Wurth Group has many years of successful hot blast system design experience. The layout of the hot blast stoves, hot blast mains and mixer assemblies is unique to each project. Adapting existing stoves to enlarged furnaces is an added complexity. Paul Wurth has proven its ability to tackle these challenges. The final design includes pressure compensation and the choice of appropriate valving.

Paul Wurth supplies the complete collection of valves for hot and cold blast control, chimney valves, crude gas bleeder valves, equalizing/relief valves, as well for the complete stove regulation, and cares for concept and detail engineering, manufacturing, erection and commissioning of the complete hot stove plant.
Paul Wurth Valves:

**Equalizing / Relief Valves** (1):
ND 250, 400, 500
- MSV – TRT main by-pass goggle valve
- PSV – combustion air vent valve

**Coffee Pot Bleeder** (2):

**GV – Goggle Valves**:
ND 450–3200
- goggle valve above cyclone / dust catcher
  - slide open type (3)
- GV, OBV – TRT goggle valves
- CGGV – combustion gas line isolation valve
  - slide type (4) / swing type (5, 6)
  - close / open type

**Two Lever Valves** (7, 8):
ND 450–3200
- CBV – cold blast valve
- CBMV – cold blast mixing shut-off valve
- CAIV – combustion air shut-off valve
- CAFOV – combustion air fan valve
- CGIV – burner valve (combustion gas isolation shut-off valve)
- GSV – gas safety valve
- WGV – waste gas valve
- mixing gas / booster shut-off valve

**DEV – Double Eccentric Valves** (9):
ND 150–2000
- GVV – combustion gas vent valve
- PRV – pressurizing line shut-off valve (pressure relieve valve)
- DPV – depressurizing line shut-off valve (pressure equalizing valve)

**Snort Valves**:
ND 1000–1600/500–1000
- piston type (10)
- double eccentric vent valve type

**BDV – Back Draft Valves**:
- gate type (11)
  - ND 600–800
- coffee pot type (12)
  - ND 500–1200

**HBV – Hot Blast Valves** (13):
ND 600–2000
- gate type

**Butterfly Valves** (14):
ND 600–2000
- CACV, CCCV, CBMVC, CBCV – combustion air / combustion gas regulation valves
- septum valve

**EXV – Explosion Valves**
ND 400–600
- BF, CO gas explosion flap (15)
- BF, CO gas explosion wedge shut-off valve (16)

**Louver Valves**
- WGLV – waste gas louver valve (17)
  - ND 2300

**Dust Discharge Valves**
- Gritzko® II (18)
The Paul Wurth Group is today one of the world leaders in the design and supply of complete plants, systems and processes as well as specialised mechanical equipment for

- **the iron & steel industry:**
  - Blast Furnaces & Auxiliary Plants
  - Coke Making Plants
  - Agglomeration Plants
  - Direct Reduction Plants
  - Environmental Protection, Recycling & Energy-Saving Technologies

- **other industries:**
  - Systems & Equipment for Non-Ferrous Pyrometallurgy, Electrometallurgy & Residue Treatment
  - Valve Solutions for Oil & Gas Downstream Processes
  - Intralogistics Solutions for Heavy Loads
  - Engineering & Project Management for Civil Construction and Infrastructure Projects


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