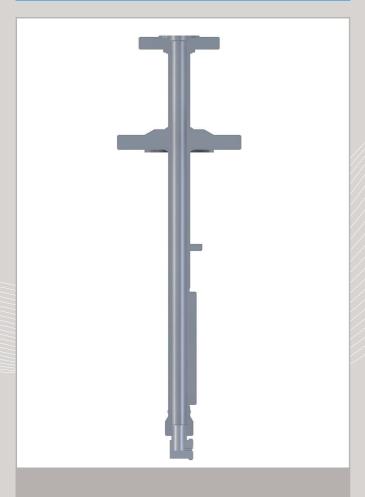
LSD Desuperheater



Application

LSD desuperheater has a lance design. It is suitable for reduction of the temperature when steam undergoes rather small load changes.

Description

LSD desuperheater basically consists of hydraulic fine atomizing nozzle (or set of such nozzles). It injects amount of water into a steam flow to lower the temperature of the steam. Highly efficient nozzle (or nozzles) with fixed diameter sprays uniformly within the whole range of cooling. Effective atomization appears if pressure difference is from 0.3 bar on. Sprayed water forms the full or hollow cone (with different spray angles). LSD handles applications requiring load changes (rangeability) up to 6:1. Maintenance-free LSD desuperheater has not any moving or quick wearing parts, but it does need the injection valve to control the coolant's's flow. It is assembled to the flanged connection pipe of the steam pipeline.

Technical data

| | | steam pipeline | | | pipeline of injected water | |
|----------------------|----------------------|-------------------------------|---|-------------------------------|-------------------------------|-------------------------|
| Nominal diameter | | DN150÷DN600 | | | DN15÷DN50 | |
| Nominal pressure | | PN10÷PN400 | | PN25÷PN400 | | |
| Connections | | bolted flanges | | bolted flanges; welding ready | | |
| Flow coefficient Kvs | | \geq 0,16 m ³ /h | | | | |
| Body | | (P250GH) (16Mo3) | 1.7335 (13CrMo4-5) 1.7380 (10CrMo9-10) | | (14MoV6-3) (X10CrMoVNb9-1) | 1.4901 (X10CrWMoVNb9-2) |
| Injection nozzles | 1.4305 (X8CrNiS18-9) | | 1.4571 (X6CrNiMoTi17-12-2) | | | |
| Rangeability | | 6:1 | | | | |