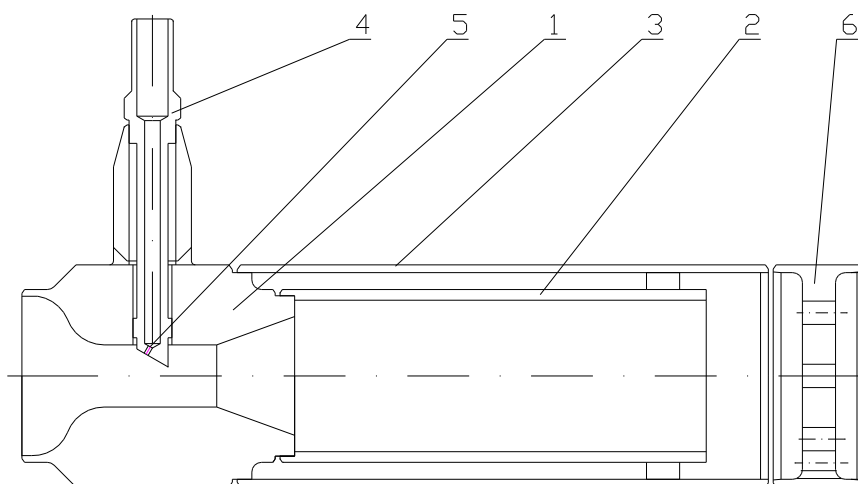
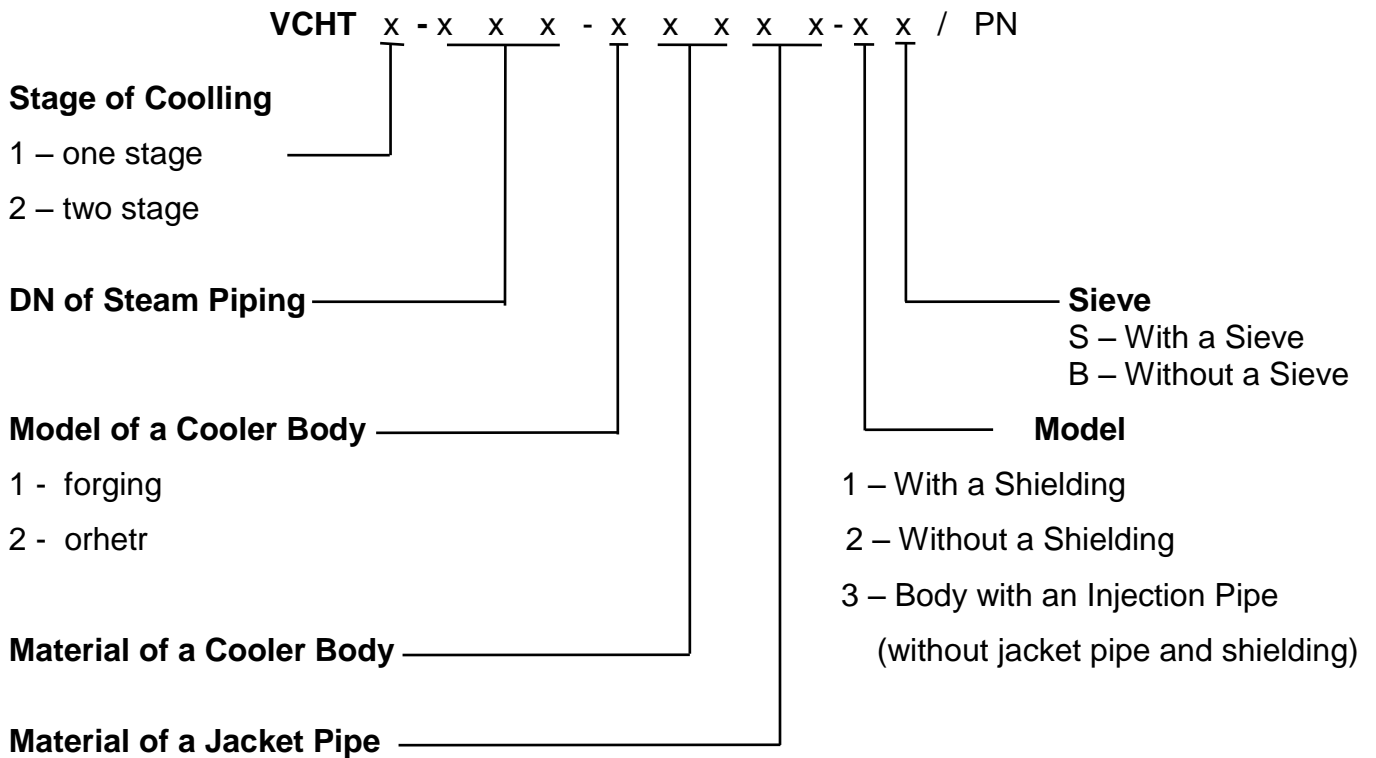


Type	Abbreviation	Name	Labelling
Venturi Cooler	VCHT	Venturi Cooler with an Injection Pipe	VCHT x-xxx-xxxxx-xx/PN

*Type Number Diagram*



- 1 - Cooler Body
- 2 - Shielding
- 3 - Jacket pipe
- 4 - Inlet Water
- 5 - Injection Pipe
- 6 - Sieve

Fig.2

### Description: (Fig.2)

The steam cooler is composed of a cooler body – Venturi tube. Both the inlet part and the outlet part (in some cases a conical diffuser is not executed on the outlet, for example cooling at stepdown stations) of the cooler body are fluently shaped and a narrowing of the body's inside diameter is proposed for the increase of speed. In this narrowing the speed of steam is several times higher than in the steam piping. The cooler body is followed with a slip conduit, in which protective shielding for some applications is located, and at the end there is a steam strainer, which serves for further decay of the cooling water supplied, for the noise level decrease and for the pressure decrease by degrees, the result of which is better cooling.

Water supply and injection is effected here by means of a profiled injection tube, in which there are openings for cooling medium supply. Having been primed into the steam current, injection water is decomposed in mild drops. The injection tube (if it is extended over all the narrowing in the body) is strutted at the loose end in the cooler body.

Furthermore, it is possible to create a so-called shortened version (internal arrangement 3) – the body with water inlet is executed without a slip conduit and shielding, an eventual diffuser is executed in the cooler body (Fig. 1).

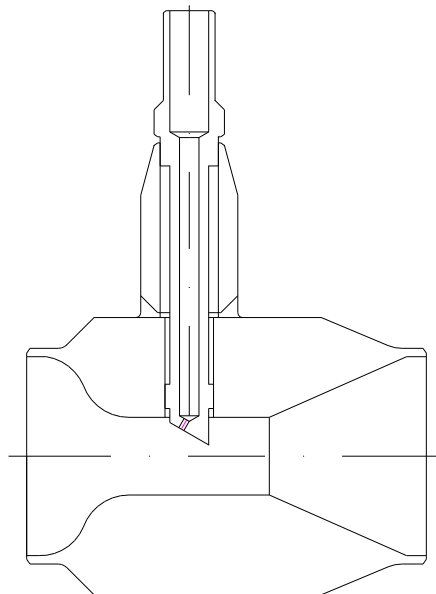


Fig. 1



### Labelling of used materials

Material Quality (acc. to ČSN)	Equivalent acc. to DIN	Labelling	Material Quality (acc. to ČSN)	Equivalent acc. to DIN	Labelling	Material Quality (acc. to ČSN)	Equivalent acc. to DIN	Labelling
11 416.1	P265GH	16	15 020.1, .5	15 Mo 3 16 Mo 3	50	17 134.3	X20CrMoV121	14
11 523.1	St 52-3	13	15 121.5	13 CrMo 44 13 CrMo 45	51	17 248.4	X6 CrNiTi 810	28
12 021.1	St 35.8	21	15 128.5, .9	14 MoV 63	58	17 348.4	X6 CrNiMoTi 17-12-2	38
12 022.1	St 45.8	22	15 313.5	10 CrMo 910 11 CrMo 910	53			

Material Quality (acc. to ČSN)	Equivalent acc. to ASTM	Labelling	Material Quality (acc. to ČSN)	Equivalent acc. to ASTM	Labelling	Material Quality (acc. to ČSN)	Equivalent acc. to ASTM	Labelling
11 416.1	A 662	16	15 020.1, .5	A 204-74	50	17 134.3	-	14
11 523.1	A 572	13	15 121.5	A 335 A 213	51	17 248.4	A 240	28
12 021.1	A 106	21	15 128.5, .9	A 405-76	58	17 348.4	A 276	38
12 022.1	A 106-85	22	15 313.5	A 335-75 A 336-75	53			

**NOTE:** A range of operating temperatures and pressures for materials are specified in the following standard:  
ČSN 13 0010 - Nominal pressures and working overpressures.

This standard is valid only for materials acc. to ČSN.  
The labelling is valid only for materials acc. to ČSN.