

可调节喷射泵，在蒸汽系统中的节能应用



baelz 590-373-P22-IP86-54298 DN 200 PN 25

baelz 590-373-P32-IP86 DN 150 PN 16



baelz 480-373-E07 DN 50 PN 16/25



baelz 477-373-E14 DN 15 PN 40

baelz 480-373/E14



baelz 480-373-E11 DN 80 PN 40



baelz 472-DN 1 1/2-373-E07

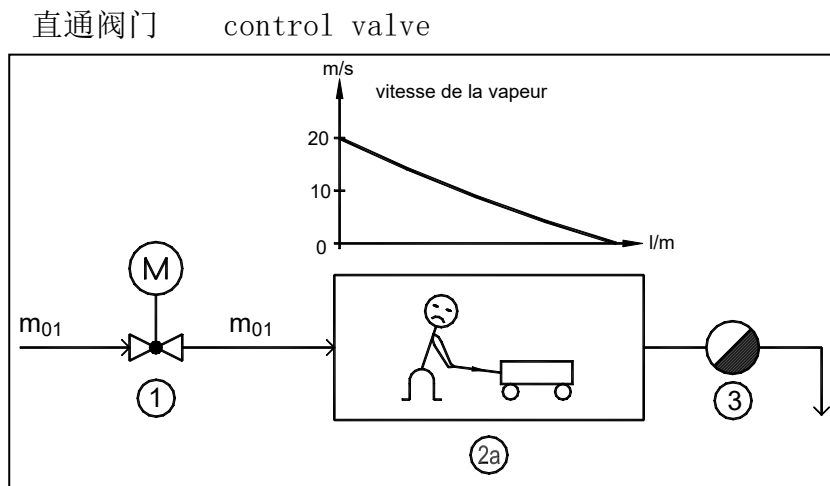


Kunde: Ziemann Auftrags-Nr.: 5480028

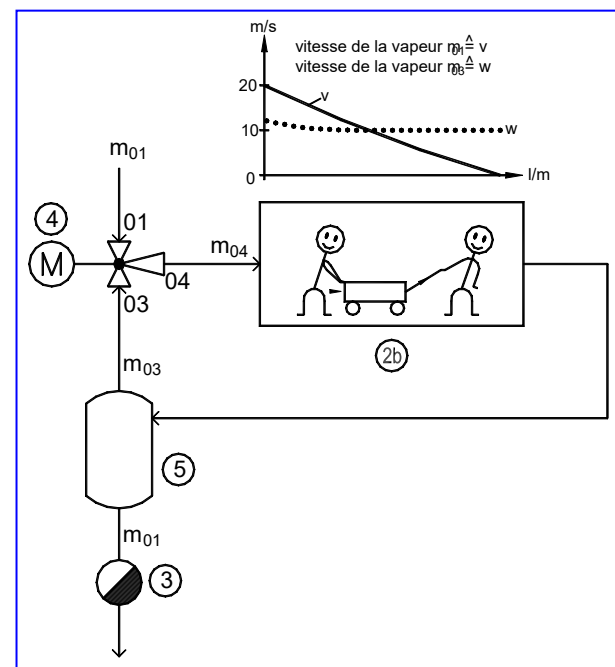
蒸汽喷射泵应用一：代替直通阀门

Steam ejector application 1: take place of 2-way control valve

与传统直通控制阀门比较 Comparison with control valve



可调节喷射泵 Steam ejector



1. 蒸汽进入设备方式：靠自身压力 by its own pressure
2. 蒸汽流出设备速度：零 Zero
3. 蒸汽进入设备流量：只有驱动蒸汽01 motive steam 01
4. 冷凝水排出：虹吸作用，水膜较厚 dick condensate film
5. 设备结构：每个设备单独疏水阀 one trap each equipment

同时依靠抽吸作用 suction additionally
 由于抽吸作用不再是零 not zero via suction
 驱动蒸汽01与抽吸蒸汽03 and the sucked steam 03
 抽吸作用，水膜较薄 thinner condensate film
 整个环路只需一个疏水阀 one steam trap only

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直通阀门 control valve

1. 蒸汽进入设备方式：靠自身压力 by its own pressure

2. 蒸汽流出设备速度：零 Zero

导热系数K是和热媒介的流速相关联的。

$$K = f \times \sqrt{v + w}$$

v 用热系统入口处蒸汽速度
w 用热系统出口处蒸汽速度
f 系数

可调节喷射泵 Steam ejector

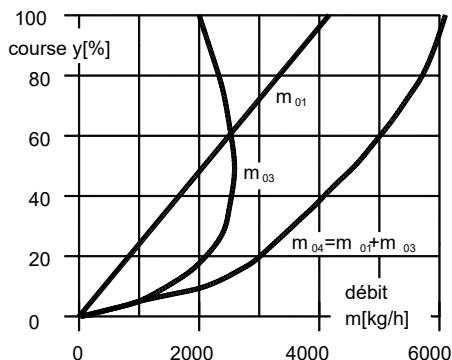
同时依靠抽吸作用 suction additionally

由于抽吸作用不再是零 not zero via suction

导热系数提高，提高生产效率

Better heat transfer coefficient

3. 蒸汽进入设备流量：只有驱动蒸汽01 motive steam 01 only 驱动蒸汽01与抽吸蒸汽03 and the sucked steam 03



流量加大，换热效率提高

充分利用设备工作面积，温度平均

Full active exchanging surface

4. 冷凝水排出：虹吸作用，水膜较厚 dick condensate film

抽吸作用，水膜较薄 thinner condensate film

水膜变薄，换热效率提高，提高滚筒表面温度

increasing the temperature of the surface

5. 设备结构：每个设备单独疏水阀 one trap each equipment

整个环路只需一个疏水阀 one steam trap only

减少疏水阀数量，节约生产成本

Traps reducing, cost saving

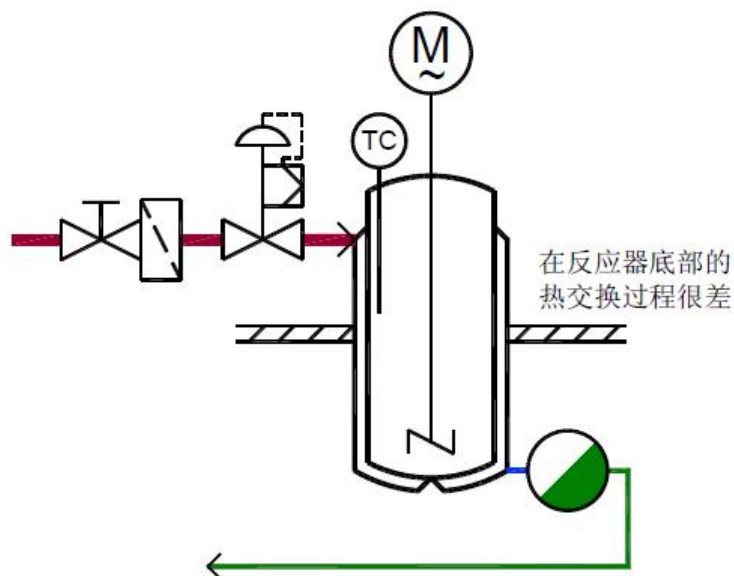
节能15%
Energy Saving 15%

蒸汽喷射泵应用一：代替直通阀门

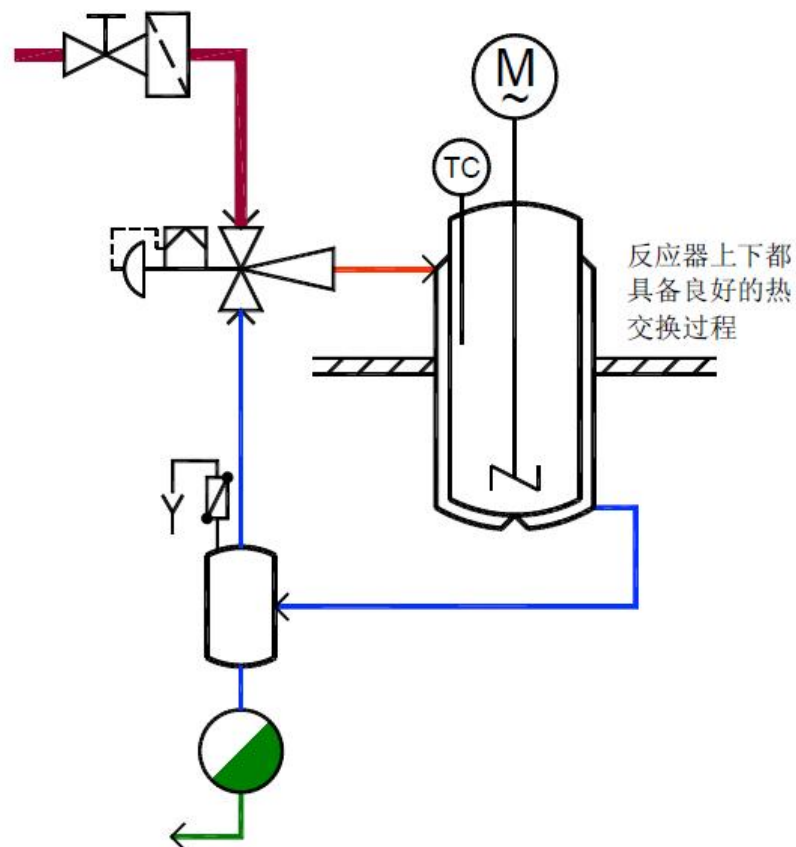
Steam ejector application 1: take place of 2-way control valve

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传统方案 A

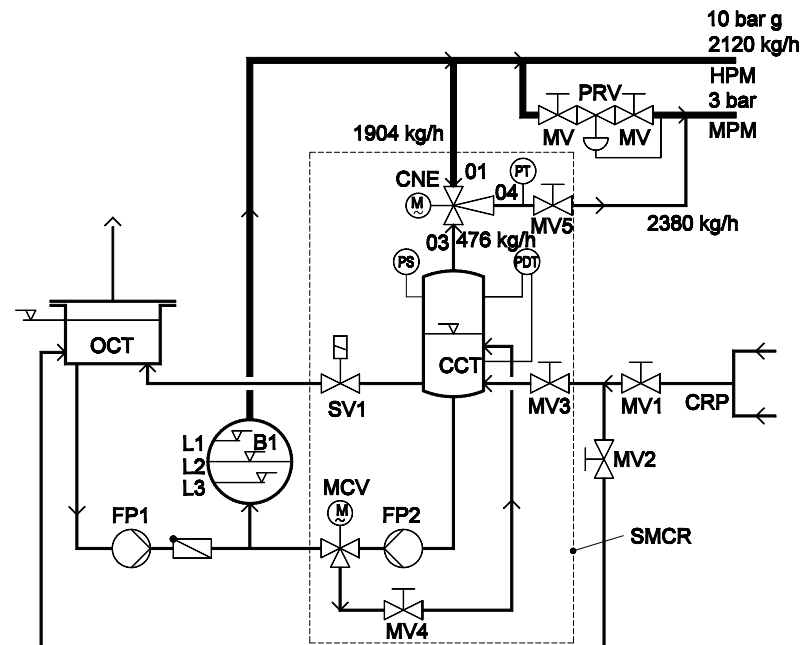
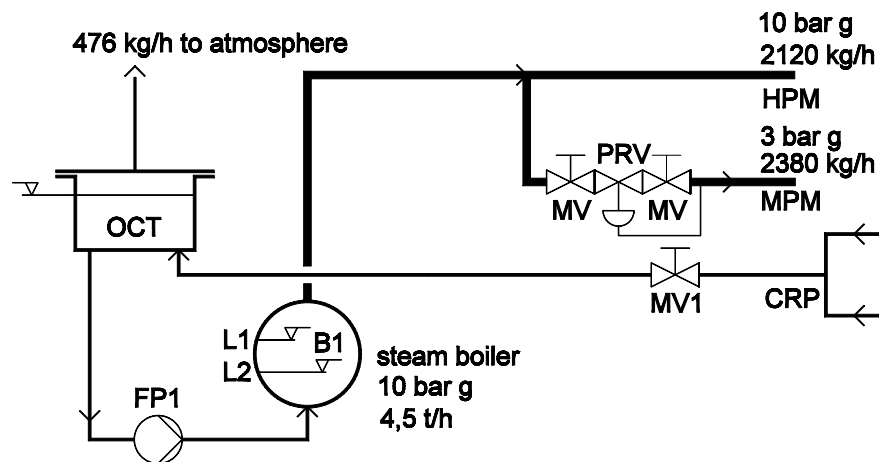


喷射泵解决方案 B



蒸汽喷射泵应用二：压缩低压蒸汽

Steam ejector application 2: compression



蒸汽减温减压器

Pressure reducer/desuperheater and saturated steam generator with water injection

1 产生的饱和蒸汽不会过热

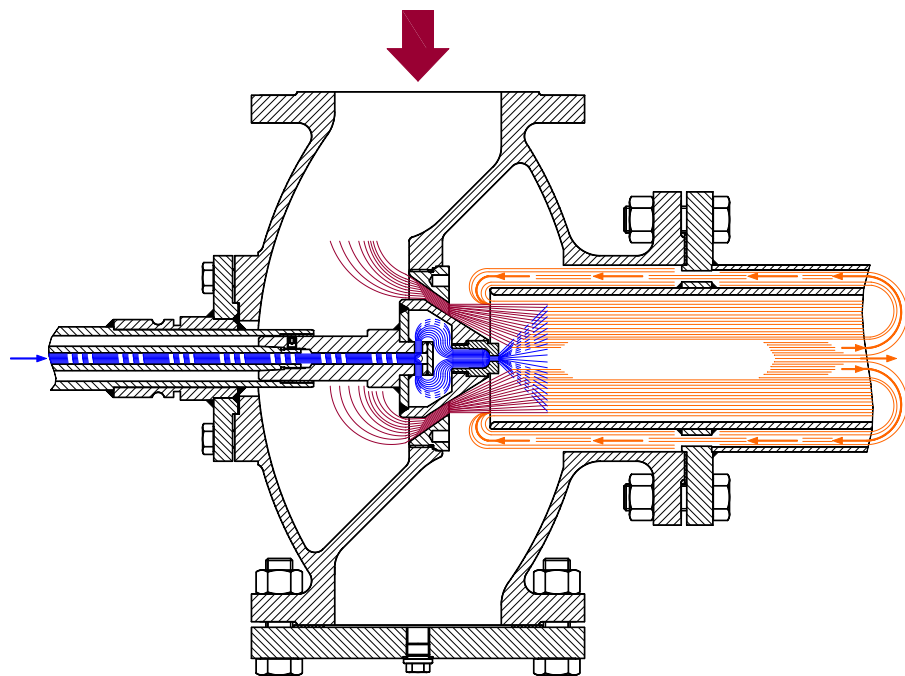
Create the saturated steam without any overheating

2 在 2 - 100%的负荷范围内具备高品质的压力及温度调控性能

High quality/precision of the pressure and temperature control within the load range of 2-100%

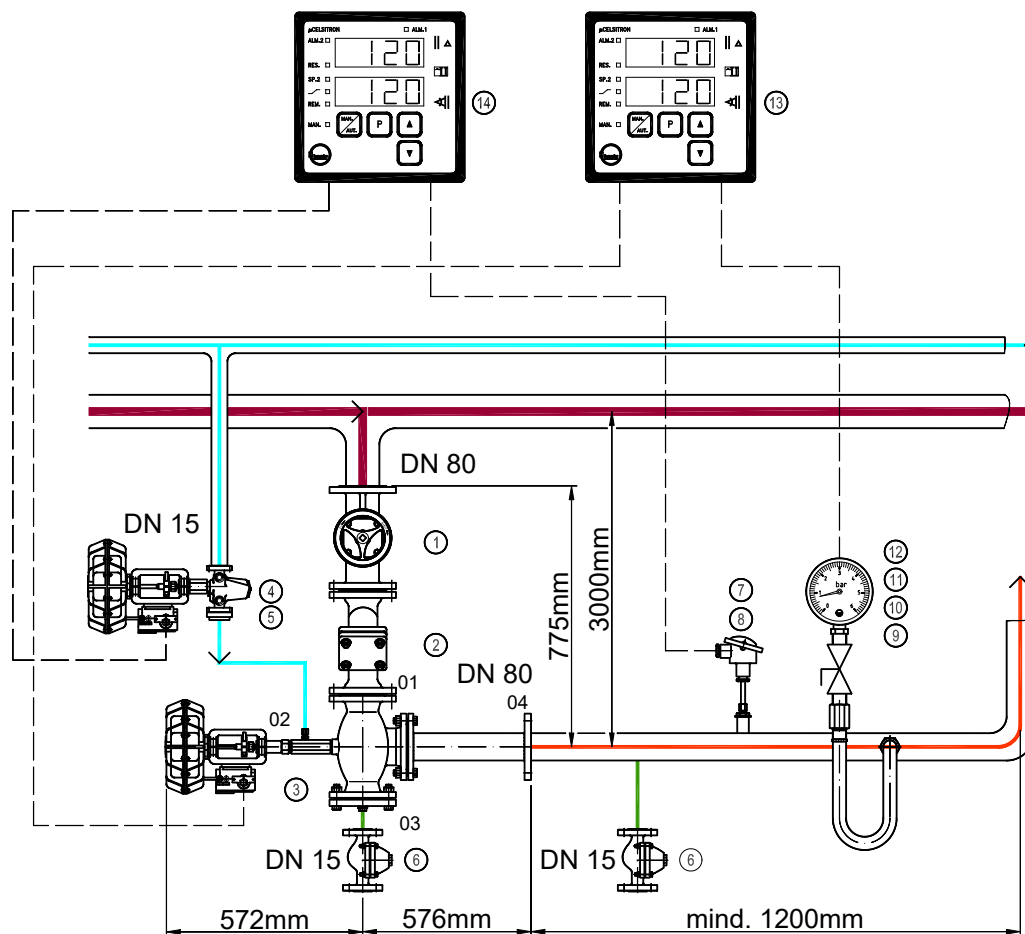
3 喷射的水得到很好地雾化

Good pulverizing of the injected water



蒸汽减温减压器

Pressure reducer/ desuperheater and saturated steam generator with water injection



蒸汽减温减压器

Pressure reducer/desuperheater and saturated steam generator with water injection

