|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **大锥角折边锥形封头内压校核** | | | | 计算单位 |  | | |
| 计算所依据的标准 | | | | | **HG/T 20582-2011** | | |
| **计 算 条 件** | | | | | **简 图** | | |
| 设计压力, Pd | | | MPa | **$$001** | $08  $07  $04  $09  $00 | | |
| 设计温度, t | | | ℃ | **$$002** |
| 介质静压力, Ps | | | MPa | **$$003** |
| 封 头 | 大端内直径, Dsi | | mm | **$$004** |
| 材料标准号 | | **$$005** | |
| 材料牌号/名称 | | **$$006** | |
| 半顶角, α | | ° | **$$007** |
| 名义厚度, δcn | | mm | **$$008** |
| 转角内半径, ri | | mm | **$$009** |
| 腐蚀裕量, Cc2 | | mm | **$$010** |
| 焊接接头系数, Φc | | / | **$$011** |
| 压力试验类型 | | | **液压试验** | |
| **材 料 特 性** | | | | | | | |
| 密度, ρc | | | kg/m³ | **$$013** | 试验温度许用应力, [σ]c | MPa | **$$016** |
| 材料负偏差, Cc1 | | | mm | **$$014** | 试验温度下屈服点, RceL | MPa | **$$017** |
| 设计温度许用应力, [σ]ct | | | MPa | **$$015** | 抗拉/屈服控制应力, [σ]ct1 | MPa | **$$018** |
| **过 程 参 数** | | | | | | | |
| 计算压力, Pc | | MPa | | Pc = Pd + Ps | | | **$$019** |
| 封头厚度附加量, Cc | | | mm | Cc = Cc1 + Cc2 | | | **$$020** |
| 封头有效厚度, δce | | | mm |  | | | **$$021** |
| **内 压 计 算 及 校 核** | | | | | | | |
| 系数, β | | | / |  | | | **$$022** |
| 系数, βT | | | / |  | | | **$$023** |
| 系数, β3 | | | / |  | | | **$$024** |
| 厚度, δk | | | mm |  | | | **$$025** |
| 厚度, δT | | | mm |  | | | **$$026** |
| 厚度, δp | | | mm |  | | | **$$027** |
| 封头计算厚度, δcc | | | mm |  | | | **$$028** |
| 封头设计厚度, δcd | | | mm | δcd = δcc + Cc2 | | | **$$029** |
| 封头厚度校核 | | | / | δcn ≥ δcd + Cc1 | | | **$$030** |
| **压 力 试 验** | | | | | | | |
| 封头试验压力值, PcT | | | MPa | PcT = 1.25×Pd×[σ]c/max{[σ]ct , [σ]ct1} | | | **$$031** |
| **MAWP** | | | | | | | |
| 压力, [P]k | | | MPa |  | | | **$$032** |
| 压力, [P]T | | | MPa |  | | | **$$033** |
| 压力, [P]P | | | MPa |  | | | **$$034** |
| 封头, MAWPc | | | MPa |  | | | **$$035** |