|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **圆形平盖设计校核** | | | | 计算单位 |  | | | |
| 计算所依据的标准 | | | | | **NB/T 47003.1-2009** | | | |
| **计 算 条 件** | | | | | **平 盖 简 图** | | | |
| 设计温度, t | | | ℃ | **$$001** | $06  $07  $13  $00  $12  $00  $12 | | | |
| 设计压力, Pd | | | MPa | **$$002** |
| 介质静压力, Ps | | | MPa | **$$003** |
| 平 盖 | 材料标准号 | | **$$004** | |
| 材料牌号/名称 | | **$$005** | |
| 内直径, Dsi | | mm | **$$006** |
| 名义厚度, δsn | | mm | **$$007** |
| 腐蚀裕量, Cs2 | | mm | **$$008** |
| 焊接接头系数, φs | | / | **$$009** |
| 加 强 筋 | 材料标准号 | | **$$010** | |
| 材料牌号/名称 | | **$$011** | |
| 名义厚度, δjn | | mm | **$$012** |
| 高度, hj | | mm | **$$013** |
| 腐蚀裕量, Cj2 | | mm | **$$014** |
| 压力试验类型 | | | **气压试验** | |
| **材 料 特 性** | | | | | | | | |
| 平 盖 | | 材料密度, ρs | kg/m³ | **$$016** | 筋 板 | 材料密度, ρj | kg/m³ | **$$021** |
| 试验温度下屈服点, RseL | MPa | **$$017** | 试验温度下屈服点, RjeL | MPa | **$$022** |
| 材料负偏差, Cs1 | mm | **$$018** | 材料负偏差, Cj1 | mm | **$$023** |
| 设计温度许用应力, [σ]st | MPa | **$$019** | 设计温度许用应力, [σ]jt | MPa | **$$024** |
| 试验温度许用应力, [σ]s | MPa | **$$020** | 试验温度许用应力, [σ]j | MPa | **$$025** |
| **过 程 参 数** | | | | | | | | |
| 计算压力, Pc | | | MPa | Pc = Pd + Ps | | | | **$$026** |
| 平 盖 | | 厚度附加量, Cs | mm | Cs = Cs1 + Cs2 | | | | **$$027** |
| 有效厚度, δse | mm |  | | | | **$$028** |
| 计算内直径, Dc | mm |  | | | | **$$029** |
| 筋 板 | | 厚度附加量, Cj | mm | Cj = Cj1 + Cj2 | | | | **$$030** |
| 有效厚度, δje | mm |  | | | | **$$031** |
| 有效高度, hje | mm |  | | | | **$$032** |
| **平 盖 内 压 强 度 计 算 及 校 核** | | | | | | | | |
| 结构特征系数, Kp | | | / |  | | | | **0.018** |
| 平盖计算厚度, δsc | | | mm |  | | | | **$$034** |
| 平盖设计厚度, δsd | | | mm | δsd = δsc + Cs2 | | | | **$$035** |
| 平盖厚度校核 | | | / | δsn ≥ δsd + Cs1 | | | | **$$036** |
| **筋 板 计 算 及 校 核** | | | | | | | | |
| 所需截面系数, Zx | | | mm3 |  | | | | **$$037** |
| 平盖有效宽度, Ls | | | mm | Ls = 20δse | | | | **$$038** |
| 重心外边距, e1 | | | mm |  | | | | **$$039** |
| 重心外边距, e2 | | | mm | e2 = hje + δse – e1 | | | | **$$040** |
| 实际惯性矩, I | | | mm4 |  | | | | **$$041** |
| 实际截面系数, Zact | | | mm3 |  | | | | **$$042** |
| 截面系数校核 | | | / | Zact ≥ Zx | | | | **$$043** |
| **压 力 试 验** | | | | | | | | |
| 平盖试验压力值, PT | | | MPa |  | | | | **$$044** |
| **MAWP** | | | | | | | | |
| 平盖最大允许工作压力 | | | MPa |  | | | | **$$045** |

注：加强筋可位于平盖外侧或内侧。