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|  | | | 项目名称 | | |  | | | | | | | | 页码 | | | 1 |
| 节点名称 | | |  | | | | | | | | | | | |
| 节点编号 | | |  | | | | | | | | | | | |
| 计算 | | |  | | | | 校核 |  | | | 日期 | | |  |
|  |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
| **图例：** |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
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| **已知：** |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
| 杆件内力： | N= | {N} | | KN |  |  | 连接耳板抗拉强度设计值 |  | *f* | {f1} | | N/mm2 | | | Q345 |  |  |
| 销轴直径 | d= | {d} | | mm |  |  | 连接板承压强度设计值 |  | *f* | {f2} | | N/mm2 | | | Q345 |  |  |
| 销轴孔径 | d0= | {d0} | | mm |  |  | 连接耳板抗剪强度设计值 |  | *f* | {f3} | | N/mm2 | | | Q345 |  |  |
| 连接耳板1厚 | t1= | {t1} | | mm | 双块 |  | 销轴抗剪强度设计值 |  |  | {f4} | | N/mm2 | | | 45号钢 |  |  |
| 连接耳板2厚 | t2= | {t2} | | mm | 单块 |  | 销轴抗承压强度设计值 |  |  | {f5} | | N/mm2 | | | Q345 |  |  |
| 连接耳板净边距 | a= | {a} | | mm |  |  | 销轴剪切面数 |  | n | {n} | | 块 | | |  |  |  |
| 连接耳板净边距 | b= | {b} | | mm |  |  | 销轴抗弯强度设计值 |  |  | {f6} | | N/mm2 | | | 45号钢 |  |  |
| **1、销轴孔净截面耳板抗拉强度验算** | | | | | | | | | | | | | | | | | |
|  |  |  |  | |  |  | {result1res} |  | {result1f} | |  | | t= | {tCop} | | mm | |
|  | σ = | {result1sigma} | | N/mm2 |  | *≤f=* | N= | {NCop} | | kN | |
|  |  |  | |  |  |  |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
|  | *b1=* | {result1b1} | | mm |  |  |  |  |  | |  |  | |  |  |
|  |  |  | |  |  |  |  |  |  | |  |  | |  |  |
| **2、耳板端部抗拉（劈开）强度按下式验算** | | | | | | | | | | | | | | | | | |
|  |  |  |  | |  |  | {result2res} |  |  |  |  | |  |  | |  |  |
|  | σ = | {result2sigma} | | N/mm2 |  | *≤f=* | {result2f} | |  | |  |  | |  |  |
|  |  |  | |  |  |  |  |  |  | |  |  | |  |  |
| **3、 耳板抗剪强度按下式验算** | | | | | | | | | | | | | | | | | |
|  |  |  |  | |  |  | {result3res} |  |  |  |  | |  |  | |  |  |
|  |  | τ = | {result3tao} | | N/mm2 |  | *≤fv=* | {result3fv} | | | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  | |  |  | |  |  |
|  |  | Z= | {result3Z} | | mm |  |  |  |  |  |  | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
| **4、 销轴的承压强度按下式验算** | | | | | | | | | | | | | | | | | |
|  |  |  |  | |  |  | {result4res} |  |  |  |  | |  |  | |  |  |
|  |  | σ c= | {result4sigmaC} | | N/mm2 |  | *≤fbc=* | {result4fbc} | | | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  | |  |  | |  |  |
| **5、 销轴抗剪强度按下式验算** | | | | | | | | | | | | | | | | | |
|  |  |  |  | |  |  | {result5res} |  |  |  |  | |  |  | |  |  |
|  |  | τ b= | {result5tao} | | N/mm2 |  | *≤fv=* | {result5fv} | | | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  |  | | M= | {result6M} | | KN.m | |
| **6、 销轴抗弯强度按下式验算** | | | | | | | | | | | | | | | | | |
|  |  |  |  | |  |  | {result6res} |  |  |  |  | |  |  | |  |  |
|  |  | σ b= | {result6sigmaB} | | N/mm2 |  | *≤fb=* | {result6fb} | | | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
|  |  |  |  | |  |  | {result6q} |  |  |  |  | |  |  | |  |  |
|  |  |  |  | |  |  | *≤* | 1 | {result6resq} | | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  | |  |  | |  |  |
| **7、 销轴连接时耳板的几何构造验算** | | | | | | | | | | | | | | | | | |
|  |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
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|  |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
| 连接耳板1（端部） | | |  | |  |  |  |  |  |  |  | |  |  | |  |  |
|  |  | b/t= | {result7bt1} | |  |  | {result7res1} |  |  |  |  | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
|  |  | be= | {result7be1} | |  |  | {result7res2} |  |  |  |  | |  |  | |  |  |
|  |  | a≥ | 4/3be | |  |  |  |  |  |  | |  |  | |  |  |
| 连接耳板2（中间） | | |  | |  |  |  |  |  |  |  | |  |  | |  |  |
|  |  | b/t= | {result7bt2} | |  |  | {result7res3} |  |  |  |  | |  |  | |  |  |
|  |  |  |  | |  |  |  |  |  |  |  | |  |  | |  |  |
|  |  | be= | {result7be2} | |  |  | {result7res4} |  |  |  |  | |  |  | |  |  |
|  |  | a≥ | 4/3be | |  |  |  |  |  |  | |  |  | |  |  |
| 制表： |  |  |  | |  |  | 校对： |  |  |  | 邮箱： | |  |  | |  |  |