

巴厘通用能源公司 PT.GENERAL ENERGY BALI

维护部 炉管专项物资 技术规范书

Maintenance Department Furnace Tube Special Materials Technical Specifications

批准 (approved by) : 徐东辉

审核 (verified by) : 马金钢

编制 (Prepared by) : 孙建元

采购编号 (Purchase number) : GEB-2026-P-046

第一条 总则

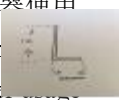
Article 1: General rules

1.1 本技术规范书适用于巴厘岛 3*142MW 电厂采购的物资。本技术规范书提出物资名称、规格型号、数量及验收标准等方面的技术要求。

1.1 This technical specification applies to materials procured for the 3*142MW power plant in Bali. It outlines the technical requirements for material names, specifications, quantities, and acceptance criteria.

第二条 物资名称及技术要求

Article 2: Material Name and Technical Requirements

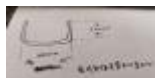
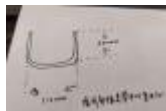
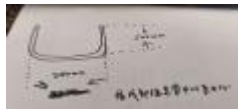
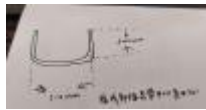
序号 No	名称 Description	规格/型号 Specification/Model	单位 Unit	数量 Quantity	用途 Purpose	备注 Remarks
1	炉管（低温过热器） Tube tube (low-temperature superheater)	型号：Φ54×6 材质：SA210-C Model: Φ54×6 Material: SA210-C	米 meter	400	锅炉炉管 更换使用 Boiler tube replacement	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
2	防磨瓦（90°弯头） Abrasion-resistant roofing sheet (90-degree bend)	型号：44（内径）×5（厚度） 材质：310S Model: 44 (inner diameter) × 5 (thickness); Material: 310S	块 piece	50	锅炉炉管 更换使用 Boiler tube replacement	高温过热器使用 High-temperature superheater usage 
3	防磨瓦 Abrasion-resistant tiles	型号：44（内径）×5（厚度） 材质：310S Model: 44 (inner diameter) × 5 (thickness); Material: 310S steel (1 meter per piece)	根 root	250	锅炉炉管 更换使用 Boiler tube replacement	高温过热器使用 High-temperature superheater usage 

4	防磨瓦配套管卡 Wear-resistant tile matching pipe clamps	型号：管卡厚度：5mm 材质：管卡、螺栓材质：310S 螺栓型号：M16×100 配套螺母垫片 每套管卡上面有 2 套螺栓 Model: Tube clamp Thickness: 5 mm Materials: Tube clamp and bolts (material: 310S) Bolt type: M16×100 Includes nuts and washers Each set contains two sets of bolts	套 set	1200	锅炉炉管更换使用 Boiler tube replacement	高温过热器使用（高温过热器管子直径 42mm） High-temperature superheater tube usage (High-temperature superheater tube diameter) 
5	防磨瓦 Abrasion-resistant tiles	型号：57（内径）×5（厚度） 材质：0Cr20Ni14Si2（2 米一根） Model: 57 (inner diameter) × 5 (thickness); Material: 0Cr20Ni14Si2 (one piece per 2 meters)	根 root	200	锅炉炉管更换使用 Boiler tube replacement	低温过热器使用 Low-temperature superheater tube usage 
6	防磨瓦配套管卡 Wear-resistant tile matching pipe clamps	材质：0Cr20Ni14Si2 Material: 0Cr20Ni14Si2	个 individual	500	锅炉炉管更换使用 Boiler tube replacement	低温过热器使用（低温过热器管子直径 54mm） Low-temperature superheater tube usage (The diameter of the low-temperature superheater tubes is 54 mm.) 

7	炉管（高温再热器）Furnace tubes (high-temperature reheater)	型号：φ51*4 材质：T91 Model: φ51*4 Material: T91	米 meter	10	锅炉炉管 更换使用 Boiler tube replacement	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
8	炉管（高温再热器）Furnace tubes (high-temperature reheater)	型号：φ51*4 材质：12Cr1MoVG Model: φ51*4 Material: 12Cr1MoVG	米 meter	10	锅炉炉管 更换使用 Boiler tube replacement	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
9	炉管（水冷壁）Furnace tubes (water-cooled wall)	型号：φ60*6 材质：SA210-C Model: φ60*6 Material: SA210-C	米 meter	10	锅炉炉管 更换使用 Boiler tube replacement	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
10	炉管（后墙悬吊管水冷壁）Furnace tubes (rear wall suspended water-cooled wall)	型号：φ76*12 材质：SA211-C Model: φ76*12 Material: SA211-C	米 meter	10	锅炉炉管 更换使用 Boiler tube replacement	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.

11	炉管（后墙垂帘管水冷壁） Furnace tubes (rear wall curtain tube water-cooled wall)	型号：φ70*8 材质：SA211-C Model: φ70*8 Material: SA211-C	米 meter	10	锅炉炉管 更换使用 Boiler tube replaceme nt	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
12	炉管（包墙过热 器）Furnace tubes (wall-mounted superheaters)	型号：φ51*5 材质：SA211-C Model: φ51*5 Material: SA211-C	米 meter	10	锅炉炉管 更换使用 Boiler tube replaceme nt	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
13	炉管（后烟井隔 墙）Furnace tubes (rear flue partition wall)	型号：φ51*5 材质：12Cr1MoVG Model: φ51*5 Material: 12Cr1MoVG	米 meter	10	锅炉炉管 更换使用 Boiler tube replaceme nt	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
14	炉管（高温过热 器）Furnace tubes (high-temperatu re superheater)	型号：φ42*6 材质：12Cr1MoVG Model: φ42*6 Material: 12Cr1MoVG	米 meter	10	锅炉炉管 更换使用 Boiler tube replaceme nt	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.

15	炉管（高温过热器）Furnace tubes (high-temperature superheater)	型号：φ42*6.5 材质：12Cr2MoWVTiB Model: φ42*6.5 Material: 12Cr2MoWVTiB	米 meter	10	锅炉炉管更换使用 Boiler tube replacement	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
16	炉管（前屏过热器）Furnace tubes (front screen superheater)	型号：φ42*5 材质：12Cr1MoVG Model: φ42*5 Material: 12Cr1MoVG	米 meter	10	锅炉炉管更换使用 Boiler tube replacement	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
17	炉管（前屏过热器）Furnace tubes (front screen superheater)	型号：φ42*5 材质：12Cr2MoWVTiB Model: φ42*5 Material: 12Cr2MoWVTiB	米 meter	10	锅炉炉管更换使用 Boiler tube replacement	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
18	炉管（后屏过热器）Furnace tubes (rear screen superheater)	型号：φ42*5.5 材质：12Cr1MoVG Model: φ42*5 Material: 12Cr1MoVG	米 meter	10	锅炉炉管更换使用 Boiler tube replacement	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.

19	炉管（后屏过热器）Furnace tubes (rear screen superheater)	型号：φ42*5.5 材质：12Cr2MoWVTiB Model: φ42*5.5 Material: 12Cr2MoWVTiB	米 meter	10	锅炉炉管 更换使用 Boiler tube replaceme nt	炉管外壁需有保护漆，内壁不允许生锈，炉管两头需封堵 The outer wall of the furnace tube must be coated with protective paint; the inner wall must not develop rust. Both ends of the furnace tube must be sealed.
20	U 型弯管（低温过热器三级） U-shaped bend (three-stage low-temperature superheater)	型号：φ54*5.5 材质：15CrMoG Model: φ54*5.5 Material: 15CrMoG	个 indiv ual	5	锅炉炉管 更换使用 Boiler tube replaceme nt	
21	U 型弯管（低温过热器三级） U-shaped bend (three-stage low-temperature superheater)	型号：φ54*5.5 材质：15CrMoG Model: φ54*5.5 Material: 15CrMoG	个 indiv ual	5	锅炉炉管 更换使用 Boiler tube replaceme nt	
22	U 型弯管（低温过热器二级） U-shaped bend (second stage of low-temperature superheater)	型号：φ54*6 材质：SA210-C Model: φ54*6 Material: SA210-C	个 indiv ual	5	锅炉炉管 更换使用 Boiler tube replaceme nt	
23	U 型弯管（低温过热器二级） U-shaped bend (second stage of low-temperature superheater)	型号：φ54*6 材质：SA210-C Model: φ54*6 Material: SA210-C	个 indiv ual	5	锅炉炉管 更换使用 Boiler tube replaceme nt	
24	耐磨瓦 Abrasion-resista nt tiles	型号：60（内径）×5（厚度） 材质：0Cr20Ni14Si2 (2 米一根) Model: 60 (inner diameter) × 5 (thickness); Material: 0Cr20Ni14Si2 (one piece per 2 meters)	根 root	200	锅炉炉管 更换使用 Boiler tube replaceme nt	低温再热器使用 Low-temperature reheater use

第三条 质量验收标准

Article 3: Quality Inspection Standards

3.1 物资须符合国家或行业标准，确保满足甲方现场使用要求。物资到厂后，甲方有权依据本协议及相关标准对物资进行验收，如发现质量问题，乙方应无条件更换或退货。

3.1 Materials Must meet national or industry standards to ensure suitability for Party A's site use. Upon arrival at plant, Party A has the right to inspect the materials according to this agreement and relevant standards. If any quality issues are found, Party B must replace or return the goods unconditionally.

3.2 乙方须提供完整的质量检测报告、合格证及相关技术资料（到场后随带产品“三证一书”）

3.2 Party B must provide complete quality inspection reports, certificates of conformity, and relevant technical documents (Upon arrival, the product must be accompanied by the "Three Certificates and One Manual.").

第四条 责任与义务

Article 4: Responsibilities and Obligations

4.1 乙方须确保所供物资的技术参数、型号、规格与本协议一致。

4.1 Party B must ensure that the technical parameters, models, and specifications of the supplied materials comply with this agreement.

第五条 其他

Article 7: Miscellaneous

5.1 本技术规范书作为采购文件的组成部分之一，属于技术附件，与采购文件具有同等法律效力。

5.1 This technical specification is an integral part of the procurement documents and is considered a technical appendix. It has the same legal effect as the procurement documents.