

GENERAL SPECIFICATION
结构设计总说明

1. THIS VOLUME IS THE CONSTRUCTION DRAWING OF FOUNDATIONS OF MAIN POWER BUILDING @ COLUMN LINE B\C\D. THE DESIGN GRADE OF FOUNDATION IS CLASS I ACCORDING TO THE <CODE FOR DESIGN OF BUILDING FOUNDATIONS>(GB 50007-2002).

本卷册为主厂房B\C\D列柱基础施工图。根据《建筑地基基础设计规范》GB50007-2002要求,基础设计等级为甲级。

2. $\pm 0.000\text{m}$ CORRESPONDS TO ABSOLUTE EL.70.00m.

$\pm 0.000\text{m}$ 相当于绝对标高70.00m。

3. THE BEARING LAYER IS ⑤ SLIGHTLY WEATHERED STONE (SANDSTONE), THE CHARACTERISTIC VALUE OF BEARING CAPACITY IS $f_{ak}=800\text{kPa}$ SEPARATELY.

基础持力层置于第⑤微风化岩(砂岩)上,承载力特征值分别为 $f_{ak}=800\text{kPa}$ 。

IF THE TOP ELEVATION OF ⑤ IS LOWER THAN THE BOTTOM ELEVATION OF THE FOUNDATION, THE SUBSOIL ABOVE ⑤ SHOULD BE REMOVED AND BACKFILLED WITH C20 RUBBLE CONCRETE (RUBBLE CONTENT:20-30%, MAXIMUM PARTICLE DIAMETER<300mm)

THE DIMENSIONS OF REMOVING AND BACKFILLING FIELD ARE THE FOUNDATION WIDTH PLUS 200mm EACH SIDE. ADAPTABLE MEASUREMENT SHOULD BE ADOPTED FOR REDUCING OF HYDRATION HEAT OF MASS RUBBLE CONCRETE. 基坑超挖部分应用C20毛石混凝土(毛石含量20-30%,最大粒径<300mm)浇至垫层底标高,浇筑范围为宽出基础四周各200,对回填体积较大的毛石砼应采用适当措施降低水化热。

4. RELEVANT DEPARTMENTS SHALL MAKE AN INSPECTION OF FOUNDATION SUBSOIL AND TAKE AN RECORD ACCORDING TO THE DRAWINGS AFTER FOUNDATION PITS ARE EXCAVATED TO THE DESIGN ELEVATION. PLEASE INFORM THE REPRESENTATIVE OF DESIGN WHEN DISADVANTAGED GEOLOGICAL CONDITION IS OCCURED. THE CONSTRUCTION OF FOUNDATION SHALL NOT BE PERMITTED UNTIL THE PROBLEM IS DEALED WITH.

基坑开挖至基础底标高后,各相关部门应进行地质验槽并做记录。当遇到不良地质条件时应及时通知现场工代,处理完毕后方可继续进行施工。

5. EFFECTIVE DEWATERING MEASURES SHALL BE ADOPTED TO KEEP THE PIT DRY AND ASSURE THE QUALITY OF FOUNDATION CONSTRUCTION, WHEN EXCAVATING FOUNDATION PITS AND POURING FOUNDATIONS.

基坑开挖和基础施工时应采取有效的排水措施保持基坑干燥,以保证基础混凝土工程的质量。

6. MATERIAL: CONCRETE GRADE: THE FIRST CASTING :C35 ;THE SECOND CASTING :C40 ;THE THIRD CASTING C15;MUD MAT :C15. THE CONCRETE GRADE SHOULD CONFORM TO CODE FOR DESIGN OF CONCRETE STRUTURES (GB50010-2002). REBARS : Φ -Fe500(USED FOR WELDING CONNECTION) OR Fe500(USED FOR MACHINACL AND LAPPING CONNECTION) 采用材料: 混凝土:第一次浇筑C35;第二次浇筑C40;第三次浇筑C15;垫层:C15. 钢筋: Fe500D(用于焊接), Fe500(用于机械连接和绑扎)。

7. THE CONCRETE COVER FOR REINFORCEMENT OF FOUNDATION AND RAFT AND BEAM AND COLUMN IS 50mm, SHEAR WALL IS 30mm.

混凝土保护层厚度:基础和筏板、基础梁、基础短柱:50mm;剪力墙30mm。

THE LENGTH OF REBARS SHOULD BE DECIDED BY FIELD SETTING OUT.

钢筋长度以现场放样为准。

8. IN THIS DRAWING, BLINDING LAPPED SPLICE OR WELDING CAN BE USED TO CONNECT THE REBAR IN COLUMN. WHEN BLINDING LAPPED SPLICE IS USED, THE LENGTH OF LAPPED SPLICE SHOULD BE 58d FOR COLUMNS AND 50d FOR FOUNDATIONS, THE PERCENTAGE OF AREA FOR LAPPED SPLICE JOINT IN REBAR AT A SAME CONNECTION SECTION SHOULD BE NOT MORE THAN 50%.

图中拉纵筋可以采用绑扎搭接或焊接。绑扎搭接长度短柱为58d,基础底板为50d,同一截面钢筋接头百分率不大于50%。

9. THE ENVIRONMENTAL CATEGORY OF FOUNDATION IS I-C ACCORDING TO THE CHINESE CODE FOR DURABILITY DESIGN OF CONCRETE STRUCTURES(GB/T 50476-2008).

根据中国《混凝土结构耐久性设计规范》GB/T 50476-2008的规定,基础所处的环境类别为I-C类。

GRADE OF CONCRETE 混凝土强度等级	MAXIMUM WATER-CEMENT RATIO 最大水灰比	MINIMUM CONSUMPTION OF CEMENT 最小水泥用量	MAXIMUM CONSUMPTION OF CEMENT 最大水泥用量	MAXIMUM CONTENT OF CL- 氯离子最大含量	MAXIMUM CONTENT OF ALKALI 最大碱含量	MAXIMUM DIAMETER OF AGGREGATE 骨料最大粒径	CATEGORY OF AGGREGATE 骨料类型
C30	0.55	280kg/m ³	400kg/m ³	0.15%	3.5kg/m ³	20mm	INACTIVE 非活性
C35	0.50	300kg/m ³	400kg/m ³	0.15%	3.5kg/m ³	25mm	INACTIVE 非活性

9. EFFECTIVE DEWATERING MEASURES SHALL BE ADOPTED TO KEEP THE PIT DRY AND ASSURE THE QUALITY OF FOUNDATION CONSTRUCTION, WHEN EXCAVATING FOUNDATION PITS AND POURING FOUNDATIONS.

基坑开挖和基础施工时应采取有效的排水措施保持基坑干燥,以保证基础混凝土工程的质量。

10. FOR MASS CONCRETE FOUNDATIONS OF MAIN BUILDING, ASSURABLE MEASUREMENTS OF PREVENTING CRACKS SHOULD BE ADOPTED ACCORDING TO CORRESPONDING CONSTRUCTION CODE.

对于主厂房基础大体积混凝土基础,应按照有关施工规范采取可靠措施防止砼开裂。

11. THE EMBEDDED PARTS SHALL BE DETAILED IN VOLUME T0104.

预埋件见-T0104册图。

12. THE SILT, PLANTATION, SWELLING SOIL AND THE SOIL WHICH THE CONTENT OF ORGANIC MATTER IS MORE THAN 5% WILL BE FORBIDDEN AS THE BACKFILL SOIL. THE BACKFILL SOIL AROUND THE FOUNDATION SHOULD BE CONSTRUCTED AT THE SAME TIME AND BE COMPACTED BY LAYERS. THE COMPACTION FACTOR (THE RATIO ABOUT CONTROLLING DRY DENSITY AND MAXIMUM DRY DENSITY) SHOULD NOT BE LESS THAN 0.95.

回填土不得使用淤泥、耕植土、膨胀性土及有机物含量大于5%的土;回填时须基础两侧同时回填,分层夯实,压实系数(压实土上的控制干密度与最大干密度的比值)不小于0.95。

13. THE POSITIONS OF SETTLEMENT OBSERVATION POINTS SHALL BE DETAILED IN 37-F4341S-T0302-02/03/04.

沉降观测点布置位置见-02、-03、-04图示。

THE DETAIL DRAWING OF SETTLEMENT OBSERVATION POINT SHALL BE DETAILED AS PER VOLUME T0103.

沉降观测点详图见-T0103卷册。

THE OBSERVATION TIME AND TIMES ARE SHOWN AS BELOW:

沉降观测时间及次数要求如下:

THE FIRST OBSERVATION IS DONE AFTER THE COMPLETION OF FOUNDATION, THE OBSERVED VALUES ARE AS THE INITIAL VALUES.

基础施工完成后即进行第一次观测,作为初始值。

THE SECOND OBSERVATION IS DONE WHEN THE MAIN STRUCTURE IS HALF COMPLETED.

主体结构完成一半时,进行第二次观测。

THE THIRD OBSERVATION IS DONE WHEN THE MAIN STRUCTURE IS COMPLETED.

主体结构完成后,进行第三次观测。

THE FOURTH OBSERVATION IS DONE BEFORE TRIAL OPERATION.

试运行前进行第四次观测。

THE TIMES OF SETTLEMENT OBSERVATION AFTER OPERATION SHOULD NOT LESS THAN THREE TIMES, IN THE FIRST YEAR, TWO TIMES, IN THE SECOND YEAR AND AT LEAST BE ONE TIME EVERY HALF YEAR TILL THE SETTLEMENT IS STABLE.

运行后第一年不少于三次,第二年不少于二次,以后每半年一次,直到沉降稳定为止。

14. ANTI TERMITE TREATMENT SHALL BE PROVIDED AS PER RELEVANT INDIA PRACTICE STANDARDS OR CODES.

防白蚁措施依据相关印度规范执行。

15. RELEVANT CODES, SPECIFICATION AND BASIS FOR DESIGN:

相关设计规范、规程及依据:

15.1 <CODE FOR DESIGN OF CONCRETE STRUCTURES>(GB50010-2002)

《混凝土结构设计规范》(GB50010-2002)

15.2 <CODE FOR DESIGN OF BUILDING FOUNDATIONS>(GB50007-2002)

《建筑地基基础设计规范》(GB50007-2002)

15.3 <CODE FOR SEISMIC DESIGN OF BUILDINGS>(GB50011-2001) (2008 VERSION)

《建筑抗震设计规范》(GB50011-2001)(2008年版)

15.4 <CODE FOR DURABILITY DESIGN OF CONCRETE STRUCTURES> (GB/T 50476-2008)

《混凝土结构耐久性设计规范》(GB/T 50476-2008)

15.5 <LOAD CODE FOR THE DESIGN OF BUILDING STRUCTURES> (GB50009-2001) (2006 VERSION)

《建筑结构荷载规范》(GB50009-2001)(2006年版)

15.6 <TECHNICAL STIPULATION FOR THE DESIGN OF CIVIL STRUCTURE OF THERMAL POWER PLANT>(DL 5022-93)

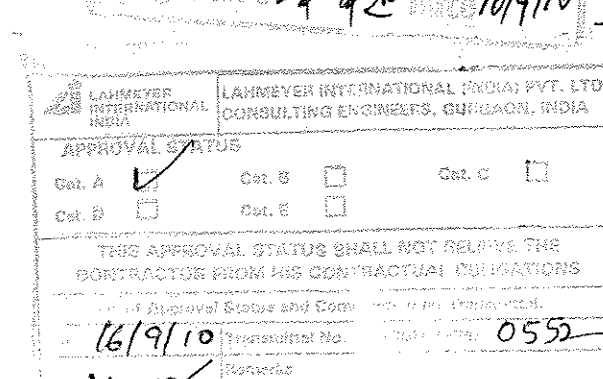
《火力发电厂土建结构设计技术规定》(DL 5022-93)

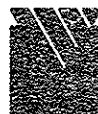
15.7 <TECHNICAL CODE FOR DESIGNING LOAD OF MAIN BUILDING IN FOSSIL FUEL POWER PLANT>(DL 5095-2007)

《火力发电厂主厂房荷载设计技术规程》(DL/T 5095-2007)

15.8 THE RELEVANT DOCUMENTS SUPPLIED BY OWNERS.

业主提供的相关资料文件。



PROJECT :	印度GMR卡玛朗加能源有限公司4×350MW电站工程 4x350MW KAMALANGA THERMAL POWER PROJECT		
OWNER :		GMR卡玛朗加能源有限公司 GMR KAMALANGA ENERGY LIMITED	
OWNER'S ENGINEER :		拉玛雅国际咨询有限公司 LAHMEYER INTERNATIONAL (INDIA)PVT.LTD. CONSULTING ENGINEERS, GURGAON	
EPC CONTRACTOR :		山东电力基本建设总公司 SEPCO ELECTRIC POWER CONSTRUCTION CORPORATION	
ORIGINATOR DESIGN INSTITUTE/SUPPLIER:		STATE NUCLEAR ELECTRIC POWER PLANNING DESIGN & RESEARCH INSTITUTE	
PROJECT CONTROL No.		KTTP-0-SNPDR1-UHF-DT-0302(01)-B	
 STATE NUCLEAR ELECTRIC POWER PLANNING DESIGN & RESEARCH INSTITUTE		PROJECT	4x350MW KAMALANGA THERMAL POWER PROJECT
		DESIGN PHASE	DETAIL DESIGN
APPRD.	王立军	CHKD.	李国斌
RVWD.	傅世豪	DSGD.	傅世豪
SCALE		DATE	2010.04
		DWG.NO.	37-F4341S-T0302-01
		GENERAL SPECIFICATION 结构设计总说明	
		REV.	B

REV	DATE	REVISION	REV'D	CHK'D	RVWD	APPRD
B	2010.09.5	ADDING FOUNDATIONS FOR BOILER UNIT 4				
A	2010.04.19	THE DRAWINGS ARE REVISED ACCORDING TO THE COMMENTS.	傅世豪	李国斌	傅世豪	王立军