

腾龙芳烃（漳州）有限公司热电厂

锅炉日用煤仓改造技术规范书

编制： 陈炫军 郑伟平 陈毅 魏和
陈木炳 谭海平 沈庆华

初审： 李建华 王红艳 郑国军

审核： 刘峰

核准： 郑达意

2021 年 04 月 1 日

- ...

Lt& 03.....	1
Lt& A7031.....	12
Lt& A7011.....	19
Lt& P1012.....	23
Lt& O1.....	27
Lt& 55.....	2 8
Lt& 15.....	31
Lt& 15k.....	32

0j 256.5m³

PG41FPÉFPMOAÑ-E)BÄ

2.1 K564

K558LeCQQÑAÑ&

7ÑM57A55A

Ä 3525K535Ö

SG-670/13.7-M3001

E78	OWF5:6Ä-MCRA	670	t /h
	NEÄ-MCRA	13.7	MPa · g
	NEÄ-MCRA	540	
5dÖ		230.0	
5ÖE		15.2	MPa · a
5ÖE		343	
NÖ		139	

2.2 0k2 ÖtÉ

2.2.1 DBCtÉ

ÄÄD Ö

ÖY

3.1.1 K583

1) K583 4 670t/h K583CQ5¹

K583N5K583

2) K583WF5:670t/h _____

3) K583 · K583 2 % _____

3.1.2 f23+5

F0/70QN5\$723+5783

5 F0/783

A70C7 0

FÈ

7+X

3.2 C8CtÉ

N©				
	Mar	Á	12.0	13.0
0D06	Mad	%	6.0	8.0
f&	Aar	Á	22.0	25.0
fã	Car	Á	54.21	49.90
fR	Har	Á	2	

- 4.2 $\frac{760CS0\dot{P}9AA\dot{A}}{764SF8\#b\dot{z}\dot{E}\dot{J}\dot{A}}$ 2t $\dot{A}$ +a $\dot{A}$
- 4.3 $65\dot{J}8\#4\ddot{O}$ $\underline{\hspace{1cm}}Q\ddot{E}L\dot{A}G\dot{E}>$
- A7 $\dot{z}$ +E7-0%CA $\ddot{A}$
- 4.4 $\dot{X}\dot{J}:\dot{G}\dot{P}Lbe\$e\dot{Q}\dot{J}\cdot$
- $\dot{?}4\ddot{O}$ $\underline{\hspace{1cm}}Q\ddot{A}\dot{A}Lbe\$e\dot{Q}\dot{J}\dot{X}\dot{G}@K8J\ddot{O}$
- CJ1L/BN1G/201 $\dot{P}$ $10\pm 0.5mm\dot{E}a\dot{K}8\dot{P}4\dot{B}\dot{P}$
- $F\ddot{O}+\dot{K}\dot{A}8-(\ddot{O}\cdot\$$ $\underline{\hspace{1cm}}\dot{E}$
- 5 $\dot{J}-(\ddot{O}i5\dot{J},\dot{A}\dot{A}$
- 4.5 $\dot{X}\dot{J}:\dot{G}\dot{P}L\dot{C}+K8J\ddot{O}$ CJ1L/BN1G/201 $\dot{P}$ $\underline{\hspace{1cm}}\pm$
- $0.5mm\dot{E}\dot{P}1$ T $\underline{\hspace{1cm}}\dot{B}\dot{J}\dot{P}\times L\pm\dot{E}+\dot{K}\dot{P}\dot{P}f+e.\dot{n}$
- L01 $\dot{F}9+\dot{X}\dot{P}4\dot{P}\dot{K},\dot{A}\dot{P}\times\dot{P}\dot{z}.\dot{E}\dot{E}$
- $\dot{A}L\dot{P}\dot{J}\dot{P}\times L0L\dot{E}\dot{E}\dot{O}M\dot{E}I\dot{A}$
- 4.6 $\times f+\dot{X}\dot{O}D\dot{E}\dot{A}\dot{N}B5\dot{z}86\dot{E}A5\dot{P}(\dot{E}\dot{g}1\dot{E}$
- $\dot{P}\dot{O}\dot{P}\dot{z}:\dot{E}(\dot{A}$
- 4.7 $\dot{G}\dot{P}\dot{P}Lbe\$e\dot{Q}\dot{J}L\dot{G}+X$
- $K8J\dot{O}4\dot{P}\dot{A}\dot{B}\dot{A}\dot{A}\dot{P}\dot{A}\dot{S}\dot{A}\dot{N}\dot{O}K8\dot{P}$
- $48F\ddot{O}+\dot{K}\dot{B}J\dot{O}4\dot{P}\dot{A}\dot{P}\dot{J}K8J\dot{C}\dot{E}+\dot{X}\ddot{O}$
- $F\ddot{A}$
- 4.8 $\dot{K}\dot{P}5\dot{A}5\dot{P}\dot{A}$
- 4.9 $\dot{B}\dot{P}\dot{P}$ $2\dot{P}KT\dot{S}\dot{y}a\dot{A}\dot{A}\dot{A}$
- $\dot{E}\dot{K}\dot{P}\dot{P}\dot{P}\dot{B}\dot{E}$ $+e.\dot{A}L0+\dot{X}\dot{P}4\dot{P}\dot{E}5h\dot{A}(\dot{E}$
- $480G+\dot{X}\dot{A}$ $40\dot{Z}\dot{S}e\dot{P}+5\dot{P}\dot{P}\dot{z}\dot{J}\dot{A}\dot{O}$
- $\dot{E}\cdot\dot{P}KT3+57-\dot{Q}\dot{P}\dot{N}\dot{E}5\dot{P}2,\dot{O}\dot{E}-0$
- $F09\times\dot{E}\dot{J}\dot{E}7-\times f7-\dot{E}-0\dot{I}\dot{B}\dot{O}f\dot{A}\dot{P}f\dot{A}$
- 4.10 $35\dot{P}\dot{A}\dot{S}\dot{P}\dot{I}8\dot{G}/\dot{A}\dot{z}\dot{D}\dot{A}\dot{N}K8J\dot{C}\dot{E}$
- $\dot{P}\dot{O}\dot{E}$ $0.45-0.65Mpa,\dot{P}\dot{E}4\times 93\$a\dot{A}\dot{A}\dot{A}\dot{W},0\ddot{O}$ $\underline{\hspace{1cm}}\dot{E}$
- $ZDKT\dot{G}DG\dot{y}$ $\underline{\hspace{1cm}}m^3/Q\dot{A}$
- 4.11 $5\dot{J}\dot{P}\dot{A}\dot{B}\dot{J}5\dot{P}\dot{A}$
- $L\dot{B}\times$ $\dot{z}\dot{K}-8\dot{P}KT\dot{I}\dot{A}-\dot{E}$ F $\dot{P}$

âPQ ± òñW8X

4.12 y4Lbe\$Qbe\$e3+5Ä-ÿ-Ö

a. G} È,´ ð#{ >~ ú × fAî 7 Ä% Cã _ Ø Ã Œ!' ÃF >| ¼ » u 4*6E÷0;,' × f Ã

8² Ã6„K1 ¼ Ô,´?±"r ×

b. 7-FJE÷PLC × fÄ DCS

4.20 4Lbe\$eÇ 4646E6M%6NB08E+K

46Äa7ÄÄ5Ä

4.21 37LtFö PLC Q#e × 1ö# DCSÄ DCS × fÖÄ+È DCS

FG4i PLC × wa7ÄCS G4ü DCS 1841B3B+a+bE0

CSÄi DCS B3BÄ

4.22 G6Ä5E >0

4.23 8-37jÖ

4.24 × f1äLbÖ4 × NEi IP65E f1ä± +eDs89+X04i|×

Ä

4.25 37LtFö × f1E 7E0CSÈ 05E 00CS+eÄ

08#× f+e568E568N1803ü± E f

1PÄK+aE0CSÄ

4.26 È 1 pM0,Lj7Ä7kP 3 pM0,0E7Ä

4.27 k± A7ö

č	N©	}..	l	7#
1	4Lbe\$eÇ			
	fFPv			
	ž		4i	
	É		= K CJ1L/BN1G/201	
	Ö(Ä) 1/) 2Ä	mm	ž ____mm /ž ____mm	
	Fj(Ä) 1/) 2 × LÄ	mm	ž ____mm /ž ____mm × ____mm	
	GÄ1 ZÄ	‡	1	
	Göy	kg		
2	ÄKT			
	fFPv			
	kÉ			
	%Ä		____KG	

№	№	№	№	№
	№		№	
	№	MPa	0.45-0.65	
	№	m3		
	№		00.1%	
	№	mm		304 №8JO
	№			
	6G+eGy			
	× fGy		1	№X
3	Dd86/ №			
	fFPv			
	№		05€	
	№			
	AAÑ	MPa		AAÑ
	AAÑ			
	90	m ³		
	AS	s	№	
	AV - E		%CMOP	
	EX			
4	AL			
	fFPv			
	№	AAÑ		

2. ü A PLC 101€ DCS 7 I/O \$...

1	2*	3	4	MD	7#
1	I I	LO}	0		0'
2		LF	0		0'
3		0a`	0		0'
4		LD-	0		0'
5	O I	LO70; 0A	8V9 eA		OL7
6		LZA 0A	8V +eA		E7

5 C03P14FP14

5.1 C017A 1CS 12 Z800+0C01N1X

+e2 1B04P140i0E80E0A7E

C01P0A7W7-P181091CS

5.2 A7+0L100

2 8<11E

24 0)à

jV08A71HFei0

5.3 A7CWJ.7Ea7CFPF@P181EWÄ

5.4 P181,NKPFPe@P181EWÄ

5.5 A0H1K0Ä7Ä

5.6 A0M0± ± 09, A70FÄ

6 5EÄ

6.1 A7502+FE0+005E:-(Ä1FA

6.2 i4G8J0Ä E7FEÄV± 0± ,50U

Ä6Ä

6.3 p910Ä0LÄ1M8E-06E0K

FEÄ0ÄL\$0ÄE01YM8Ä

6.4 ±eÄÄ70U15EÄEÄ0ÄL\$'

00E0A7%ÄÄ

6.5 A75097Ö

6.5.1 FEA7GLb%AbM7AAG53RE1Ä

6.5.2 CW75FK65FCW1CW10(KfhQ)CÄ

GA70 ÄWÄCWÄ.

7 P14Ä

7.1 A7E9jÈ +a7EJ.Ä010È)'—Ä58Ä

F14Ä

7.2 A7E9jÄ0(0 E7Ä

8 ³

8.1 03EW93\$ 0809%IFkp9ü

ÄCÄ &Ä

8.2 Q%\$ · GA703,LtE01xÄ

8.3 ÄE€x030T-Ä

8.4 ZmÄ

9 \$ÄE6EÄEÄ

9.10 MSÖ

M466P9, (CMÄSLÄ9E9} 7AÄ

91CX-ÄPMLÄPEÄ³, GEGF\$#4

6E04\$6EG+6b7Ä

10.6S+

10.1 7ES+

10.1.1 COCSB30E6Ä

10.1.2 COCSAÄYÄ

10.1.3 COCS44N6COCS43PFÄ

10.1.4 ÄFP65, AB8Ä

10.1.5 COCSÄ, ÄÄÄ

10.1.6 COCSÄÄ7JAÄ

10.2 ÄES+

10.2.1 ÄEOCSQÄÄÄBÄÄYÄ

10.2.2 ÄEOCS+e × 1ä65ÄBü(ÄeÄ

DCS 4i, Ä

Ä

10.2.3 07EÄGÄ, Ä

10.2.4 ÄEOCS)ÄÄ-(ÄÄtOÄÄ}

Ä4EJÄÄ(Ä)ÄÄ

10.2.5 ÄÄÄÄ7\$ÄÄtÄ

10.2.6 ÄÄFÄ4NÄÄÄÄ(ÄÄÄ

Lt& AA&W93& f

1 08& f

1.1 10iFPp#AA&W93& f&â

A&E, &× A7j&â, &W, È

DA7, &7-1803, & Ä

1.2 A&A&W&E&â

× Å × a&7F&0, G&L t

8GF-€&X- &â&Ä

3.2.4.5 #OC01yCS+,08EJÄ

3.2.4.6 #0086)BÄ

3.2.4.7 #OAAÖWKIEC§JkAÄ

3.2.4.8 #OB3BB9C§3+5Fk± A7EÄ

3.2.5 40A7+

iE0 × ÖCS, I EÄN¶Ö7-GL4280 ×

#Ö0,6CSEÄMÄCG§E6E

+0 × Fþ-Ä

3.2.6 #0 × ÖSAÖ

D)Fjê9EÄÖ3h:ÖAÖ

3.2.7 #Ö

#Öa46K1E

1015 6JÄ

#Ö± AÖ ÖEÖEÖbÖX

#A7,†EÖÖAÖEÄ

#Öa46EÖÖÖk50QÈ

6Ö,7jÖÖ6Ä

3.2.8 #0 × ÄfÖ

3.2.8.1 (e)NÖ,Ö

(e)Ö3AÖNÖLNÈ)äAÖ´

ÖFJ.ÄÖGiÖLNÖEÖE4

65ÈÖ67-0ÖÖk1ÖÖCSFÄ

3.2.8.2 NÖG8Ö

NÖG6YpCOCS,0NÖ,ÖE

93Ö

a.p9ÄÄlbÖ

b.dEÄbÖ

c.

d. 7J ~~de 1A~~

e . d b a b c d e f g h i j k l m

f. 4i—€L\$LbÂ

g. MŽOK (P82GyES+GyNä

h. D $\tilde{A}\tilde{A}$ D + $\frac{8}{3}\tilde{D} / \tilde{A}$

i . 9fK/ 5Ez . È . LOM § Ä

j.4/yā7ā

k.) $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} \frac{d}{dt} \right)$

1. ~~3~~ ~~3~~ PÄ

m. ~~Y9~~Lb & f. G~~EM~~4ö~~Ö~~e

$$\underline{\underline{M}}_{\#}^{\sim} \underline{\underline{G}}_{\#}^{\sim} b^{\sim}$$
 $\hat{A} \in \mathbb{R}^{n \times n}$, $b \in \mathbb{R}^n$.

3.2.8.3 P₄O

a. 7J4E*aN@N@GCOCSA

F&B&E&I&E&A

b. $\text{H}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{NH}_2 + \text{H}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{NH}_2 \rightarrow \text{H}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{NH}-\text{CH}_2-\text{CH}_2-\text{NH}_2$

60CSEPM&I&A

3.2.9 ÄÖ

3.2.9.1 $\mathbb{A}_+^1$

00R@OC\$ÄV(0Ez

E07+ F00Q0+aB1F

ABN, — KaB104m

ŒCã#9£0367Ä

AFBGOA&

1. ~~LN~~ ~~EN~~ ~~EN~~ ~~EN~~ ~~EN~~

~~À A-X-ETHU~~

)WF&BÈi Q9Ä

3.2.10 (©) $\mathbb{A}^1_{\mathbb{C}} \times \mathbb{C}^*$

3.2.10.1 (C) 1994 by 9GVP

01A50165E (01A

3.2.10.2 (C) 1936 by the American Psychological Association

3.2.10.3 p9bCQE-S49-EdDLF7E63

h: ~~Ä~~Ä

3.2.10.4 $\int_0^1 x^2 dx = \frac{1}{3}$

3.2.11 $\int_0^1 \frac{1}{x} dx = \infty$

[illegible]

CSLb8E10E1k1A1COCS, iÄ

3.2.11.2 NGG (Lb8S + fE46) à Lb8S + fE46

$$\hat{L}_B \times L_B = L_B$$

3.2.11.3 $\text{NCG} \rightarrow \text{A6F4jW, Lb8\zeta b. A\hat{\text{E}}\#b\hat{\text{a}}$

%BETYNIC&A

3.2.11.4 ~~01b8E6YZ1)à F2b8~~

~~46~~ × ~~NG004496~~ à ~~LbBPQ~~ (6)

NCFBA

3.2.11.5 $\int_0^1 \frac{1}{x^2} dx = \left[-\frac{1}{x} \right]_0^1 = -1 - (-\infty) = \infty$

3.2.11.6 ~~Đà Nẵng~~—~~Đ~~

3.2.12 f

3.2.12.1 j ~~3~~ ~~4~~ ~~5~~ ~~6~~ ~~7~~ ~~8~~ ~~9~~ ~~10~~ ~~11~~ ~~12~~ ~~13~~ ~~14~~ ~~15~~ ~~16~~ ~~17~~ ~~18~~ ~~19~~ ~~20~~ ~~21~~ ~~22~~ ~~23~~ ~~24~~ ~~25~~ ~~26~~ ~~27~~ ~~28~~ ~~29~~ ~~30~~ ~~31~~ ~~32~~ ~~33~~ ~~34~~ ~~35~~ ~~36~~ ~~37~~ ~~38~~ ~~39~~ ~~40~~ ~~41~~ ~~42~~ ~~43~~ ~~44~~ ~~45~~ ~~46~~ ~~47~~ ~~48~~ ~~49~~ ~~50~~ ~~51~~ ~~52~~ ~~53~~ ~~54~~ ~~55~~ ~~56~~ ~~57~~ ~~58~~ ~~59~~ ~~60~~ ~~61~~ ~~62~~ ~~63~~ ~~64~~ ~~65~~ ~~66~~ ~~67~~ ~~68~~ ~~69~~ ~~70~~ ~~71~~ ~~72~~ ~~73~~ ~~74~~ ~~75~~ ~~76~~ ~~77~~ ~~78~~ ~~79~~ ~~80~~ ~~81~~ ~~82~~ ~~83~~ ~~84~~ ~~85~~ ~~86~~ ~~87~~ ~~88~~ ~~89~~ ~~90~~ ~~91~~ ~~92~~ ~~93~~ ~~94~~ ~~95~~ ~~96~~ ~~97~~ ~~98~~ ~~99~~ ~~100~~ ~~101~~ ~~102~~ ~~103~~ ~~104~~ ~~105~~ ~~106~~ ~~107~~ ~~108~~ ~~109~~ ~~110~~ ~~111~~ ~~112~~ ~~113~~ ~~114~~ ~~115~~ ~~116~~ ~~117~~ ~~118~~ ~~119~~ ~~120~~ ~~121~~ ~~122~~ ~~123~~ ~~124~~ ~~125~~ ~~126~~ ~~127~~ ~~128~~ ~~129~~ ~~130~~ ~~131~~ ~~132~~ ~~133~~ ~~134~~ ~~135~~ ~~136~~ ~~137~~ ~~138~~ ~~139~~ ~~140~~ ~~141~~ ~~142~~ ~~143~~ ~~144~~ ~~145~~ ~~146~~ ~~147~~ ~~148~~ ~~149~~ ~~150~~ ~~151~~ ~~152~~ ~~153~~ ~~154~~ ~~155~~ ~~156~~ ~~157~~ ~~158~~ ~~159~~ ~~160~~ ~~161~~ ~~162~~ ~~163~~ ~~164~~ ~~165~~ ~~166~~ ~~167~~ ~~168~~ ~~169~~ ~~170~~ ~~171~~ ~~172~~ ~~173~~ ~~174~~ ~~175~~ ~~176~~ ~~177~~ ~~178~~ ~~179~~ ~~180~~ ~~181~~ ~~182~~ ~~183~~ ~~184~~ ~~185~~ ~~186~~ ~~187~~ ~~188~~ ~~189~~ ~~190~~ ~~191~~ ~~192~~ ~~193~~ ~~194~~ ~~195~~ ~~196~~ ~~197~~ ~~198~~ ~~199~~ ~~200~~ ~~201~~ ~~202~~ ~~203~~ ~~204~~ ~~205~~ ~~206~~ ~~207~~ ~~208~~ ~~209~~ ~~210~~ ~~211~~ ~~212~~ ~~213~~ ~~214~~ ~~215~~ ~~216~~ ~~217~~ ~~218~~ ~~219~~ ~~220~~ ~~221~~ ~~222~~ ~~223~~ ~~224~~ ~~225~~ ~~226~~ ~~227~~ ~~228~~ ~~229~~ ~~230~~ ~~231~~ ~~232~~ ~~233~~ ~~234~~ ~~235~~ ~~236~~ ~~237~~ ~~238~~ ~~239~~ ~~240~~ ~~241~~ ~~242~~ ~~243~~ ~~244~~ ~~245~~ ~~246~~ ~~247~~ ~~248~~ ~~249~~ ~~250~~ ~~251~~ ~~252~~ ~~253~~ ~~254~~ ~~255~~ ~~256~~ ~~257~~ ~~258~~ ~~259~~ ~~260~~ ~~261~~ ~~262~~ ~~263~~ ~~264~~ ~~265~~ ~~266~~ ~~267~~ ~~268~~ ~~269~~ ~~270~~ ~~271~~ ~~272~~ ~~273~~ ~~274~~ ~~275~~ ~~276~~ ~~277~~ ~~278~~ ~~279~~ ~~280~~ ~~281~~ ~~282~~ ~~283~~ ~~284~~ ~~285~~ ~~286~~ ~~287~~ ~~288~~ ~~289~~ ~~290~~ ~~291~~ ~~292~~ ~~293~~ ~~294~~ ~~295~~ ~~296~~ ~~297~~ ~~298~~ ~~299~~ ~~300~~ ~~301~~ ~~302~~ ~~303~~ ~~304~~ ~~305~~ ~~306~~ ~~307~~ ~~308~~ ~~309~~ ~~310~~ ~~311~~ ~~312~~ ~~313~~ ~~314~~ ~~315~~ ~~316~~ ~~317~~ ~~318~~ ~~319~~ ~~320~~ ~~321~~ ~~322~~ ~~323~~ ~~324~~ ~~325~~ ~~326~~ ~~327~~ ~~328~~ ~~329~~ ~~330~~ ~~331~~ ~~332~~ ~~333~~ ~~334~~ ~~335~~ ~~336~~ ~~337~~ ~~338~~ ~~339~~ ~~340~~ ~~341~~ ~~342~~ ~~343~~ ~~344~~ ~~345~~ ~~346~~ ~~347~~ ~~348~~ ~~349~~ ~~350~~ ~~351~~ ~~352~~ ~~353~~ ~~354~~ ~~355~~ ~~356~~ ~~357~~ ~~358~~ ~~359~~ ~~360~~ ~~361~~ ~~362~~ ~~363~~ ~~364~~ ~~365~~ ~~366~~ ~~367~~ ~~368~~ ~~369~~ ~~370~~ ~~371~~ ~~372~~ ~~373~~ ~~374~~ ~~375~~ ~~376~~ ~~377~~ ~~378~~ ~~379~~ ~~380~~ ~~381~~ ~~382~~ ~~383~~ ~~384~~ ~~385~~ ~~386~~ ~~387~~ ~~388~~ ~~389~~ ~~390~~ ~~391~~ ~~392~~ ~~393~~ ~~394~~ ~~395~~ ~~396~~ ~~397~~ ~~398~~ ~~399~~ ~~400~~ ~~401~~ ~~402~~ ~~403~~ ~~404~~ ~~405~~ ~~406~~ ~~407~~ ~~408~~ ~~409~~ ~~410~~ ~~411~~ ~~412~~ ~~413~~ ~~414~~ ~~415~~ ~~416~~ ~~417~~ ~~418~~ ~~419~~ ~~420~~ ~~421~~ ~~422~~ ~~423~~ ~~424~~ ~~425~~ ~~426~~ ~~427~~ ~~428~~ ~~429~~ ~~430~~ ~~431~~ ~~432~~ ~~433~~ ~~434~~ ~~435~~ ~~436~~ ~~437~~ ~~438~~ ~~439~~ ~~440~~ ~~441~~ ~~442~~ ~~443~~ ~~444~~ ~~445~~ ~~446~~ ~~447~~ ~~448~~ ~~449~~ ~~450~~ ~~451~~ ~~452~~ ~~453~~ ~~454~~ ~~455~~ ~~456~~ ~~457~~ ~~458~~ ~~459~~ ~~460~~ ~~461~~ ~~462~~ ~~463~~ ~~464~~ ~~465~~ ~~466~~ ~~467~~ ~~4~~

THESE f A

3.2.12.2 $T_{\tilde{X}}(\tilde{A} \otimes \tilde{B}) = 0, \hat{e} \in T_{\tilde{A}}W$

1. Ä

4 EW93\$

p9A9B\$ijA ueDA7EW93B5W

93\$A7G8)F9a , AÄÄ

4.1 $\frac{3}{4}$ 2 ZD

NEH 9:16 / 5E:5E

PLC $\times f_{\text{Ä}}$

4e0; 19 ZM0iFP0E|

11 ZCFP ÈFP ÈNO

F5iFPÄ

763 × f1á × f9365ZjFGÄeñA Ä

7 × f1á × f0ZCTFÄ

4.2 B46W938GyñA

ž	θ	}..	Gÿ	»	+0 × æ
1	4Lbe\$eQ	‡			
2	ÄL				
3	DKT	‡			
4	Dd86/8z	‡			
5	+e × 1á	‡			
6	ê	‡		500 × 500mm	
7	ø	‡		200 × 200mm	
8	8#8Ü 8ž	‡			
9	R8JÜ88 ²	‡			
10	ŸE8ž	‡			
11	8ž	‡			
12	8	‡			

4.3 FC8...

ž	θ	»	}..	Gÿ	× `	+0 × æ	7#
1	EE PLC		&				
2	DKT+e.ñ0		&				DKT+X

4.4 Lj7ñ8...

ž	θ	»	}..	Gÿ	× `	+0 × æ	7#
1	DKTD5h88		46				
2	LD8h 88		46				
3	DKT+e.ñ0		&				

4	DKTÊ0		&				
5	DKTF08		&				
6							&

Lt& A7E4ÉÖ

1 08± F

1.1 AĖCtĖXĖLĖCtĖ4è

,· /ý]· AĖCtĖX08\$COCSÄ

Ė.48& AUTOCAD2004 +e€ Ä

1.2 CtĖ405\$ĖkEWjÄtĖ308\$Mä

0± Ä

1.3 AĖCtĖX0C0F0 Ä3100

10 Y

ĖCtĖXĖyĖÄ

1.4 AĖCtĖjÄlfĖ3AAÑĖÄ7-FP003B

BWĖ-BPPĖFĖ6Z0WĖCäZĖ,± Ä

1.5)Ė3G8CtĖ50pM0 · 0tĖ4yĖ

AĖiĖ0jJ A7Ė079iFĖ

ĖiĖCtĖÄ

1.6 7eĖÄ7AAÑFP9ĖCtĖÄ

1.7 AĖiĖXtĖy8/ ÄX70W}

10 Ė

1.8 A7Ė07+CtĖ

6 Ė€x

2 Ä

1.9 AĖp9CtĖĖCtĖ+XĖQ4AÑĖÄ40tĖ

0ĖÄ7CWpCtĖĖFP07FĖ+a760

CSCÄ

2 CtĖ0± F

2.1 jÑtĖĖÖ

0310

10 ĖĖĖ4

KTA7k.Ä×

A7FĖÄ×

4GA7,7Ä×

GA7,588607×

4GA7,03×

4GA7,B3BP04×

778+80*

8+807*

A7*p¼eDÃ fÖtÉ

× f6CtÉ

× f1fj (6 ×

8

+e56\$Ä

2.2 78FPA78-87X083¼

78-5Ä.

2.3 A7-FPpM0± ,CtÉ

78C8A7-FPpM0± ,CtÉ

2.4 83B8FjA87-BPpM0,CtÉ

\$¾. 845ÉÄÉ

12 #yj46A7CW

} 1 88E7e° 84E-A7F8Ä

8° 8486tÉCA7Xg ,83BPVÄ

F8M0± 8Ä

2.2 ;CtÉ

2.4.1 × 81A8*

2.4.2 A7F8*

2.4.3 4GBA7,83B8*

2.4.4 4GBA7,5886X*

2.4.5 4GBA7,83*

2.4.6 4GBA7,B380*

2.4.7 4GBA7,81A8*

2.4.8 4G87k± +8881A8*

2.4.9 778+80*

2.4.10 8+807*

2.4.11 C6888DÄ

2.4.12 A7kA88*

2.4.13 A7k6}C86 ×

2.4.14 A7*p¼eDÃ fÖtÉ

č ,	θ	… }	Gy	»	ČWFÖ
1	4Lbe\$eQ	‡			»e 4L® A 0 4 6 0 4 4 1® A 0 30 6 WÄ
2	ÄL				
3	DKT	‡			
4	Dd86/ 6ž	‡			
5	+e × 1á	‡			
6	6	‡			
7	6	‡			
8	6 6 6 6ž	‡			
9	6 8 J 0 6 2	‡			
10	6 6 ž	‡			
11	6 ž	‡			

BŠ

1. ČWB8T&ÄC0FÖ± Ä

Lt& -FP17-F1BP14

1 F

1.1 1+8<-0L\$7pEA7(5)65FC17)F1FPÄ

07-F1BP17pEA71803, 2 Ä

1.2 7Ä<0x 2 Z8E7EA79E'-FPÄ

W7-F1BP70ZÄ003, Ä

2 ð

2.1 00X× f, 0ZG7± 40076UIF1+0 ×)8²

, 00PÄ7EA7G-9CXYÄ14E

pCÖV8XYñ 8400Ä

2.2 093\$E8FE800PÄ

PÄ

2.3 701,6E-6%03, 29E1FE7±

Ä6005-8%CA± E700\$Ä

ÄeOGYCCYN80J.7Ä6Ä7ÄÖ

2.4 01/9Ci+80KÄ

2.5 A70FP01D10FP007-0 Ä

7080CCXY6S+, 07-17ÄA7CCXYCS+Ä

3 A7-FP

3.1 -FPÉ

i0keEGÄIG · 8eÄ995Ä7

É×eÄ

7CCXYFPÄ×eÄ7fFPK40E

ú0Ä

3.2 -FPÄ

· ÄÄ1ÄE

R Ä

Ä

Ä-FPÄ

7ÄeFPNÄ: 15Äe

3 -Ö

7eFP> 1 -Ä

R ÄMOÖBPMEÖNCE ÄÄ

W ÄeFPÄ0FPBP14CÄ1ÄÄ

H 847éFPBP¼

,NÇ

7HJ. 847BP¼)à

A8E

7-9

W 8Çje

R&

H 8

974FJ. Eje

R 847BP¼

\$847-9

H 8Çje

R 8

3.3 -FP

Ç	-FPG&	-FPé	-FPé				
			H	W	R	Gÿ	7#
1	L	Lbe\$eÇ					
2		ADÇ					
3		8					
4		Ç					
5		847é)85ž					
6		8ž					
7		88JÇ8²					
8	8ž	8KT					
9		88ž					
10		88Ç/8 8ž					
11	× fg6	+e × 1á					
12	)à8	4Lbe\$eÇ Ç					
8 H—8—)à8— · 88ÿ 8Çÿ							

3.4) 768-FP, 2± F

3.4.1 7687éFP, 8(CtEa#0+...

Ci+Ä

3.4.2 767éFPÖKÄ

3.4.3 767160E 10 6A7-FPNCSJ.7é

FPÄ

3.4.4 7éFP9s(0)L58<FPA799CtEAÖ

jM0± 7ÄÄ

3.4.5 7698BPMÖE7é

FPÄ

4 W7-P7BP¼

4.1 W7-P7BP¼, j 08A7, p9W7-1803, 2± Ä

4.2 W7-P7BP¼Ba8<Ö8j7öjÄ

4.3 W7-P7BP¼B6467-BP08X 168 8FÖE

PP86a7Ä

4.4 W7-P7BP¼a7k1ÄPW4âa7Äé

ÄÖE7Pka7C7FÄP%F

7Ö 4.4.7 ± F68ÄPPKÉpMOERËy

+a7Ä

4.6 W7-P7BP¼764

(1)42kb7699ZÄ

(2)j166EÖÖ6, 6-ÉÄH¼L03K5&

j40ÄL-T5047-958Ä-Ä

(3)šÄ) · 4 × , 7CBÖ704

(3)4

(3)4

(3)4

(3)4

(3)4

Lt& 02± f

N0j6<0x

120 88000

24880x

35 88A

¿	)AÝ	AÑ	)AÝ@		&	7#
			6p	ê		
1	B3B		C		)à	
2	56		C		)à	
3	9E		C		)à	

2.3)AÝ,´ &L\$ Ã ê Ã `&é1y s f µ é+a † ü é v Ê Ä

2.4 Å 7 é j 7 é)AÝ ê ^ ÄÂ 7 Ã j ` ÃCt É1y)AÝ ´ & È ¡ ÆO ï ¼ ÔFJ é ï È +OCi+X+a Å 7 é8 *6 /

Lt& 98

75FÖ				85Ö		
ñ'	CW(0'	7 · & ε'	7 · & ñ	Ä · & ñ	7B\$	7#

$\hat{A} \cdot \hat{B} \cdot \hat{C}, 2 \pm 0.001$
 $\hat{A} \cdot \hat{B} \cdot \hat{C}, 2 \pm 0.001$

Lt& 15jk.



