

PROJECT NAME 项目名称	PUROLITE PEARL PROJECT 漂莱特（浙江）科技有限公司 年产32000吨功能性新材料项目	WORK NO. 项 目 号	WPA0243
DOC NO. 文件号	ED-2200-INC-DAT-INST-0406	CLIENT PRJ. NO. 客户项目号	
CLIENT DOC NO. 客户文件号		PHASE 设计阶段	DED 施工图

ANION WORKSHOP

阴树脂车间

Instrument Datasheet - Restriction Orifice

仪表数据表-限流孔板

DISCIPLINE:INSTRUMENT

专业:仪表

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1A	Jun/13/25	施工图	邱驰逸	王哲明	蒋磊		蒋磊	王廷亮
1	May/09/25	施工图	邱驰逸	王哲明	蒋磊		蒋磊	王廷亮
REV. 版次	DATE 日期	DESCRIPTION 说明	DESD 设计	CHKD 校核	APVD 审核	AUTH 审定	LAE 专业负责人	PRJ 项目负责人

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上海科元燃化工程设计有限公司

SHANGHAI KEYUAN CHEMICAL & GAS ENGINEERING DESIGN CO.,LTD.

PUROLITE PEARL PROJECT 漂莱特（浙江）科技有限公司 年产32000吨功能性新材料项目			Instrument Datasheet - Restriction Orifice 仪表数据表-限流孔板		DWG NO. 图号: ED-2200-INC-DAT-INST-0406 CLIENT DWG NO. 图号:
No. 序列	REV. 版次	TAG NO. 位号	TYPE 类型	SHEET NO. 表单号	REMARKS 备注
1	1	COVER		1	
2	1	Index		2	
3	1	2210-RO-15401	Concentric Square Orifice Plate	3	
4	1	2210-RO-12201	Concentric Square Orifice Plate	4	
5	1	2210-RO-23501	Concentric Square Orifice Plate	5	
6	1	2210-RO-12301A	Concentric Square Orifice Plate	6	
7	1	2210-RO-12301B	Concentric Square Orifice Plate	7	
8	1	2210-RO-12301C	Concentric Square Orifice Plate	8	
9	1	2210-RO-12401A	Concentric Square Orifice Plate	9	
10	1	2210-RO-12401B	Concentric Square Orifice Plate	10	
11	1A	2210-RO-12601	DELETED		
12	1A	2210-RO-12602	DELETED		
13	1	2210-RO-13601	Concentric Square Orifice Plate	11	
14	1	2210-RO-20101	Concentric Square Orifice Plate	12	
15	1	2210-RO-23001	Concentric Square Orifice Plate	13	
16	1	2230-RO-11501	Concentric Square Orifice Plate	14	
17	1	2230-RO-10601	Concentric Square Orifice Plate	15	
18	1	2230-RO-11701	Concentric Square Orifice Plate	16	
19	1A	2220-RO-15901	Concentric Square Orifice Plate -NEW ADD	17	



GENERAL	1	Tag Number		2210-RO-15401						
	2	P&ID Number	Line No.	2210-PID-0101B			MF-22110106-25-N1E1-E30			
	3	Service		Backflow to 2210-T154						
SERVICE CONDITIONS	4	Process Fluid / State		MF		/		L		
				Max.	Norm.		Min.	Units		
	5	Flow Rate			5450			kg/h		
	6	Pressure			0.36			MPaG		
	7	Temperature			55			°C		
	8	Density			1090			kg/m3		
	9	Specific Gravity						-		
	10	Viscosity			2.6			mPa.s		
	11	Molecular Weight			-			-		
	12	Specific Heats CP / CV			-			-		
	13	Copressibility Factor Z			-			-		
	14	Velocity						m/s		
	15	Pressure Loss Limit			230			kpa		
	16	Design Press.	Max / Min	0.6	/			kPaG		
	17	Design Temp.	Max / Min	75	/			°C		
	18	Base Press.	Base Temp.	101.3	kPa		20	°C		
	19	Toxic Corrosive Erosive Dirty		极度危害, 腐蚀						
	LINE	20	Class		N1E1					
		21	Size / Schedule / Line ID		DN25	/	S-40S	/	inch	
BASIS	22	Type		Concentric Square Orifice Plate						
	23	Pressure Drop		230				KPa		
	24	Calc. Standard		HG / T 20570.15						
	25	Design Standard		HG / T 20570.15						
	26									
ORIFICE PLATE	27	Size and Flange Rating		HG / T 20592 DN25 PN25 RF						
	28	Bore Diameter (d)		(*)				mm		
	29	Diameter Ratio (beta=d/D)		(*)						
	30	Material		316L SS						
	31	Thickness		3				mm		
	32	Paddle Length / Thickness / Round Corner		MFR. STD	mm	MFR. STD	mm	Yes, R3		
	33									
	34									
MULTISTAGE ORIFICE	35	Type		N/A						
	36	Number of stage		N/A						
	37	End Connection		N/A						
	38	Size, Rating and Facing		N/A						
	39	Flange Facing Finish		N/A						
	40	Plate Material		N/A						
	41	Body Material		N/A						
	42	Flange Material		N/A						
	43	Bore Diameter (d)		N/A				mm		
	44	Thickness		N/A				mm		
OPTIONS	45	Total Length		N/A				mm		
	46									
PURCHASE	47									
	48									
	49	Manufacturer		(*)						
	50	Model No.		(*)						
	51	P.O.		-						
	52	MFR Serial Number		-						

Notes: 1) 提供材质证明
2) 限流型
3)



1	施工图	May/09/25	邱逸逸	王哲明	蒋磊
Rev 版次	Description 说明	Date 日期	By 编制	Checked 校核	Approved 审核
Instrument Datasheet - Restriction Orifice			CLIENT DOC No. 客户文件号:		
仪表数据表-限流孔板			DOC No. 文件号:		
			ED-2200-INC-DAT-INST-0406		

GENERAL	1	Tag Number		2210-RO-12201						
	2	P&ID Number	Line No.	2210-PID-0106A			NL1-22110604-40-M4E1-C50			
	3	Service		Backflow to 2210-T122						
SERVICE CONDITIONS	4	Process Fluid / State		NL1 / L						
				Max.		Norm.		Min.		Units
	5	Flow Rate				6272				kg/h
	6	Pressure				0.15				MPaG
	7	Temperature				30				℃
	8	Density				896				kg/m3
	9	Specific Gravity								-
	10	Viscosity				2				mPa.s
	11	Molecular Weight				-				-
	12	Specific Heats CP / CV				-				-
	13	Copressibility Factor Z				-				-
	14	Velocity								m/s
	15	Pressure Loss Limit				150				kPa
	16	Design Press.	Max / Min	0.5		/				kPaG
	17	Design Temp.	Max / Min	60		/				℃
	18	Base Press.	Base Temp.	101.3		kPa		20		℃
	19	Toxic Corrosive Erosive Dirty		中度危害, 腐蚀						
LINE	20	Class		M4E1						
	21	Size / Schedule / Line ID		DN40		/	S-40S		/	inch
BASIS	22	Type		Concentric Square Orifice Plate						
	23	Pressure Drop		150 KPa						
	24	Calc. Standard		HG / T 20570.15						
	25	Design Standard		HG / T 20570.15						
	26									
ORIFICE PLATE	27	Size and Flange Rating		HG / T 20592 DN40 PN16 RF						
	28	Bore Diameter (d)		(*) mm						
	29	Diameter Ratio (beta=d/D)		(*)						
	30	Material		316L SS						
	31	Thickness		3 mm						
	32	Paddle Length / Thickness / Round Corner		MFR. STD	mm	MFR. STD	mm	Yes, R3		
	33									
	34									
MULTISTAGE ORIFICE	35	Type		N/A						
	36	Number of stage		N/A						
	37	End Connection		N/A						
	38	Size, Rating and Facing		N/A						
	39	Flange Facing Finish		N/A						
	40	Plate Material		N/A						
	41	Body Material		N/A						
	42	Flange Material		N/A						
	43	Bore Diameter (d)		N/A mm						
	44	Thickness		N/A mm						
OPTIONS	45	Total Length		N/A mm						
	46									
PURCHASE	47									
	48									
PURCHASE	49	Manufacturer		(*)						
	50	Model No.		(*)						
	51	P.O.		-						
	52	MFR Serial Number		-						
Notes: 1) 提供材质证明										
2) 限流型										
3)										
 PROTECTING WHAT'S VITAL™										
			1	施工图	May/09/'25	邱驰逸	王哲明	蒋磊		
			Rev 版次	Description 说明	Date 日期	By 编制	Checked 校核	Approved 审核		
 上海科元燃气工程设计有限公司 SHANGHAI KEYUAN CHEMICAL & GAS ENGINEERING DESIGN CO.,LTD			Instrument Datasheet - Restriction Orifice				CLIENT DOC No.客户文件号:			
			仪表数据表-限流孔板				DOC No. 文件号: ED-2200-INC-DAT-INST-0406			

GENERAL	1	Tag Number	2210-RO-23501				
	2	P&ID Number	Line No.	2210-PID-0106A	NL1-22110606-40-M4E1-C50		
	3	Service	Backflow to 2210-T235				
SERVICE CONDITIONS	4	Process Fluid / State	NL1 / L				
			Max.	Norm.	Min.	Units	
	5	Flow Rate		6272		kg/h	
	6	Pressure		0.15		MPaG	
	7	Temperature		30		°C	
	8	Density		896		kg/m3	
	9	Specific Gravity				-	
	10	Viscosity		2		mPa.s	
	11	Molecular Weight		-		-	
	12	Specific Heats CP / CV		-		-	
	13	Copressibility Factor Z		-		-	
	14	Velocity				m/s	
	15	Pressure Loss Limit		20		kpa	
	16	Design Press. Max / Min	0.5	/		kPaG	
	17	Design Temp. Max / Min	60	/		°C	
	18	Base Press. Base Temp.	101.3	kPa	20	°C	
	19	Toxic Corrosive Erosive Dirty	中度危害, 腐蚀				
LINE	20	Class	M4E1				
	21	Size / Schedule / Line ID	DN40	/	S-40S	/ inch	
BASIS	22	Type	Concentric Square Orifice Plate				
	23	Pressure Drop	20			KPa	
	24	Calc. Standard	HG / T 20570.15				
	25	Design Standard	HG / T 20570.15				
	26						
ORIFICE PLATE	27	Size and Flange Rating	HG / T 20592 DN40 PN16 RF				
	28	Bore Diameter (d)	(*) mm				
	29	Diameter Ratio (beta=d/D)	(*)				
	30	Material	316L SS				
	31	Thickness	3			mm	
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm Yes, R3	
	33						
	34						
MULTISTAGE ORIFICE	35	Type	N/A				
	36	Number of stage	N/A				
	37	End Connection	N/A				
	38	Size, Rating and Facing	N/A				
	39	Flange Facing Finish	N/A				
	40	Plate Material	N/A				
	41	Body Material	N/A				
	42	Flange Material	N/A				
	43	Bore Diameter (d)	N/A			mm	
	44	Thickness	N/A			mm	
	45	Total Length	N/A			mm	
OPTIONS	47						
	48						
PURCHASE	49	Manufacturer	(*)				
	50	Model No.	(*)				
	51	P.O.	-				
	52	MFR Serial Number	-				

Notes: 1) 提供材质证明
2) 限流型
3)

					
	1	施工图	May/09/25	邱逸逸	王哲明 蒋磊
	Rev 版次	Description 说明	Date 日期	By 编制	Checked 校核 Approved 审核
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	仪表数据表-限流孔板			DOC No. 文件号:	
				ED-2200-INC-DAT-INST-0406	

GENERAL	1	Tag Number		2210-RO-12301A			
	2	P&ID Number	Line No.	2210-PID-0106B		NL1-22110613-40-M4E1-C50	
	3	Service		Backflow to 2210-T123A			
SERVICE CONDITIONS	4	Process Fluid / State		NL1		/ L	
				Max.	Norm.	Min.	Units
	5	Flow Rate			5000		kg/h
	6	Pressure			0.225		MPaG
	7	Temperature			30		°C
	8	Density			1000		kg/m3
	9	Specific Gravity					-
	10	Viscosity			1		mPa.s
	11	Molecular Weight			-		-
	12	Specific Heats CP / CV			-		-
	13	Copressibility Factor Z			-		-
	14	Velocity					m/s
	15	Pressure Loss Limit			68		kpa
	16	Design Press.	Max / Min	0.4		/	
	17	Design Temp.	Max / Min	60		/	
	18	Base Press.	Base Temp.	101.3		kPa	20
		19	Toxic Corrosive Erosive Dirty		中度危害, 腐蚀		
LINE	20	Class		M4E1			
	21	Size / Schedule / Line ID		DN40	/	S-40S /	
BASIS	22	Type		Concentric Square Orifice Plate			
	23	Pressure Drop		68 KPa			
	24	Calc. Standard		HG / T 20570.15			
	25	Design Standard		HG / T 20570.15			
	26						
ORIFICE PLATE	27	Size and Flange Rating		HG / T 20592 DN40 PN16 RF			
	28	Bore Diameter (d)		(*) mm			
	29	Diameter Ratio (beta=d/D)		(*)			
	30	Material		316L SS			
	31	Thickness		3 mm			
	32	Paddle Length / Thickness / Round Corner		MFR. STD	mm	MFR. STD	mm
	33						
MULTISTAGE ORIFICE	34						
	35	Type		N/A			
	36	Number of stage		N/A			
	37	End Connection		N/A			
	38	Size, Rating and Facing		N/A			
	39	Flange Facing Finish		N/A			
	40	Plate Material		N/A			
	41	Body Material		N/A			
	42	Flange Material		N/A			
	43	Bore Diameter (d)		N/A mm			
	44	Thickness		N/A mm			
OPTIONS	45	Total Length		N/A mm			
	46						
PURCHASE	47						
	48						
	49	Manufacturer		(*)			
	50	Model No.		(*)			
	51	P.O.		-			
	52	MFR Serial Number		-			

Notes: 1) 提供材质证明
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	1	施工图	May/09/25	邱逸逸	王哲明	蒋磊
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	仪表数据表-限流孔板			DOC No. 文件号:		
				ED-2200-INC-DAT-INST-0406		

GENERAL	1	Tag Number	2210-RO-12301B				
	2	P&ID Number	Line No.	2210-PID-0106B	NL1-22110623-40-M4E1-C50		
	3	Service	Backflow to 2210-T123B				
SERVICE CONDITIONS	4	Process Fluid / State	NL1 / L				
			Max.	Norm.	Min.	Units	
	5	Flow Rate		5000		kg/h	
	6	Pressure		0.225		MPaG	
	7	Temperature		30		°C	
	8	Density		1000		kg/m3	
	9	Specific Gravity				-	
	10	Viscosity		1		mPa.s	
	11	Molecular Weight		-		-	
	12	Specific Heats CP / CV		-		-	
	13	Copressibility Factor Z		-		-	
	14	Velocity				m/s	
	15	Pressure Loss Limit		68		kpa	
	16	Design Press. Max / Min	0.4	/		kPaG	
	17	Design Temp. Max / Min	60	/		°C	
	18	Base Press. Base Temp.	101.3	kPa	20	°C	
	19	Toxic Corrosive Erosive Dirty	中度危害, 腐蚀				
LINE	20	Class	M4E1				
	21	Size / Schedule / Line ID	DN40	/	S-40S	/ inch	
BASIS	22	Type	Concentric Square Orifice Plate				
	23	Pressure Drop	68			KPa	
	24	Calc. Standard	HG / T 20570.15				
	25	Design Standard	HG / T 20570.15				
	26						
ORIFICE PLATE	27	Size and Flange Rating	HG / T 20592 DN40 PN16 RF				
	28	Bore Diameter (d)	(*) mm				
	29	Diameter Ratio (beta=d/D)	(*)				
	30	Material	316L SS				
	31	Thickness	3			mm	
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm Yes, R3	
	33						
	34						
MULTISTAGE ORIFICE	35	Type	N/A				
	36	Number of stage	N/A				
	37	End Connection	N/A				
	38	Size, Rating and Facing	N/A				
	39	Flange Facing Finish	N/A				
	40	Plate Material	N/A				
	41	Body Material	N/A				
	42	Flange Material	N/A				
	43	Bore Diameter (d)	N/A			mm	
	44	Thickness	N/A			mm	
OPTIONS	45	Total Length	N/A			mm	
	46						
PURCHASE	47						
	48						
	49	Manufacturer	(*)				
	50	Model No.	(*)				
	51	P.O.	-				
	52	MFR Serial Number	-				

Notes: 1) 提供材质证明
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1	施工图	May/09/25	邱逸逸	王哲明	蒋磊
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Instrument Datasheet - Restriction Orifice			CLIENT DOC No. 客户文件号:		
仪表数据表-限流孔板			DOC No. 文件号:		
			ED-2200-INC-DAT-INST-0406		

GENERAL	1	Tag Number	2210-RO-12301C					
	2	P&ID Number Line No.	2210-PID-0106B		NL1-22110633-40-M4E1-C50			
	3	Service	Backflow to 2210-T123C					
SERVICE CONDITIONS	4	Process Fluid / State	NL1		/	L		
			Max.	Norm.	Min.	Units		
	5	Flow Rate		5000		kg/h		
	6	Pressure		0.225		MPaG		
	7	Temperature		30		°C		
	8	Density		1000		kg/m3		
	9	Specific Gravity				-		
	10	Viscosity		1		mPa.s		
	11	Molecular Weight		-		-		
	12	Specific Heats CP / CV		-		-		
	13	Copressibility Factor Z		-		-		
	14	Velocity				m/s		
	15	Pressure Loss Limit		68		kpa		
	16	Design Press. Max / Min	0.4	/		kPaG		
	17	Design Temp. Max / Min	60	/		°C		
	18	Base Press. Base Temp.	101.3	kPa	20	°C		
	19	Toxic Corrosive Erosive Dirty	中度危害, 腐蚀					
LINE	20	Class	M4E1					
	21	Size / Schedule / Line ID	DN40	/	S-40S	/ inch		
BASIS	22	Type	Concentric Square Orifice Plate					
	23	Pressure Drop	68			KPa		
	24	Calc. Standard	HG / T 20570.15					
	25	Design Standard	HG / T 20570.15					
	26							
ORIFICE PLATE	27	Size and Flange Rating	HG / T 20592 DN40 PN16 RF					
	28	Bore Diameter (d)	(*)		mm			
	29	Diameter Ratio (beta=d/D)	(*)					
	30	Material	316L SS					
	31	Thickness	3			mm		
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm Yes, R3		
	33							
	34							
MULTISTAGE ORIFICE	35	Type	N/A					
	36	Number of stage	N/A					
	37	End Connection	N/A					
	38	Size, Rating and Facing	N/A					
	39	Flange Facing Finish	N/A					
	40	Plate Material	N/A					
	41	Body Material	N/A					
	42	Flange Material	N/A					
	43	Bore Diameter (d)	N/A		mm			
	44	Thickness	N/A		mm			
	45	Total Length	N/A		mm			
	46							
OPTIONS	47							
	48							
PURCHASE	49	Manufacturer	(*)					
	50	Model No.	(*)					
	51	P.O.	-					
	52	MFR Serial Number	-					

Notes: 1) 提供材质证明
2) 限流型
3)

						
		1	施工图	May/09/25	邱逸逸	王哲明
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 上海科元石化工程设计有限公司 SHANGHAI KEYUAN CHEMICAL & GAS ENGINEERING DESIGN CO.,LTD		Instrument Datasheet - Restriction Orifice			CLIENT DOC No. 客户文件号:	
		仪表数据表-限流孔板			DOC No. 文件号:	
					ED-2200-INC-DAT-INST-0406	

GENERAL	1	Tag Number	2210-RO-12401A					
	2	P&ID Number Line No.	2210-PID-0106C		NL1-22110643-25-M4E1-C40			
	3	Service	Backflow to 2210-T124A					
SERVICE CONDITIONS	4	Process Fluid / State	NL1		/	L		
			Max.	Norm.	Min.	Units		
	5	Flow Rate		2000		kg/h		
	6	Pressure		0.19		MPaG		
	7	Temperature		30		°C		
	8	Density		1000		kg/m3		
	9	Specific Gravity				-		
	10	Viscosity		1		mPa.s		
	11	Molecular Weight		-		-		
	12	Specific Heats CP / CV		-		-		
	13	Copressibility Factor Z		-		-		
	14	Velocity				m/s		
	15	Pressure Loss Limit		37		kpa		
	16	Design Press. Max / Min	0.4		/	kPaG		
	17	Design Temp. Max / Min	60		/	°C		
	18	Base Press. Base Temp.	101.3		kPa	20 °C		
	19	Toxic Corrosive Erosive Dirty	中度危害, 腐蚀					
LINE	20	Class	M4E1					
	21	Size / Schedule / Line ID	DN25	/	S-40S	/ inch		
BASIS	22	Type	Concentric Square Orifice Plate					
	23	Pressure Drop	37		KPa			
	24	Calc. Standard	HG / T 20570.15					
	25	Design Standard	HG / T 20570.15					
	26							
ORIFICE PLATE	27	Size and Flange Rating	HG / T 20592 DN25 PN16 RF					
	28	Bore Diameter (d)	(*)		mm			
	29	Diameter Ratio (beta=d/D)	(*)					
	30	Material	316L SS					
	31	Thickness	3		mm			
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm Yes, R3		
	33							
	34							
MULTISTAGE ORIFICE	35	Type	N/A					
	36	Number of stage	N/A					
	37	End Connection	N/A					
	38	Size, Rating and Facing	N/A					
	39	Flange Facing Finish	N/A					
	40	Plate Material	N/A					
	41	Body Material	N/A					
	42	Flange Material	N/A					
	43	Bore Diameter (d)	N/A		mm			
	44	Thickness	N/A		mm			
	45	Total Length	N/A		mm			
	46							
OPTIONS	47							
	48							
PURCHASE	49	Manufacturer	(*)					
	50	Model No.	(*)					
	51	P.O.	-					
	52	MFR Serial Number	-					

Notes: 1) 提供材质证明
2) 限流型
3)

						
	1	施工图	May/09/25	邱逸逸	王哲明	蒋磊
	Rev 版次	Description 说明	Date 日期	By 编制	Checked 校核	Approved 审核
 上海科元燃化工程设计有限公司 SHANGHAI KEYUAN CHEMICAL & GAS ENGINEERING DESIGN CO.,LTD	Instrument Datasheet - Restriction Orifice			CLIENT DOC No. 客户文件号:		
	仪表数据表-限流孔板			DOC No. 文件号:		
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GENERAL	1	Tag Number	2210-RO-12401B					
	2	P&ID Number Line No.	2210-PID-0106C		NL1-22110653-25-M4E1-C40			
	3	Service	Backflow to 2210-T124B					
SERVICE CONDITIONS	4	Process Fluid / State	NL1		/	L		
			Max.	Norm.	Min.	Units		
	5	Flow Rate		2000		kg/h		
	6	Pressure		0.19		MPaG		
	7	Temperature		30		°C		
	8	Density		1000		kg/m3		
	9	Specific Gravity				-		
	10	Viscosity		1		mPa.s		
	11	Molecular Weight		-		-		
	12	Specific Heats CP / CV		-		-		
	13	Copressibility Factor Z		-		-		
	14	Velocity				m/s		
	15	Pressure Loss Limit		37		kpa		
	16	Design Press. Max / Min	0.4	/		kPaG		
	17	Design Temp. Max / Min	60	/		°C		
	18	Base Press. Base Temp.	101.3	kPa	20	°C		
	19	Toxic Corrosive Erosive Dirty	中度危害, 腐蚀					
LINE	20	Class	M4E1					
	21	Size / Schedule / Line ID	DN25	/	S-40S	/ inch		
BASIS	22	Type	Concentric Square Orifice Plate					
	23	Pressure Drop	37			KPa		
	24	Calc. Standard	HG / T 20570.15					
	25	Design Standard	HG / T 20570.15					
	26							
ORIFICE PLATE	27	Size and Flange Rating	HG / T 20592 DN25 PN16 RF					
	28	Bore Diameter (d)	(*)		mm			
	29	Diameter Ratio (beta=d/D)	(*)					
	30	Material	316L SS					
	31	Thickness	3		mm			
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm Yes, R3		
	33							
	34							
MULTISTAGE ORIFICE	35	Type	N/A					
	36	Number of stage	N/A					
	37	End Connection	N/A					
	38	Size, Rating and Facing	N/A					
	39	Flange Facing Finish	N/A					
	40	Plate Material	N/A					
	41	Body Material	N/A					
	42	Flange Material	N/A					
	43	Bore Diameter (d)	N/A		mm			
	44	Thickness	N/A		mm			
OPTIONS	45	Total Length	N/A		mm			
	46							
PURCHASE	47							
	48							
	49	Manufacturer	(*)					
	50	Model No.	(*)					
	51	P.O.	-					
	52	MFR Serial Number	-					

Notes: 1) 提供材质证明
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		1	施工图	May/09/25	邱逸逸	王哲明
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		仪表数据表-限流孔板			DOC No. 文件号:	
					ED-2200-INC-DAT-INST-0406	

GENERAL	1	Tag Number		2210-RO-13601				
	2	P&ID Number	Line No.	2210-PID-0108B		ORGL-22110852-40-N1H1-C50		
	3	Service		Backflow to 2210-T136				
SERVICE CONDITIONS	4	Process Fluid / State		ORGL / L				
				Max.	Norm.	Min.	Units	
	5	Flow Rate			6200		kg/h	
	6	Pressure			0.394		MPaG	
	7	Temperature			20		°C	
	8	Density			1550		kg/m3	
	9	Specific Gravity					-	
	10	Viscosity			5		mPa.s	
	11	Molecular Weight			-		-	
	12	Specific Heats CP / CV			-		-	
	13	Copressibility Factor Z			-		-	
	14	Velocity					m/s	
	15	Pressure Loss Limit			184		kpa	
	16	Design Press.	Max / Min	0.7 /			kPaG	
	17	Design Temp.	Max / Min	60 /			°C	
	18	Base Press.	Base Temp.	101.3	kPa	20	°C	
	19	Toxic Corrosive Erosive Dirty		极度危害, 腐蚀				
	LINE	20	Class		N1H1			
		21	Size / Schedule / Line ID		DN40	/	S-40	/ inch
BASIS	22	Type		Concentric Square Orifice Plate				
	23	Pressure Drop		184 KPa				
	24	Calc. Standard		HG / T 20570.15				
	25	Design Standard		HG / T 20570.15				
	26							
ORIFICE PLATE	27	Size and Flange Rating		HG / T 20592 DN40 PN25 RF				
	28	Bore Diameter (d)		(*) mm				
	29	Diameter Ratio (beta=d/D)		(*)				
	30	Material		316L SS + PTFE				
	31	Thickness		3 mm				
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm	Yes, R3	
	33							
	34							
MULTISTAGE ORIFICE	35	Type		N/A				
	36	Number of stage		N/A				
	37	End Connection		N/A				
	38	Size, Rating and Facing		N/A				
	39	Flange Facing Finish		N/A				
	40	Plate Material		N/A				
	41	Body Material		N/A				
	42	Flange Material		N/A				
	43	Bore Diameter (d)		N/A mm				
	44	Thickness		N/A mm				
OPTIONS	45	Total Length		N/A mm				
	46							
PURCHASE	47							
	48							
	49	Manufacturer		(*)				
	50	Model No.		(*)				
	51	P.O.		-				
	52	MFR Serial Number		-				

Notes: 1) 提供材质证明
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	1	施工图	May/09/25	邱逸逸	王哲明	蒋磊
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 上海科元石化工程设计有限公司 SHANGHAI KEYUAN CHEMICAL & GAS ENGINEERING DESIGN CO.,LTD	Instrument Datasheet - Restriction Orifice			CLIENT DOC No. 客户文件号:		
	仪表数据表-限流孔板			DOC No. 文件号:		
				ED-2200-INC-DAT-INST-0406		

GENERAL	1	Tag Number		2210-RO-20101				
	2	P&ID Number	Line No.	2210-PID-0108B		ALML1-22110811-40-N1H1		
	3	Service		Backflow to 2210-T201				
SERVICE CONDITIONS	4	Process Fluid / State		ALML1 / L				
				Max.	Norm.	Min.	Units	
	5	Flow Rate		12000		kg/h		
	6	Pressure		0.232		MPaG		
	7	Temperature		AMB		°C		
	8	Density		1500		kg/m3		
	9	Specific Gravity				-		
	10	Viscosity		1.5		mPa.s		
	11	Molecular Weight		-		-		
	12	Specific Heats CP / CV		-		-		
	13	Copressibility Factor Z		-		-		
	14	Velocity				m/s		
	15	Pressure Loss Limit		20		kpa		
	16	Design Press.	Max / Min	0.5 /		kPaG		
	17	Design Temp.	Max / Min	60 /		°C		
	18	Base Press.	Base Temp.	101.3	kPa	20	°C	
	19	Toxic Corrosive Erosive Dirty		极度危害, 腐蚀				
	LINE	20	Class		N1H1			
		21	Size / Schedule / Line ID		DN40	/	S-40	/ inch
BASIS	22	Type		Concentric Square Orifice Plate				
	23	Pressure Drop		20		KPa		
	24	Calc. Standard		HG / T 20570.15				
	25	Design Standard		HG / T 20570.15				
	26							
ORIFICE PLATE	27	Size and Flange Rating		HG / T 20592 DN40 PN25 RF				
	28	Bore Diameter (d)		(*)		mm		
	29	Diameter Ratio (beta=d/D)		(*)				
	30	Material		316L SS + PTFE				
	31	Thickness		3		mm		
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm	Yes, R3	
	33							
	34							
MULTISTAGE ORIFICE	35	Type		N/A				
	36	Number of stage		N/A				
	37	End Connection		N/A				
	38	Size, Rating and Facing		N/A				
	39	Flange Facing Finish		N/A				
	40	Plate Material		N/A				
	41	Body Material		N/A				
	42	Flange Material		N/A				
	43	Bore Diameter (d)		N/A		mm		
	44	Thickness		N/A		mm		
OPTIONS	45	Total Length		N/A		mm		
	46							
PURCHASE	47							
	48							
	49	Manufacturer		(*)				
	50	Model No.		(*)				
	51	P.O.		-				
	52	MFR Serial Number		-				

Notes: 1) 提供材质证明
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上海科元石化工程设计有限公司
SHANGHAI KEYUAN CHEMICAL & GAS ENGINEERING DESIGN CO.,LTD

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GENERAL	1	Tag Number		2210-RO-23001				
	2	P&ID Number	Line No.	2210-PID-0109A		MAL-22110916-25-M4E1-C50		
	3	Service		Backflow to 2210-T230				
SERVICE CONDITIONS	4	Process Fluid / State		MAL		/ L		
				Max.	Norm.	Min.	Units	
	5	Flow Rate		4300		kg/h		
	6	Pressure		0.215		MPaG		
	7	Temperature		30		°C		
	8	Density		860		kg/m3		
	9	Specific Gravity				-		
	10	Viscosity		3.25		mPa.s		
	11	Molecular Weight		-		-		
	12	Specific Heats CP / CV		-		-		
	13	Copressibility Factor Z		-		-		
	14	Velocity				m/s		
	15	Pressure Loss Limit		65		kpa		
	16	Design Press.	Max / Min	0.4 /		kPaG		
	17	Design Temp.	Max / Min	60 /		°C		
	18	Base Press.	Base Temp.	101.3	kPa	20	°C	
	19	Toxic Corrosive Erosive Dirty		中度危害				
	LINE	20	Class		M4E1			
		21	Size / Schedule / Line ID		DN25	/	S-40S	/ inch
BASIS	22	Type		Concentric Square Orifice Plate				
	23	Pressure Drop		65		KPa		
	24	Calc. Standard		HG / T 20570.15				
	25	Design Standard		HG / T 20570.15				
	26							
ORIFICE PLATE	27	Size and Flange Rating		HG / T 20592 DN25 PN16 RF				
	28	Bore Diameter (d)		(*)		mm		
	29	Diameter Ratio (beta=d/D)		(*)				
	30	Material		316L SS				
	31	Thickness		3		mm		
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm	Yes, R3	
	33							
	34							
MULTISTAGE ORIFICE	35	Type		N/A				
	36	Number of stage		N/A				
	37	End Connection		N/A				
	38	Size, Rating and Facing		N/A				
	39	Flange Facing Finish		N/A				
	40	Plate Material		N/A				
	41	Body Material		N/A				
	42	Flange Material		N/A				
	43	Bore Diameter (d)		N/A		mm		
	44	Thickness		N/A		mm		
OPTIONS	45	Total Length		N/A		mm		
	46							
PURCHASE	47							
	48							
	49	Manufacturer		(*)				
	50	Model No.		(*)				
	51	P.O.		-				
	52	MFR Serial Number		-				

Notes: 1) 提供材质证明
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1	施工图	May/09/25	邱逸逸	王哲明	蒋磊
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Instrument Datasheet - Restriction Orifice			CLIENT DOC No. 客户文件号:		
仪表数据表-限流孔板			DOC No. 文件号: ED-2200-INC-DAT-INST-0406		

GENERAL	1	Tag Number	2230-RO-11501				
	2	P&ID Number	Line No.	2230-PID-0401	DMAPA-22340103-25-M1E1-C40		
	3	Service	Backflow to 2230-T115				
SERVICE CONDITIONS	4	Process Fluid / State	DMAPA / L				
			Max.	Norm.	Min.	Units	
	5	Flow Rate		2214		kg/h	
	6	Pressure		0.3		MPaG	
	7	Temperature		AMB		°C	
	8	Density		820		kg/m3	
	9	Specific Gravity				-	
	10	Viscosity		1.6		mPa.s	
	11	Molecular Weight		-		-	
	12	Specific Heats CP / CV		-		-	
	13	Copressibility Factor Z		-		-	
	14	Velocity				m/s	
	15	Pressure Loss Limit		208		kpa	
	16	Design Press. Max / Min	0.5	/		kPaG	
	17	Design Temp. Max / Min	100	/		°C	
	18	Base Press. Base Temp.	101.3	kPa	20	°C	
	19	Toxic Corrosive Erosive Dirty	中度危害, 腐蚀				
LINE	20	Class	M1E1				
	21	Size / Schedule / Line ID	DN25	/	S-40S	/ inch	
BASIS	22	Type	Concentric Square Orifice Plate				
	23	Pressure Drop	208			KPa	
	24	Calc. Standard	HG / T 20570.15				
	25	Design Standard	HG / T 20570.15				
	26						
ORIFICE PLATE	27	Size and Flange Rating	HG / T 20592 DN25 PN16 RF				
	28	Bore Diameter (d)	(*) mm				
	29	Diameter Ratio (beta=d/D)	(*)				
	30	Material	316L SS				
	31	Thickness	3 mm				
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm Yes, R3	
	33						
	34						
MULTISTAGE ORIFICE	35	Type	N/A				
	36	Number of stage	N/A				
	37	End Connection	N/A				
	38	Size, Rating and Facing	N/A				
	39	Flange Facing Finish	N/A				
	40	Plate Material	N/A				
	41	Body Material	N/A				
	42	Flange Material	N/A				
	43	Bore Diameter (d)	N/A mm				
	44	Thickness	N/A mm				
	45	Total Length	N/A mm				
	46						
OPTIONS	47						
	48						
PURCHASE	49	Manufacturer	(*)				
	50	Model No.	(*)				
	51	P.O.	-				
	52	MFR Serial Number	-				

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		1	施工图	May/09/25	邱逸逸	王哲明
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GENERAL	1	Tag Number	2230-RO-10601					
	2	P&ID Number Line No.	2230-PID-0402		WW15-22340203-25-M1B1-C40			
	3	Service	Backflow to 2230-T106					
SERVICE CONDITIONS	4	Process Fluid / State	WW15 / L					
			Max.	Norm.	Min.	Units		
	5	Flow Rate		2600		kg/h		
	6	Pressure		0.338		MPaG		
	7	Temperature		AMB		°C		
	8	Density		1000		kg/m3		
	9	Specific Gravity				-		
	10	Viscosity		1		mPa.s		
	11	Molecular Weight		-		-		
	12	Specific Heats CP / CV		-		-		
	13	Copressibility Factor Z		-		-		
	14	Velocity				m/s		
	15	Pressure Loss Limit		201		kpa		
	16	Design Press. Max / Min	0.6 /			kPaG		
	17	Design Temp. Max / Min	100 /			°C		
	18	Base Press. Base Temp.	101.3	kPa	20	°C		
	19	Toxic Corrosive Erosive Dirty	中度危害, 腐蚀					
LINE	20	Class	M1B1					
	21	Size / Schedule / Line ID	DN25	/	S-80	/ inch		
BASIS	22	Type	Concentric Square Orifice Plate					
	23	Pressure Drop	201		KPa			
	24	Calc. Standard	HG / T 20570.15					
	25	Design Standard	HG / T 20570.15					
	26							
ORIFICE PLATE	27	Size and Flange Rating	HG / T 20592 DN25 PN16 RF					
	28	Bore Diameter (d)	(*)		mm			
	29	Diameter Ratio (beta=d/D)	(*)					
	30	Material	316L SS					
	31	Thickness	3		mm			
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm Yes, R3		
	33							
	34							
MULTISTAGE ORIFICE	35	Type	N/A					
	36	Number of stage	N/A					
	37	End Connection	N/A					
	38	Size, Rating and Facing	N/A					
	39	Flange Facing Finish	N/A					
	40	Plate Material	N/A					
	41	Body Material	N/A					
	42	Flange Material	N/A					
	43	Bore Diameter (d)	N/A		mm			
	44	Thickness	N/A		mm			
	45	Total Length	N/A		mm			
	46							
OPTIONS	47							
	48							
PURCHASE	49	Manufacturer	(*)					
	50	Model No.	(*)					
	51	P.O.	-					
	52	MFR Serial Number	-					

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Instrument Datasheet - Restriction Orifice			CLIENT DOC No. 客户文件号:		
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GENERAL	1	Tag Number	2230-RO-11701				
	2	P&ID Number	Line No.	2230-PID-0403	PITCH-22340303-25-M1E1-C40		
	3	Service	Backflow to 2230-T117				
SERVICE CONDITIONS	4	Process Fluid / State	PITCH / L				
			Max.	Norm.	Min.	Units	
	5	Flow Rate		2132		kg/h	
	6	Pressure		0.276		MPaG	
	7	Temperature		AMB		°C	
	8	Density		820		kg/m3	
	9	Specific Gravity				-	
	10	Viscosity		1.6		mPa.s	
	11	Molecular Weight		-		-	
	12	Specific Heats CP / CV		-		-	
	13	Copressibility Factor Z		-		-	
	14	Velocity				m/s	
	15	Pressure Loss Limit		182		kpa	
	16	Design Press. Max / Min	0.5	/		kPaG	
	17	Design Temp. Max / Min	100	/		°C	
	18	Base Press. Base Temp.	101.3	kPa	20	°C	
	19	Toxic Corrosive Erosive Dirty	中度危害, 腐蚀				
LINE	20	Class	M1E1				
	21	Size / Schedule / Line ID	DN25	/	S-40S	/ inch	
BASIS	22	Type	Concentric Square Orifice Plate				
	23	Pressure Drop	182			KPa	
	24	Calc. Standard	HG / T 20570.15				
	25	Design Standard	HG / T 20570.15				
	26						
ORIFICE PLATE	27	Size and Flange Rating	HG / T 20592 DN25 PN16 RF				
	28	Bore Diameter (d)	(*) mm				
	29	Diameter Ratio (beta=d/D)	(*)				
	30	Material	316L SS				
	31	Thickness	3			mm	
	32	Paddle Length / Thickness / Round Corner	MFR. STD	mm	MFR. STD	mm Yes, R3	
	33						
	34						
MULTISTAGE ORIFICE	35	Type	N/A				
	36	Number of stage	N/A				
	37	End Connection	N/A				
	38	Size, Rating and Facing	N/A				
	39	Flange Facing Finish	N/A				
	40	Plate Material	N/A				
	41	Body Material	N/A				
	42	Flange Material	N/A				
	43	Bore Diameter (d)	N/A mm				
	44	Thickness	N/A mm				
OPTIONS	45	Total Length	N/A mm				
	46						
PURCHASE	47						
	48						
	49	Manufacturer	(*)				
	50	Model No.	(*)				
	51	P.O.	-				
	52	MFR Serial Number	-				

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				ED-2200-INC-DAT-INST-0406		

GENERAL	1	Tag Number		2220-RO-15901				
	2	P&ID Number	Line No.	2220-PID-0106		DETA-22210605-40-M1E1		
	3	Service		Backflow to 2220-T159				
SERVICE CONDITIONS	4	Process Fluid / State		DETA / L				
				Max.	Norm.	Min.	Units	
	5	Flow Rate			3808		kg/h	
	6	Pressure			0.35		MPaG	
	7	Temperature			AMB		°C	
	8	Density			952		kg/m3	
	9	Specific Gravity					-	
	10	Viscosity			5		mPa.s	
	11	Molecular Weight			-		-	
	12	Specific Heats CP / CV			-		-	
	13	Copressibility Factor Z			-		-	
	14	Velocity					m/s	
	15	Pressure Loss Limit			210		kpa	
	16	Design Press.	Max / Min	0.6	/		kPaG	
	17	Design Temp.	Max / Min	60	/		°C	
	18	Base Press.	Base Temp.	101.3	kPa	20	°C	
	19	Toxic Corrosive Erosive Dirty		高度危害				
	LINE	20	Class		M1E1			
		21	Size / Schedule / Line ID		DN40	/	S-40S	/ inch
BASIS	22	Type		Concentric Square Orifice Plate				
	23	Pressure Drop		210 KPa				
	24	Calc. Standard		HG / T 20570.15				
	25	Design Standard		HG / T 20570.15				
	26							
ORIFICE PLATE	27	Size and Flange Rating		HG / T 20592 DN40 PN16 RF				
	28	Bore Diameter (d)		(*) mm				
	29	Diameter Ratio (beta=d/D)		(*)				
	30	Material		316L SS				
	31	Thickness		3 mm				
	32	Paddle Length / Thickness / Round Corner		MFR. STD	mm	MFR. STD	mm Yes, R3	
	33							
	34							
MULTISTAGE ORIFICE	35	Type		N/A				
	36	Number of stage		N/A				
	37	End Connection		N/A				
	38	Size, Rating and Facing		N/A				
	39	Flange Facing Finish		N/A				
	40	Plate Material		N/A				
	41	Body Material		N/A				
	42	Flange Material		N/A				
	43	Bore Diameter (d)		N/A mm				
	44	Thickness		N/A mm				
OPTIONS	45	Total Length		N/A mm				
	46							
PURCHASE	47							
	48							
	49	Manufacturer		(*)				
	50	Model No.		(*)				
	51	P.O.		-				
	52	MFR Serial Number		-				

Notes: 1) 提供材质证明
2) 限流型
3)



1A	施工图	Jun/13/25	邱地逸	王哲明	蒋磊
1	施工图	May/09/25	邱地逸	王哲明	蒋磊
Rev 版次	Description 说明	Date 日期	By 编制	Checked 校核	Approved 审核



Instrument Datasheet - Restriction Orifice
仪表数据表-限流孔板

CLIENT DOC No. 客户文件号:
DOC No. 文件号:
ED-2200-INC-DAT-INST-0406