

Vendor specified dryer length as 13 m length in bid stage. So, it shall be rechecked and clarified. Also dryer width to be rechecked and clarified.

Tianli Reply:
天力根据项目优化设备设计。Tianli has optimized the equipment design.
1. 增大了每组换热机组的换热面积，所以由之前的9组小换热器调整为8组大换热器。
1. The heat exchange area of each heat exchanger has been increased, so the previous 9 sets of small heat exchangers have been adjusted to 8 sets of large heat exchangers.
2. 优化换热器布置，缩短了流化床干燥器的长度，可有效的减少氮气使用量。
2. Optimize the layout of the heat exchanger and shorten the length of the fluid bed dryer, which can effectively reduce the use of nitrogen.

CSA comment:
CV-01:
Please specify the location of overall operating Center of Gravity.
Tianli modification :According to CSA comment; Added overall operating Center of Gravity.

MA-03:
As per agreement in Bid stage coil quantity to be 9 no. not 8 no. So, it shall be revised or clarified.

Tianli Reply:
天力优化设备设计。Tianli has optimized the equipment design.
增大了每组换热机组的换热面积，所以由之前的9组小换热器调整为8组大换热器。
The heat exchange area of each heat exchanger has been increased, so the previous 9 sets of small heat exchangers have been adjusted to 8 sets of large heat exchangers.

PI-03:
There is only 3 product inlet. N44 to be deleted. Tianli modification :Delete N44 in the drawings

PI-01:
Please extend Lugs as much as possible. Tianli modification : Tianli has checked and modified according to CSA comment.

PI-02:
Please extend Lugs as much as possible. Tianli modification : Tianli has checked and modified according to CSA comment.

CSA2comment:
CV-02:
Please specify the installation elevation. Tianli modification : Tianli has checked and modified according to CSA comment.

MA-02:
As per MA DSH: Operation temperature: 90
Tianli Reply:
天力已在设备外形图中修改。Tianli has modified on the Equipment Outline Drawing.

MA-03:
As per MA DSH: Operation temperature: 110
Tianli Reply:
天力已在设备外形图中修改。Tianli has modified on the Equipment Outline Drawing.

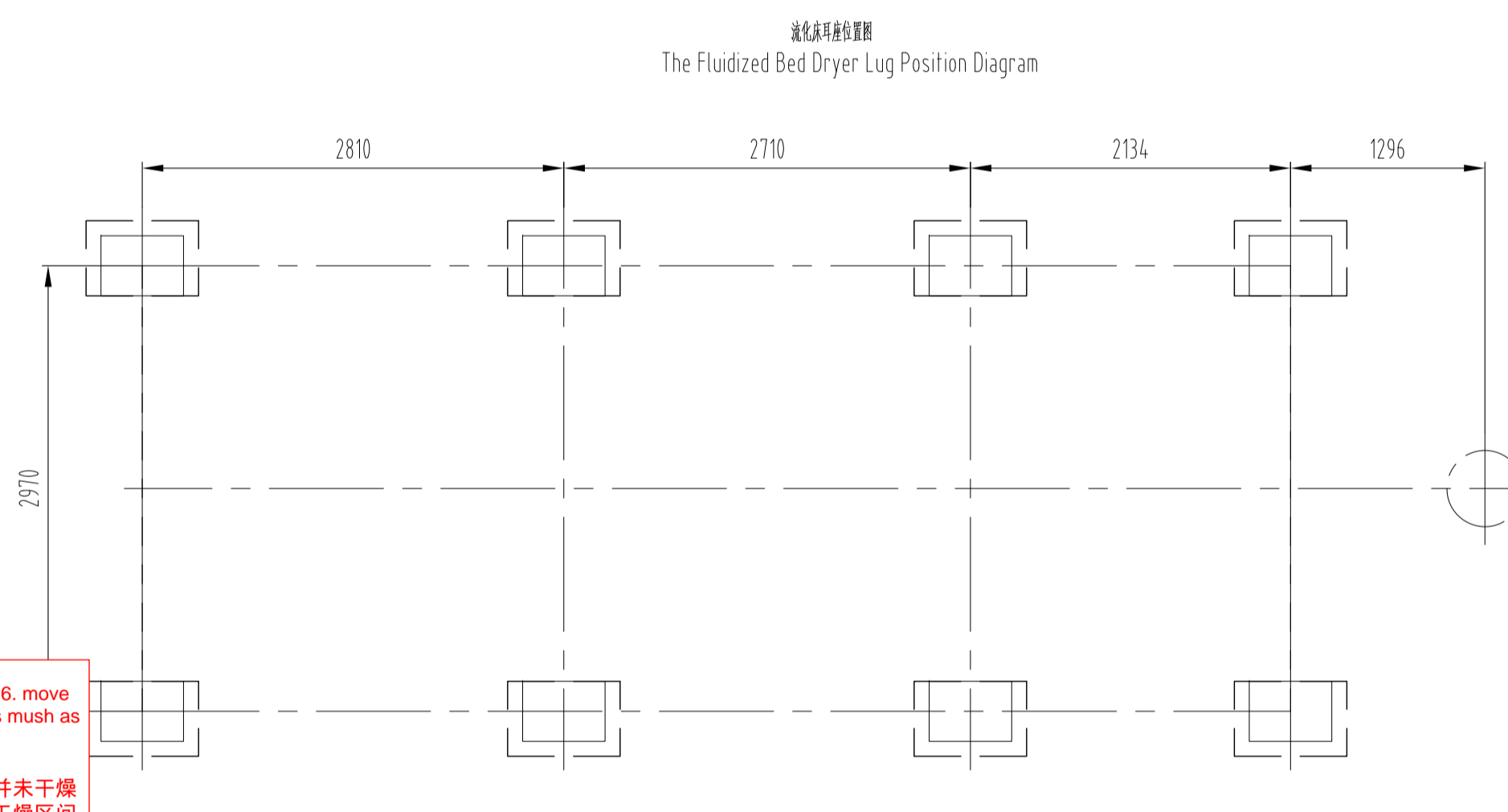
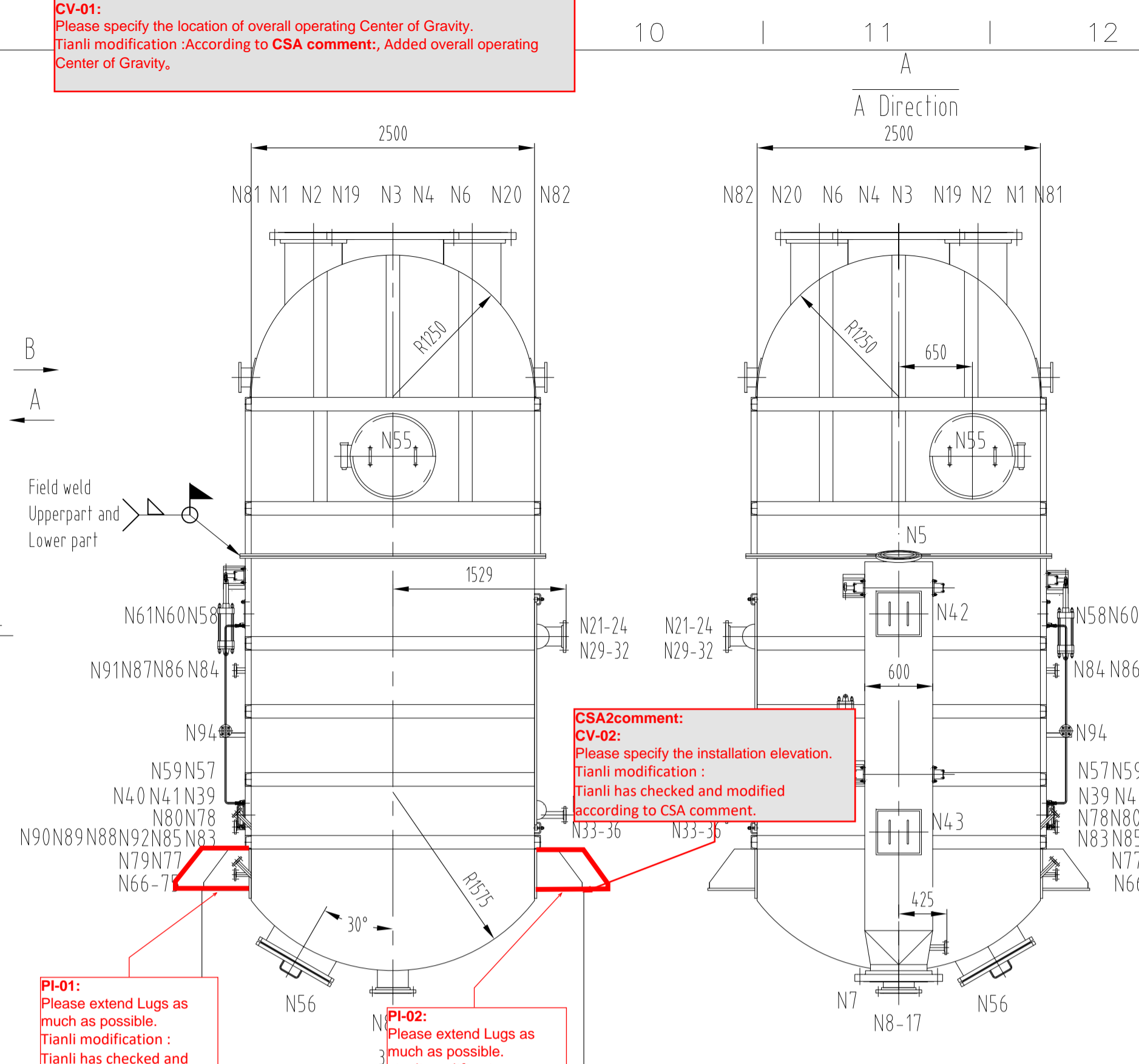
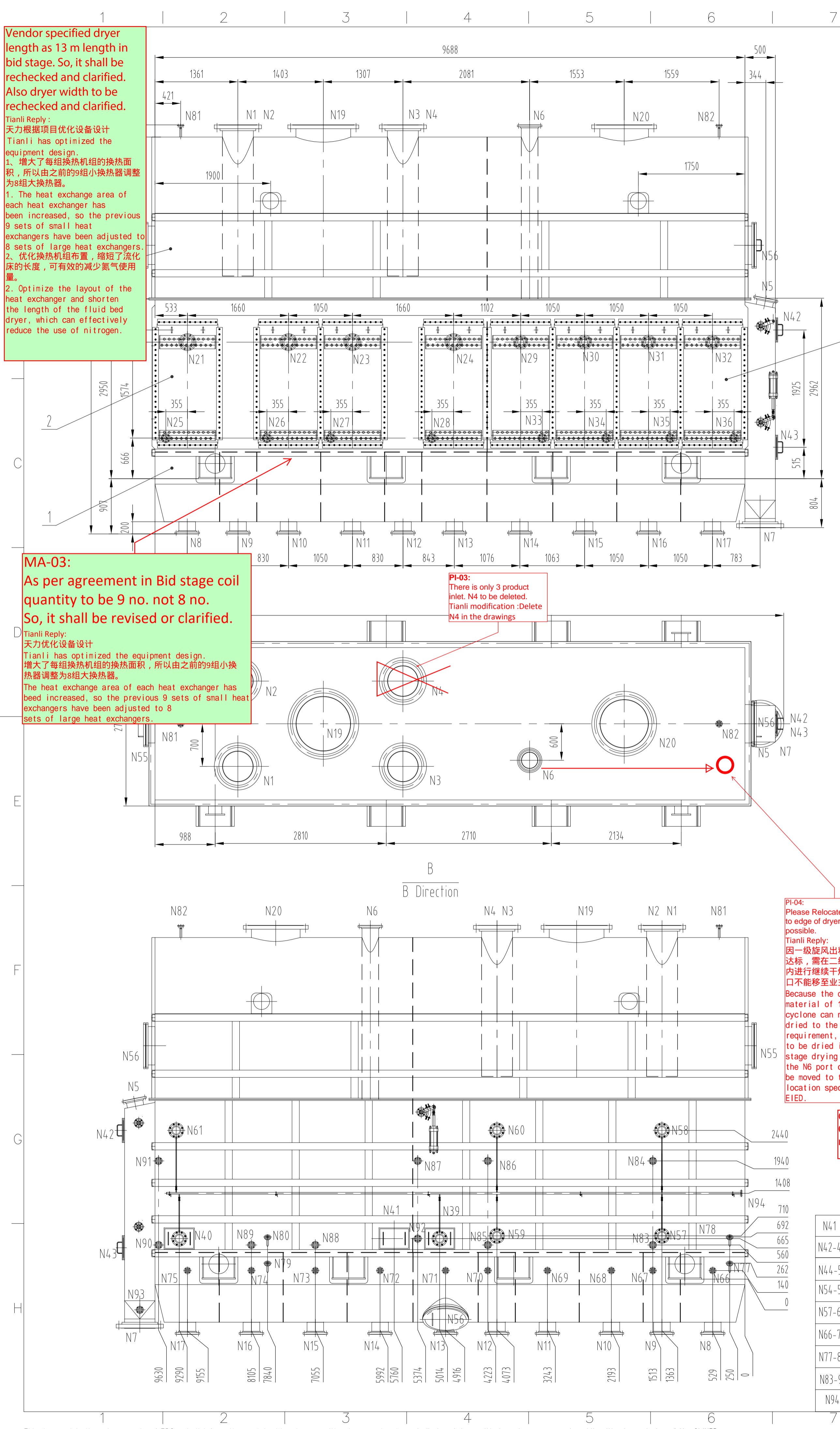
CSA2comment:
CV-03:
Please specify test weight. Also please specify the type of presented "Maximum weight".
Tianli Reply:
天力已在设备外形图中补充说明此问题。Tianli has clarified this issue on the Equipment Outline Drawing.

CSA2comment:
CV-04:
With respect to the note that the supported structure is concrete one, so related lugs are welded to insert plates. Please specify the location and dimensions of required insert plates. Also please refer to "CV-05".
Tianli Reply:
天力已在设备外形图中补充说明此问题。Tianli has clarified this issue on the Equipment Outline Drawing.

CSA2comment:
CV-05:
According to the construction problems such as leveling in concrete structures, utilizing anchor bolts and grout is proposed for supporting this equipment (instead of welding to the insert plates).
Tianli modification : Tianli has checked and modified according to CSA2 comment.

MA-04:
MECHANICAL SCATTER FOR EACH LINE OF POWDER ENTRANCE WHICH ARE COMING FROM CENTRIFUGES TO BE CONSIDERED AS PER AGREEMENT.

General comment:
Considering PFD and H&M has not been received yet, so, relevant comments will be reflected to Vendor later.



Item No.	Symbol	Size	Rating	Standard	Face	Material	Remarks
N41	250x400	TLFS	RF	ASME B16.5	RF	TLFS	检修口 Inspection opening
N42-43	270x270	TLFS	RF	ASME B16.5	RF	TLFS	检修口 Inspection opening
N44-53	φ600	TLFS	RF	ASME B16.5	RF	TLFS	人孔 Manhole inside the device not visible
N54-56	φ600	TLFS	RF	ASME B16.5	RF	TLFS	人孔 Manhole
N57-61	φ150	TLFS	RF	ASME B16.5	RF	TLFS	冲洗口 Sight glass with flushing
N66-75	1"	ASME B16.5	RF	ASME B16.5	RF	ASME B16.5	压力口 Pressure
N77-82	1"	ASME B16.5	RF	ASME B16.5	RF	ASME B16.5	压差口 Pressure difference
N83-93	1 1/2"	ASME B16.5	RF	ASME B16.5	RF	ASME B16.5	温度口 Temperature
N94	1"	ASME B16.5	RF	ASME B16.5	RF	ASME B16.5	冲洗氮气口 Nitrogen flushing inlet

符号	公称尺寸	公称功	标准	接管型式	用途或名称	备注
Pos Item	DN Size	PN Rating	DN Standard	Face type	Benennung Designation	Bemerkung Remarks
N1-4	20"	150 lbs	ASME B16.5	RF	原料口 Product inlet	
N5	10"	150 lbs	ASME B16.5	RF	除尘回料口 Dust inlet	
N6	10"	150 lbs	ASME B16.5	RF	除尘回料口 Dust inlet	
N7	20"	150 lbs	ASME B16.5	RF	出口 Product outlet	
N8-13	10"	150 lbs	ASME B16.5	RF	一级蒸汽口 Gas inlet stage 1	
N14-17	10"	150 lbs	ASME B16.5	RF	二级蒸汽口 Gas inlet stage 2	
N19	φ900	TLFS	RF	RF	一级出口 Gas outlet stage 1	
N20	φ800	TLFS	RF	RF	二级出口 Gas outlet stage 2	
N21-24	6"	150 lbs	ASME B16.5	RF	一级蒸汽口 Steam outlet stage 1	
N25-28	2"	150 lbs	ASME B16.5	RF	一级冷凝水出口 condensate outlet stage 1	
N29-32	3"	150 lbs	ASME B16.5	RF	二级蒸汽口 Steam outlet stage 2	
N33-36	2"	150 lbs	ASME B16.5	RF	二级冷凝水出口 condensate outlet stage 2	
N39-40	250x400	TLFS	RF	RF	检修口 Inspection opening with sight glass	

物料名称	HDPE + HEXANE	物料状态	粉末
process fluid to be treated	HDPE + HEXANE	Material status	Powder
堆积密度 kg/m³	400-500	Gasous medium	N₂
设计温度 °C	150	设计压力 kPa	50
操作温度 °C	115	操作压力 kPa	20
换热器设计温度 °C	195	换热器设计压力 MPa	0.6
换热器操作温度 °C	150	换热器操作压力 MPa	0.3
表面积 m²	24.2	换热器面积 m²	108
Workong area		Heat exchanger area	

主要材质 Main material
接触物料 material in contact with product S30403
其余 Other S30408

备注 Remarks
1. 本图为初版图，管口大小和方位后期会根据实际情况进行调整。设备重量以竣工图为准。
1. This drawing is the first edition, the nozzle size and orientation will be adjusted according to the actual situation in the later stage. The weight of equipment shall be according to as-built drawing.
2. 空重: ≈47000kg
2. Empty weight: ≈47000kg
3. 工作重量: ≈67000kg
3. Operating weight: ≈67000kg
4. 最大重量: ≈78500kg
4. Maximum weight: ≈78500kg
5. 流化床干燥器设置8个支腿，支腿与地面（混凝土表面预埋铁板）直接焊接连接，不需要设置地脚螺栓。
5. The fluidized bed dryer is provided with 8 lugs, the support lug is welded directly to the ground, anchor bolts are not required.
6. 流化床干燥器无动荷载。
6. The fluidized bed dryer has no dynamic load.
7. 流化床干燥器水平安装，无倾斜角，无支撑度要求。
7. The fluidized bed dryer horizontal installation, no inclination angle, no grouting thickness requirements.

MA-06:
As per design basis: 0.6 barg
Tianli Reply:
天力已在设备外形图中修改。Tianli has modified on the Equipment Outline Drawing.

Code1	Code2	Code3	Code4	Code5
<input type="checkbox"/> Approved (Applicable only for "FOR APPROVAL" documents) Approved and the documents are released for manufacturing.	<input type="checkbox"/> Approved with Note(s) Vendor shall correct, revise and resubmit the document. The document is released for manufacturing if changes incorporated.	<input type="checkbox"/> Commented Vendor shall correct, revise and resubmit the document by the date specified. The document shall be revised under the Status of "Revised Issue". All corrected documents shall be resubmitted before starting the manufacturing process.	<input type="checkbox"/> Rejected Vendor shall correct, revise and resubmit the document with previous revision.	<input type="checkbox"/> No Code (Applicable only for "For Review" and As-Built documents) Document has been submitted for information (I). Consistency, completeness and correctness of document content is Vendor's responsibility.

REV.	DATE	POI	PREP.	CHKD.	APPD.	AUTH.
00	20-Sep-24					

Tianli Petrochemical Company
310 KTPA HDPE Plant

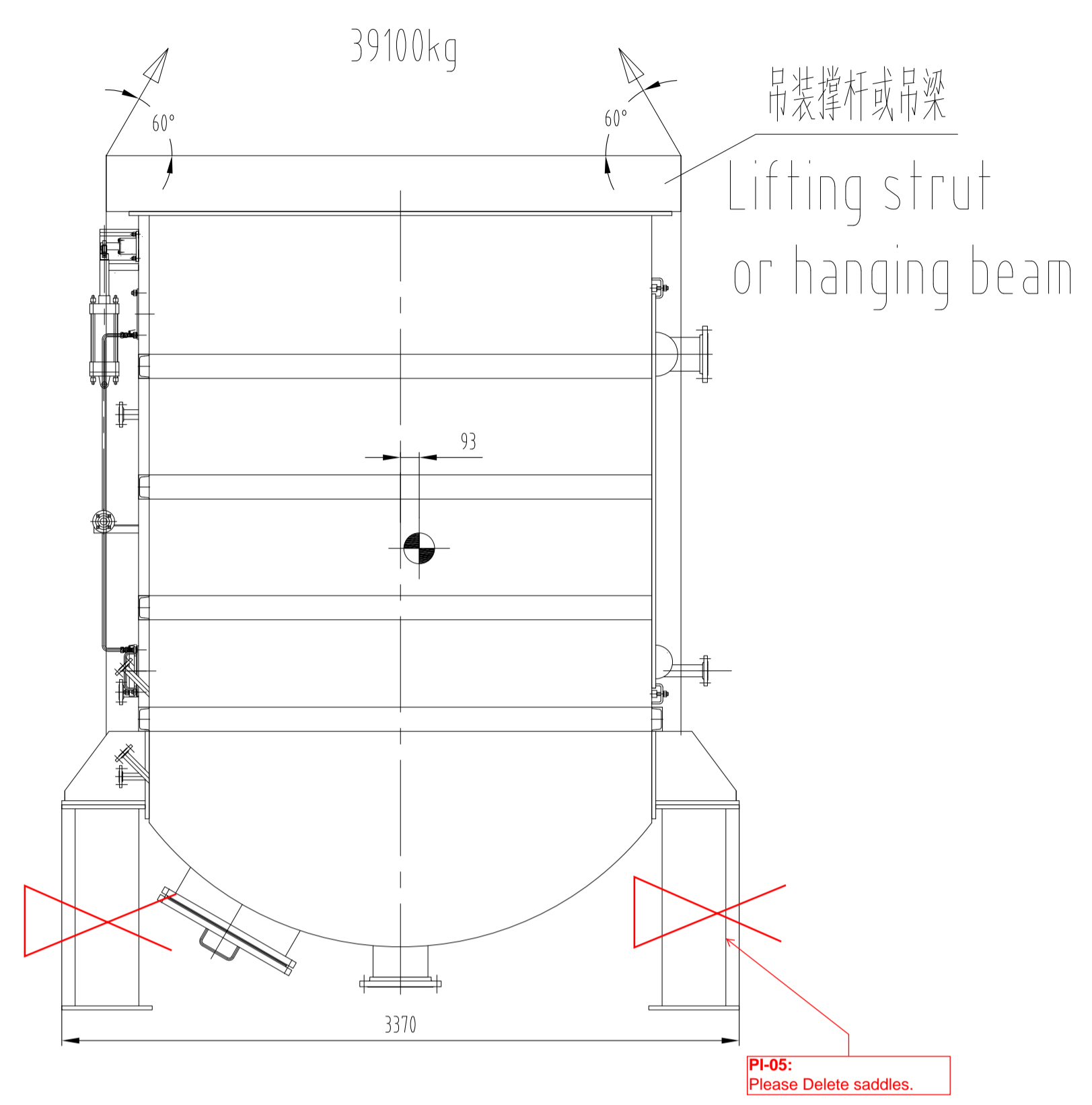
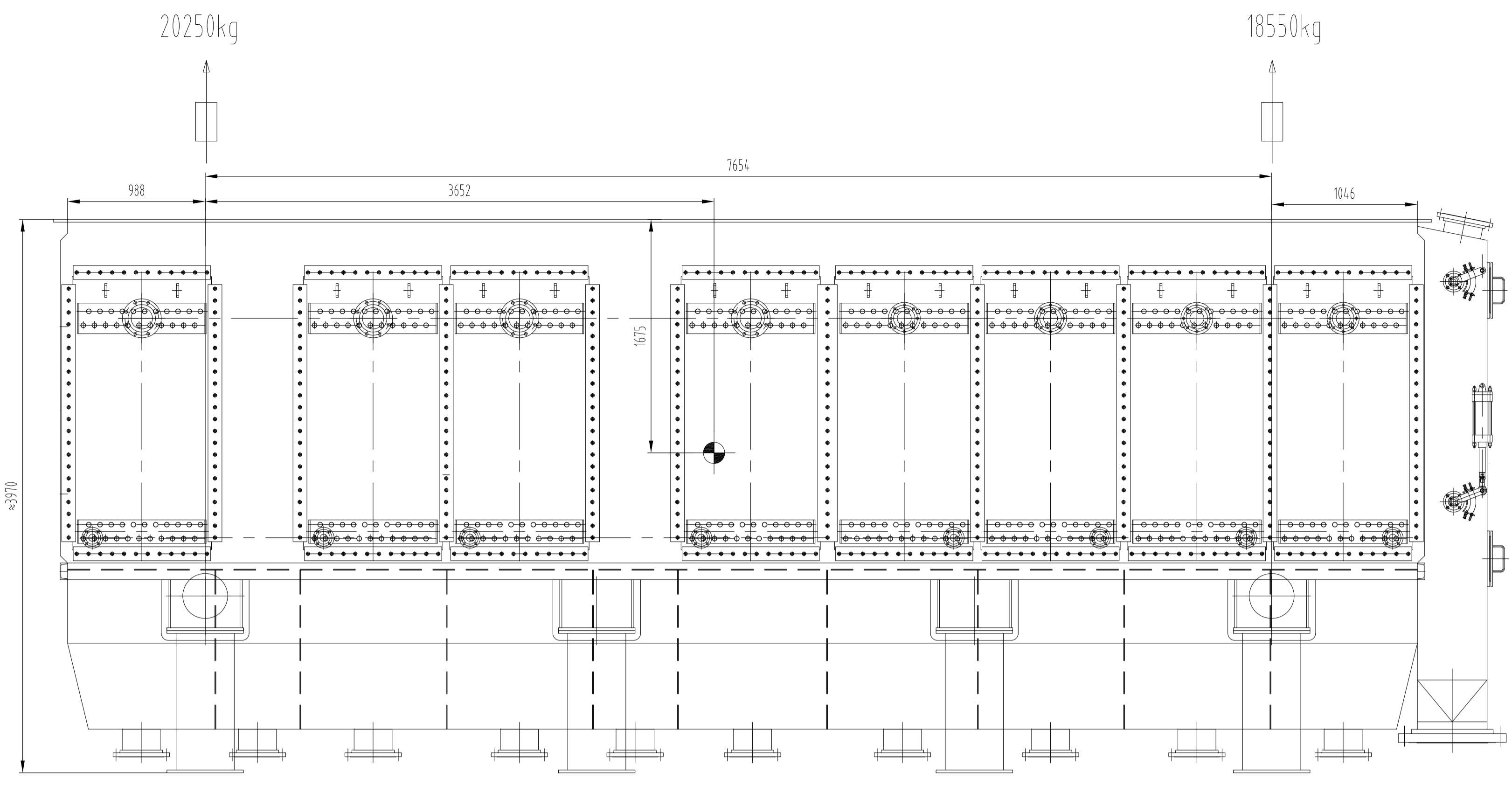
CONTRACT NO.:
PURCHASE ORDER NO.:XXXXX

DRAWING TITLE: Fluidized Bed Dryer (16-DR-221) Outline Drawing for Fluid Bed Dryer Package Unit (16-PK-221)

DRAWING NO.:

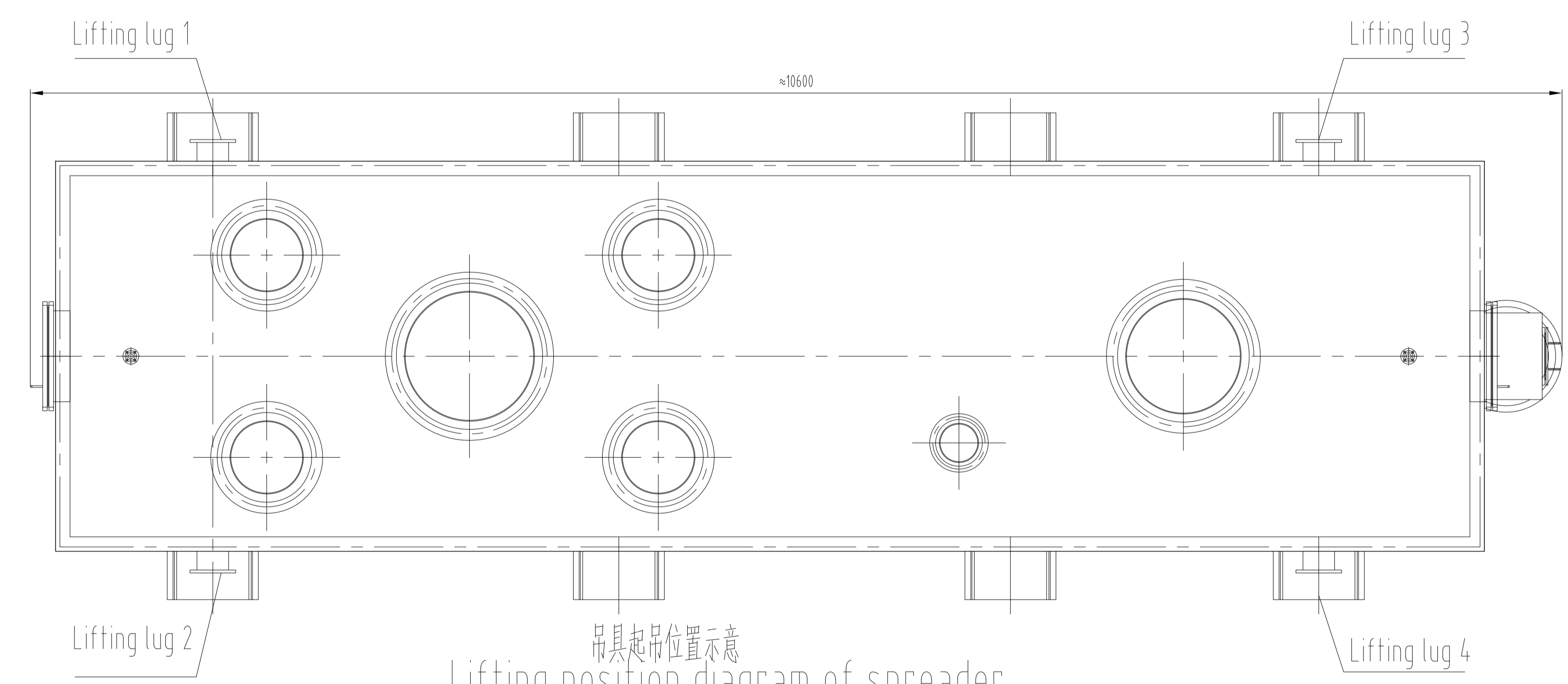
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CLASS	REV.	SHEET NO.	SIZE
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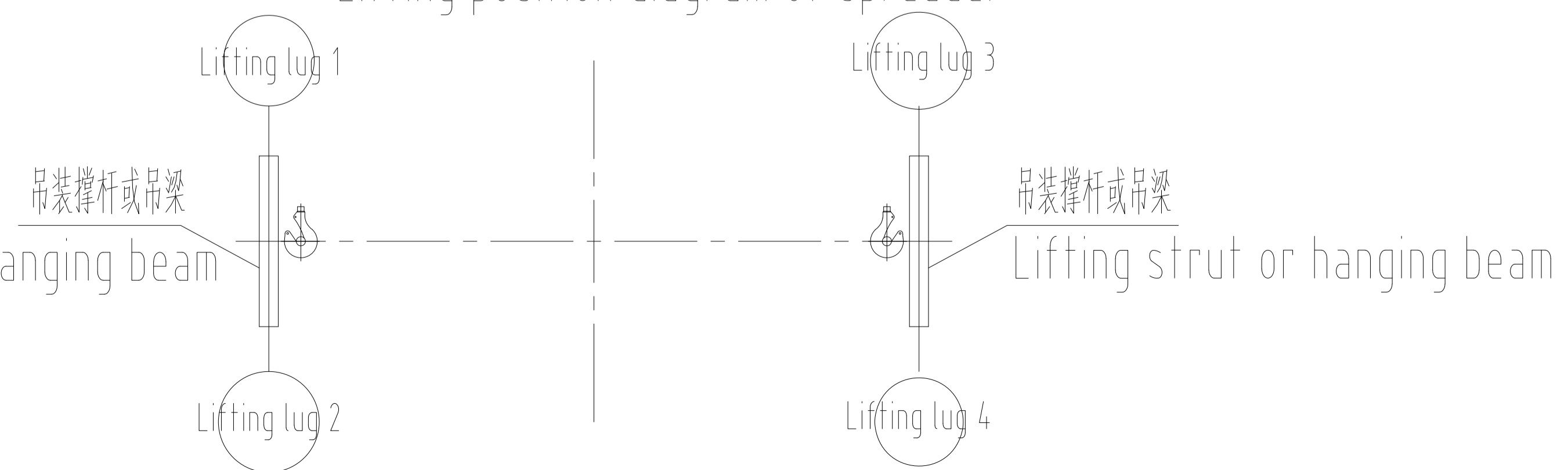


技术要求 Technical requirements

- 1.设备通过吊装位置1、2和3、4分别竖直向上吊装。
1.The devices must be lifted vertically from lifting lug 1,2 and lifting lug 3,4.
- 2.吊装时采用钢丝绳。
2. Wire rope is used for hoisting.
- 3.设备净重量: 39.1吨 含包装及支腿总量: 41.1吨。
3.Net weight of equipment:39.1t Total weight including package and outrigger:41.1t.
- 4.设备重量以竣工图为准。
4.The weight of equipment shall be subject to as-built drawing.



吊具起吊位置示意图
Lifting position diagram of spreader



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<input type="checkbox"/> Approved with Note(s) Code2	Vendor shall correct, revise and resubmit the document. The document is released for manufacturing if changes incorporated.
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<input type="checkbox"/> Rejected Code4	Vendor shall correct, revise and resubmit the document with previous revision.
<input type="checkbox"/> No Code (Applicable only for "For Review" and As-Built documents) Code5	Document has been submitted for information (I). Consistency, completeness and correctness of document content is Vendor's responsibility.

The above checking result by EIED shall in no way relieve Vendor of any liability, obligation and responsibility out of the purchase order and the mutual agreement in writing.

DATE: _____
DEPT: _____
Signature: _____

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20-Sep-24	Issue for Review				
DATE	POI	PREP.	CHKD.	APPD.	AUTH.

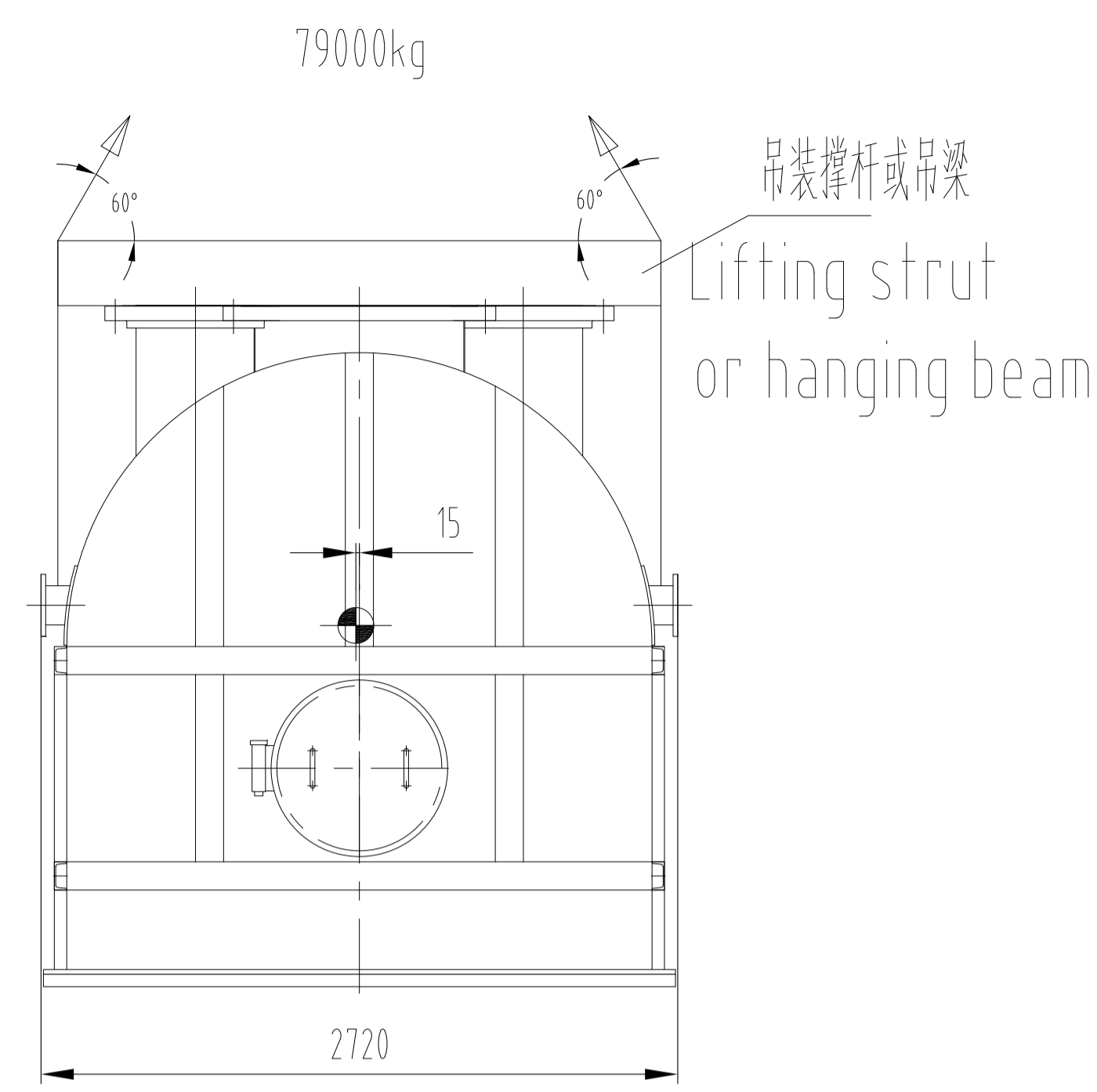
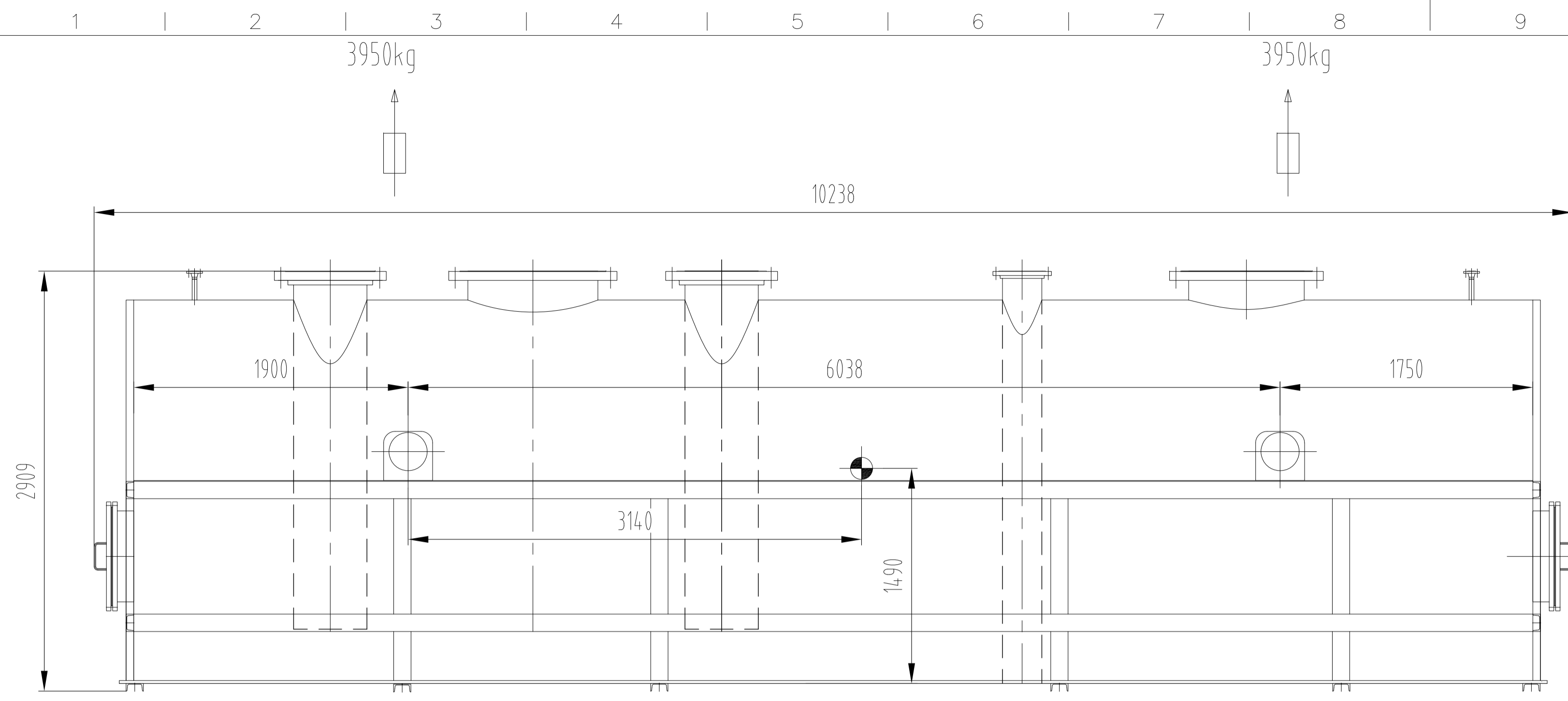
Tabriz Petrochemical Company
310 KTPA HDPE Plant

CONTRACT NO.: _____
PURCHASE ORDER NO.:XXXXX

DRAWING TITLE: Fluidized Bed Dryer (16-DR-221) Lifting Drawing of Lower part for Fluid Bed Dryer Package Unit (16-PK-221)

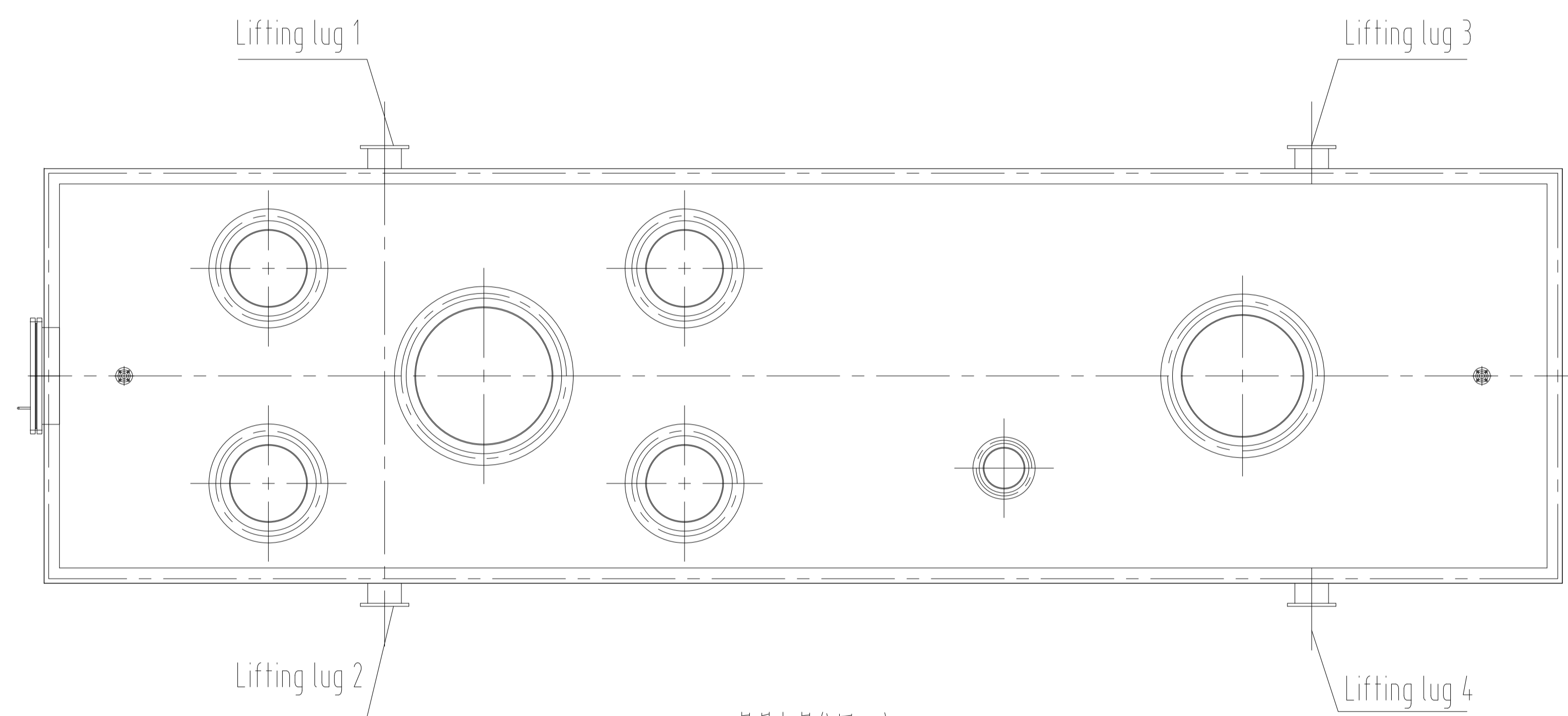
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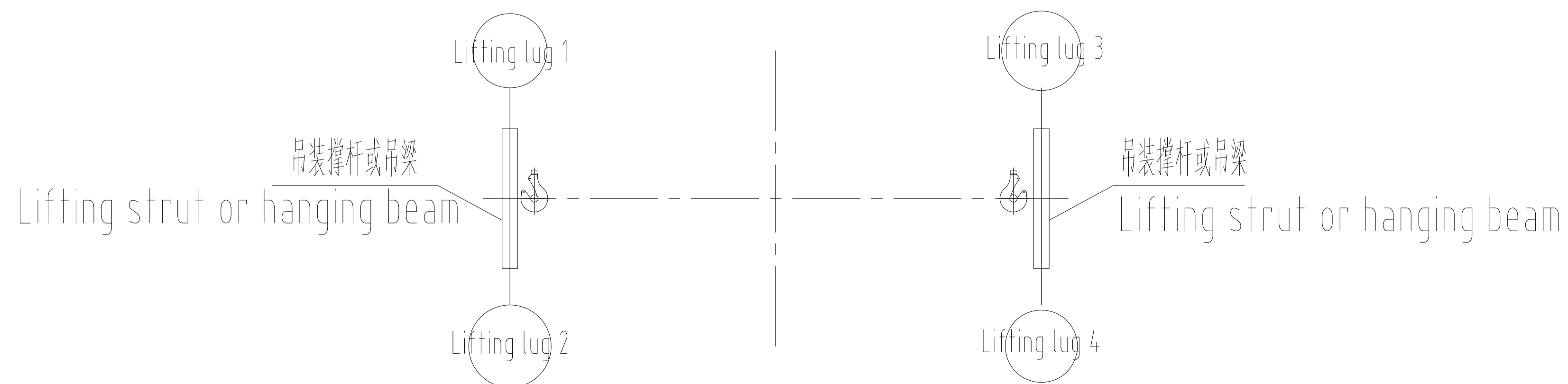


吊装撑杆或吊梁
Lifting strut or hanging beam

技术要求 Technical requirements
 1.设备通过吊装位置1、2和3、4分别竖直向上吊装。
 1.The devices must be lifted vertically from lifting lug 1,2 and lifting lug 3,4.
 2.吊装时采用钢丝绳。
 2. Wire rope is used for hoisting.
 3.设备净重量: 7.9吨 含包装及支腿总量: 9.4吨。
 3.Net weight of equipment:7.9t Total weight including package and outrigger:9.4t.
 4.设备重量以竣工图为准。
 4.The weight of equipment shall be subject to as-built drawing.



吊具起吊位置示意
Lifting position diagram of spreader



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DATE :
DEPT :
Signature :
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Only for internal review

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20-Sep-24	Issue for Review	PREP.	CHKD.	APPD.	AUTH.
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Tabriz Petrochemical Company
310 KTPA HDPE Plant

CONTRACT NO.:
PURCHASE ORDER NO.:XXXXX

DRAWING TITLE: Fluidized Bed Dryer (16-DR-221) Lifting Drawing of Upper Part for Fluid Bed Dryer Package Unit (16-PK-221)

DRAWING NO.:

VENDOR DWG NO.:	CLASS	REV.	SHEET NO.	SIZE
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