

SUPPLIER'S DOCUMENT FRONT SHEET

For A3 / A4 Document Only

PROJECT TITLE : Western Desert Gas Complex (Train D) Project				
PROJECT No. : 05072-200				
PURCHASE ORDER No. : 05072-200-165-01-11				
SUPPLIER NAME : ISG S.P.A				
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package				
EQUIPMENT / PACKAGE TAG No. : 505				
DOCUMENT CODE IDENTIFICATION : B03				
DOCUMENT TYPE : ARRANGEMENTS DRAWINGS				
DOCUMENT TITLE : General Arrangement of 505-D-001 A/B/C/D Molecular Sieve Dryer				
SUPPLIER OWN DOCUMENT NUMBER (ORIGINAL)	Rev.	Date	Authorized Supplier Name	Signature
3070-04PE02.01	0	July 7, 2021	OCS	
	1	September 16,2021	OCS	
	2	November 22,2021	OCS	
	3	January 14,2022	OCS	
	4	March 17, 2022	OCS	
	5	June 21, 2022	OCS	<i>John Beale</i>
SUPPLIER DOCUMENT NUMBER (As per the SDR)				TOTAL No. OF PAGES
05072-200-165-01-11-B03-001				2
				5

PURCHASER REVIEW OF SUPPLIER DOCUMENT

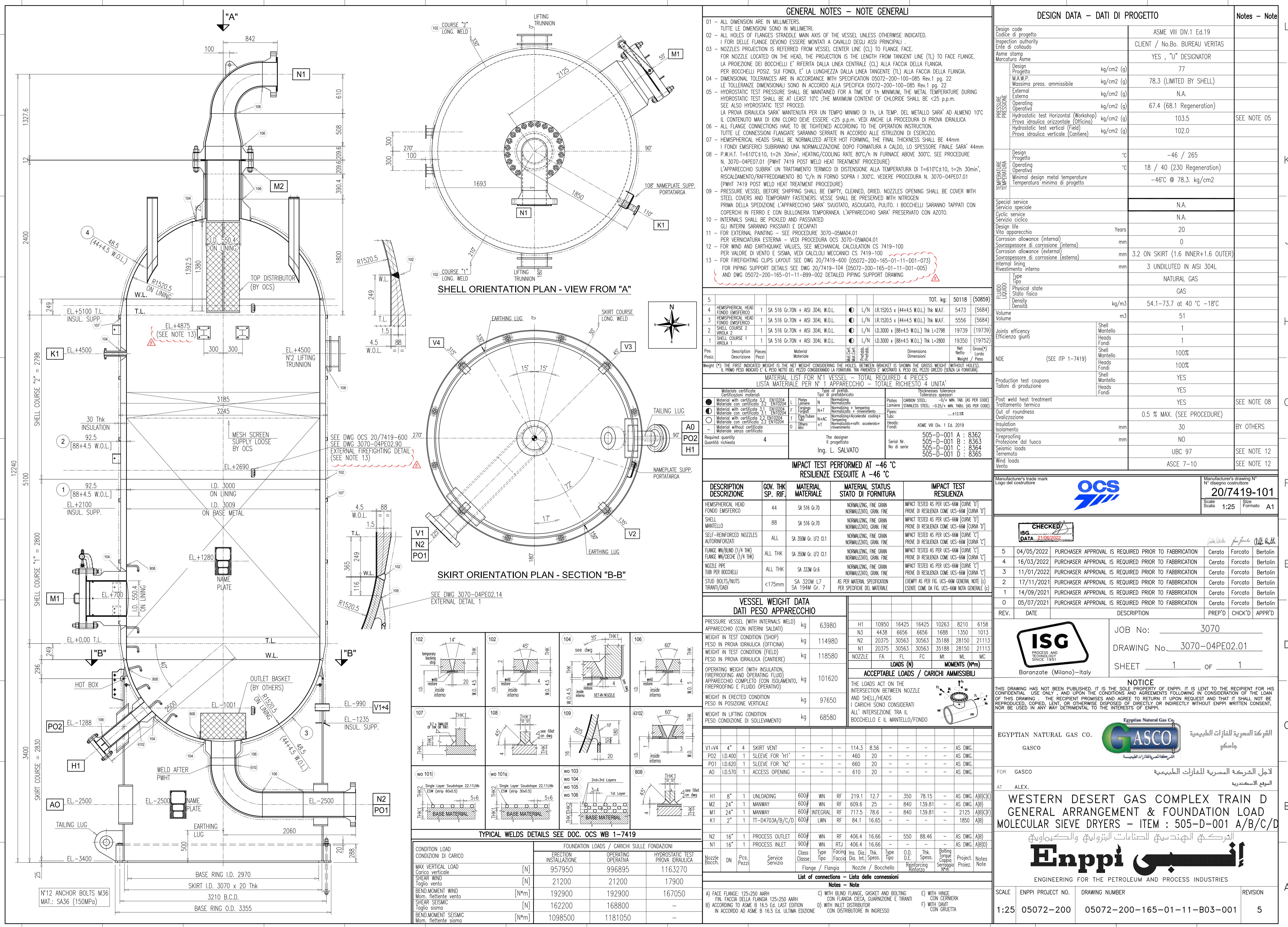
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PURCHASER REVIEW CODE

- 1. WORK MAY PROCEED.
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- 3. REVISE AND RESUBMIT, WORK MAY NOT PROCEED.
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PURCHASER APPROVAL

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SUPPLIER'S DOCUMENT FRONT SHEET

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PROJECT TITLE : Western Desert Gas Complex (Train D) Project

PROJECT No. : 05072-200

PURCHASE ORDER No. : 05072-200-165-01-11

SUPPLIER NAME : ISG S.P.A

EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package

EQUIPMENT / PACKAGE TAG No. : 505-V001

DOCUMENT CODE IDENTIFICATION : B03

DOCUMENT TYPE : ARRANGEMENTS DRAWINGS

DOCUMENT TITLE : General Arrangement of 505-V-001 Feed High Efficiency Separator

SUPPLIER OWN DOCUMENT NUMBER (ORIGINAL)	Rev.	Date	Authorized Supplier Name	Signature
3070-04PE02.02	0	July 7, 2021	OCS	
	1	October 6, 2021	OCS	
	2	November 9, 2021	OCS	
	3	February 14, 2022	OCS	
	4	March 17, 2022	OCS	
	5	June 21, 2022	OCS	<i>John Besler</i>
SUPPLIER DOCUMENT NUMBER (As per the SDR)				TOTAL No. OF PAGES
05072-200-165-01-11-B03-002				2
				5

PURCHASER REVIEW OF SUPPLIER DOCUMENT

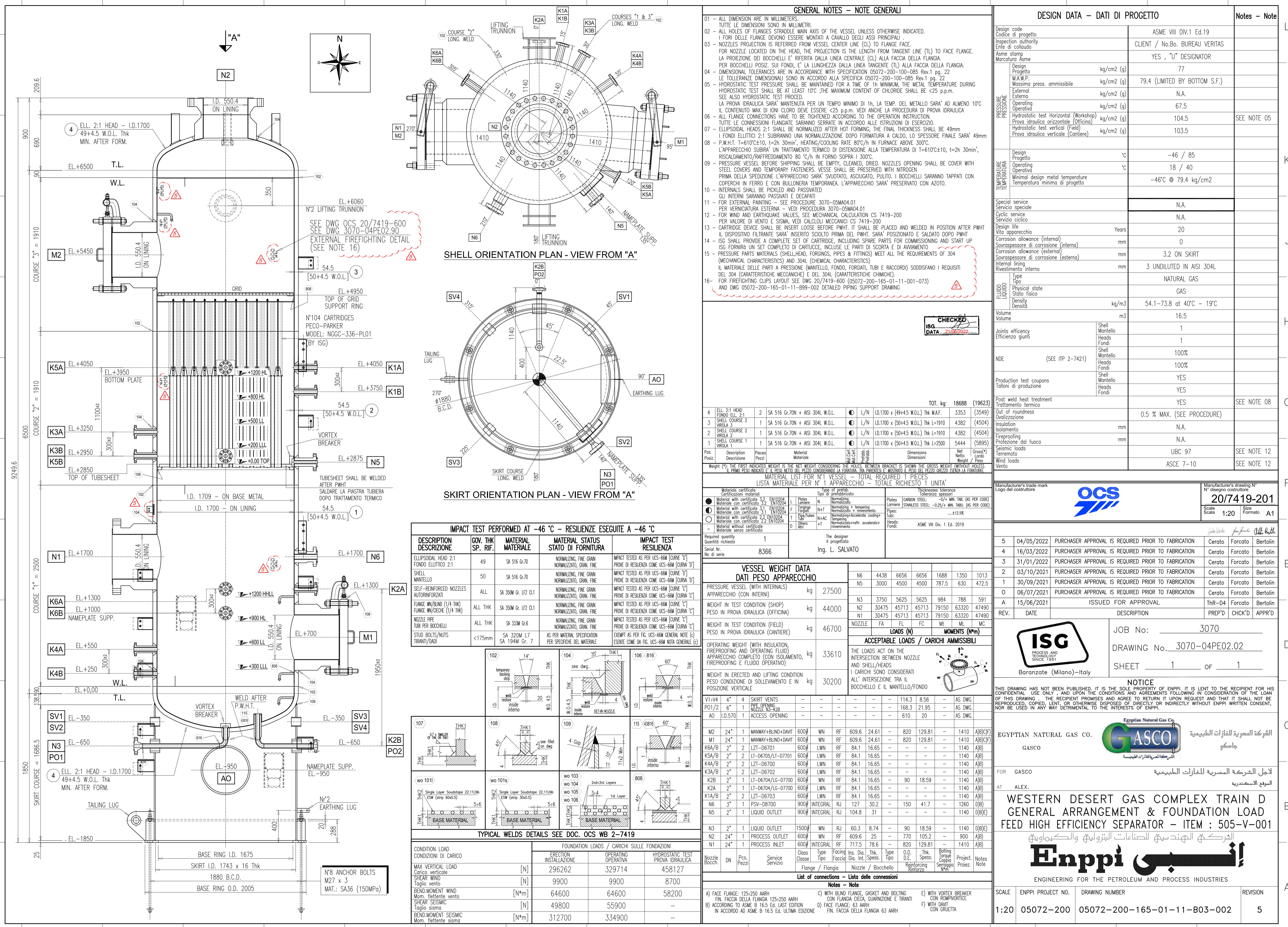
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PROJECT TITLE : Western Desert Gas Complex (Train D) Project

PROJECT No. : 05072-200

PURCHASE ORDER No. : 05072-200-165-01-11

SUPPLIER NAME : ISG S.P.A

EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package

EQUIPMENT / PACKAGE TAG No. : 505-V-002

DOCUMENT CODE IDENTIFICATION : B03

DOCUMENT TYPE : ARRANGEMENTS DRAWINGS

DOCUMENT TITLE : General Arrangement of 505-V-002 Regeneration Gas Ko Drum

SUPPLIER OWN DOCUMENT NUMBER (ORIGINAL)	Rev.	Date	Authorized Supplier Name	Signature
3070-04PE02.03	0	July 8, 2021	OCS	
	1	September 16,2021	OCS	
	2	November 22, 2021	OCS	
	3	January 3, 2021	OCS	
	4	February 09,2022	OCS	
	5	July 07, 2022	OCS	
	6	November 08, 2022	OCS	<i>John Besbe</i>

SUPPLIER DOCUMENT NUMBER (As per the SDR)	TOTAL No. OF PAGES	REVISION No.
05072-200-165-01-11-B03-003	2	6

PURCHASER REVIEW OF SUPPLIER DOCUMENT

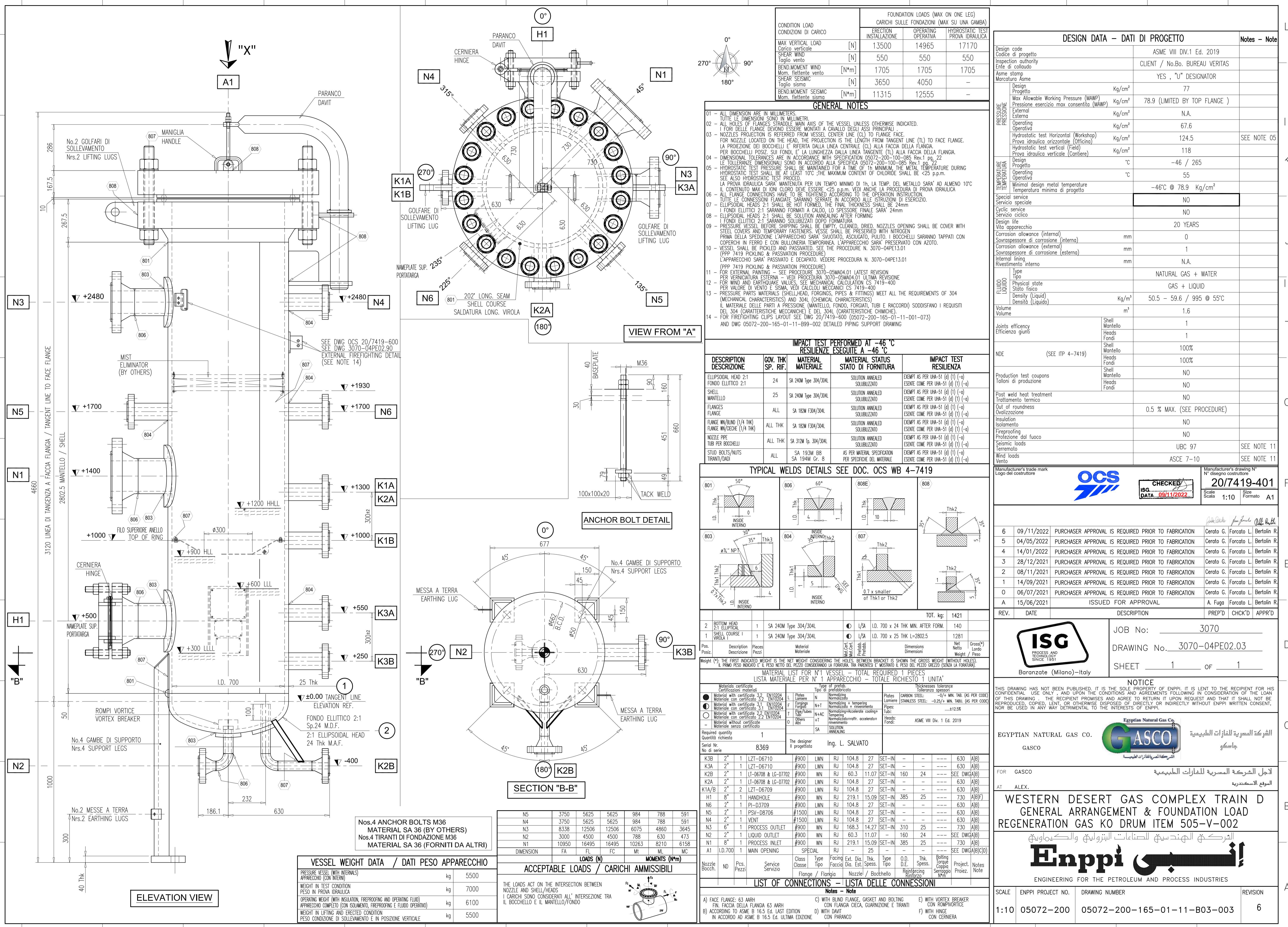
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NAME :	SIGNATURE : <i>Km. n/a</i>	DATE :
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PROJECT TITLE	: Western Desert Gas Complex (Train D) Project
PROJECT No.	: 05072-200
PURCHASE ORDER No.	: 05072-200-165-01-11
SUPPLIER NAME	: ISG S.P.A
EQUIPMENT / PACKAGE DESCRIPTION	: Molecular Sieve Dehydration Package
EQUIPMENT / PACKAGE TAG No.	: 505
DOCUMENT CODE IDENTIFICATION	: D01
DOCUMENT TYPE	: DETAIL DRAWINGS
DOCUMENT TITLE	: Nozzles Details Item: 505-D-001 A/B/C/D

SUPPLIER OWN DOCUMENT NUMBER (ORIGINAL)	Rev.	Date	Authorized Supplier Name	Signature
3070-04PE02.11	0	July 26, 2021	OCS	
	1	September 7,2021	OCS	
	2	October 6,2021	OCS	
	3	January 14,2022	OCS	<i>John Bechtel</i>
SUPPLIER DOCUMENT NUMBER (As per the SDR)	TOTAL No. OF PAGES		REVISION No.	
05072-200-165-01-11-D01-003	2		3	

PURCHASER REVIEW OF SUPPLIER DOCUMENT

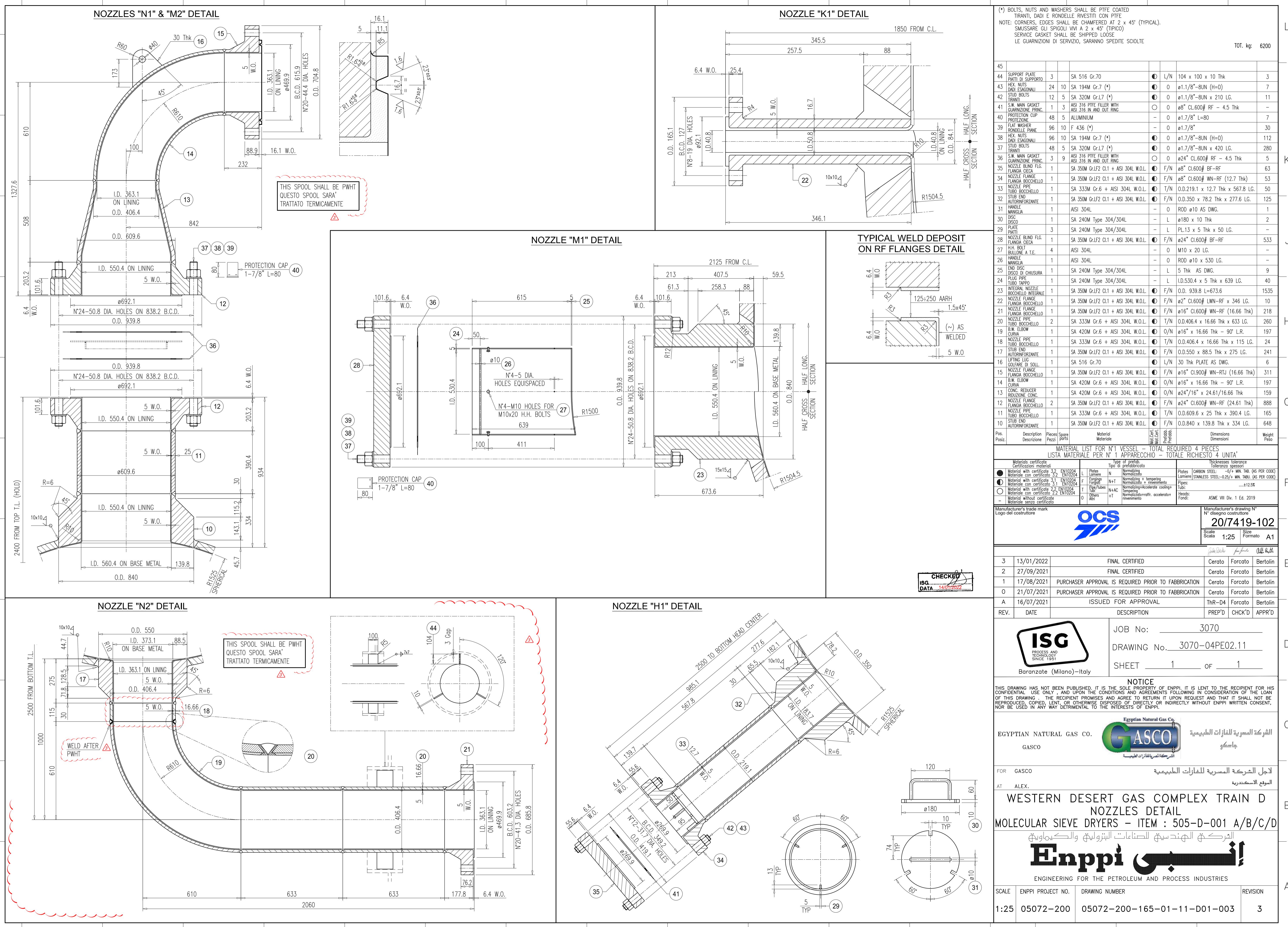
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PROJECT TITLE	: Western Desert Gas Complex (Train D) Project
PROJECT No.	: 05072-200
PURCHASE ORDER No.	: 05072-200-165-01-11
SUPPLIER NAME	: ISG S.P.A
EQUIPMENT / PACKAGE DESCRIPTION	: Molecular Sieve Dehydration Package
EQUIPMENT / PACKAGE TAG No.	: 505-V-001
DOCUMENT CODE IDENTIFICATION	: D01
DOCUMENT TYPE	: DETAIL DRAWINGS
DOCUMENT TITLE	: Nozzles Details Item: 505-V-001

SUPPLIER OWN DOCUMENT NUMBER (ORIGINAL)	Rev.	Date	Authorized Supplier Name	Signature
3070-04PE02.19	0	July 26, 2021	OCS	
	1	October 6, 2021	OCS	
	2	November 9,2021	OCS	
	3	February 9,2022	OCS	<i>John Doe</i>
SUPPLIER DOCUMENT NUMBER (As per the SDR)	TOTAL No. OF PAGES		REVISION No.	
05072-200-165-01-11-D01-009	2		3	

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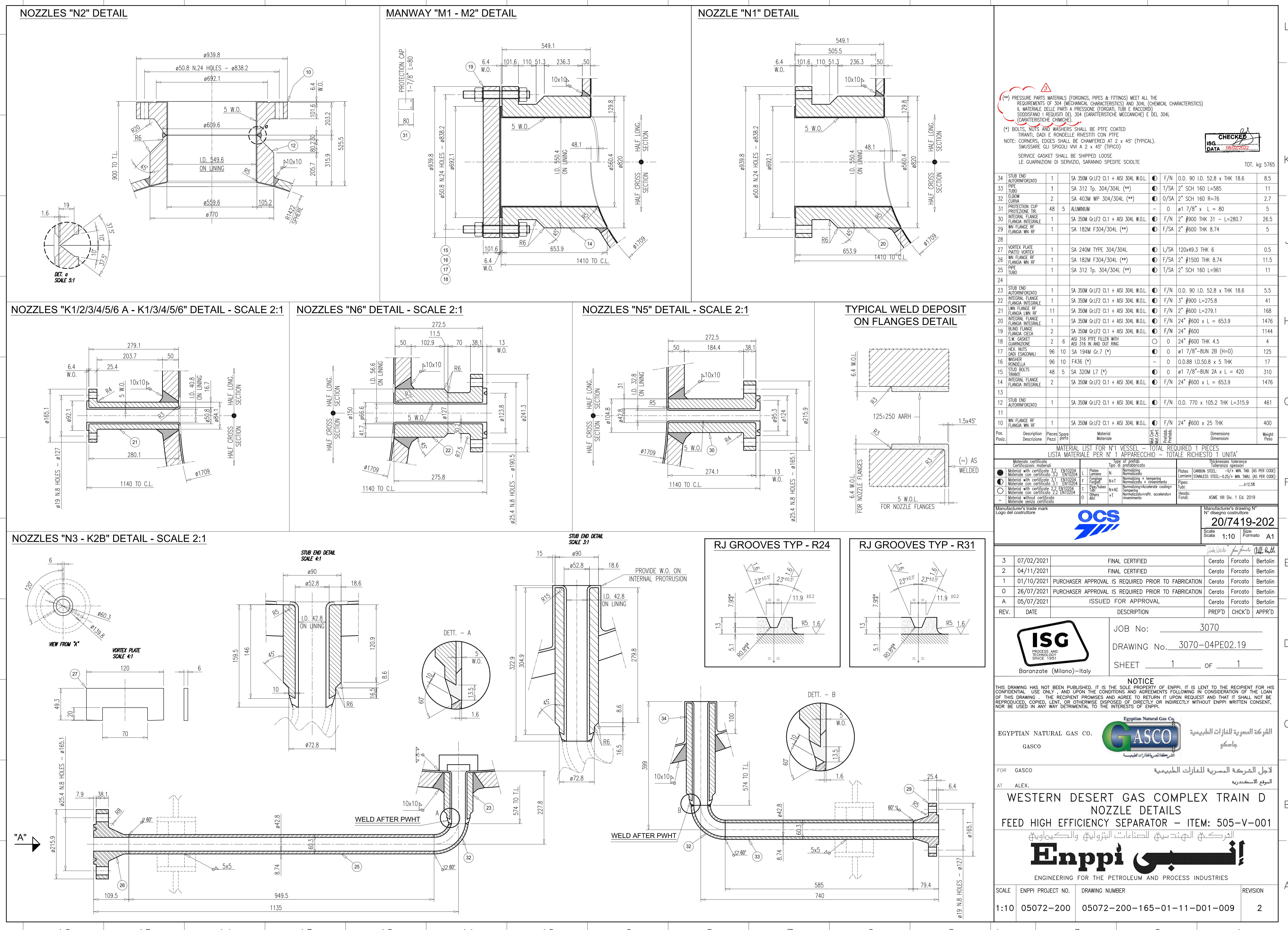
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SIGNATURE : 

DATE:



SUPPLIER'S DOCUMENT FRONT SHEET

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PROJECT TITLE	: Western Desert Gas Complex (Train D) Project
PROJECT No.	: 05072-200
PURCHASE ORDER No.	: 05072-200-165-01-11
SUPPLIER NAME	: ISG S.P.A
EQUIPMENT / PACKAGE DESCRIPTION	: Molecular Sieve Dehydration Package
EQUIPMENT / PACKAGE TAG No.	: 505-V-002
DOCUMENT CODE IDENTIFICATION	: D01
DOCUMENT TYPE	: DETAIL DRAWINGS
DOCUMENT TITLE	: Nozzles Details Item: 505-V-002

SUPPLIER OWN DOCUMENT NUMBER (ORIGINAL)	Rev.	Date	Authorized Supplier Name	Signature
3070-04PE02.30	0	August 16, 2021	OCS	
	1	November 02,2021	OCS	
	2	November 22, 2021	OCS	
	3	February 9,2022	OCS	<i>John Bechtel</i>
SUPPLIER DOCUMENT NUMBER (As per the SDR)	TOTAL No. OF PAGES	REVISION No.		
05072-200-165-01-11-D01-020	2	3		

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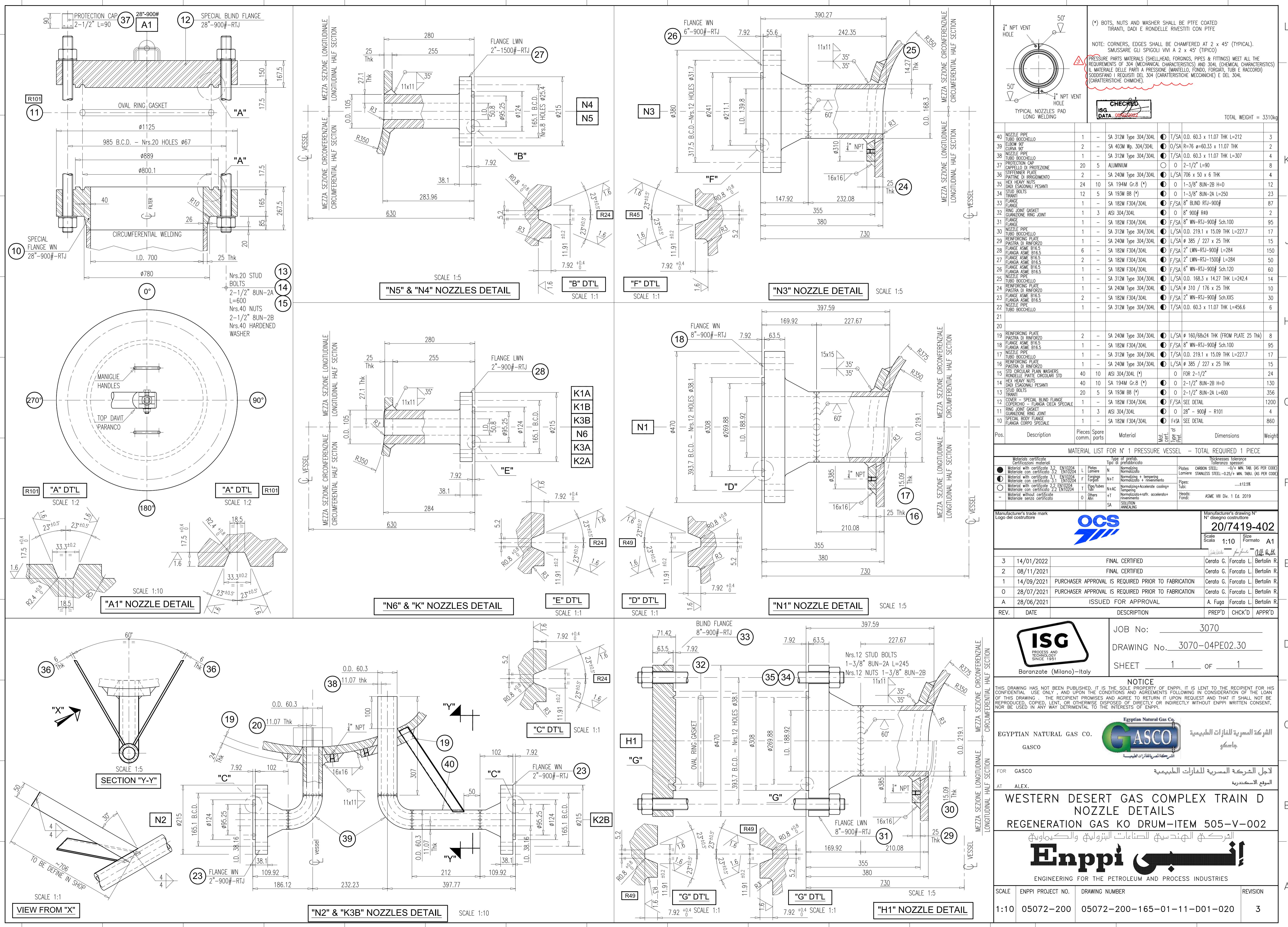
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PROJECT TITLE	: Western Desert Gas Complex (Train D) Project
PROJECT No.	: 05072-200
PURCHASE ORDER No.	: 05072-200-165-01-11
SUPPLIER NAME	: ISG S.P.A
EQUIPMENT / PACKAGE DESCRIPTION	: Molecular Sieve Dehydration Package
EQUIPMENT / PACKAGE TAG No.	: 505-D-001
DOCUMENT CODE IDENTIFICATION	: D01
DOCUMENT TYPE	: DETAIL DRAWINGS
DOCUMENT TITLE	: Internal Details Item: 505-D-001 A/B/C/D

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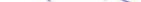
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PROJECT TITLE : Western Desert Gas Complex (Train D) Project

PROJECT No. : 05072-200

PURCHASE ORDER No. : 05072-200-165-01-11

SUPPLIER NAME : ISG S.P.A.

EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package

EQUIPMENT / PACKAGE TAG No. : 505-V-001

DOCUMENT CODE IDENTIFICATION : D01

DOCUMENT TYPE : DETAIL DRAWINGS

DOCUMENT TITLE : Internal Details 1 Item: 505-V-001

SUPPLIER OWN DOCUMENT NUMBER (ORIGINAL)	Rev.	Date	Authorized Supplier Name	Signature
3070-04PE02.21	0	August 27, 2021	OCS	
	1	October 6, 2021	OCS	
	2	November 9, 2021	OCS	
	3	January 3, 2022	OCS	
	4	May 30, 2022	OCS	Jeff Beale
SUPPLIER DOCUMENT NUMBER (As per the SDR)	TOTAL No. OF PAGES	REVISION No.		
05072-200-165-01-11-D01-011	2	4		

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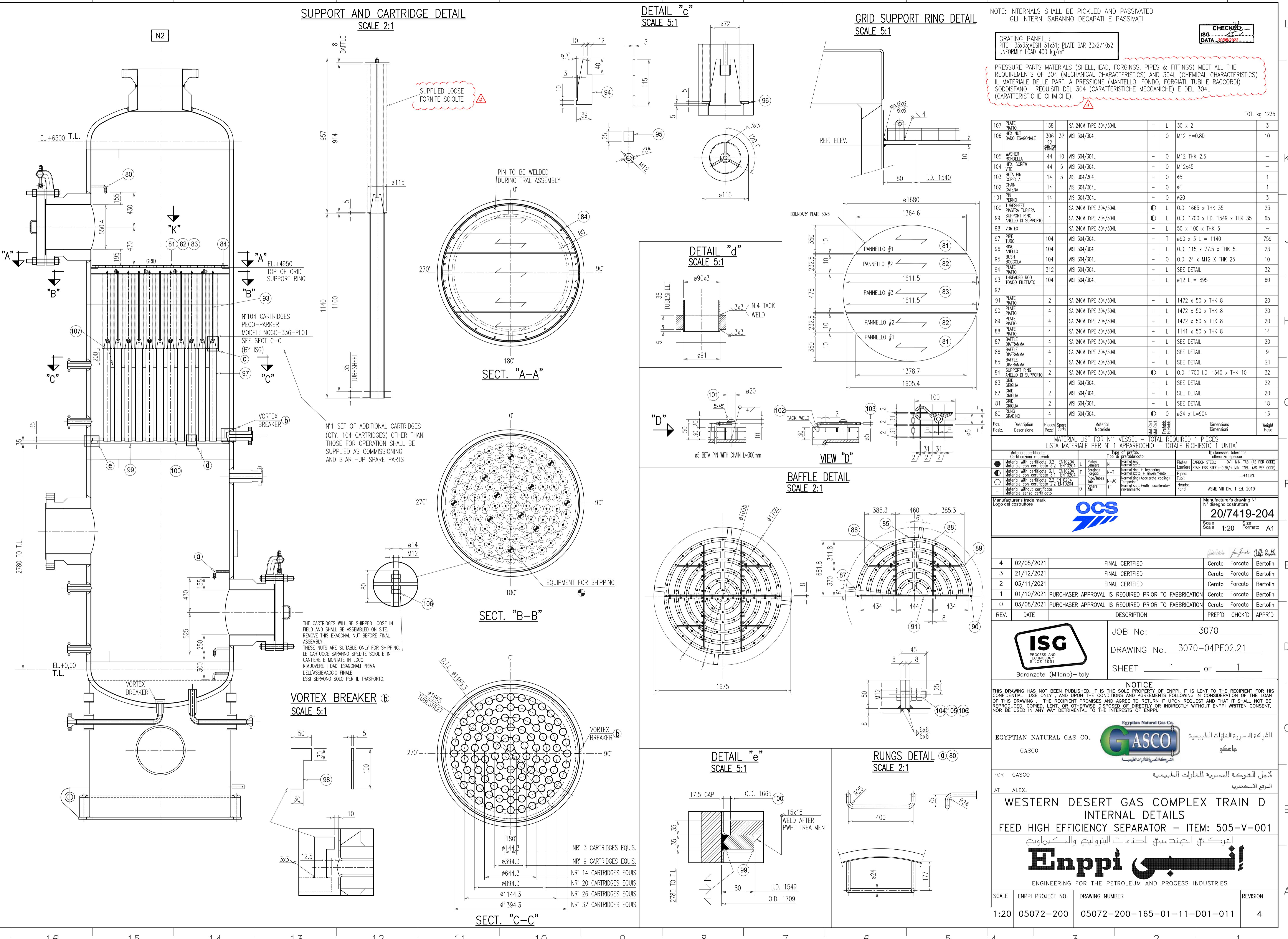
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PROJECT TITLE : Western Desert Gas Complex (Train D) Project

PROJECT No. : 05072-200

PURCHASE ORDER No. : 05072-200-165-01-11

SUPPLIER NAME : ISG S.P.A.

EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package

EQUIPMENT / PACKAGE TAG No. : 505-V-002

DOCUMENT CODE IDENTIFICATION : D01

DOCUMENT TYPE : DETAIL DRAWINGS

DOCUMENT TITLE : Internal Details 1 Item: 505-V-002

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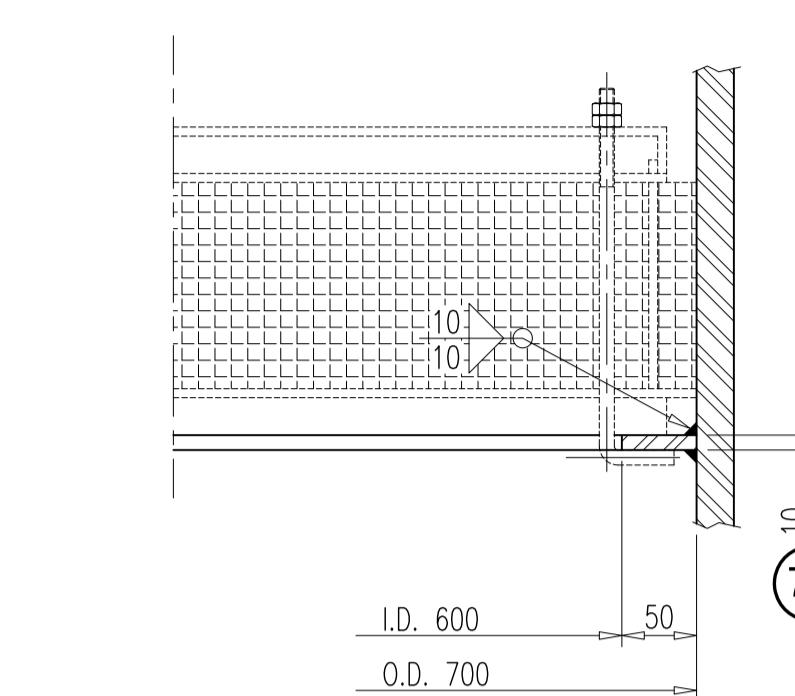
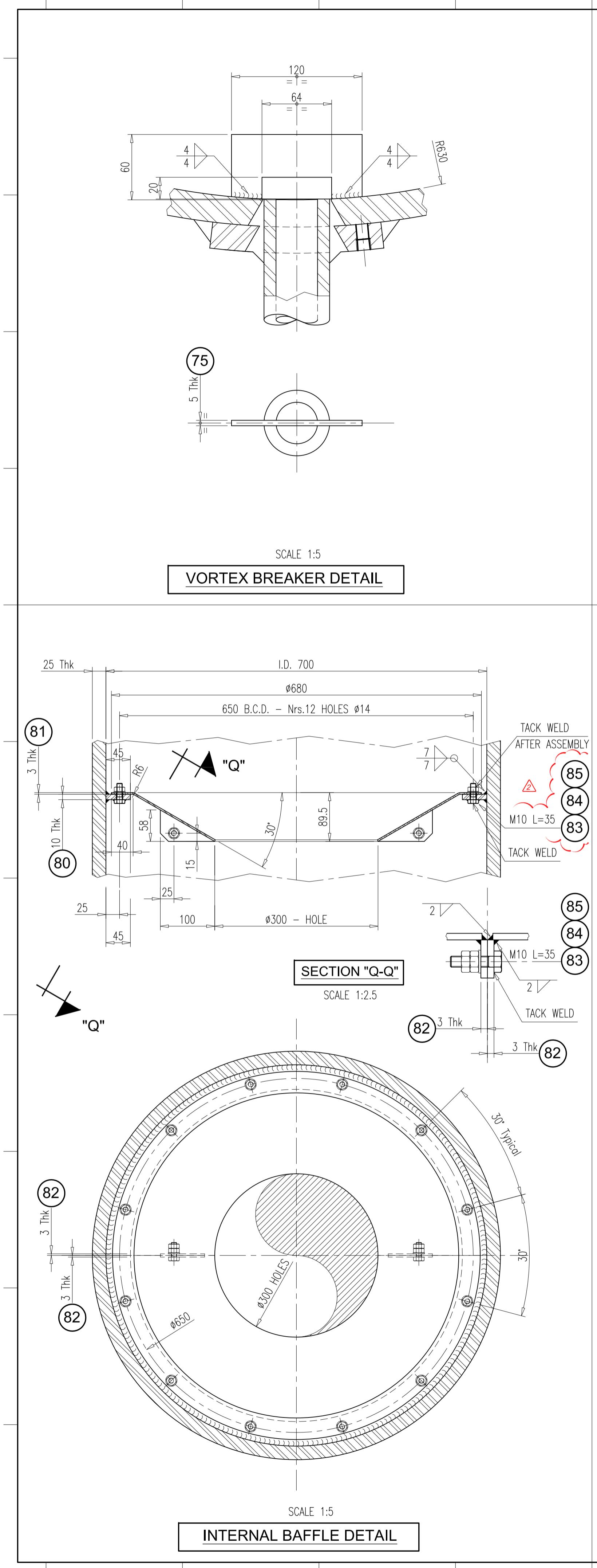
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NOTE: CORNERS, EDGES SHALL BE CHAMFERED AT 2 x 45° (TYPICAL).
SMUSSARE GLI SPIGOLI VIVI A 2 x 45° (TIPICO)
INTERNAL SURFACES SHALL BE PICKLED AND PASSIVATED
GLI INTERNI SARANNO DECAPATI E PASSIVATI

TOTAL WEIGHT = 25kg

MATERIAL LIST FOR N° 1 PRESSURE VESSEL - TOTAL REQUIRED 1 PIECE								
Materials certificate Certificazioni materiali		Type of prefab. Tipo di prefabbricato			Thicknesses tolerance Tolleranza spessori			
Pos.	Description	Pieces comm.	Spare parts	Material	Mat. cert.	Type of Pref.	Dimensions	Weight
88								
87								
86								-
85	RONDELLA PIANA STANDARD STD PLAIN WASHER	14	5	AISI 304	-	O	M10	-
84	NUT DADO	16	5	AISI 304	-	O	M10 H=0.8D	-
83	HEXAGONAL HEAD SCREW VITE A TESTA ESAGONALE	14	5	AISI 304	-	O	M10 L=35	-
82	PLATE FOR BAFFLE SUPPORT PIATTO PER SUPPORTO DIAFRAMMA	4	-	SA 240M Type 304/304L	-	L	100 x 58 x 3 THK	1
81	RING FOR BAFFLE SUPPORT ANELLO PER SUPPORTO DIAFRAMMA	1	-	SA 240M Type 304/304L	-	L	ø680 / 300 3 THK - IN TWO HALF	8
80	RING FOR BAFFLE SUPPORT ANELLO PER SUPPORTO DIAFRAMMA	1	-	SA 240M Type 304/304L	●	L/SA	45 x 10 THK	7
79								-
78								
77								
76	RING FOR MIST ELIMINATOR SUPPORT ANELLO PER SUPPORTO FILTRO	1	-	SA 240M Type 304/304L	●	L/SA	50 x 10 THK	8
75	PLATE FOR VORTEX BREAKER PIATTO PER ROMPI VORTICE	1	-	SA 240M Type 304/304L	●	L/SA	120 x 60 x 5 THK	1
Materials certificate Certificazioni materiali								
		Type of prefab. Tipo di prefabbricato			Thicknesses tolerance Tolleranza spessori			
●	Material with certificate 3,2 EN10204 Materiale con certificato 3,2 EN10204	L	Plates Lamiere	N	Normalizing Normalizzata	Plates Lamiere	CARBON STEEL: -0/+ MIN. TAB. (AS PER CODE)	
●	Material with certificate 3,1 EN10204 Materiale con certificato 3,1 EN10204	F	Forgings Forgiati	N+T	Normalizing + tempering Normalizzato + rinfreno		STAINLESS STEEL:-0.25/+ MIN. TABU. (AS PER CODE)	
○	Material with certificate 2,2 EN10204 Materiale con certificato 2,2 EN10204	T	Pipe/tubes Tubi	N+AC	Normalizing+Accelerate cooling+Tempering Normalizzato+raffr. accelerato+	Pipes: Tubi:±12.5%	
-	Material without certificate	O	Others	TT	Normalizato+raffr. accelerato+	Heads: Fondi:	ASME VIII Div. 1 Ed. 2019	

MATERIAL LIST FOR N° 1 PRESSURE VESSEL – TOTAL REQUIRED 1 PIECE

CS

Manufacturer's drawing N°
N° disegno costruttore

2	13/11/2021	FINAL CERTIFIED	Cerato G.	Forcato L.	Bertolin I.
1	14/09/2021	FINAL CERTIFIED	Cerato G.	Forcato L.	Bertolin I.
0	28/07/2021	PURCHASER APPROVAL IS REQUIRED PRIOR TO FABRICATION	Cerato G.	Forcato L.	Bertolin I.
A	28/06/2021	ISSUED FOR APPROVAL	A. Fuga	Forcato L.	Bertolin I.
REV.	DATE	DESCRIPTION	PREP'D	CHCK'D	APPR'D

NOTICE

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EGYPTIAN NATURAL GAS CO. Egyptian Natural Gas Co. GASCO الشركة المصرية لغازات الطبيعة جاسكو

لأحاديث الشفاعة المصبة للغذاء الطبيعية FOR GASCO

AT ALEX. الموقع الاسكندرية
WESTERN DESERT GAS COMPLEX TRAIN D

INTERNAL DETAILS
REGENERATION GAS KO DRUM-ITEM 505-V-002

الشركة الوطنية للصناعات البترولية والكيماوية

Enppi

SCALE FNPP1 PROJECT NO. DRAWING NUMBER REVISION

TIME	ENTRY NUMBER	DRAWING NUMBER	REVISON
1:10	05072-200	05072-200-165-01-11-D01-022	2

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PROJECT TITLE	: Western Desert Gas Complex (Train D) Project
PROJECT No.	: 05072-200
PURCHASE ORDER No.	: 05072-200-165-01-11
SUPPLIER NAME	: ISG S.P.A
EQUIPMENT / PACKAGE DESCRIPTION	: Molecular Sieve Dehydration Package
EQUIPMENT / PACKAGE TAG No.	: 505
DOCUMENT CODE IDENTIFICATION	: M07
DOCUMENT TYPE	: Maintenance and Operation
DOCUMENT TITLE	: 2 Years Operating Spare Parts

PURCHASER REVIEW OF SUPPLIER DOCUMENT

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PURCHASER APPROVAL

NAME :	SIGNATURE : 	DATE :
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SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT TITLE : Western Desert Gas Complex (Train D) Project

PROJECT No. : 5072-200

SUPPLIER NAME : ISG S.P.A

PURCHASE ORDER No. : 05072-200-165-01-11

EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package

EQUIPMENT / PACKAGE TAG No. : 505

DOCUMENT CODE IDENTIFICATION : M07

DOCUMENT TYPE Comparing with the approved Spare Parts List (attachment 7 in the pre-award meeting), some items are missing.

DOCUMENT TITLE ISG shall add all the items in the approved Spare Parts List.

SUPPLIER ORIGINAL DOCUMENT You can find attached the approved Spare Parts List for reference.

SUPPLIER DOCUMENT NUMBER



Spare Parts for Commissionning / Start-Up

Spare Parts for 2 Years of Operation

Supplier Information

Address : Via dei Giovi, 18, Baranzate, 20021, MI

Contact Name : ISG S.p.A

Telephone :

2 Years operation spare parts for vessels and filters included in the PKG to be added

Fax :

GASCO comment:

Spare parts for the control systems (PLC's) and vibration monitoring system (Bentley Nevada) are not included.

The above shall be added.

Email :

Delivery Terms :

Price Validity :

For the Completion of the Spare Parts Interchangeability List Form, please refer to Page 2

SPIL REVIEW CODE

1 The Information are Adequate. - Enppi will advise Purchase Requirements

2 Revise and Resubmit after Incorporating the Comments

0	05/12/2022	Submit to Purchaser for Information	E. Pastori EP	F. Liga
Rev.	Date	Revision Description	By	Approved

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT TITLE	: Western Desert Gas Complex (Train D) Project
PROJECT No.	: 5072-200
SUPPLIER NAME.	: ISG S.P.A
PURCHASE ORDER No.	: 05072-200-165-01-11
EQUIPMENT / PACKAGE DESCRIPTION	: Molecular Sieve Dehydration Package
EQUIPMENT / PACKAGE TAG No.	: 505
DOCUMENT CODE IDENTIFICATION	: M07
DOCUMENT TYPE	: Maintenance and Operation
DOCUMENT TITLE	: 2 Years Operating Spare Parts
SUPPLIER ORIGINAL DOCUMENT NUMBER	: 3070-01GI13.01
SUPPLIER DOCUMENT NUMBER	: 3070-01GI13.01

The Section Below shall be used for the Completion of the Spare Parts Interchangeability List in Page 3

To be Completed By Supplier

- Row 1** Equipment / Tag No. Identification (As shown on the Purchase Order.)
- Row 2** Manufacturer's Model (Type & Model Number of Equipment)
- Row 3** Manufacturer's Serial No.
- Row 4** Enter Total Number of Units of Identical Equipment in each relevant Cell in the Row.
- Row 5** For each Unit or group of Identical Units, enter in the appropriate square, the Number of Parts fitted in each Unit of equipment
- Col. 6** The Total No. of Identical Parts Installed shall equal the Sum of the following:
"Number of Units" in (Row 4)" Multiplied by its relevant "Number of Parts per Units" in (Row 5)
- Col. 7** Description of the Parts Recommended for holding as Spare Parts, Include also All Special Tools and Consumables Required.
- Col. 8** Cross Sectional Drawing or Circuit Diagram in which Component Listed In Col 8. can be identified.
- Col. 9** Part Number which uniquely identifies Components.
- Col. 10** Sub-Supplier Part No. (If different than the Manufacturer Number)
- Col. 11** Material Specification or Size as Applicable.
- Col. 12** Quantities of Components Described in Col 7, Recommended to be held as spares for 2 Years Operation.
- Col. 13** Enter Number of Spare Parts, Tools or Consumable Items required to maintain the Equipment through the Initial Start-Up Period.
{These Spares shall include the the Spare Parts defined in the MR ITEM LIST + the Spare Parts recommended by the Supplier for Commissionning & Start-Up}
- Col. 14** Total Quantity to be Purchased (Col 12 + Col 13). Based on Company / Client Formal Request
- Col. 15** Enter Unit Price for Parts Listed In Col 7.
- Col. 16** Enter Remarks Required to clarify Unit Prices In Col 19, i.e. Price Per Meter, For Quantity of 10-50.

Remark:

Supplier to Submit all Drawings and Items Listed in Column 8

For the Compressors 505-K-001 A/B, and as per Attachment#7 in the pre-award meeting, the following spares are missing and shall be added:
 1- (QTY: 1 Set) Lower Rot.
 2- (QTY: 1 Set) Upper Rot.
 3- (QTY: 1 Set) Gasket Thermal
 4- (QTY: 1 Set) GearBox Mechanical Seal.
 5- (QTY: 1 Set) GearBox Rotating face.
 6- (QTY: 2 sets) GearBox O-ring Housing Split.
 7- (QTY: 4 Sets) GearBox O-rings.
 8- (QTY: 1 Set) GearBox Vibration Probe.
 9- (QTY: 1 Set) GearBox Thermocouple.
 10- (QTY: 1 Set) GearBox Oil Filter Cartridge.
 11- (QTY: 50%) GearBox Flush Filter Cartridge.



PROJECT No. :

As per Attachment#7 in the pre-award meeting, the following spare parts are missing and shall be added:

- 1- For 505-H-01A/B Purge fans, (QTY: 1 Set) Elastic Coupling.
- 2- For 505-H-01A/B Purge fans, (QTY: 1 Set) AntiVibration Joint - suction.
- 3- For 505-H-01A/B Purge fans, (QTY: 1 Set) AntiVibration Joint - delivery.

BILITY LIST (SPIL)

PURCHASE ORDER No. : 05072-200-165-01-11

SUPPLIER NAME. : ISG S.p.A. sales@isgspa.com

EQUIPMENT / PACKAGE DESCRIPTION

: Molecular Sieve Dehydration Package

1	2	3	4	No. of Units	Serial No.	Manufacturer's Model	Equipment No. or Tag No.	Manufacturer Data		Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO	Remarks		
								LINE NUMBER	Total No of Identical Parts Installed	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)							
								6	7	8	9	10	11	12	13	14	15	16
								104	104	Coalescent Cartridge	3070-04PE01.02	ISG-633-3070-1PL	-	Synthetic	104	-	833,00	
								55	55	Dust Filter Cartridge	3070-04PE01.04	ISG-633-3070-1CM	-	Synthetic	110	-	330,00	
								7	7	Dust Filter Cartridge	3070-04PE01.05	ISG-633-3070-OTH	-	Synthetic	7	-	597,00	
5	Number of Parts per Unit.	1	1	1	1	1	1	4	2	Input Shaft Seal	3070-08MP01.01	3070R0374INSHFT03AA	SE03	Steel/PTFE	1	1	1,151,00	
		1	1	1	1	1	1	5	2	Input Shaft Lower Ball Bearing	3070-08MP01.01	3070R0374SHTBRLGW	21-18	Steel	1	-	1.339,00	
		1	1	1	1	1	1	6	2	Input Shaft Upper Ball Bearing	3070-08MP01.01	3070R0374SHTBRGUP	21-17	Steel	1	1	651,00	
		1	1	1	1	1	1	7	2	Oil Seal Rotating	3070-08MP01.01	3070R0374OLSLRTG	RJ09	Alphalast	1	-	2.672,00	
		1	1	1	1	1	1	8	2	Oil Mechanical Seal	3070-08MP01.01	3070R0374OILMCHSL	SE04	Steel	1	-	3.517,00	
		1	1	1	1	1	1	9	2	Lower Mechanical Seal	3070-08MP01.01	3070R0374LWMCHSL	D22	Steel	1	1	8.728,00	
		1	1	1	1	1	1	10	2	Upper Mechanical Seal	3070-08MP01.01	3070R0374UPMCHSL	D29	Steel	1	1	15.665,00	
		1	1	1	1	1	1	11	2	O-ring Repair Kit	3070-08MP01.01	3070R0374ORGKTRP	RK09	Fluorcarbon	1	-	2.618,00	
		1	1	1	1	1	1	12	2	Double/Tandem Lower Shaft Sleeve	3070-08MP01.01	3070R0374DTLSHFSLV	AA12	Steel	1	-	2.460,00	
		1	1	1	1	1	1	13	2	Double/Tandem Upper Shaft Sleeve	3070-08MP01.01	3070R0374DTUSHFSLV	AD02	Steel	1	-	3.954,00	
		1	1	1	1	1	1	14	2	Kit Repair for On-Off Ball Valve 1" 150#	3070-09IN02.00 sheet 36	3070R0305XVD9727KRP	5110210A	Steel/Viton	1	-	4.281,00	
		1	1	1	1	1	1	15	2	Kit Repair for On-Off Ball Valve 1" 150#	3070-09IN02.00 sheet 38	3070R0305XVD9729KRP	5110210B	Steel/Viton	1	-	4.281,00	
		1	1	1	1	1	1	16	2	Kit Repair for On-Off Ball Valve 1" 150#	3070-09IN02.00 sheet 40	3070R0305XVD9731KRP	5110210C	Steel/Viton	1	-	4.281,00	
		1	1	1	1	1	1	17	2	Kit Repair for On-Off Ball Valve 1-1/2" 150#	3070-09IN02.00 sheet 37	3070R0305XVD9728KRP	5110220A	Steel/Viton	1	-	4.811,00	
		1	1	1	1	1	1	18	2	Kit Repair for On-Off Ball Valve 1-1/2" 150#	3070-09IN02.00 sheet 39	3070R0305XVD9730KRP	5110220B	Steel/Viton	1	-	4.811,00	
		1	1	1	1	1	1	19	2	Kit Repair for On-Off Ball Valve 1-1/2" 150#	3070-09IN02.00 sheet 41	3070R0305XVD9732KRP	5110220C	Steel/Viton	1	-	4.811,00	
		20																
		21																
		22																
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Notes:

DELIVERY TIME: To be agreed

PACKING: Our standard for export included

VALIDITY: 31 DECEMBER 2022

DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010

DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English language

INVOICING/PAYMENT: To be agreed

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No.			: 5072-200		PURCHASE ORDER No.			: 05072-200-165-01-11													
EQUIPMENT / PACKAGE DESCRIPTION			: Molecular Sieve Dehydration Package		SUPPLIER NAME.			: ISG S.p.A. sales@isgspa.com													
1 No. of Units	2 Serial No.	3 Manufacturer's Model	4 Equipment No. or Tag No.	5 LINE NUMBER	Manufacturer Data						8 Drawing No. (The Supplier shall attach the Drawing to the SPIL)	9 Part Identification No.	10 Sub-Supplier Part No. (If different than the Manufacturer Number)	11 Material Specification	12 2 Years Spare Parts	13 Commissioning / Start-Up Spare Parts	14 Quantity to be Purchased	15 Unit Price in EURO	16 Remarks		
1	1	2	2	1	1	1	1	1	1	1	6	7	8	9	10	11	12	13	14	15	16
											26	1 Kit Repair for On-Off Ball Valve 4" 600#	3070-09IN02.00 sheet 30	3070R0305BDVD9710KRP	5110230	Steel/Viton	1	-	12.193,00		
											27	1 Kit Repair for On-Off Ball Valve 2" 600#	3070-09IN02.00 sheet 31	3070R0305BDVD9716KRP	5110240	Steel/Viton	1	-	5.238,00		
											28	2 Kit Repair for On-Off Ball Valve 1" 150#	3070-09IN02.00 sheet 32	3070R0305BDVD9723KRP	5110250A	Steel/Viton	1	-	4.281,00		
											29	2 Kit Repair for On-Off Ball Valve 1" 150#	3070-09IN02.00 sheet 33	3070R0305BDVD9726KRP	5110250B	Steel/Viton	1	-	4.281,00		
											30	1 Kit Repair for On-Off Ball Valve 2" 600#	3070-09IN02.00 sheet 20	3070R0305SDVD9717KRP	5110260	Steel/Viton	1	-	4.811,00		
											31	1 Kit Repair for On-Off Ball Valve 24" 600#	3070-09IN02.00 sheet 1	3070R0305SDVD9701KRP	5110270K	Steel/Viton	1	-	15.638,00		
											32	1 Metal Seats for On-Off Ball Valve 24" 600#	3070-09IN02.00 sheet 1	3070R0305SDVD9701STS	5110270S	AISI316	1	-	21.442,00		
											33	1 Kit Repair for On-Off Ball Valve 2" 600#	3070-09IN02.00 sheet 15	3070R0305SDVD9702KRP	5110280A	Steel/Viton	1	-	4.811,00		
											34	1 Kit Repair for On-Off Ball Valve 2" 600#	3070-09IN02.00 sheet 16	3070R0305SDVD9703KRP	5110280B	Steel/Viton	1	-	4.811,00		
											35	1 Kit Repair for On-Off Ball Valve 2" 600#	3070-09IN02.00 sheet 17	3070R0305SDVD9740KRP	5110280C	Steel/Viton	1	-	4.811,00		
											36	1 Kit Repair for On-Off Ball Valve 24" 600#	3070-09IN02.00 sheet 18	3070R0305SDVD9711KRP	5110290K	Steel/Viton	1	-	15.683,00		
											37	1 Metal Seats for On-Off Ball Valve 24" 600#	3070-09IN02.00 sheet 18	3070R0305SDVD9711STS	5110290S	AISI316	1	-	21.442,00		
											38										
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Notes:

DELIVERY TIME: To be agreed
PACKING: Our standard for export included
VALIDITY: 31 DECEMBER 2022

DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010
DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English language
INVOICING/PAYMENT: To be agreed



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No.

: 5072-200

PURCHASE ORDER No.

: 05072-200-165-01-11

EQUIPMENT / PACKAGE DESCRIPTION

: Molecular Sieve Dehydration Package

SUPPLIER NAME.

: ISG S.p.A. sales@isgsp.com

1	2	3	4	No. of Units	Number of Parts per Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Remarks
						51	1	Kit Repair for On-Off Ball Valve 6" 600#	3070-09IN02.00 sheet 19	3070R0305SDVD9712KRP	51102100	Steel/Viton	1	-	12.193.00							
						52	1	Kit Repair for On-Off Ball Valve 6" 600#	3070-09IN02.00 sheet 21	3070R0305SDVD9718KRP	51102110	Steel/Viton	1	-	12.193.00							
						53	2	Kit Repair for On-Off Ball Valve 3" 150#	3070-09IN02.00 sheet 22	3070R0305SDVD9721KRP	51102120A	Steel/Viton	1	-	4.879.00							
						54	2	Kit Repair for On-Off Ball Valve 3" 150#	3070-09IN02.00 sheet 23	3070R0305SDVD9722KRP	51102120B	Steel/Viton	1	-	4.879.00							
						55	2	Kit Repair for On-Off Ball Valve 1" 150#	3070-09IN02.00 sheet 24	3070R0305SDVD9724KRP	51102130	Steel/Viton	1	-	4.281.00							
						56	2	Kit Repair for On-Off Ball Valve 1" 150#	3070-09IN02.00 sheet 25	3070R0305SDVD9725KRP	51102140	Steel/Viton	1	-	4.281.00							
						57	2	Seat for Rising Stem Valve 6" 600#	3070-09IN02.00 sheet 12	3070R2328KVD9713SEAT	60-48	AISI410	1	-	2.818.00							
						58	2	Core for Rising Stem Valve 6" 600#	3070-09IN02.00 sheet 12	3070R2328KVD9713CORE	59-91	A216	1	-	10.192.00							
						59	2	Stem with guides for Rising Stem Valve 6" 600#	3070-09IN02.00 sheet 12	3070R2328KVD9713STMG	60-01	AISI8620	1	-	7.898.00							
						60	2	Bonnet Gasket and Bushing for Rising Stem Valve 6" 600#	3070-09IN02.00 sheet 12	3070R2328KVD9713BTBH	60-46	AISI304	1	-	2.556.00							
						61	2	Packing Set for Stem Valve 6" 600#	3070-09IN02.00 sheet 12	3070R2328KVD9713PCK	8010	AISI316/Teflon	1	-	1.353.00							
						62	1	Seat for Rising Stem Valve 6" 900#	3070-09IN02.00 sheet 11	3070R2328KVD9704SEAT	60-44	A351	1	-	7.011.00							
						63	1	Core for Rising Stem Valve 6" 900#	3070-09IN02.00 sheet 11	3070R2328KVD9704CORE	59-88	A351	1	-	16.177.00							
						64	1	Stem with guides for Rising Stem Valve 6" 900#	3070-09IN02.00 sheet 11	3070R2328KVD9704STMG	59-99	A638	1	-	16.042.00							
						65	1	Bonnet Gasket and Bushing for Rising Stem Valve 6" 900#	3070-09IN02.00 sheet 11	3070R2328KVD9704BTBH	60-42	AISI304	1	-	3.011.00							
						66	1	Packing Set for Stem Valve 8" 600#	3070-09IN02.00 sheet 11	3070R2328KVD9704PCK	01-01	Garlock	1	-	4.585.00							
						67	4	Seat for Rising Stem Valve 8" 600#	3070-09IN02.00 sheet 9	3070R2328KVD9707SEAT	60-36	AISI410	1	-	3.776.00							
						68	4	Core for Rising Stem Valve 8" 600#	3070-09IN02.00 sheet 9	3070R2328KVD9707CORE	59-79	A216	1	-	15.442.00							
						69	4	Stem with guides for Rising Stem Valve 8" 600#	3070-09IN02.00 sheet 9	3070R2328KVD9707STMG	59-96	AISI4120	1	-	6.830.00							
						70	4	Bonnet Gasket and Bushing for Rising Stem Valve 8" 600#	3070-09IN02.00 sheet 9	3070R2328KVD9707BTBH	60-34	AISI304	1	-	6.536.00							
						71	4	Packing Set for Stem Valve 8" 600#	3070-09IN02.00 sheet 9	3070R2328KVD9707PCK	03-01	Garlock	1	-	7.464.00							
						72																
						73																
						74																
						75																

Notes:

DELIVERY TIME: To be agreed

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VALIDITY: 31 DECEMBER 2022

INVOICING/PAYMENT: To be agreed



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SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No.		: 5072-200		PURCHASE ORDER No.		: 05072-200-165-01-11													
EQUIPMENT / PACKAGE DESCRIPTION				: Molecular Sieve Dehydration Package								SUPPLIER NAME.				: ISG S.p.A. sales@isgspa.com			
1	Equipment No. or Tag No.	2	Manufacturer's Model	3	Serial No.	4	No. of Units	LINE NUMBER	Total No of Identical Parts Installed	Manufacturer Data				SUPPLIER NAME.				Remarks	
										Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO	
									6	7	8	9	10	11	12	13	14	15	16
5 Number of Parts per Unit.	1							76	3	Seat for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708SEAT	60-40	AISI17-4-PH	1	-	5.284,00		
	1							77	3	Core for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708CORE	59-82	A351	1	-	27.942,00		
	1							78	3	Stem for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708STM	59-97	A638	1	-	9.602,00		
	1							79	3	Stem Cam for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708STMC	59-98	A638	1	-	17.147,00		
	1							80	3	Stem guide with gasket for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708STMG	60-39	A638	1	-	3.092,00		
	1							81	3	Bonnet Gasket and Sleeve for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708BTSL	60-38	A479	1	-	5.879,00		
	1							82	3	Packing Set for Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708PCK	11067	Garlock	1	-	677,00		
	1							83	1	Seat for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708BSDSAT	60-40D	AISI17-4-PH	1	-	5.284,00		
	1							84	1	Core for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708DCOE	59-85	A351	1	-	28.433,00		
	1							85	1	Stem for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708DSTM	59-97D	A638	1	-	9.602,00		
5 Number of Parts per Unit.	1							86	1	Stem Cam for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708BDSTC	59-98D	A638	1	-	17.147,00		
	1							87	1	Stem guide with gasket for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708BDSTG	60-39D	A638	1	-	3.092,00		
	1							88	1	Bonnet Gasket and Sleeve for Rising Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708DBSL	60-38D	A479	1	-	5.879,00		
	1							89	1	Packing Set for Stem Valve 8" 900#	3070-09IN02.00 sheet 10	3070R2328KVD9708DPCK	11067D	Garlock	1	-	677,00		
	1							90	4	Seat for Rising Stem Valve 16" 600#	3070-09IN02.00 sheet 8	3070R2328KVD9706SEAT	60-32	AISI17-4-PH	1	-	15.097,00		
	1							91	4	Core for Rising Stem Valve 16" 600#	3070-09IN02.00 sheet 8	3070R2328KVD9706CORE	59-76	A216	1	-	29.412,00		
	1							92	4	Stem for Rising Stem Valve 16" 600#	3070-09IN02.00 sheet 8	3070R2328KVD9706STM	59-94	AISI17-4-PH	1	-	7.545,00		
	1							93	4	Stem Cam for Rising Stem Valve 16" 600#	3070-09IN02.00 sheet 8	3070R2328KVD9706STMC	59-95	AISI9310	1	-	14.404,00		
	1							94	4	Stem guide with gasket for Rising Stem Valve 16" 600#	3070-09IN02.00 sheet 8	3070R2328KVD9706STMG	60-31	AISI316	1	-	3.967,00		
	1							95	4	Bonnet Gasket and Sleeve for Rising Stem Valve 16" 600#	3070-09IN02.00 sheet 8	3070R2328KVD9706BTSL	60-30	AISI304	1	-	7.652,00		
	1							96	4	Packing Set for Stem Valve 16" 600#	3070-09IN02.00 sheet 8	3070R2328KVD9706PCK	03-01	Garlock	1	-	7.467,00		
	97							98											
	99							100											

Notes:

DELIVERY TIME: To be agreedPACKING: Our standard for export includedVALIDITY: 31 DECEMBER 2022DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English languageINVOICING/PAYMENT: To be agreed



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No.		: 5072-200		PURCHASE ORDER No.		: 05072-200-165-01-11							
EQUIPMENT / PACKAGE DESCRIPTION				: Molecular Sieve Dehydration Package		SUPPLIER NAME.		: ISG S.p.A. sales@isgspa.com					
1	Equipment No. or Tag No.	Manufacturer Data								Remarks			
2	Manufacturer's Model	Total No of Identical Parts Installed	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts				
3	Serial No.	LINE NUMBER	6	7	8	9	10	11	12	13	14	15	16
4	No. of Units	Number of Parts per Unit.	101	3 Seat for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705SEAT	60-28	A351	1	-	11.325,00		
5			102	3 Core for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705SCORE	59-70	A351	1	-	67.647,00		
			103	3 Stem for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705STM	59-92	A638	1	-	31.436,00		
			104	3 Stem Cam for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705STMC	59-93	A638	1	-	48.239,00		
			105	3 Stem guide with gasket for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705STMG	60-27	A638	1	-	5.377,00		
			106	3 Bonnet Gasket and Sleeve for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705BTSL	60-26	A479	1	-	8.373,00		
			107	3 Packing Set for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705PCK	04-01	Garlock	1	-	2.247,00		
			108	1 Seat for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705DSAT	60-28D	A351	1	-	11.325,00		
			109	1 Core for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705DCOE	59-73D	A351	1	-	68.627,00		
			110	1 Stem for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705DSTM	59-92D	A638	1	-	31.436,00		
			111	1 Stem Cam for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705DSTC	59-93D	A638	1	-	48.239,00		
			112	1 Stem guide with gasket for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705DSTG	60-27D	A638	1	-	5.377,00		
			113	1 Bonnet Gasket and Sleeve for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705DBSL	60-26D	A479	1	-	8.373,00		
			114	1 Packing Set for Rising Stem Valve 16" 900#	3070-09IN02.00 sheet 7	3070R2328KVD9705DPCK	04-01D	Garlock	1	-	2.247,00		
			115	2 Seats for Antisurge Globe valve 3" 600#	3070-09IN02.00 sheet 56	3070R0339D1706STS	2806	AISI410	1	-	5.177,00		
			116	2 Bushing Assembly for Antisurge Globe valve 3" 600#	3070-09IN02.00 sheet 56	3070R0339D1706BSHAS	2239	AISI316	1	-	442,00		
			117	2 Packing for Antisurge Globe valve 3" 600#	3070-09IN02.00 sheet 56	3070R0339D1706PACK	3051	Asbestos Free	1	-	1.963,00		
			118	2 Seal Kit for Antisurge Globe valve 3" 600#	3070-09IN02.00 sheet 56	3070R0339D1706SEALK	3680	AISI316	1	-	440,00		
			119	2 Diaphragm for Antisurge Globe valve 3" 600#	3070-09IN02.00 sheet 56	3070R0339D1706DIAPH	1391	NBR	1	-	465,00		
			120	2 Positioner for Antisurge Globe valve 3" 600#	3070-09IN02.00 sheet 56	3070R0339D1706POSR	3793	3793	1	-	11.377,00		
			121										
			122										
			123										
			124										
			125										
Notes:													
DELIVERY TIME:		To be agreed											
PACKING:		Our standard for export included											
VALIDITY:		31 DECEMBER 2022											
DELIVERY POINT:		Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010											
DOCUMENTATION:		Conformity Certificate EN 10204-2.1 as per our standard included in English language											
INVOICING/PAYMENT:		To be agreed											



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200												PURCHASE ORDER No. : 05072-200-165-01-11		
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package												SUPPLIER NAME. : ISG S.p.A. sales@isgspa.com		
1 No. of Units	2 Manufacturer's Model	3 Serial No.	4 Equipment No. or Tag No.	LINE NUMBER	Total No. of Identical Parts Installed	Manufacturer Data						Remarks		
						Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO
6	7	8	9	10	11	12	13	14	15	16				
Number of Parts per Unit.	126	2	Seats for Level Control valve 1" 600#	3070-09IN02.00 sheet 52	3070R0339D6704STS	0791	1.4404	1	-	5.055,00				
	127	2	Bushing Assembly for Level Control valve 1" 600#	3070-09IN02.00 sheet 52	3070R0339D6704BSHAS	3341	1.4404	1	-	1.121,00				
	128	2	Packing for Level Control valve 1" 600#	3070-09IN02.00 sheet 52	3070R0339D6704PACK	3188	1.4404	1	-	1.028,00				
	129	2	Seal Kit for Level Control valve 1" 600#	3070-09IN02.00 sheet 52	3070R0339D6704SEALK	3675	AISI316	1	-	376,00				
	130	2	Plug Assembly for Level Control valve 1" 600#	3070-09IN02.00 sheet 52	3070R0339D6704PLUGA	0514	Stellite 6	1	-	9.397,00				
	131	2	Diaphragm for Level Control valve 1" 600#	3070-09IN02.00 sheet 52	3070R0339D6704DIAPH	0525	NBR	1	-	444,00				
	132	1	Positioner for Level Control valve 1" 600#	3070-09IN02.00 sheet 52	3070R0339D6704POSR	3730	-	1	-	8.169,00				
	133	1	Seats for Level Control valve 1" 600#	3070-09IN02.00 sheet 55	3070R0339D6708STS	0791C	1.4404	1	-	5.055,00				
	134	1	Bushing Assembly for Level Control valve 1" 600#	3070-09IN02.00 sheet 55	3070R0339D6708BSHAS	3341C	1.4404	1	-	1.121,00				
	135	1	Packing for Level Control valve 1" 600#	3070-09IN02.00 sheet 55	3070R0339D6708PACK	3188C	1.4404	1	-	1.028,00				
	136	1	Seal Kit for Level Control valve 1" 600#	3070-09IN02.00 sheet 55	3070R0339D6708SEALK	3675C	AISI316	1	-	376,00				
	137	1	Plug Assembly for Level Control valve 1" 600#	3070-09IN02.00 sheet 55	3070R0339D6708PLUGA	0514C	Stellite 6	1	-	9.397,00				
	138	1	Diaphragm for Level Control valve 1" 600#	3070-09IN02.00 sheet 55	3070R0339D6708DIAPH	0525	NBR	1	-	444,00				
	139	1	Positioner for Level Control valve 1" 600#	3070-09IN02.00 sheet 55	3070R0339D6708POSR	3730	-	1	-	8.169,00				
	140	1	Seats for Flow Control valve 4" 600#	3070-09IN02.00 sheet 54	3070R0339D1704STS	3769	14.006	1	-	4.331,00				
	141	1	Balanced Plug for Flow Control valve 4" 600#	3070-09IN02.00 sheet 54	3070R0339D1704BPLG	8859	14.006	1	-	21.191,00				
	142	1	Bushing Assembly for Flow Control valve 4" 600#	3070-09IN02.00 sheet 54	3070R0339D1704BSHAS	2239	1.4404	1	-	442,00				
	143	1	Packing for Flow Control valve 4" 600#	3070-09IN02.00 sheet 54	3070R0339D1704PACK	3189	1.4404	1	-	1.148,00				
	144	1	Seal Kit for Flow Control valve 4" 600#	3070-09IN02.00 sheet 54	3070R0339D1704SEALK	3682	AISI	1	-	2.119,00				
	145	1	Diaphragm for Flow Control valve 4" 600#	3070-09IN02.00 sheet 54	3070R0339D1704DIAPH	1465	NBR	1	-	906,00				
	146	1	Positioner for Flow Control valve 4" 600#	3070-09IN02.00 sheet 54	3070R0339D1704POSR	3730	-	1	-	8.169,00				
	147													
	148													
	149													
	150													

Notes:

DELIVERY TIME: To be agreed

DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010

PACKING: Our standard for export included

DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English language

VALIDITY: 31 DECEMBER 2022

INVOICING/PAYMENT: To be agreed



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No.		: 5072-200										PURCHASE ORDER No.		: 05072-200-165-01-11			
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package												SUPPLIER NAME.		: ISG S.p.A. sales@isgspa.com			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Remarks	
No. of Units	Serial No.	Manufacturer's Model	Equipment No. or Tag No.	LINE NUMBER	Total No. of Identical Parts Installed	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO			
Number of Parts per Unit.	1			151	2	Seats for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 58	3070R0339D1716STS	7726	1.4404	1	-	936,00				
	1			152	2	Bushing Asssembly for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 52	3070R0339D1716BSHAS	2238	1.4404	1	-	212,00				
	1			153	2	Packing for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 52	3070R0339D1716PACK	2401	1.4404	1	-	234,00				
	1			154	2	Seal Kit for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 52	3070R0339D1716SEALK	2613	Graphite	1	-	252,00				
	1			155	2	Plug Assembly for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 52	3070R0339D1716PLUGA	7926	1.4404	1	-	1.360,00				
	1			156	2	Diaphragm for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 52	3070R0339D1716DIAPH	1116	NBR	1	-	270,00				
	1			157	2	Positioner for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 52	3070R0339D1716POSR	3730	-	1	-	8.169,00				
	1			158	2	Bellow seal for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 67	3070R0339D9745BLWSL	2188	1.4571	1	-	810,00				
	1			159	2	Bellow Ass.bly for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 67	3070R0339D9745BLWAS	2186	1.4571	1	-	1.187,00				
	1			160	2	Balancing screw for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 67	3070R0339D9745BLCSW	6741	1.4305	1	-	425,00				
	1			161	2	Seat for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 67	3070R0339D9745SEAT	6721	1.4571	1	-	849,00				
	1			162	2	Plug for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 67	3070R0339D9745PLG	7097	1.4401	1	-	1.447,00				
	1			163	2	Disk/Washer/Gasket for Shutdown valve 1-1/2" 300#	3070-09IN02.00 sheet 67	3070R0339D9745DKWGK	1079	1.4301	1	-	525,00				
	1			164	2	Seat Assembly for Shutdown valve 1/2" 300#	3070-09IN02.00 sheet 67	3070R0339D9746SEATAY	1896A	FPM	1	-	1.765,00				
	1			165	2	Diaphragm for Shutdown valve 1/2" 300#	3070-09IN02.00 sheet 67	3070R0339D9746DIAPH	0502A	FKM	1	-	963,00				
	1			166	2	Kit of O-ring for Shutdown valve 1/2" 300#	3070-09IN02.00 sheet 67	3070R0339D9746ORINGK	0321A	FPM	1	-	440,00				
	1			167	2	Seat Assembly for Shutdown valve 1/2" 300#	3070-09IN02.00 sheet 68	3070R0339D9747SEATAY	1896B	FPM	1	-	1.765,00				
	1			168	2	Diaphragm for Shutdown valve 1/2" 300#	3070-09IN02.00 sheet 68	3070R0339D9747DIAPH	0502B	FKM	1	-	963,00				
	1			169	2	Kit of O-ring for Shutdown valve 1/2" 300#	3070-09IN02.00 sheet 68	3070R0339D9747ORINGK	0321B	FPM	1	-	440,00				
				170													
				171													
				172													
				173													
				174													
				175													

Notes:

DELIVERY TIME: To be agreed

DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010

PACKING: Our standard for export included

DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English language

VALIDITY: 31 DECEMBER 2022

INVOICING/PAYMENT: To be agreed

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200										PURCHASE ORDER No. : 05072-200-165-01-11				
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package										SUPPLIER NAME. : ISG S.p.A. sales@isgspa.com				
1 No. of Units	2 Manufacturer's Model	3 Serial No.	4 Equipment No. or Tag No.	Manufacturer Data										16 Remarks
				Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO		
LINE NUMBER	Total No of Identical Parts Installed	6	7	8	9	10	11	12	13	14	15	16	17	
Number of Parts per Unit.	1	50910	3AO	505-PSV-D8700	3070-09IN02.00 sheet 61	3070R0986PSV8700DSC	0276A	AISI316L	1	-	695,00			
	1	50920A-D	3AO	505-PSV-D8701 A-D	3070-09IN02.00 sheet 61	3070R0986PSV8700NZL	1145A	AISI316L	1	-	2.008,00			
	1	50930A-B	3AO	505-PSV-D8702 A/B	3070-09IN02.00 sheet 61	3070R0986PSV8700GSK	2961A	Graphite	1	-	160,00			
	1	50940A-B	3AO	505-PSV-D8703 A/B	3070-09IN02.00 sheet 61	3070R0986PSV8701DSC	0276B	AISI316L	1	-	695,00			
	1	50940C-D	3AO	505-PSV-D8704 A/B	3070-09IN02.00 sheet 61	3070R0986PSV8701NZL	1145B	AISI316L	1	-	2.008,00			
	1	50950	3AO	505-PSV-D8705	3070-09IN02.00 sheet 61	3070R0986PSV8701GSK	1725B	Graphite	1	-	160,00			
	1	50960	3AO	505-PSV-D8706	3070-09IN02.00 sheet 62	3070R0986PSV8702DSC	0279A	AISI316L	1	-	640,00			
	1				3070-09IN02.00 sheet 62	3070R0986PSV8702NZL	1141A	AISI316L	1	-	1.662,00			
	1				3070-09IN02.00 sheet 62	3070R0986PSV8702GSK	2371A	Graphite	1	-	103,00			
	1				3070-09IN02.00 sheet 62	3070R0986PSV8703DSC	0276C	AISI316L	1	-	695,00			
	1				3070-09IN02.00 sheet 62	3070R0986PSV8703NZL	1145C	AISI316L	1	-	2.008,00			
	1				3070-09IN02.00 sheet 62	3070R0986PSV8703GSK	2371B	Graphite	1	-	103,00			
	1				3070-09IN02.00 sheet 63	3070R0986PSV8704DSC	0276D	AISI316L	1	-	695,00			
	1				3070-09IN02.00 sheet 63	3070R0986PSV8704NZL	1145D	AISI316L	1	-	2.008,00			
	1				3070-09IN02.00 sheet 63	3070R0986PSV8704GSK	2371C	Graphite	1	-	103,00			
	1				3070-09IN02.00 sheet 63	3070R0986PSV8705DSC	0279B	AISI316L	1	-	640,00			
	1				3070-09IN02.00 sheet 63	3070R0986PSV8705NZL	1171	AISI316L	1	-	2.008,00			
	1				3070-09IN02.00 sheet 63	3070R0986PSV8705GSK	2371D	Graphite	1	-	103,00			
	1				3070-09IN02.00 sheet 64	3070R0986PSV8706DSC	0279C	AISI316L	1	-	640,00			
	1				3070-09IN02.00 sheet 64	3070R0986PSV8706NZL	1141B	AISI316L	1	-	1.662,00			
	1				3070-09IN02.00 sheet 64	3070R0986PSV8706GSK	2371E	Graphite	1	-	103,00			
	22													
	23													
	24													
	25													

Notes:

DELIVERY TIME: To be agreed
PACKING: Our standard for export included
VALIDITY: 31 DECEMBER 2022

DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010
DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English language
INVOICING/PAYMENT: To be agreed

For the Coolers 505-A-001, and as per Attachment#7 in the pre-award meeting, the following spares are missing and shall be added:
 1- (QTY: 2 Set) Driver Belt Sheaves.
 2- (QTY: 10%) bolting fan blades and block bearing.



LIST (SPIL)

PROJECT No. : 5072-200										PURCHASE ORDER No. : 05072-200-165-01-11									
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package										SUPPLIER NAME. : ISG S.p.A. sales@isgspa.com									
1	2	3	4	No. of Units	Serial No.	Equipment No. or Tag No.	Manufacturer's Model	LINE NUMBER	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO	Remarks	
									Total No of Identical Parts Installed										
									6	7	8	9	10	11	12	13	14	15	16
									1	2 Disc for Safety Valve 2" x 3"	3070-09IN02.00 sheet 64	3070R0986PSV8707DSC	0278A	AISI316L	1	-	964,00		
									2	Nozzle for Safety Valve 2" x 3"	3070-09IN02.00 sheet 64	3070R0986PSV8707NZL	1192A	AISI316L	1	-	2.291,00		
									3	Gasket Kit for Safety Valve 2" x 3"	3070-09IN02.00 sheet 64	3070R0986PSV8707GSK	0099A	Graphite	1	-	160,00		
									4	Disc for Safety Valve 2" x 3"	3070-09IN02.00 sheet 65	3070R0986PSV8708DSC	0278B	AISI316L	1	-	964,00		
									5	Nozzle for Safety Valve 2" x 3"	3070-09IN02.00 sheet 65	3070R0986PSV8708NZL	1192B	AISI316L	1	-	2.291,00		
									6	Gasket Kit for Safety Valve 2" x 3"	3070-09IN02.00 sheet 65	3070R0986PSV8708GSK	0099B	Graphite	1	-	160,00		
				360					7	360 Closer Plug for Air Cooler	21118	3070R0059A001PLUG	01-15	AISI316L	18	-	206,00		
				360					8	360 Threaded Plug for Air Cooler	21118	3070R0059A001THRPLG	01-14	AISI316L	18	-	206,00		
				360					9	360 Gasket for Plug for Air Cooler	21118	3070R0059A001GSKPLG	01-16	AISI316L	36	-	65,00		
				2					10	2 Shaft Bearing for Air Cooler	21118	3070R0059A001SHFTBRG	01-44	-	-	1	-	2.419,00	
				2					11	2 Motor Pulley for Air Cooler	21118	3070R0059A001MTRPLLY	01-41	-	-	1	-	464,00	
				2					12	2 Fan Pulley for Air Cooler	21118	3070R0059A001FANPLLY	01-42	-	-	1	-	2.791,00	
				4					13	4 Belts for Air Cooler	21118	3070R0059A001BELT	01-43	-	-	4	-	3.349,00	
				2					14	2 Vibration Transmitter for Air Cooler	21118	3070R0059A001VBRTRM	01-46	-	-	1	-	6.050,00	
				2					15	2 Fan Blades for Air Cooler	21118	3070R0059A001FNBLADE	01-45	-	-	1	-	14.361,00	
				2					16	2 Electric Motor for Air Cooler	21118	3070R0059A001MOTOR	01-40	-	-	1	-	19.942,00	
				1					17	1 Mist eliminator for Gas Separator	3070-04PE01-03	3070R0102KODRUM	-	AISI304L	1	-	2.280,00		
				1					18	2 Temperature Transmitter	3070-09IN02.00 sheet 163	3070R0131TT4714	644	-	1	-	1.317,00		
				1					19	2 Temperature Transmitter	3070-09IN02.00 sheet 164	3070R0131TT4717	644	-	1	-	1.317,00		
				1					20	2 Temperature Transmitter	3070-09IN02.00 sheet 162	3070R0131TT4713	644	-	1	-	1.295,00		
				1					21	2 Temperature Transmitter	3070-09IN02.00 sheet 166	3070R0131TT4720	644	-	1	-	1.295,00		
				1					22	2 Temperature Transmitter	3070-09IN02.00 sheet 167	3070R0131TT4721	644	-	1	-	1.295,00		
				1					23	2 Temperature Transmitter	3070-09IN02.00 sheet 168	3070R0131TT4722	644	-	1	-	1.295,00		
				24															
				25															

Notes:

DELIVERY TIME:

To be agreed

PACKING:

Our standard for export included

VALIDITY:

31 DECEMBER 2022

DELIVERY POINT:

Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010

DOCUMENTATION:

Conformity Certificate EN 10204-2.1 as per our standard included in English language

INVOICING/PAYMENT:

To be agreed

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No.

: 5072-200

PURCHASE ORDER No.

: 05072-200-165-01-11

EQUIPMENT / PACKAGE DESCRIPTION

: Molecular Sieve Dehydration Package

SUPPLIER NAME.

: ISG S.p.A. sales@isgspa.com

1 1 2 2 3 3 4 4 No. of Units	Equipment No. or Tag No.	Manufacturer's Model	Serial No.	LINE NUMBER	Total No of identical Parts Installed	Manufacturer Data						Remarks	
						6	7	8	9	10	11	12	
5 Number of Parts per Unit	1			1	2	Temperature Transmitter	3070-09IN02.00 sheet 169	3070R0131TT4723	644	-	1	-	1.295,00
	1			2	2	Temperature Transmitter	3070-09IN02.00 sheet 157	3070R0131TT4707	644	-	1	-	1.335,00
	1			3	4	Temperature Transmitter	3070-09IN02.00 sheet 161	3070R0131TT4711	644	-	1	-	1.335,00
	1			4	2	Temperature Transmitter	3070-09IN02.00 sheet 172	3070R0131TT4729	644	-	1	-	1.335,00
	1			5	1	Temperature Transmitter	3070-09IN02.00 sheet 154	3070R0131TT4704	644	-	1	-	1.361,00
	1			6	1	Temperature Transmitter	3070-09IN02.00 sheet 158	3070R0131TT4708	644	-	1	-	1.361,00
	1			7	1	Temperature Transmitter	3070-09IN02.00 sheet 159	3070R0131TT4709	644	-	1	-	1.361,00
	1			8	4	Temperature Transmitter	3070-09IN02.00 sheet 171	3070R0131TT4726AB	644	-	1	-	1.453,00
	1			9	2	Temperature Transmitter	3070-09IN02.00 sheet 171	3070R0131TT4726C	644	-	1	-	1.482,00
	1			10	1	Temperature Transmitter	3070-09IN02.00 sheet 160	3070R0131TT4710	644	-	1	-	1.482,00
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SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200												PURCHASE ORDER No. : 05072-200-165-01-11				
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package												SUPPLIER NAME. : ISG S.p.A. sales@isgspa.com				
1	2	3	4	No. of Units	Serial No.	Manufacturer's Model	Equipment No. or Tag No.	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Number of Parts per Unit.
1	4	1	1	2	4	2	1	2	2							1
1							1	1	3070-09IN02.00 sheet 151	3070R0131TT4701	644	-	1	-	1.217,00	
							2	4	3070-09IN02.00 sheet 153	3070R0131TT4703	644	-	1	-	1.217,00	
							3	1	3070-09IN02.00 sheet 150	3070R0131TT4700	644	-	1	-	1.335,00	
							4	1	3070-09IN02.00 sheet 152	3070R0131TT4702	644	-	1	-	1.335,00	
							5	1	3070-09IN02.00 sheet 155	3070R0131TT4705	644	-	1	-	1.335,00	
							6	1	3070-09IN02.00 sheet 170	3070R0131TT4724	644	-	1	-	1.500,00	
							7	1	3070-09IN02.00 sheet 173	3070R0131TT4740	644	-	1	-	1.335,00	
							8	1	3070-09IN02.00 sheet 81	3070R0131FT1704	2051	-	1	-	2.608,00	
							9	2	3070-09IN02.00 sheet 82	3070R0131FT1706	2051	-	1	-	2.608,00	
							10	2	3070-09IN02.00 sheet 84	3070R0131FT1714	2051	-	1	-	2.608,00	
							11									
							12									
							13									
							14									
							15									
							16									
							17									
							18									
							19									
							20									
							21									
							22									
							23									
							24									
							25									

Notes:

DELIVERY TIME: To be agreed
PACKING: Our standard for export included
VALIDITY: 31 DECEMBER 2022

DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010
DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English language
INVOICING/PAYMENT: To be agreed

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200										PURCHASE ORDER No. : 05072-200-165-01-11									
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package										SUPPLIER NAME. : ISG S.p.A. sales@isgspa.com									
1	2	3	4	No. of Units	Serial No.	Manufacturer's Model	Equipment No. or Tag No.	Manufacturer Data										Remarks	
LINE NUMBER	Total No of Identical Parts Installed	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO									
6	7	8	9	10	11	12	13	14	15	16									
1	2	Flow Transmitter	3070-09IN02.00 sheet 85	3070R0131FT1715	2051	-	1	-	2.608,00										
1	2	Flow Transmitter	3070-09IN02.00 sheet 86	3070R0131FT1716	2051	-	1	-	2.608,00										
1	6	Flow Transmitter	3070-09IN02.00 sheet 83	3070R0131FT1711	2051	-	1	-	2.720,00										
1	2	Flow Transmitter	3070-09IN02.00 sheet 87	3070R0131FT1722	2051	-	1	-	2.720,00										
1	5	Differential Pressure Transmitter	3070-09IN02.00 sheet 136	3070R0131PDT2704	2051	-	1	-	2.557,00										
1	2	Differential Pressure Transmitter	3070-09IN02.00 sheet 138	3070R0131PDT2707	2051	-	1	-	2.557,00										
1	7	Differential Pressure Transmitter	3070-09IN02.00 sheet 139	3070R0131PDT2711	2051	-	1	-	2.557,00										
1	8	Differential Pressure Transmitter	3070-09IN02.00 sheet 141	3070R0131PDT2717	2051	-	1	-	2.557,00										
1	9	Differential Pressure Transmitter	3070-09IN02.00 sheet 140	3070R0131PDT2720	2051	-	1	-	2.557,00										
1	10	Differential Pressure Transmitter	3070-09IN02.00 sheet 137	3070R0131PDT2705	2051	-	1	-	2.557,00										
11																			
12																			
13																			
14																			
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16																			
17																			
18																			
19																			
20																			
21																			
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23																			
24																			
25																			

Notes:

DELIVERY TIME: To be agreed

PACKING: Our standard for export included

VALIDITY: 31 DECEMBER 2022

DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010

DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English language

INVOICING/PAYMENT: To be agreed

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No.			: 5072-200			PURCHASE ORDER No.			: 05072-200-165-01-11				
EQUIPMENT / PACKAGE DESCRIPTION			: Molecular Sieve Dehydration Package			SUPPLIER NAME.			: ISG S.p.A. sales@isgspa.com				
1	2	3	4	No. of Units	Serial No.	Manufacturer's Model	Equipment No. or Tag No.	Part Identification No.	Material Specification	Commissioning / Start-Up Spare Parts	Quantity to be Purchased		
5	6	7	8	9	10	11	12	13	14	15	16		
Number of Parts per Unit.	LINE NUMBER	LINE NUMBER	Total No of Identical Parts Installed	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO	Remarks
1	1	1	1	1	1	1	1	1	1	1	1	2.557,00	
1	1	1	1	1	1	1	1	1	1	1	1	2.686,00	
1	1	1	1	1	1	1	1	1	1	1	1	2.686,00	
1	1	1	1	1	1	1	1	1	1	1	1	2.703,00	
1	1	1	1	1	1	1	1	1	1	1	1	2.815,00	
1	1	1	1	1	1	1	1	1	1	1	1	2.815,00	
1	1	1	1	1	1	1	1	1	1	1	1	2.405,00	
1	1	1	1	1	1	1	1	1	1	1	1	2.493,00	
1	1	1	1	1	1	1	1	1	1	1	1	2.405,00	
1	1	1	1	1	1	1	1	1	1	1	1	2.133,00	
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													

Notes:

DELIVERY TIME: To be agreed
PACKING: Our standard for export included
VALIDITY: 31 DECEMBER 2022

DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010
DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English language
INVOICING/PAYMENT: To be agreed

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200										PURCHASE ORDER No. : 05072-200-165-01-11									
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package										SUPPLIER NAME. : ISG S.p.A. sales@isgspa.com									
1	2	3	4	No. of Units	Serial No.	Manufacturer's Model	Equipment No. or Tag No.	Manufacturer Data										Remarks	
LINE NUMBER	LINE NUMBER	LINE NUMBER	LINE NUMBER	LINE NUMBER	LINE NUMBER	LINE NUMBER	LINE NUMBER	6	Total No of Identical Parts Installed	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in EURO	
Number of Parts per Unit.	1							1	2	Pressure Transmitter	3070-09IN02.00 sheet 126	3070R0131PT2738	3051	-	1	-	2.133,00		
	1							2	2	Pressure Transmitter	3070-09IN02.00 sheet 127	3070R0131PT2739	3051	-	1	-	2.133,00		
	1							3	2	Pressure Transmitter	3070-09IN02.00 sheet 120	3070R0131PT2721	3051	-	1	-	2.133,00		
	1							4	2	Pressure Transmitter	3070-09IN02.00 sheet 114	3070R0131PT2710	3051	-	1	-	2.133,00		
	1							5	4	Pressure Transmitter	3070-09IN02.00 sheet 116	3070R0131PT2713	3051	-	1	-	2.133,00		
	1							6	1	Pressure Transmitter	3070-09IN02.00 sheet 110	3070R0131PT2701	3051	-	1	-	2.133,00		
	1							7	1	Pressure Transmitter	3070-09IN02.00 sheet 111	3070R0131PT2706	3051	-	1	-	2.133,00		
	1							8	2	Pressure Transmitter	3070-09IN02.00 sheet 112	3070R0131PT2708	3051	-	1	-	2.133,00		
	1							9	1	Pressure Transmitter	3070-09IN02.00 sheet 115	3070R0131PT2712	3051	-	1	-	2.133,00		
	1							10	2	Pressure Transmitter	3070-09IN02.00 sheet 119	3070R0131PT2719	3051	-	1	-	2.133,00		
	11																		
	12																		
	13																		
	14																		
	15																		
	16																		
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	24																		
	25																		

Notes:

DELIVERY TIME: To be agreed
PACKING: Our standard for export included
VALIDITY: 31 DECEMBER 2022

DELIVERY POINT: Ex Works our warehouse in Baranzate (Milan) Italy - Incoterms 2010
DOCUMENTATION: Conformity Certificate EN 10204-2.1 as per our standard included in English language
INVOICING/PAYMENT: To be agreed

SUPPLIER'S DOCUMENT FRONT SHEET**For A3 / A4 Document Only****PROJECT TITLE** : Western Desert Gas Complex (Train D) Project**PROJECT No.** : 05072-200**PURCHASE ORDER No.** : 05072-200-165-01-11**SUPPLIER NAME** : ISG S.P.A**EQUIPMENT / PACKAGE DESCRIPTION** : Molecular Sieve Dehydration Package**EQUIPMENT / PACKAGE TAG No.** : 505**DOCUMENT CODE IDENTIFICATION** : M08**DOCUMENT TYPE** : Maintenance and Operation**DOCUMENT TITLE** : Commissioning Spare Parts

SUPPLIER OWN DOCUMENT NUMBER (ORIGINAL)	Rev.	Date	Authorized Supplier Name	Signature
3070-01GI11.01	0	May 11, 2022	E. Pastori	
	1	September 23, 2022	E. Pastori	
	2	March 1, 2023	E. Pastori	
SUPPLIER DOCUMENT NUMBER (As per the SDR)				TOTAL No. OF PAGES
05072-200-165-01-11-M08-001				17
				2

PURCHASER REVIEW OF SUPPLIER DOCUMENT

Permission to proceed does not constitute acceptance or Approval of design details, calculations, test methods of materials developed or selected by the Supplier and does not relieve the Supplier from full compliance with full contractual or other obligations.

PURCHASER REVIEW CODE

- 1. WORK MAY PROCEED.
- 2. REVISE AND RESUBMIT, WORK MAY PROCEED SUBJECT TO INCORPORATION OF COMMENTS AND CHANGES INDICATED.
- 3. REVISE AND RESUBMIT, WORK MAY NOT PROCEED.
- 4. REVIEW IS NOT REQUIRED, WORK MAY PROCEED.
- H. THE DOCUMENT IS ON HOLD AS INDICATED AND HAS TO BE RE-SUBMITTED FOR REVIEW.

PURCHASER APPROVAL

NAME :	SIGNATURE :	DATE :
--------	-------------	--------

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT TITLE : Western Desert Gas Complex (Train D) Project

PROJECT No. : 5072-200

SUPPLIER NAME : ISG S.P.A

PURCHASE ORDER No. : 05072-200-165-01-11

EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package

EQUIPMENT / PACKAGE TAG No. : 505

DOCUMENT CODE IDENTIFICATION : M08

DOCUMENT TYPE : Maintenance and Operation

DOCUMENT TITLE : Commissioning Spare Parts

SUPPLIER ORIGINAL DOCUMENT NUMBER : 3070-01GI11.01

SUPPLIER DOCUMENT NUMBER : 3070-01GI11.01

Spare Parts for Commissionning / Start-Up

Spare Parts for 2 Years of Operation

Supplier Information

Address : Via dei Giovi, 18, Baranzate, 20021, MI

Contact Name : ISG S.p.A

Telephone :

Fax :

Email :

Delivery Terms :

Price Validity :

For the Completion of the Spare Parts Interchangeability List Form, please refer to Page 2

SPIL REVIEW CODE

1 The Information are Adequate. - Enppi will advise Purchase Requirements

2 Revise and Resubmit after Incorporating the Comments

2	01/032023	Fabrication may Start prior to Purchaser Approval	E. Pastori	F. Liga
1	23/09/2022	Fabrication may Start prior to Purchaser Approval	E. Pastori	F. Liga
0	11/05/2022	Fabrication may Start prior to Purchaser Approval	E. Pastori	F. Liga
Rev.	Date	Revision Description	By	Approved

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT TITLE	: Western Desert Gas Complex (Train D) Project
PROJECT No.	: 5072-200
SUPPLIER NAME.	: ISG S.P.A
PURCHASE ORDER No.	: 05072-200-165-01-11
EQUIPMENT / PACKAGE DESCRIPTION	: Molecular Sieve Dehydration Package
EQUIPMENT / PACKAGE TAG No.	: 505
DOCUMENT CODE IDENTIFICATION	: M08
DOCUMENT TYPE	: Maintenance and Operation
DOCUMENT TITLE	: Commissioning Spare Parts
SUPPLIER ORIGINAL DOCUMENT NUMBER	: 3070-01GI11.01
SUPPLIER DOCUMENT NUMBER	: 3070-01GI11.01

The Section Below shall be used for the Completion of the Spare Parts Interchangeability List in Page 3

To be Completed By Supplier

- Row 1** Equipment / Tag No. Identification (As shown on the Purchase Order.)
- Row 2** Manufacturer's Model (Type & Model Number of Equipment)
- Row 3** Manufacturer's Serial No.
- Row 4** Enter Total Number of Units of Identical Equipment in each relevant Cell in the Row.
- Row 5** For each Unit or group of Identical Units, enter in the appropriate square, the Number of Parts fitted in each Unit of equipment
- Col. 6** The Total No. of Identical Parts Installed shall equal the Sum of the following:
"Number of Units" in (Row 4)" Multiplied by its relevant "Number of Parts per Units" in (Row 5)
- Col. 7** Description of the Parts Recommended for holding as Spare Parts, Include also All Special Tools and Consumables Required.
- Col. 8** Cross Sectional Drawing or Circuit Diagram in which Component Listed In Col 8. can be identified.
- Col. 9** Part Number which uniquely identifies Components.
- Col. 10** Sub-Supplier Part No. (If different than the Manufacturer Number)
- Col. 11** Material Specification or Size as Applicable.
- Col. 12** Quantities of Components Described in Col 7, Recommended to be held as spares for 2 Years Operation.
- Col. 13** Enter Number of Spare Parts, Tools or Consumable Items required to maintain the Equipment through the Initial Start-Up Period.
{These Spares shall include the the Spare Parts defined in the MR ITEM LIST + the Spare Parts recommended by the Supplier for Commissionning & Start-Up}
- Col. 14** Total Quantity to be Purchased (Col 12 + Col 13). Based on Company / Client Formal Request
- Col. 15** Enter Unit Price for Parts Listed In Col 7.
- Col. 16** Enter Remarks Required to clarify Unit Prices In Col 19, i.e. Price Per Meter, For Quantity of 10-50.

Remark:

Supplier to Submit all Drawings and Items Listed in Column 8



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200										PURCHASE ORDER No. : 05072-200-165-01-11							
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package										SUPPLIER NAME. : ISG S.p.A. / OCS							
1 Equipment No. or Tag No.	2 Manufacturer's Model	3 Serial No.	4 No. of Units	5 Number of Parts per Unit.	6 LINE NUMBER	7 Description of Parts	Manufacturer Data				10 Sub-Supplier Part No. (If different than the Manufacturer Number)	11 Material Specification	12 2 Years Spare Parts	13 Commissioning / Start-Up Spare Parts	14 Quantity to be Purchased	15 Unit Price in	16 Remarks
							Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)								
3	48	120	1	1	1	S.W. Gasket ASME B16.20 24" #600 Thk 4.5	05072-200-165-01-11-D01-003	36	/	AISI 316 PTFE FILLER	/	36	/ /	/	/	/	
							Stud Bolts ø1" 7/8 UN L=420	05072-200-165-01-11-D01-003	37	/	SA 320M Gr.L7 PTFE COATED	/	20	/ /	/	/	/
							Hexagonal Nuts ø1" 7/8 UN H=D	05072-200-165-01-11-D01-003	38	/	SA 194M Gr.7 PTFE COATED	/	40	/ /	/	/	/
							Flat Washer ø1" 7/8	05072-200-165-01-11-D01-003	39	/	F 436 PTFE COATED	/	40	/ /	/	/	/
							Protection cap ø1" 7/8 L=80	05072-200-165-01-11-D01-003	40	/	ALUMINIUM	/	20	/ /	/	/	/
							S.W. Gasket ASME B16.20 8" #600 Thk 4.5	05072-200-165-01-11-D01-003	41	/	AISI 316 PTFE FILLER	/	12	/ /	/	/	/
							Stud Bolts ø1" 1/8 UN L=210	05072-200-165-01-11-D01-003	42	/	SA 320M Gr.L7 PTFE COATED	/	20	/ /	/	/	/
							Hexagonal Nuts ø1" 1/8 UN H=D	05072-200-165-01-11-D01-003	43	/	SA 194M Gr.7 PTFE COATED	/	40	/ /	/	/	/
							Hexagonal Screw M12 x 50	3070-04PE02.66	/	/	CL 8.8 UNI EN 20898-1 PTFE COATED	/	20	/ /	/	/	/
							Hexagonal Screw M16 x 60	3070-04PE02.66	/	/	CL 8.8 UNI EN 20898-1 PTFE COATED	/	72	/ /	/	/	/
							Hexagonal Screw M20 x 60	3070-04PE02.66	/	/	CL 8.8 UNI EN 20898-1 PTFE COATED	/	20	/ /	/	/	/
							Countersunk screw M16 x 55	3070-04PE02.66	/	/	CL 8.8 UNI EN 20898-1 PTFE COATED	/	20	/ /	/	/	/
							Hexagonal Nuts M12	3070-04PE02.66	/	/	CL 8 UNI EN 20898-2 PTFE COATED	/	20	/ /	/	/	/
							Hexagonal Nuts M16	3070-04PE02.66	/	/	CL 8 UNI EN 20898-2 PTFE COATED	/	76	/ /	/	/	/
							Hexagonal Nuts M20	3070-04PE02.66	/	/	CL 8 UNI EN 20898-2 PTFE COATED	/	20	/ /	/	/	/
							Washer M12	3070-04PE02.66	/	/	CL 200 HV EN ISO 7089 PTFE COATED	/	20	/ /	/	/	/
							Washer M16	3070-04PE02.66	/	/	CL 200 HV EN ISO 7089 PTFE COATED	/	132	/ /	/	/	/
							Washer M20	3070-04PE02.66	/	/	CL 200 HV EN ISO 7089 PTFE COATED	/	28	/ /	/	/	/
							Beveled Washer M16	3070-04PE02.66	/	/	CL 200 HV UNI 6598-69 / DIN 434 PTFE COATED	/	20	/ /	/	/	/
							Grating Stop	3070-04PE02.66	/	/	HOT DIP GALVANIZED	/	76	/ /	/	/	/

Notes:



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200										PURCHASE ORDER No. : 05072-200-165-01-11					SUPPLIER NAME. : ISG S.p.A. / OCS					
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package										SUPPLIER NAME. : ISG S.p.A. / OCS					SUPPLIER NAME. : ISG S.p.A. / OCS					
1 Equipment No. or Tag No.	2 Manufacturer's Model	3 Serial No.	4 No. of Units	5 Number of Parts per Unit.	Manufacturer Data					6 Total No of Identical Parts Installed	7 Description of Parts	8 Drawing No. (The Supplier shall attach the Drawing to the SPIL)	9 Part Identification No.	10 Sub-Supplier Part No. (If different than the Manufacturer Number)	11 Material Specification	12 2 Years Spare Parts	13 Commissioning / Start-Up Spare Parts	14 Quantity to be Purchased	15 Unit Price in	16 Remarks
2	/	8367, 8368	2	1	1	4	S.W. Gasket ø126/1220 x thk 4.5	05072-200-165-01-11-D01-015	8	/	AISI 316 PTFE FILLER	/	6	/	/					
44	/	8370	1	1	2	88	Stud Bolts ø1" 7/8 8UN L=580	05072-200-165-01-11-D01-015	9	/	SA 320M Gr.L7 PTFE COATED	/	10	/	/					
88	/		1	1	3	176	Hexagonal Nuts ø1" 7/8 8UN H=D	05072-200-165-01-11-D01-015	10	/	SA 194M Gr.7 PTFE COATED	/	20	/	/					
88	/		1	1	4	176	Washer ø1" 7/8	05072-200-165-01-11-D01-015	11	/	F 436 PTFE COATED	/	20	/	/					
1	/		1	1	5	2	S.W. Gasket 8" #600 Thk 4.5	05072-200-165-01-11-D01-015	19	/	AISI 316 PTFE FILLER	/	6	/	/					
12	/		1	1	6	24	Stud Bolts ø1" 1/8 8UN L=205	05072-200-165-01-11-D01-015	20	/	SA 320M Gr.L7 PTFE COATED	/	10	/	/					
24	/		1	1	7	48	Hexagonal Nuts ø1" 1/8 8UN H=D	05072-200-165-01-11-D01-015	21	/	SA 194M Gr.7 PTFE COATED	/	20	/	/					
44	/		1	1	8	88	Protection cap ø1" 7/8 L=90	05072-200-165-01-11-D01-015	36	/	ALUMINIUM	/	10	/	/					
134	/		1	1	9	268	Hexagonal Nuts M12 H=0.8D	05072-200-165-01-11-D01-017	116	/	AISI 304	/	28	/	/					
1	/		1	1	10	1	Ring Joint Gasket 20" #900 R74	05072-200-165-01-11-D01-025	11	/	AISI 304	/	3	/	/					
24	/		1	1	11	24	Stud Bolts ø1" 3/4 8UN L=450	05072-200-165-01-11-D01-025	13	/	SA 193M B8 PTFE COATED	/	5	/	/					
48	/		1	1	12	48	Hexagonal Nuts ø1" 3/4 8UN H=D	05072-200-165-01-11-D01-025	14	/	SA 193M Gr.8 PTFE COATED	/	10	/	/					
48	/		1	1	13	48	Plain Washer ø1" 3/4	05072-200-165-01-11-D01-025	15	/	AISI 304 PTFE COATED	/	10	/	/					
1	/		1	1	14	1	Ring Joint Gasket 8" #900 R49	05072-200-165-01-11-D01-025	31	/	AISI 304	/	3	/	/					
12	/		1	1	15	12	Stud Bolts ø1" 3/8 8UN L=250	05072-200-165-01-11-D01-025	33	/	SA 193M B8 PTFE COATED	/	5	/	/					
24	/		1	1	16	24	Hexagonal Nuts Hexagonal Nuts	05072-200-165-01-11-D01-025	34	/	SA 193M Gr.8 PTFE COATED	/	10	/	/					
24	/		1	1	17	24	Protection cap ø1" 3/4 L=90	05072-200-165-01-11-D01-025	35	/	ALUMINIUM	/	5	/	/					
28	/		1	1	18	28	Hexagonal Nuts M12 H=0.8D	3070-04PE02.37	106	/	AISI 304	/	5	/	/					
				1	19															
				2	20															
				3	21															

Notes:

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200										PURCHASE ORDER No. : 05072-200-165-01-11					
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package										SUPPLIER NAME. : ISG S.p.A. / OCS					
1 Equipment No. or Tag No.	2 Manufacturer's Model	3 Serial No.	4 No. of Units	Manufacturer Data										16 Remarks	
				Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in			
5 Number of Parts per Unit.				Total No of Identical Parts Installed											
				6	7	8	9	10	11	12	13	14	15		
				1	48 Stud Bolts ø1" 7/8 UNI L=420	05072-200-165-01-11-D01-009	15	/	SA 320M Gr.L7 PTFE COATED	/	5	/	/		
				2	96 Washer ø1" 7/8	05072-200-165-01-11-D01-009	16	/	F 436 PTFE COATED	/	10	/	/		
				3	96 Hexagonal Nuts ø1" 7/8 UNI H=D	05072-200-165-01-11-D01-009	17	/	SA 194M Gr.7 PTFE COATED	/	10	/	/		
				4	2 S.W. Gasket ASME B16.20 24" #600 Thk 4.5	05072-200-165-01-11-D01-009	18	/	AISI 316 PTFE FILLER	/	6	/	/		
				5	48 Protection cap ø1" 7/8 L=80	05072-200-165-01-11-D01-009	31	/	ALUMINIUM	/	5	/	/		
				6	14 Beta Pin ø5	05072-200-165-01-11-D01-011	103	/	AISI 304	/	5	/	/		
				7	44 Hexagonal Screw M12 x 45	05072-200-165-01-11-D01-011	104	/	AISI 304	/	5	/	/		
				8	44 Washer M12 THK 2,5	05072-200-165-01-11-D01-011	105	/	AISI 304	/	10	/	/		
				9	306 Hexagonal Nuts M12 H=0.8D	05072-200-165-01-11-D01-011	106	/	AISI 304	/	30	/	/		
				10	6 Hexagonal Screw M12 x 50	3070-04PE02.72	/	/	CL 8.8 UNI EN 20898-1 PTFE COATED	/	5	/	/		
				11	106 Hexagonal Screw M16 x 60	3070-04PE02.72	/	/	CL 8.8 UNI EN 20898-1 PTFE COATED	/	12	/	/		
				12	28 Hexagonal Screw M20 x 80	3070-04PE02.72	/	/	CL 8.8 UNI EN 20898-1 PTFE COATED	/	5	/	/		
				13	58 Contersunk screw M16 x 55	3070-04PE02.72	/	/	CL 8.8 UNI EN 20898-1 PTFE COATED	/	6	/	/		
				14	6 Hexagonal Nuts M12	3070-04PE02.72	/	/	CL 8 UNI EN 20898-2 PTFE COATED	/	5	/	/		
				15	146 Hexagonal Nuts M16	3070-04PE02.72	/	/	CL 8 UNI EN 20898-2 PTFE COATED	/	15	/	/		
				16	58 Hexagonal Nuts M20	3070-04PE02.72	/	/	CL 8 UNI EN 20898-2 PTFE COATED	/	6	/	/		
				17	12 Washer M12	3070-04PE02.72	/	/	CL 200 HV EN ISO 7089 PTFE COATED	/	5	/	/		
				18	212 Washer M16	3070-04PE02.72	/	/	CL 200 HV EN ISO 7089 PTFE COATED	/	22	/	/		
				19	118 Washer M20	3070-04PE02.72	/	/	CL 200 HV UNI 6598-69 PTFE COATED	/	12	/	/		
				20	28 Beveled Washer M16	3070-04PE02.72	/	/	CL 200 HV UNI 6598-69 / DIN 434 PTFE COATED	/	5				
				21	104 Grating Stop	3070-04PE02.72	/	/	HOT DIP GALVANIZED	/	10	/	/		

Notes:



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200										PURCHASE ORDER No. : 05072-200-165-01-11						
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package										SUPPLIER NAME. : ISG S.p.A. / OCS						
1	Equipment No. or Tag No.	Manufacturer's Model	Serial No.	LINE NUMBER	Description of Parts	Total No of Identical Parts Installed	Manufacturer Data				Material Specification	Commissioning / Start-Up Spare Parts	2 Years Spare Parts	Quantity to be Purchased	Unit Price in	Remarks
2		/					Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)							
3			8369													
4	No. of Units	1				6	7	8	9	10	11	12	13	14	15	16
5	Number of Parts per Unit.	1			1	1	Ring Joint Gasket 28" #900 R101	05072-200-165-01-11-D01-020	11	/	AISI 304	/	3	/	/	
		20			2	20	Stud Bolts ø2" 1/2 8UN L=600	05072-200-165-01-11-D01-020	13	/	SA 193M B8 PTFE COATED	/	5	/	/	
		40			3	40	Hexagonal Nuts ø2" 1/2 8UN H=D	05072-200-165-01-11-D01-020	14	/	SA 193M Gr.8 PTFE COATED	/	10	/	/	
		40			4	40	Plain Washer ø2" 1/2	05072-200-165-01-11-D01-020	15	/	AISI 304 PTFE COATED	/	10	/	/	
		1			5	1	Ring Joint Gasket 8" #900 R49	05072-200-165-01-11-D01-020	32	/	AISI 304	/	3	/	/	
		12			6	12	Stud Bolts ø1" 3/8 8UN L=250	05072-200-165-01-11-D01-020	34	/	SA 193M B8 PTFE COATED	/	5	/	/	
		24			7	24	Hexagonal Nut ø1" 3/8 8UN H=D	05072-200-165-01-11-D01-020	35	/	SA 193M Gr.8 PTFE COATED	/	10	/	/	
		20			8	20	Protection cap ø2" 1/2 L=90	05072-200-165-01-11-D01-020	37	/	ALUMINIUM	/	5	/	/	
		14			9	14	Hexagonal Screw M10 x 45	05072-200-165-01-11-D01-022	83	/	AISI 304	/	5	/	/	
		16			10	16	Hexagonal Nuts M10 H=0.8D	05072-200-165-01-11-D01-022	84	/	AISI 304	/	5	/	/	
		14			11	14	Washer M10	05072-200-165-01-11-D01-022	85	/	AISI 304	/	5	/	/	
					12											
					13											
					14											
					15											
					16											
					17											
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					19											
					20											
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Notes:



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200				PURCHASE ORDER No. : 05072-200-165-01-11				
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package				SUPPLIER NAME. : ISG S.p.A. / BOLDROCCHI				
1	Equipment No. or Tag No.	LINE NUMBER	Total No of Identical Parts Installed	Manufacturer Data				
2	Manufacturer's Model	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	Remarks	
3	Serial No.	6	7	8	9	10	11	
4	No. of Units	1			12	13	14	
5	Number of Parts per Unit	360	1 CLOSER PLUG	05072-200-165-01-11-D01-002	15	242002/SQ210473/01-15	SA 182 F316L	/ 18 18 /
		360	2 THREADED PLUG	05072-200-165-01-11-D01-002	14	242002/SQ210473/01-14	SA 182 F316L	/ 18 18 /
		360	3 GASKETS	05072-200-165-01-11-D01-002	16	242002/SQ210473/01-16	316L	/ 36 36 /
		2	4 MOTORPULLEYS	05072-200-165-01-11-D05-002	41	242006/SQ210473/01-41	-	/ 2 2 /
		4	5 BELTS	05072-200-165-01-11-D05-002	43	242006/SQ210473/01-43	-	/ 4 4 /
		2	6 VIBRATION TRANSMITTER	05072-200-165-01-11-D05-002	46	242006/SQ210473/01-46	-	/ 1 1 /
		2	7 FAN BLADES	05072-200-165-01-11-D05-002	45	242006/SQ210473/01-45	-	/ 1 1 /
			8 - STRUCT. PARTS BOLTS					/ / /
		224	9 224 HEX SCREWS M20X50	05072-200-165-01-11-G15-003	50	242005/SQ210473/01-50	EN20898-8.8	/ 23 23 /
		224	10 224 HEX NUT M20	05072-200-165-01-11-G15-003	51	242005/SQ210473/01-51	EN 20898-8	/ 23 23 /
		448	11 448 PLAIN WASHER Ø21	05072-200-165-01-11-G15-003	52	242005/SQ210473/01-52	R40	/ 46 46 /
		224	12 224 ELASTIC WASHER A21	05072-200-165-01-11-G15-003	53	242005/SQ210473/01-53	R150	/ 23 23 /
		120	13 120 HEX SCREW M16X50	05072-200-165-01-11-G15-003	54	242005/SQ210473/01-54	EN20898-8.8	/ 12 12 /
		120	14 120 HEX NUT M16	05072-200-165-01-11-G15-003	55	242005/SQ210473/01-55	EN 20898-8	/ 12 12 /
		240	15 240 PLAIN WASHER Ø17	05072-200-165-01-11-G15-003	56	242005/SQ210473/01-56	R40	/ 24 24 /
		120	16 120 ELASTIC WASHER A17	05072-200-165-01-11-G15-003	57	242005/SQ210473/01-57	R150	/ 12 12 /
		2	17 2 HEX SREW M16X120	05072-200-165-01-11-D05-002	60	242006/SQ210473/01-60	EN20898-8.8	/ 1 1 /
		2	18 2 HEX NUT M16	05072-200-165-01-11-D05-002	61	242006/SQ210473/01-61	EN 20898-8	/ 1 1 /
		4	19 4 HEX SCREW M12X50	05072-200-165-01-11-D05-002	62	242006/SQ210473/01-62	EN20898-8.8	/ 1 1 /
		8	20 8 HEX NUT M12	05072-200-165-01-11-D05-002	63	242006/SQ210473/01-63	EN 20898-8	/ 4 4 /
		8	21 8 PLAIN WASHER Ø13	05072-200-165-01-11-D05-002	64	242006/SQ210473/01-64	R40	/ 4 4 /

Notes:

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No.				: 5072-200				PURCHASE ORDER No.				: 05072-200-165-01-11			
EQUIPMENT / PACKAGE DESCRIPTION				: Molecular Sieve Dehydration Package				SUPPLIER NAME.				: ISG S.p.A. / BOLDROCCHI			
1	Equipment No. or Tag No.	Equipment's Model	LINE NUMBER	Total No of Identical Parts Installed	Manufacturer Data				Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in	Remarks
2	Serial No.	No. of Units	6	7	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	8							
Number of Parts per Unit.	4		1	4	ELASTIC WASHER A13	05072-200-165-01-11-D05-002	65	242006/SQ210473/01-65	C72	/	2	2	/		
	12		2	12	HEX SCREW M16X50	05072-200-165-01-11-D05-002	66	242006/SQ210473/01-66	EN 20898-8.8	/	2	2	/		
	8		3	8	HEX NUT M16	05072-200-165-01-11-D05-002	67	242006/SQ210473/01-67	EN 20898-8	/	2	2	/		
	24		4	24	PLAIN WASHER Ø17	05072-200-165-01-11-D05-002	68	242006/SQ210473/01-68	R40	/	10	10	/		
	12		5	12	ELASTIC WASHER A17	05072-200-165-01-11-D05-002	69	242006/SQ210473/01-69	C72	/	5	5	/		
	4		6	4	HEX SCREW M12X65	05072-200-165-01-11-D05-002	70	242006/SQ210473/01-70	EN 20898-8.8	/	2	2	/		
	8		7	8	HEX NUT M12	05072-200-165-01-11-D05-002	71	242006/SQ210473/01-71	EN 20898-8	/	4	4	/		
	8		8	8	PLAIN WASHER Ø13	05072-200-165-01-11-D05-002	72	242006/SQ210473/01-72	R40	/	4	4	/		
	4		9	4	ELASTIC WASHER A13	05072-200-165-01-11-D05-002	73	242006/SQ210473/01-73	C72	/	2	2	/		
	518		10	518	HEX SCREW M16X50	05072-200-165-01-11-G15-003/D05-002	-	-	EN 20898-8.8	/	51	51	/		
	518		11	518	HEX NUT M16	05072-200-165-01-11-G15-003/D05-002	-	-	EN 20898-8	/	51	51	/		
	518		12	518	PLAIN WASHER Ø17	05072-200-165-01-11-G15-003/D05-002	-	-	R40	/	51	51	/		
	518		13	518	ELASTIC WASHER A17	05072-200-165-01-11-G15-003/D05-002	-	-	R150	/	51	51	/		
	196		14	196	HEX SCREW M12X50	05072-200-165-01-11-D05-002	-	-	EN 20898-8.8	/	18	18	/		
	196		15	196	HEX NUT M12	05072-200-165-01-11-D05-002	-	-	EN 20898-8	/	19	19	/		
	196		16	196	PLAIN WASHER Ø13	05072-200-165-01-11-D05-002	-	-	R40	/	19	19	/		
	196		17	196	ELASTIC WASHER A13	05072-200-165-01-11-D05-002	-	-	C72	/	19	19	/		
	4		18	4	GASKET FOR BLIND FLANGE	05072-200-165-01-11-D05-002	32	242002/SQ210473/01-32	SOFT IRON	/	12	12	/		
	64		19	64	BOLTS BLIND FLANGES	05072-200-165-01-11-D05-002	25,33	242002/SQ210473/01-25-33	SA 193 GR B8M	/	10	10	/		
	128		20	128	NUTS BLIND FLANGES	05072-200-165-01-11-D05-002	26,34	242002/SQ210473/01-26-34	SA 194 GR 8M	/	20	20	/		
			21												

Notes:



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No.				: 5072-200				PURCHASE ORDER No.				: 05072-200-165-01-11			
EQUIPMENT / PACKAGE DESCRIPTION				: Molecular Sieve Dehydration Package				SUPPLIER NAME.				: ISG			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
			No. of Units		1										
					24	Hex Head screw M20x100	/			CARBON STEEL grade 8.8	/	6	6	/	
					48	Nuts M24	/			CARBON STEEL grade 8.8	/	12	12	/	
					48	Washer M24	/			CARBON STEEL grade 8.8	/	12	12	/	
					4										
					5										
					6										
					7										
					8										
					9										
					10										
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					25										
					26										
					27										

SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200										PURCHASE ORDER No. : 003070-0104-01										
EQUIPMENT / PACKAGE DESCRIPTION : Molecular Sieve Dehydration Package										SUPPLIER NAME. : VERGA										
1	Equipment No. or Tag No.	2	Manufacturer's Model	3	Serial No.	4	No. of Units	LINE NUMBER	Total No of Identical Parts Installed	Manufacturer Data					Material Specification					
505-H-001 A	505-H-001 B									Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)		2 Years Spare Parts	Commissioning / Start-Up Spare Parts	Quantity to be Purchased	Unit Price in	Remarks	
21-392	21-393									6	7	8	9	10	11	12	13	14	15	16
22	22							1	44	Bolt M20*60 + 1 nut + 1 plain washer	05072-200-165-01-11-D01-032			A193 B8C + A194 Gr.8C + SS304	/	10	/	/		
8	8							2	16	Bolt M12*30 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-034			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
16	16							3	32	Bolt M12*45 + 2 nuts + 2 plain washers ISO7093	05072-200-165-01-11-D01-034			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
20	20							4	40	Bolt M16*45 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-034			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
88	88							5	176	Bolt M20*45 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-034			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	18	/	/		
480	480							6	960	Bolt M20*50 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-034			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	96	/	/		
8	8							7	16	Bolt M20*60 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-034			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
8	8							8	16	Bolt M20*60 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-034			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
28	28							9	56	Bolt M20*70 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-034			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
44	44							10	88	Bolt M20*55 + 1 nut + 2 tapered washers	05072-200-165-01-11-D01-035			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
18	18							11	36	Bolt M20*60 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-035			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
40	40							12	80	Bolt M20*70 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-035			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
32	32							13	64	Bolt M20*60 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-039			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
6	6							14	12	Bolt M12*40 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-040			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
6	6							15	12	Bolt M12*45 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-040			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
60	60							16	120	Bolt M12*40 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-041			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	12	/	/		
12	12							17	24	Bolt M16*40 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-041			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
4	4							18	8	Bolt M16*45 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-041			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
24	24							19	48	Bolt M16*45 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-041			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
8	8							20	16	Bolt M20*50 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-041			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
12	12							21	24	Bolt M12*35 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-042			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		
16	16							22	32	Bolt M16*40 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-042			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/		

5	12	12						23	24	Bolt M16*45 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-042			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	10	10						24	20	Bolt M16*80 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-042			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	24	24						25	48	Bolt M20*50 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-042			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	82	82						26	164	Bolt M16*40 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-044			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	18	/	/	
	32	32						27	64	Bolt M16*45 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-044			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	44	44						28	88	Bolt M16*45 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-044			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	28	28						29	56	Bolt M20*60 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-044			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	32	32						30	64	Bolt M20*70 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-044			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	82	82						31	164	Bolt M16*40 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-045			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	18	/	/	
	30	30						32	60	Bolt M16*45 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-045			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	64	64						33	128	Bolt M16*45 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-045			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	14	/	/	
	2	2						34	4	Bolt M16*50 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-045			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	58	58						35	116	Bolt M20*45 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-045			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	12	/	/	
	56	56						36	112	Bolt M20*55 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-045			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	12	/	/	
	6	6						37	12	Bolt M20*65 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-045			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	24	24						38	48	Bolt M20*70 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-045			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	126	126						39	252	Bolt M16*40 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-046			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	26	/	/	
	47	47						40	94	Bolt M16*45 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-046			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	202	202						41	404	Bolt M16*45 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-046			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	42	/	/	
	8	8						42	16	Bolt M16*50 + 1 nut + 1 plain and 1 tapered washers	05072-200-165-01-11-D01-046			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	72	72						43	144	Bolt M20*45 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-046			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	16	/	/	
	24	24						44	48	Bolt M20*70 + 1 nut + 2 plain washers	05072-200-165-01-11-D01-046			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	10	10						45	20	Bolt M8*25 + 1 nut + 2 plain washers	05072-200-165-01-11-D99-008			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	24	24						46	48	Bolt M12*40 + 1 nut + 2 plain washers	05072-200-165-01-11-D99-008			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	4	4						47	8	Bolt M16*45 + 1 nut + 2 plain washers	05072-200-165-01-11-D99-008			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	14	14						48	28	Bolt M8*25 + 1 nut + 2 plain washers	05072-200-165-01-11-D99-009			ISO 898 Gr.8.8 + ISO 898 Gr.8 + 200HV	/	10	/	/	
	8	8						49	16	Stud bolt 1" dia x 145mm + 2 nuts	05072-200-165-01-11-D01-001	R/50		A193 Gr.B8 Cl.2 + A194 Gr.8	/	10	/	/	
	2	2						50	4	Gasket 1" x145	05072-200-165-01-11-D01-001	R/60		ASME B16.20	/	4	/	/	
	250	250						51	500	Platform grating clips	-				/	50	/	/	
	3	3						52	6	Burner tips	05072-200-165-01-11-D99-003	D6635			/	4	/	/	
	3	3						53	6	Pilot tip	05072-200-165-01-11-D99-004				/	4	/	/	
	3	3						54	6	Sight glass and gasket	05072-200-165-01-11-D99-003	D0017+D0018+D0019			/	2	/	/	
	3	3						55	6	Ignition/ionization rod	05072-200-165-01-11-D99-004				/	2	/	/	
	1	1						56	2	Mortar for muffle block (set)	05072-200-165-01-11-D99-003	N0004			/	2	/	/	
	0,25	0,25						57	0,5	Castable class Q (ton)	05072-200-165-01-11-D10-002	LINCOFEST LW 202 HT		ASTM C401	/	0,05	/	/	
	1,70	1,70						58	3,4	Castable class O (ton)	05072-200-165-01-11-D10-002	LINCOFEST PC 124 I		ASTM C401	/	0,3	/	/	
	370	370						59	740	Fire bricks MAREF 45 Y (No.)	05072-200-165-01-11-D10-002	MAREF 45 Y			/	80	/	/	
	44	44						60	88	Ceramic fiber blankets (No.) 128 kg/m3 THK 25mm Dim. 7320 x 610 mm.	05072-200-165-01-11-D10-002	LM ECO 1300			/	5	/	/	
	38	38						61	76	Ceramic fiber blankets (No.) 96 kg/m3 THK 25mm Dim. 7320 x 610 mm.	05072-200-165-01-11-D10-002	LM ECO 1200			/	4	/	/	
	6	6						62	12	Ceramic fiber blankets (No.) 128 kg/m3 THK 25mm Dim. 7320 x 610 mm.	05072-200-165-01-11-D10-002	LM ECO 1300			/	1	/	/	
	7	7						63	14	Ceramic fiber blankets (No.) 96 kg/m3 THK 25mm Dim. 7320 x 610 mm.	05072-200-165-01-11-D10-002	LM ECO 1200			/	1	/	/	

2	2						64	4	Ceramic fiber blankets (No.) 96 kg/m ³ THK 13 mm Dim. (14640 x 610)	05072-200-165-01-11-D10-002	LM ECO 1200				/	1	/	/	
209	209						65	418	Ceramic fiber strips (No.) 128 kg/m ³ THK 13mm Dim. 230 x 750 mm.	05072-200-165-01-11-D10-002	STRIP - LM ECO 1200				/	22	/	/	
12	12						66	24	Ceramic fiber rope (m) Dim. 40 mm THK 3mm	05072-200-165-01-11-D10-002	LM ECO ROPE				/	1	/	/	
50	50						67	100	Anchors type "V" - Pos. C1	05072-200-165-01-11-D01-033				/	41	/		2	
150	150						68	300	Anchors type "V" - Pos. C2	05072-200-165-01-11-D01-033				/	82	/		2	
5300	5300						69	10600	Anchors type "V" - Pos. C6	05072-200-165-01-11-D01-033				/	1301	/		2	
16	16						70	32	Anchors type "V" - Pos. C7	05072-200-165-01-11-D01-033				/	21	/		2	
1300	1300						71	2600	Anchors type "J" - Pos. A1	05072-200-165-01-11-D01-033				/	150	/		2	
200	200						72	400	Anchors type "J" - Pos. A2	05072-200-165-01-11-D01-033				/	49	/		2	
24	24						73	48	Anchors type "J" - Pos. A4	05072-200-165-01-11-D01-033				/	33	/		2	
88	88						74	176	Anchors type "V" for corbeling - Pos. B	05072-200-165-01-11-D01-033				/	43	/		2	
							75												

Notes:



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200				PURCHASE ORDER No. : 05072-200-165-01-11			
EQUIPMENT / PACKAGE DESCRIPTION : MOLECULAR SIEVE DEHYDRATION PACKAGE				SUPPLIER NAME: ISG S.p.A / COMBUSTION AND ENERGY			
1	2	3	4	5	6	7	8
No. of Units	Serial No.	Manufacturer's Model	Equipment No. or Tag No.	LINE NUMBER	Total No of Identical Parts Installed	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)
1	220142/01	EIB-D	505-LCP-004A	2	1	SET OF FUSES	05072-200-165-01-11-E17-001/2
1	220142/02	EJB-D	505-LCP-004B	2	1	TWILIGHT SENSOR	05072-200-165-01-11-E17-001/2
3	3			3	6	ELECTRONIC BOARDS FOR LIOL SUPPLY	05072-200-165-01-11-E17-001/2
4				4			
5				5			
6				6			
7				7			
8				8			
9				9			
10				10			
11				11			
12				12			
13				13			
14				14			
15				15			
16				16			
17				17			
18				18			
19				19			
20				20			
21				21			
22				22			
23				23			
24				24			
25				25			
26				26			
27				27			

Notes:



SPARE PARTS INTERCHANGEABILITY LIST (SPIL)

PROJECT No. : 5072-200												PURCHASE ORDER No. : 05072-200-165-01-11				
EQUIPMENT / PACKAGE DESCRIPTION : Molecural Sieve Dehydration Package												SUPPLIER NAME. : ISG S.p.A. / AUTOMATA				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Remarks
No. of Units	Manufacturer's Model	Serial No.	LINE NUMBER	Number of Parts per Unit.	Total No of Identical Parts Installed	Description of Parts	Drawing No. (The Supplier shall attach the Drawing to the SPIL)	Part Identification No.	Sub-Supplier Part No. (If different than the Manufacturer Number)	Material Specification	Commissioning / Start-Up Spare Parts	2 Years Spare Parts	Quantity to be Purchased	Unit Price in Euro		
44	58	58	36	36	1	232	ANALOG INPUT I.S. BARRIER	3070-06AU02.03	D5014S	NA	/	3	/			
5	3	3	2	2	2	15	ANALOG OUTPUT I.S. BARRIER	3070-06AU02.03	D5020S	NA	/	3	/			
35	16	16	0	0	3	67	DIGITAL INPUT I.S. BARRIER	3070-06AU02.03	D5036D	NA	/	2	/			
69	21	21	9	9	4	129	SIL RELAY	3070-06AU02.03	D5090S	NA	/	3	/			
2	2	2	3	3	5	12	SIL 3, 4 A, 24 VDC POWER DISTRIBUTION AND DIAGNOSTIC MODULE	3070-06AU02.03	D5202S	NA	/	2	/			
2	2	2	2	2	6	10	REDUNDANCY MODULE	3070-06AU02.03	QUINT-DIODE/12-24DC/2X20/1X40	NA	/	1	/			
2	2	2	2	2	7	10	230VAC/24VDC POWER SUPPLY	3070-06AU02.03	QUINT-PS/1AC/24DC/40	NA	/	1	/			
2	2	2	2	2	8	10	UNMANAGED SWITCH ETHERNET 8 PORTS 10/100MBPS	3070-06AU02.03	ISW-800T	NA	/	1	/			
9	7	7	4	4	9	31	DIGITAL INPUT SM 326, 24DI-F	3070-06AU02.03	6ES7326-1BK02-0AB0	NA	/	1	/			
13	8	8	4	4	10	37	DIGITAL OUTPUT SM 326, 10DO-F	3070-06AU02.03	6ES7326-2BF10-0AB0	NA	/	1	/			
2	2	2	0	0	11	6	ANALOG OUTPUT SM 332, 8AO	3070-06AU02.03	6ES7332-8TF01-0AB0	NA	/	1	/			
13	17	17	7	7	12	61	ANALOG INPUT SM 336, 6AI-F	3070-06AU02.03	6ES7336-4GE00-0AB0	NA	/	1	/			
12	8	8	0	0	13	28	DIGITAL INPUT I.S. BARRIER	3070-06AU02.03	D5030D	NA	/	1	/			
0	0	0	3	3	14	6	ANALOG INPUT I.S. BARRIER	3070-06AU02.06	D5014D	NA	/	1	/			
0	0	0	3	3	15	6	VIBRATION TRANSDUCER INTERFACE	3070-06AU02.06	D5062S	NA	/	1	/			
88	77	77	34	34	16	310	12MM DIN RAIL CONNECTOR	3070-06AU02.03	JDFT049	NA	/	10	/			
2	2	2	2	2	17	10	22MM DIN RAIL CONNECTOR	3070-06AU02.03	JDFT050	NA	/	1	/			
					19											
					20											
					21											
					22											
					23											
					24											
					25											
					26											

Notes:

LIST OF BOLTS

PROJECT DATA	
PROJECT:	ITEM 505-H-001 A/B NOTE: THE LIST IS VALID FOR ONLY ONE ITEM.

ENPPI DOC No.	DRAWING	BOLT SIZE	BOLT Q.TY	SCREW STANDARD	SCREW MATERIAL	NUTS PER BOLT	NUTS STANDARD	NUTS MATERIAL	WASHERS PER BOLT	PLAIN WASHERS EN-ISO-7089	PLAIN WASHERS EN-ISO-7093	TAPERED WASHERS UNI5716	WASHERS MATERIAL	FINISH	SPARE Q.TY	TOTAL SUPPLIED Q.TY
05072-200-165-01-11-D01-032	965-A1-MK-0200	M20*60	22	EN-15048-4017	ASTM A193 B8C	1	EN-ISO-4032	ASTM A194 Gr.8C	1	1			SS 304	PLAIN	5	27
05072-200-165-01-11-D01-034	965-A1-MK-0400	M12*30	8	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	13
05072-200-165-01-11-D01-034	965-A1-MK-0400	M12*45	16	EN-15048-4017	ISO 898 Gr. 8.8	2	EN-ISO-4032	ISO 898 Gr. 8	2		2		200 HV	HDG	5	21
05072-200-165-01-11-D01-034	965-A1-MK-0400	M16*45	20	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	1		1	200 HV	HDG	5	25
05072-200-165-01-11-D01-034	965-A1-MK-0400	M20*45	88	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	9	97
05072-200-165-01-11-D01-034	965-A1-MK-0400	M20*50	480	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	48	528
05072-200-165-01-11-D01-034	965-A1-MK-0400	M20*60	8	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	1		1	200 HV	HDG	5	13
05072-200-165-01-11-D01-034	965-A1-MK-0400	M20*60	8	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	13
05072-200-165-01-11-D01-034	965-A1-MK-0400	M20*70	28	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	33
05072-200-165-01-11-D01-035	965-A1-MK-0410	M20*55	44	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2		2		200 HV	HDG	5	49
05072-200-165-01-11-D01-035	965-A1-MK-0410	M20*60	18	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	1		1	200 HV	HDG	5	23
05072-200-165-01-11-D01-035	965-A1-MK-0410	M20*70	40	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	45
05072-200-165-01-11-D01-039	965-A1-MK-0430	M20*60	32	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	37
05072-200-165-01-11-D01-040	965-A1-MK-0431	M12*40	6	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	11
05072-200-165-01-11-D01-040	965-A1-MK-0431	M12*45	6	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	1		1	200 HV	HDG	5	11
05072-200-165-01-11-D01-041	965-A1-MK-0440	M12*40	60	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	6	66
05072-200-165-01-11-D01-041	965-A1-MK-0440	M16*40	14	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	19
05072-200-165-01-11-D01-041	965-A1-MK-0440	M16*45	4	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	1		1	200 HV	HDG	5	9
05072-200-165-01-11-D01-041	965-A1-MK-0440	M16*45	24	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	29
05072-200-165-01-11-D01-041	965-A1-MK-0440	M20*50	8	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	13
05072-200-165-01-11-D01-042	965-A1-MK-0442	M12*35	12	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	17
05072-200-165-01-11-D01-042	965-A1-MK-0442	M16*40	16	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	21
05072-200-165-01-11-D01-042	965-A1-MK-0442	M16*45	12	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	17
05072-200-165-01-11-D01-042	965-A1-MK-0442	M16*80	10	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	15
05072-200-165-01-11-D01-042	965-A1-MK-0442	M20*50	24	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	29
05072-200-165-01-11-D01-044	965-A1-MK-0444	M16*40	82	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	9	91
05072-200-165-01-11-D01-044	965-A1-MK-0444	M16*45	32	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	1		1	200 HV	HDG	5	37
05072-200-165-01-11-D01-044	965-A1-MK-0444	M16*45	44	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	49
05072-200-165-01-11-D01-044	965-A1-MK-0444	M20*60	28	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	33
05072-200-165-01-11-D01-044	965-A1-MK-0444	M20*70	32	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	1		1	200 HV	HDG	5	37
05072-200-165-01-11-D01-045	965-A1-MK-0445	M16*40	84	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	9	93
05072-200-165-01-11-D01-045	965-A1-MK-0445	M16*45	30	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	1		1	200 HV	HDG	5	35
05072-200-165-01-11-D01-045	965-A1-MK-0445	M16*45	64	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	7	71
05072-200-165-01-11-D01-045	965-A1-MK-0445	M16*50	2	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	5	7
05072-200-165-01-11-D01-045	965-A1-MK-0445	M20*45	58	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	6	64
05072-200-165-01-11-D01-045	965-A1-MK-0445	M20*55	56	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	2			200 HV	HDG	6	62
05072-200-165-01-11-D01-045	965-A1-MK-0445	M20*65	6	EN-15048-4017	ISO 898 Gr. 8.8	1	EN-ISO-4032	ISO 898 Gr. 8	2	1		1	200 HV	HDG	5	11
05072-200-165-01-11-D01-045	965-A1-MK-0445	M20*70	24	EN-15048-4017	ISO 8											