

<b>Filter Data Sheet</b>								SHEET: <b>1 of 3</b>	
<b>FAUDI</b> <small>we keep work flowing</small>			ELETRONIC FILE®  4008688-DS.PDF				TECHNICAL RESPONS.		
							REG. N°:		SIGNATURE
	REV. 0	REV. 1	REV. 2	REV. 3	REV. 4	REV. 5	REV. 6	REV. 7	REV. 8
DATE	20.05.2010	31.05.2010	28.07.2010						
DESIGN	HOJCZYK	HOJCZYK	HOJCZYK						
EXECUTION	BARTH	BARTH	BARTH						
CHECK	GERLACH	GERLACH	GERLACH						
APPROVAL	GERLACH	GERLACH	GERLACH						
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<b>FAUDI</b>				<b>FILTER DATA SHEET</b>				<b>DOCUMENT NO.: 4008688-DS</b>			
FAUDI GmbH 35260 Stadtallendorf - Germany				DHT Feed Filter				PROJECT Pancevo Oil Refinery Modernization			
				ITEM NO.: FD-4302 A/B							
1	Total No.	Working	Standby	CLIENT NIS Petroleum Industry of Serbia				SHEET NO.: 2 OF 3		Rev. 2	
2	2	1	NA								
3	FAUDI Filter Type No.: 37.1201.03.2016				FAUDI Order No.: A00514-10						
4	<b>PROCESS DESIGN &amp; OPERATING DATA</b>							<b>ARRANGEMENT</b>			
5	Operation:			<input type="checkbox"/> Continuous		<input checked="" type="checkbox"/> Intermittent		<input checked="" type="checkbox"/> Vertical			
6	Location:			<input type="checkbox"/> Indoor		<input checked="" type="checkbox"/> Outdoor		<input type="checkbox"/> Horizontal			
7	Name of Fluid:			Mixture of Kerosene, LGO, HGO, LCO				<input type="checkbox"/>			
8	Phase:			<input checked="" type="checkbox"/> Liquid		<input type="checkbox"/> Vapour					
9								<b>FILTER TYPE</b>			
10	Other Fluid Data			Units	Normal	Design	<input checked="" type="checkbox"/> Simplex				
11	Flow Rate:			kg/h	189416	208358	<input type="checkbox"/> Duplex				2
12	Density: (@ OT)			kg/m³	691,3	691,3	<input type="checkbox"/> Self Cleaning				
13	Specific Gravity: (@ OT)						<input type="checkbox"/> Strainer				
14	Molecular Weight:						<input type="checkbox"/> Basket				
15	Viscosity: (@ OT)			cP	0,3	0,3	<input type="checkbox"/> Multi-Basket				
16	Inlet Pressure:			bar g	5,6	5,6	<input checked="" type="checkbox"/> Cartridge				
17	Inlet Temperature:			°C	227	227	<input type="checkbox"/> Activated Carbon				
18	Pressure Drop (clean):			bar	0,4		<input type="checkbox"/> Wedge Wire				
19	Max. Allowable Pressure Drop (dirty):			bar	1,4		<input type="checkbox"/>				
20											
21	Suspended Solids:				-		<b>CLEANING METHOD</b>				
22	Characteristics of Solids:						<input checked="" type="checkbox"/> Manual				
23	Solid content:			ppmw	20-40	200	<input type="checkbox"/> Disposable Cartridge				
24	Particle Size Retention (nominal):			µm	25		<input type="checkbox"/> Mechanical				
25	Filter Area:			m²	35		<input type="checkbox"/> Backflush				
26							<input type="checkbox"/> Automatic				
27	<b>FILTER / VESSEL DESIGN DATA</b>							<input type="checkbox"/> Internal Flushing			
28	Internal Design Pressure:			bar g	19,5		<input type="checkbox"/> External Flushing				1
29	External Design Pressure:			bar g	-1		<input type="checkbox"/>				
30	Design Temperature:			°C	260						
31	Steam-out Conditions:				-0,5 barg @ 150 °C		<b>ACCESSORIES</b>				
32	Hydrostatic Test Pressure:			bar g	27,9		<input checked="" type="checkbox"/> Support Legs				1
33	Corrosion Allowance:			mm	3		<input checked="" type="checkbox"/> Brackets for Ladder				1
34	Joint Efficiency:				0,85		<input type="checkbox"/> Skirt				2
35							<input type="checkbox"/> Template				
36	Design Code:			ASME Sec.VIII Div.1 & PED 97/23/EC				<input type="checkbox"/> Skid <input type="checkbox"/>			
37	Radiography:			Spot				<input type="checkbox"/> Maintenance Platform			
38	Post Weld Heat Treatment:			No				<input checked="" type="checkbox"/> Davit			
39								<input type="checkbox"/> Manway			
40	<b>Materials</b>							<input checked="" type="checkbox"/> Earthing Connection			
41	Vessel Shell / Heads:			SA516 Gr.60				<input checked="" type="checkbox"/> Insulation Supports			
42	Gird Flanges:			SA105				<input type="checkbox"/> Diff. Press. Gauge			
43	Nozzles:			SA106 Gr.B				<input type="checkbox"/> Diff. Press. Transmitter			
44	Nozzle Flanges:			SA105				<input type="checkbox"/> Quick Opening Cover			
45	Internals:			SS316/SS316L				<input type="checkbox"/> Isolation Valves			
46	Bolts & Nuts:			SA193 Gr.B7/SA194 Gr.2H				<input type="checkbox"/> Vent Valve			
47	Gaskets:			Spiral Wound SS/Grafit				<input type="checkbox"/> Drain Valve			
48								<input type="checkbox"/> Auto Air Eliminator			
49	<b>Additional Data</b>							<input type="checkbox"/> Pressure Relief Valve			
50	Surface Preparation:			SA 2 1/2				<input type="checkbox"/> Cathodic Protection			
51	Painting:			acc. paint spec. No. O-611 Rev.2				<input checked="" type="checkbox"/> Name Plate & Bracket			
52	Insulation:			70mm (by others)				<input type="checkbox"/>			
53								<input type="checkbox"/>			
54											
55	3										
56	2	SECOND REVISION		28.07.2010	PH		WS		HB		
57	1	FIRST REVISION		31.05.2010	PH		WS		PG		
58	0	FOR ORDER		20.05.2010	PH		WS		PG		
59	Rev.	Revision Description		Date	Initials	Sign	Initials	Sign	Initials	Sign	
60					Prepared		Checked		Approved		

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**FAUDI**FAUDI GmbH  
35260 Stadtlendorf - Germany**FILTER DATA SHEET**

DHT Feed Filter

DOCUMENT NO.:

4008688-DS

PROJECT Pancevo Oil Refinery Modernization  
0

ITEM NO.:

FD-4302 A/B

CLIENT  
NIS Petroleum Industry of Serbia

SHEET NO.:

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Rev.

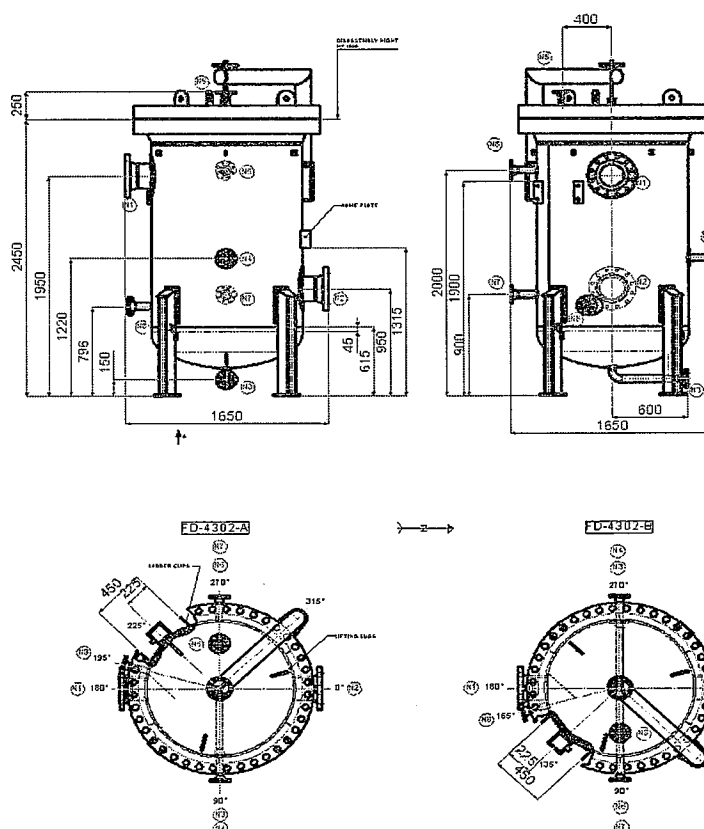
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**1 FILTER / VESSEL NOZZLE CONNECTIONS**

No.	Description	Size	Rating	Facing	Standard	Remarks
N1	Inlet	8"	300 lbs	RF	B 16.5	
N2	Outlet	8"	300 lbs	RF	B 16.5	
N3	Drain (Bottom)	2"	300 lbs	RF	B 16.5	
N4	Drain (Shell)	2"	300 lbs	RF	B 16.5	
N5	Vent	2"	300 lbs	RF	B 16.5	
N6	PDT+	2"	300 lbs	RF	B 16.5	
N7	PDT-	2"	300 lbs	RF	B 16.5	
N8	Steam Out / UC	2"	300 lbs	RF	B 16.5	

**17 DIMENSIONS & SHIPPING DATA**

Volume:	2000 l	Dimensions (LxHxW):	1650x1420x2950 mm
Empty Weight:	3400 kg	Operation Weight:	5400 kg
		Shipping Weight:	3600 kg

**21 NOTES****30 EQUIPMENT SKETCH**

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Part List for Assembly/Detail drawing								SHEET: 1 of 9	
<b>FAUDI</b> we keep work flowing		ELETRONIC FILE®  4008688-PL.PDF				TECHNICAL RESPONS.			
						REG. N°:		SIGNATURE	
	REV. 0	REV. 1	REV. 2	REV. 3	REV. 4	REV. 5	REV. 6	REV. 7	REV. 8
DATE	28.06.2010	05.08.2010	01.09.2010	23.09.2010					
DESIGN	HOJCZYK	HOJCZYK	HOJCZYK	HOJCZYK					
EXECUTION	W.SCHÄFER	W.SCHÄFER	W.SCHÄFER	W.SCHÄFER					
CHECK	GERLACH	GERLACH	GERLACH	GERLACH					
APPROVAL	GERLACH	GERLACH	GERLACH	GERLACH					
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Article 4008688 / DHT FEED FILTER FD-4302 A / B

Rev. 01

Job-No.

Pos.	Qty	Unit	Resource	Description Dimensions	Material Standard	Certif.	U.-Art	U.-No.	Rev.
	0,00		AP1-0004	Montage					
	0,00		AP1-0007	LAGER					
	0,00			-----					
	0,00			Werknummer A00514-10/1 - 2					
	0,00			-----					
	0,00			-----FILTER HOUSING-----					
1	1,00	pc	4009039	FILTER HOUSING - 37.1201.03.2016 - FD-430	C-STEEL			4008688	00
	0,00			-----Innenteile/INNER PARTS-----					
2	12,00	pc	4007431	SPINDLE 12/1140 58/20 1.4404/SS316L	1.4404/SS316L			4006684	
3	1,00	pc	4009109	COVER PLATE DHT FEED FILTER FD-4302 A/B	1.4404/SS316L	2.2		4008688 -Pos. 3	
4	175,00	pc	4009932	FILTER ELEMENT 25MY 65/27x1000	1.4404/SS316L	2.2			
4.1	175,00	pc	4009933	SEALING CAP TOP WITH SPRING	1.4404/SS316L	2.2			
4.2	175,00	pc	4009934	SEALING CAP BOTTOM	1.4404/SS316L	2.2			
4.3	175,00	pc	4009935	GUIDE POLE 40"	1.4404/SS316L	2.2			
5	12,00	pc	2005340	HEX NUT M10-24035 A2-50	A2-50	STEMP ZSB		24035	00
6	12,00	pc	7771744	LOCK WASHER A 10 DIN 127-1.4310					

# Resource-List

Article 4008688 / DHT FEED FILTER FD-4302 A / B

Job-No.

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Rev. 01

Pos.	Qty	Unit	Resource	Description Dimensions	Material Standard	Certif.	U.-Art	U.-No.	Rev.
	0,00			-----Deckeldichtung/COVER GASKET-----					
7	1,00	pc	4009293	GASKET SPV2J 48" 300LBS 316L/GRAPHIT	SS/GRAPHIT		ASME		
	0,00			-----Deckelbolzen/BOLTS-NUTS-COVER-----					
8	40,00	pc	4009296	STUD BOLT 1 7/8- 8UN 2AX400 A193-B7 GZN	SA-193 B7/GZN	3.1			
9	80,00	pc	4009297	HEX NUT 1 7/8"-8UN-2B A194GR 2H #	ASME SEC.II SA-194 GR2H/GZN	3.1	ANS		
10	80,00	pc	4009298	WASHER A50 - 125-ST/GZN	ST/GZN		TÜV		
	0,00			-----Schwenkarmteile/PARTS FOR DAVIT-----					
11	1,00	pc	9226614	CLEVIS PIN B22H11*60*52	9SMNPB28K		DIN	0001444	0
12	1,00	pc	9227026	SPLINT 4 X 40 ST-A2J	ST-A2J		DIN	94	00
13	1,00	pc	2007501	WASHER A23 -125-CS ZINC COATED	ST/GZN	0	DIN	0000125	0
14	1,00	pc	9165085	WASHER A25 - 125-CS GALVANIZED	ST/GZN		DIN	125	00
15	1,00	pc	9549692	EYEBOLT LBM24X360- 444 5.6 GZN	125 5.6/GZN				
16	1,00	pc	9229238	HAND WHEEL DIN 950-GG-200-B18-A(M24)	EN20898-1 GG	STEMP	DIN	0000444	DIN 00
17	1,00	pc	4005419	GLEITRING 159/135X 5 MS/RG	MS/RG	2.2		0	01
	0,00			-----NAMEPLATE-----					
18	1,00	pc	4009861	NAMEPLATE FOR FD-4302 A/B	SS304		SW	4008688-NP	01

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Article 4008688 / DHT FEED FILTER FD-4302 A / B

Rev. 01

Job-No.

Pos.	Qty Unit	Resource	Description Dimensions	Material Standard	Certif.	U.-Art	U.-No.	Rev.
19	1,00 pc	4009863	RIVET 5 X12 MM COPPER	KUPFER DIN 7338		DIN	DIN7338	
20	3,00 pc	4009864	RIVET 3X10 - 1.4571					

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Article Job-No. K4009039 / SG-GEHÄUSE - 37.1201.03.2016 - FD-4302A/B

Rev. 01

Pos.	Qty	Unit	Resource	Description Dimensions	Material Standard	Certif.	U.-Art	U.-No.	Rev.
	0,00			-----					
	0,00			SG-GEHÄUSE - 37.1201.03.2016 - FD-4302A/B					
	0,00			Werknummer A00514-10/1 - 2					
	0,00			-----					
1.01	6,17	qm	4009053	BLECH 18 A516GR60 N # 1,00 Stk. 3.832,00 mm x 1.611,00 mm PLATE	SA-516 GR60 N ASME SEC.II	3.1	ANS		
1.02	1,00	pc	4009055	BODEN ELLIP 2:1-1220X16 VA A516GR60 N # BOTTOM	SA-516 GR60 N ASME SEC.II	3.1	ANS		
1.03	1,00	pc	4009063	FLANSCH WN48 300lbs RF A105N J=1184# FLANGE	SA-105 ASME SEC.II	3.1	ASME		
	0,00			-----Deckel/COVER-----					
1.04	2,28	qm	4009065	BLECH 120 A516GR60 N # 1,00 Stk. 1.510,00 mm x 1.510,00 mm PLATE	SA-516 GR60 N ASME SEC.II	3.1	ANS		
	0,00			-----Platte/PLATE-----					
1.05	1,39	qm	4009107	BLECH 32 A516GR60 N 1,00 Stk. 1.180,00 mm x 1.180,00 mm PLATE	SA-516 GR60 N ASME SEC.II	3.1	ANS		
1.06	2,00	pc	4009067	FLANSCH WN 8 300#RF A105N J=193,7 #	SA-105 N ASME SEC.II	3.1	ANS		



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Article K4009039 / SG-GEHÄUSE - 37.1201.03.2016 - FD-4302A/B

Rev. 01

Job-No.

Pos.	Qty	Unit	Resource	Description Dimensions	Material Standard	Certif.	U.-Art	U.-No.	Rev.
1.07	0,24	m	4009068	FLANGE ROHR 219,1 X12,7 -B36.10-A106GR.B N # 2,00 Stk. 122,00 mm TUBE	SA-106 GR.B N ASME SEC.II	3.1	ASME		
1.08	6,00	pc	4009069	TUBE FLANSCH WN 2 300#RF A105N J=42,9 #	SA-105 N ASME SEC.II	3.1	ANS		
1.09	0,65	m	4009072	FLANGE ROHR 60,3 X8,7 -B36.10-A106GR.B N # 4,00 Stk. 163,00 mm TUBE	SA-106 GR.B N ASME SEC.II	3.1	ASME		
1.10	0,06	m	4009072	TUBE ROHR 60,3 X8,7 -B36.10-A106GR.B N # 1,00 Stk. 56,00 mm TUBE	SA-106 GR.B N ASME SEC.II	3.1	ASME		
1.11	0,06	m	4009072	TUBE ROHR 60,3 X8,7 -B36.10-A106GR.B N # 1,00 Stk. 60,00 mm TUBE	SA-106 GR.B N ASME SEC.II	3.1	ASME		
1.12	0,58	m	4009072	TUBE ROHR 60,3 X8,7 -B36.10-A106GR.B N # 1,00 Stk. 580,00 mm TUBE	SA-106 GR.B N ASME SEC.II	3.1	ASME		
1.13	1,00	pc	4009866	BOGEN 90-2- 60,3 X 8,7 -B16.9 A234WPB N #	SA-234 WPB N ASME SEC.II	3.1	ANS		
1.14	0,13	qm	4009081	ELBOW BLECH 8 A516GR60 N # 5,00 Stk. 160,00 mm x 160,00 mm PLATE	SA-516 GR60 N ASME SEC.II	3.1	ANS		

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Article K4009039 / SG-GEHÄUSE - 37.1201.03.2016 - FD-4302A/B

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Job-No.

Pos.	Qty	Unit	Resource	Description Dimensions	Material Standard	Certif.	U.-Art	U.-No.	Rev.
1.15	0,32	qm	4009081	BLECH 8 A516GR60 N # 2,00 Stk. 400,00 mm x 400,00 mm PLATE	SA-516 GR60 N ASME SEC.II	3.1	ANS		
1.16	0,06	qm	4009090	BLECH 3 A516GR60 N 1,00 Stk. 377,00 mm x 150,00 mm PLATE	SA-516 GR60 N ASME SEC.II	2.2	ANS		
1.17	0,06	qm	4009092	BLECH 8 A516GR60 N 1,00 Stk. 300,00 mm x 200,00 mm PLATE	SA-516 GR60 N ASME SEC.II	2.2	ANS		
1.18	0,06	qm	4009292	BLECH 15 A516GR60 N 3,00 Stk. 131,00 mm x 142,00 mm PLATE	SA-516 GR60 N ASME SEC.II	2.2	ANS		
1.19	0,05	qm	4009093	BLECH 12 A516GR60 N 2,00 Stk. 333,00 mm x 80,00 mm	SA-516 GR60 N ASME SEC.II	2.2	ANS		
1.20	0,01	qm	4009092	BLECH 8 A516GR60 N 1,00 Stk. 135,00 mm x 60,00 mm PLATE	SA-516 GR60 N ASME SEC.II	2.2	ANS		
1.21	0,01	qm	4009095	BLECH 10 A516GR60 N 1,00 Stk. 198,00 mm x 30,00 mm PLATE	SA-516 GR60 N ASME SEC.II	2.2	ANS		
1.22	0,01	qm	9104472	BLECH 4 1.4301 2,00 Stk. 165,00 mm x 30,00 mm PLATE	1.4301 EN10088-2	2.2	EN	0010029	EN 00
1.23	0,01	qm	4009096	BLECH 5 A516GR60 N 6,00 Stk. 40,00 mm x 40,00 mm PLATE	SA-516 GR60 N ASME SEC.II	2.2	ANS		

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Article K4009039 / SG-GEHÄUSE - 37.1201.03.2016 - FD-4302A/B

Rev. 01

Job-No.

Pos.	Qty	Unit	Resource	Description Dimensions	Material Standard	Certif.	U.-Art	U.-No.	Rev.
1.24	0,08	qm	4009100	BLECH 20 A516GR60 N 4,00 Stk. 160,00 mm x 120,00 mm PLATE	SA-516 GR60 N ASME SEC.II	3.1	ANS		
1.25	3,70	m	2008575	IPB BAR 100 4,00 Stk. 925,00 mm	S235JR EN10025	2.2	DIN	01025-2	0
1.26	0,20	qm	4009053	BLECH 18 A516GR60 N # 4,00 Stk. 150,00 mm x 330,00 mm PLATE	SA-516 GR60 N ASME SEC.II	3.1	ANS		
1.27	0,10	qm	6012041	BLECH 6 A516GR60 4,00 Stk. 160,00 mm x 150,00 mm PLATE	SA-516 GR60 ASME SEC.II	3.1	ASME	SA-20	00
1.28	2,16	m	9115064	TUBE 133 X12,5 -2448 -1.0305 1,00 Stk. 2.163,00 mm TUBE TUBE	ST 35.8 DIN17175	3.1	DIN	0002448	DIN 00
1.29	0,30	m	6021638	TUBE 159 X12,5 -2448 -1.0421 1,00 Stk. 300,00 mm TUBE TUBE	ST 52.0 DIN1629	2.2	DIN	0002448	DIN 00
1.30	0,03	m	6021638	TUBE 159 X12,5 -2448 -1.0421 1,00 Stk. 25,00 mm TUBE TUBE	ST 52.0 DIN1629	2.2	DIN	0002448	DIN 00
1.31	0,16	qm	4009093	BLECH 12 A516GR60 N 2,00 Stk. 280,00 mm x 285,00 mm PLATE	SA-516 GR60 N ASME SEC.II	2.2	ANS		
1.32	0,02	qm	9106287	PLATE 10 1,00 Stk. 133,00 mm x 133,00 mm	SA-516 GR60 ASME SEC.II	3.1	ANS	00SA-20	0

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Article 4008696 / SPARE PARTS FOR FD-4302 A / B

Rev. 0

Job-No.

Pos.	Qty	Unit	Resource	Description Dimensions	Material Standard	Certif.	U.-Art	U.-No.	Rev.
	0,00		AP1-0007	LAGER					
	0,00			-----					
	0,00			SPARE PARTS FOR FD-4302 A/B					
	0,00			-----					
4	36,00	pc	4009932	FILTER ELEMENT 25MY 65/27x1000	1.4404/SS316L	2.2			
4.1	36,00	pc	4009933	SEALING CAP TOP WITH SPRING	1.4404/SS316L	2.2			
4.2	36,00	pc	4009934	SEALING CAP BOTTOM	1.4404/SS316L	2.2			
4.3	36,00	pc	4009935	GUIDE POLE 40"	1.4404/SS316L	2.2			
7	8,00	pc	4009293	GASKET SPV2J 48" 300LBS 316L/GRAPHIT	SS/GRAPHIT		ASME		
8	4,00	pc	4009296	STUD BOLT 1 7/8- 8UN 2AX400 A193-B7 GZN	SA-193 B7/GZN	3.1			
9	8,00	pc	4009297	HEX NUT 1 7/8"-8UN-2B A194GR 2H #	ASME SEC.II SA-194 GR2H/GZN	3.1	ANS		
10	8,00	pc	4009298	WASHER A50 - 125-ST/GZN	ST/GZN		TÜV		

