Auftrag 9050300 Datum 01.06.05 08:49:57
ASU Kosice N0. 9
System: KO 05

CCC ********** CCC
CCC Spannungsanalyse CCC
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Spannungsnachweise nach PRESSURE PIPING ASME B31.3 Stand 2002

Automatische Ermittlung der zul. Spannung nach folgenden Regeln:

Die zulaessigen Spannungen Sh und Sa werden entweder vom Programm in Anlehnung an ASME B31.3 Art. 302.3
mit den Festigkeitswerten der Werkstoffdatei ermittelt oder direkt der Werkstoffdatei entnommen, falls ein ASME/ASTM-Werkstoff vorliegt. Die im ET-Satz (RR-Aufgabe) vorgegebenen zulaessigen Spannungen haben jedoch Vorrang.

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Sc = min (Rm\RT\min/3.0 , Rp0.2\RT\min/1.5)
Fuer ferritische Werkstoffe:
Sh = min (Sc , Rm\T\min/3.0 , Rp0.2\T\min/1.5 ,
          Rm\100000\mitt/1.5 , 0.8*Rm\100000\min)
Fuer austenitische Werkstoffe:
Sh = min (Sc , Rp1.0\T\min/1.5 ,
          Rm\100000\mitt/1.5 , 0.8*Rm\100000\min)
Sa = f * (1.25*Sc + 0.25*Sh)
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Rm\RT\min	=Zugfestigkeit 20 Grad C Mindestw.	in N/mm^2
Rm\T\min	=Zugfestigkeit Berechn.-T. Mindestwert	in N/mm^2
Rp02\RT\min	=0.2% Streckgrenze 20 Grad C Mindestw.	in N/mm^2
Rp02\T\min	=0.2% Streckgrenze Berechn.-T. Mindestw.	in N/mm^2
Rp1.0\T\min	=1.0% Streckgrenze Berechn.-T. Mindestw.	in N/mm^2
Rm\100000\mitt	=Zeitstandsfestw. 100000h Mittelwert	in N/mm^2
Rm\100000\min	=Zeitstandsfestw. 100000h Mindestwert	in N/mm^2

Erlaeuterungen:

Bei austenit. Staehlen mit einem Verhaeltnis von Streckgrenze/Zugfestigkeit bei 20 Grad C <= 0.5 wird mit Werten der 1% Streckgrenze gerechnet. Dieser, in deutschen Regelwerken ueblicherweise verwendete Wert zur Ermittlung der zul.Spannung fuer Austenite (/1.5), ersetzt den Wert "90% der Steckgrenze bei Temperatur" aus ASME B31.3 (303.3.2 d(3))

Falls Rm\T\min nicht vorliegt, werden Naeherungsformeln eingesetzt.
Fuer ferritische Werkstoffe:
Rm\T\min = Rm\RT\min * (Rp02\RT\min + Rp02\T\min) / (2 * Rp02\RT\min) .

Der Faktor f (von Lastwechselzahl abhaengiger Spannungs-Reduktionsfaktor) kann ueber den SPI-Datenatz eingegeben werden. (SPI .... F=f)

ANSI B31.3		Werkstoff: ST37.0				
Materialkennwert	ZUGF RP1P	RP02 RM2H	RM1H EMOD	AFAT		
Quelle	DIN1629	DIN1629	---	SEW 310		
Ausgabe	10/1984	10/1984	---	08/1997		
Rp02-Werte fuer Temperatur sind nicht nachgewiesen; Beruecksichtigung des um 20% hoeheren Sicherheitsbeiwertes durch um den Faktor 1/1.2 reduzierte Rp02-Werte;						
AuslegungstempGR C	50.00	50.00				
Betriebstemp. GR C	50.00	50.00				
E-Mod kalt kN/mm^2	212.50	212.50				
E-Mod warm kN/mm^2	210.12	210.12				
Wanddicken mm	0- 16	16- 40				
in N/mm^2						
Rm\RT\min	350.00	350.00				
(Rm\T\min)	339.95	339.76				
Rp0.2\RT\min	235.00	225.00				
Rp0.2\T\min	221.50	211.83				
Rm\100000\mitt	-.-	-.-				
Rm\100000\min	-.-	-.-				
Rm\RT\min/3.0	116.67	116.67				
Rp0.2\RT\min/1.5	156.67	150.00				
Sc	116.67	116.67				
Rm\T\min/3.0	113.32	113.25				
Rp0.2\T\min /1.5	147.67	141.22				
Rm\100000\mitt/1.5	-.-	-.-				
0.8*Rm\100000\min	-.-	-.-				
Sh	113.32	113.25				
Sa	174.16	174.15				

ANSI B31.3		Werkstoff: RST37-2				
Materialkennwert	ZUGF	RP02 RP1P	RM1H RM2H	EMOD AFAT		
Quelle	DIN17100	AD-MB-W1	---	SEW 310		
Ausgabe	01/1980	11/1987		08/1997		
Die Werte fuer Raumtemperatur sind aus DIN17100, die Werte ab 50 GRD C aus dem AD-Merkblatt W1 entnommen. Die Kennwerte fuer 20 GRD C gelten bis 50 GRD C, die Werte fuer 100 bis 120 GRD. Daher ist in diesen 2 Temp-Bereichen keine korrekte Ermittlung der zul. Spannung moeglich, da z.B fuer T=80 GRD C zwischen 20 und 100 GRD interpoliert wird.						
AuslegungstempGR C	50.00					
Betriebstemp. GR C	50.00					
E-Mod kalt kN/mm^2	212.50					
E-Mod warm kN/mm^2	210.12					
Wanddicken mm	3- 16					
in N/mm^2						
Rm\RT\min	340.00					
(Rm\T\min)	326.98					
Rp0.2\RT\min	235.00					
Rp0.2\T\min	217.00					
Rm\100000\mitt	-.-					
Rm\100000\min	-.-					
Rm\RT\min/3.0	113.33					
Rp0.2\RT\min/1.5	156.67					
Sc	113.33					
Rm\T\min/3.0	108.99					
Rp0.2\T\min /1.5	144.67					
Rm\100000\mitt/1.5	-.-					
0.8*Rm\100000\min	-.-					
Sh	108.99					
Sa	168.91					

ANSI B31.3 Werkstoff: ALMG45MN

Materialkennwert	ZUGF	RP02 RP1P	RM1H RM2H	EMOD AFAT	
Quelle	MMW 400R	DIN17175	DIN17175	SEW 310	
Ausgabe	08/1995	05/1979	05/1979	08/1997	
AuslegungstempGR C	50.00				
Betriebstemp. GR C	50.00				
E-Mod kalt kN/mm^2	69.00				
E-Mod warm kN/mm^2	68.62				
Wanddicken mm	0- 16				
in N/mm^2					
Rm\RT\min	350.00				
Rm\T\min	321.88				
Rp0.2\RT\min	125.00				
Rp0.2\T\min	123.12				
Rm\100000\mitt	-.-				
Rm\100000\min	-.-				
Rm\RT\min/3.0	116.67				
Rp0.2\RT\min/1.5	83.33				
Sc	83.33				
Rm\T\min/3.0	107.29				
Rp0.2\T\min /1.5	82.08				
Rm\100000\mitt/1.5	-.-				
0.8*Rm\100000\min	-.-				
Sh	82.08				
Sa	124.69				

Den Spannungsnachweisen liegen folgende Lastfaelle zugrunde :

Lf-Datei	Lf-Feld	Lf-Bezeichnung	erstellt am:
Gew1.erg	G1	Gewicht	01.06.05 08:49:40
Temp1.erg	T1	Betrieb1	01.06.05 08:49:43
Temp2.erg	T2	Betrieb2	01.06.05 08:49:45
Temp3.erg	T3	Betrieb3	01.06.05 08:49:49
Wind1.erg	W1	Wind1-X	01.06.05 08:49:51
Wind1.erg	W2	Wind1-Y	01.06.05 08:49:51

Gedruckte Querschnittsdaten sind Nettowerte.

Es werden Toleranzeingaben beruecksichtigt fuer :
Druck-Spannungsanteile S(P)
Momenten-Spannungsanteile in SL, SOL

U E B E R L A G E R U N G S V O R S C H R I F T

Lf-Feld TMP1	Lastf. Betrie.-Gewich.1 = ARITHMET aus:			
	Lf-Feld T1	Lastf. Betrieb1	*	1.00
	+ Lf-Feld G1	Lastf. Gewicht	*	-1.00
Lf-Feld TMP2	Lastf. Betrie.-Gewich.2 = ARITHMET aus:			
	Lf-Feld T2	Lastf. Betrieb2	*	1.00
	+ Lf-Feld G1	Lastf. Gewicht	*	-1.00
Lf-Feld TMP3	Lastf. Betrie.-Gewich.3 = ARITHMET aus:			
	Lf-Feld T3	Lastf. Betrieb3	*	1.00
	+ Lf-Feld G1	Lastf. Gewicht	*	-1.00
Lf-Feld TRANGE	Lastf. Range	= RANGE aus:		
	Lf-Feld TMP1	Lastf. Betrie.-Gewich.1	*	1.00
	+ Lf-Feld TMP2	Lastf. Betrie.-Gewich.2	*	1.00
	+ Lf-Feld TMP3	Lastf. Betrie.-Gewich.3	*	1.00
Lf-Feld W-G_21	Lastf. Wind1-X-Gew	= ARITHMET aus:		
	Lf-Feld W1	Lastf. Wind1-X	*	1.00
	+ Lf-Feld G1	Lastf. Gewicht	*	-1.00
Lf-Feld W-G_22	Lastf. Wind1-Y-Gew	= ARITHMET aus:		
	Lf-Feld W2	Lastf. Wind1-Y	*	1.00
	+ Lf-Feld G1	Lastf. Gewicht	*	-1.00
Lf-Feld W_RMS2	Lastf. Wind1-XY	= RMS aus:		
	Lf-Feld W-G_21	Lastf. Wind1-X-Gew	*	1.00
	+ Lf-Feld W-G_22	Lastf. Wind1-Y-Gew	*	1.00

Angeforderte GLEICHUNGEN:

ANSI B31.3 Nachweis 01 SL = SLP+QXL/A+SQRT(ii*MiL^2+io*MoL^2)/Z < Sh
P aus ET-Satz (Ausleg.Druck)
Ma aus Lastfall Gewicht
Sh aus MATDAT errechnet oder aus ET-Satz Faktor = 1.00

ANSI B31.3 Nachweis 02 SE =SQRT(ii*MiE^2+io*MoE^2+MT^2)/Z < SA+f*(Sh-SL)
P aus ET-Satz (Ausleg.Druck)
Ma aus Lastfall Gewicht
Mc aus Lastfall Range
Sh aus MATDAT errechnet oder aus ET-Satz Faktor = 1.00
Sa aus MATDAT errechnet oder aus ET-Satz Faktor = 1.00
Ermuedungsfaktor f = 1.00
P,Ma fuer die Ermittlung von SL in Gleichung SE
Mc = Mc * E-MODkalt / E-MODwarm

ANSI B31.3 Nachweis 03 SOL = SL+QXO/A+SQRT(ii*MiO^2+io*MoO^2)/Z < k*Sh
P aus ET-Satz (Ausleg.Druck)
Ma aus Lastfall Gewicht
Mb aus Lastfall Wind1-XY
Sh aus MATDAT errechnet oder aus ET-Satz Faktor = 1.33

Pkt 180 Strg 23 v Da= 610.0 mm s= 11.5 mm (TTU) T-Stck Uverstaerkt
Strg 23 n Da= 610.0 mm s= 11.5 mm ii= 5.9 io= 7.5
Strg 2 n Da= 406.4 mm s= 7.8 mm

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	2.5	0.853	2.849	0.519	5.4	7.9	113.3	7
01	SL n	2.0	2.5	0.496	0.879	0.456	2.0	4.5	113.3	4
01	SL n	2.0	2.5	4.813	1.971	0.185	8.6	11.0	113.3	10
02	SE v	SL=	7.9	2.713	2.542	0.178	4.5	4.5	279.5	2
02	SE n	SL=	4.5	1.061	5.569	1.072	9.9	9.9	283.0	3
02	SE n	SL=	11.0	1.250	8.111	1.652	32.0	32.0	276.4	12
03	SOLv	SL=	7.9	0.120	0.029	0.017	0.1	8.0	150.7	5
03	SOLn	SL=	4.5	0.085	0.013	0.003	0.0	4.5	150.7	3
03	SOLn	SL=	11.0	0.008	0.042	0.016	0.2	11.2	150.7	7

Pkt 400 Strg 2 v Da= 406.4 mm s= 7.8 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	2.5	5.156	1.423	0.580	2.1	4.6	113.3	4
01	SL n	2.0	3.7	5.156	1.423	0.580	3.1	6.8	113.3	6
02	SE v	SL=	4.6	1.250	4.962	1.324	5.0	5.0	282.9	2
02	SE n	SL=	6.8	1.250	4.962	1.324	6.9	6.9	280.7	2
03	SOLv	SL=	4.6	0.008	0.028	0.007	0.0	4.6	150.7	3
03	SOLn	SL=	6.8	0.008	0.028	0.007	0.0	6.8	150.7	5

Pkt 405 Strg 2 v Da= 406.4 mm s= 5.3 mm (BGL) Bogen GLatt
Strg 2 m Da= 406.4 mm s= 5.3 mm R= 610.0 mm
Strg 2 n Da= 406.4 mm s= 5.3 mm ii= 4.1 io= 3.4

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	5.403	0.972	0.878	8.4	12.1	113.3	11
01	SL m	2.0	3.7	4.713	0.391	0.005	3.2	6.8	113.3	6
01	SL n	2.0	3.7	0.971	1.958	0.886	13.2	16.9	113.3	15
02	SE v	SL=	12.1	1.250	0.998	1.828	9.9	9.9	275.4	4
02	SE m	SL=	6.8	0.977	0.896	1.169	7.2	7.2	280.6	3
02	SE n	SL=	16.9	2.904	1.344	3.482	17.6	17.6	270.5	6
03	SOLv	SL=	12.1	0.008	0.003	0.014	0.1	12.2	150.7	8
03	SOLm	SL=	6.8	0.011	0.015	0.015	0.1	7.0	150.7	5
03	SOLn	SL=	16.9	0.024	0.023	0.035	0.2	17.2	150.7	11

Pkt 410 Strg 2 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	0.971	0.886	1.958	3.4	7.1	113.3	6
01	SL n	2.0	3.7	0.971	0.886	1.958	3.4	7.1	113.3	6
02	SE v	SL=	7.1	2.904	3.482	1.344	6.1	6.1	280.4	2
02	SE n	SL=	7.1	2.904	3.482	1.344	6.1	6.1	280.4	2
03	SOLv	SL=	7.1	0.024	0.035	0.023	0.1	7.1	150.7	5
03	SOLn	SL=	7.1	0.024	0.035	0.023	0.1	7.1	150.7	5

Pkt 415 Strg 2 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 431.6 mm s= 17.9 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.971	0.983	2.391	4.1	7.7	113.3	7
01 SL n	2.0	1.1	0.971	0.983	2.391	1.2	2.2	113.3	2
02 SE v	SL=	7.7	2.904	4.040	1.443	6.7	6.7	279.7	2
02 SE n	SL=	2.2	2.904	4.040	1.443	2.2	2.2	285.2	1
03 SOLv	SL=	7.7	0.024	0.038	0.023	0.1	7.8	150.7	5
03 SOLn	SL=	2.2	0.024	0.038	0.023	0.0	2.2	150.6	1

Pkt 420 Strg 2 v Da= 431.6 mm s= 17.9 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	1.1	0.971	1.120	3.140	1.5	2.5	113.3	2
01 SL n	2.0	3.7	0.971	1.120	3.140	5.2	8.9	113.3	8
02 SE v	SL=	2.5	2.904	4.832	1.583	2.4	2.4	284.9	1
02 SE n	SL=	8.9	2.904	4.832	1.583	7.6	7.6	278.6	3
03 SOLv	SL=	2.5	0.024	0.042	0.024	0.0	2.6	150.6	2
03 SOLn	SL=	8.9	0.024	0.042	0.024	0.1	8.9	150.7	6

Pkt 425 Strg 2 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.971	1.454	5.301	8.5	12.1	113.3	11
01 SL n	2.0	3.7	0.971	0.000	5.301	8.2	11.8	113.3	10
02 SE v	SL=	12.1	2.904	6.748	1.922	9.8	9.8	275.3	4
02 SE n	SL=	11.8	0.000	0.000	1.922	2.5	2.5	275.6	1
03 SOLv	SL=	12.1	0.024	0.050	0.026	0.1	12.2	150.7	8
03 SOLn	SL=	11.8	0.024	0.000	0.026	0.0	11.9	150.7	8

Pkt 430 Strg 2 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.971	0.000	4.271	6.6	10.3	113.3	9
01 SL n	2.0	3.7	0.971	0.000	4.271	6.6	10.3	113.3	9
02 SE v	SL=	10.3	0.000	0.000	1.696	2.2	2.2	277.2	1
02 SE n	SL=	10.3	0.000	0.000	1.696	2.2	2.2	277.2	1
03 SOLv	SL=	10.3	0.024	0.000	0.025	0.0	10.3	150.7	7
03 SOLn	SL=	10.3	0.024	0.000	0.025	0.0	10.3	150.7	7

WWWWW Bei Pkt 440 DO/T > 100 WWWWWWW

Pkt 440 Strg 2 v Da= 406.4 mm s= 5.3 mm (RKR) Reduz. Kl.Radien
Strg 2 n Da= 800.0 mm s= 5.0 mm A= 53.0 Grd
ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.971	0.000	3.285	5.1	8.8	113.3	8
01 SL n	2.0	7.9	0.971	0.000	3.285	1.4	9.3	109.0	8
02 SE v	SL=	8.8	0.000	0.000	1.472	1.9	1.9	278.7	1

02 SE n	SL=	9.3	0.000	0.000	1.472	0.5	0.5	268.6	0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
03	SOLv	SL=	8.8	0.024	0.000	0.024	0.0	8.8	150.7	6
03	SOLn	SL=	9.3	0.024	0.000	0.024	0.0	9.3	145.0	6

Pkt 445 Strg 2 v Da= 800.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 800.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	7.9	0.971	0.000	2.631	1.1	9.0	109.0	8
01	SL n	2.0	7.9	0.971	0.000	2.631	1.1	9.0	109.0	8
02	SE v	SL=	9.0	0.000	0.000	1.305	0.4	0.4	268.9	0
02	SE n	SL=	9.0	0.000	0.000	1.305	0.4	0.4	268.9	0
03	SOLv	SL=	9.0	0.024	0.000	0.023	0.0	9.0	145.0	6
03	SOLn	SL=	9.0	0.024	0.000	0.023	0.0	9.0	145.0	6

Pkt 450 Strg 2 v Da= 800.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 800.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	7.9	0.971	0.000	1.368	0.6	8.5	109.0	8
01	SL n	2.0	7.9	1.771	0.000	1.888	0.9	8.8	109.0	8
02	SE v	SL=	8.5	0.000	0.000	0.719	0.2	0.2	269.4	0
02	SE n	SL=	8.8	0.000	0.000	1.311	0.4	0.4	269.2	0
03	SOLv	SL=	8.5	0.024	0.000	0.020	0.0	8.5	145.0	6
03	SOLn	SL=	8.8	0.052	0.000	0.001	0.0	8.8	145.0	6

Pkt 455 Strg 2 v Da= 800.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 800.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	7.9	1.771	0.000	0.032	0.2	8.0	109.0	7
01	SL n	2.0	7.9	1.771	0.000	0.032	0.2	8.0	109.0	7
02	SE v	SL=	8.0	0.000	0.000	0.409	0.1	0.1	269.9	0
02	SE n	SL=	8.0	0.000	0.000	0.409	0.1	0.1	269.9	0
03	SOLv	SL=	8.0	0.052	0.000	0.002	0.0	8.0	145.0	6
03	SOLn	SL=	8.0	0.052	0.000	0.002	0.0	8.0	145.0	6

WWWWW Bei Pkt 460 DO/T > 100 WWWWWWW

Pkt 460 Strg 2 v Da= 800.0 mm s= 5.0 mm (RKR) Reduz. Kl.Radien
Strg 2 n Da= 406.4 mm s= 5.3 mm A= 53.0 Grd
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	7.9	1.771	0.000	0.205	0.2	8.1	109.0	7
01	SL n	2.0	3.7	1.771	0.000	0.205	0.6	4.3	113.3	4
02	SE v	SL=	8.1	0.000	0.000	0.155	0.1	0.1	269.8	0
02	SE n	SL=	4.3	0.000	0.000	0.155	0.2	0.2	283.2	0
03	SOLv	SL=	8.1	0.052	0.000	0.003	0.0	8.1	145.0	6
03	SOLn	SL=	4.3	0.052	0.000	0.003	0.0	4.3	150.7	3

Pkt 470 Strg 2 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	1.771	0.000	0.408	0.9	4.6	113.3	4
01	SL n	2.0	3.7	1.771	0.000	0.408	0.9	4.6	113.3	4
02	SE v	SL=	4.6	0.000	0.000	0.229	0.3	0.3	282.9	0
02	SE n	SL=	4.6	0.000	0.000	0.229	0.3	0.3	282.9	0
03	SOLv	SL=	4.6	0.052	0.000	0.004	0.0	4.6	150.7	3
03	SOLn	SL=	4.6	0.052	0.000	0.004	0.0	4.6	150.7	3

Pkt 480 Strg 2 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 2 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	1.771	0.000	0.455	1.0	4.6	113.3	4
01	SL n	2.0	3.7	1.771	0.000	0.455	1.0	4.6	113.3	4
02	SE v	SL=	4.6	0.000	0.000	0.380	0.5	0.5	282.8	0
02	SE n	SL=	4.6	0.000	0.000	0.380	0.5	0.5	282.8	0
03	SOLv	SL=	4.6	0.052	0.000	0.005	0.0	4.7	150.7	3
03	SOLn	SL=	4.6	0.052	0.000	0.005	0.0	4.7	150.7	3

Pkt 490 Strg 2 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	1.771	0.000	0.451	0.9	4.6	113.3	4
02	SE v	SL=	4.6	0.000	0.000	0.466	0.6	0.6	282.8	0
03	SOLv	SL=	4.6	0.052	0.000	0.005	0.0	4.6	150.7	3

Pkt 90 Strg 23 v Da= 610.0 mm s= 5.3 mm (TTU) T-Stck Uverstaerkt
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 9.2 io= 11.9
Strg 5 n Da= 21.3 mm s= 1.0 mm

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	5.6	0.726	8.296	0.738	50.7	56.3	113.3	50
01	SL n	2.0	5.6	0.726	8.296	0.738	50.7	56.3	113.3	50
01	SL n	2.0	0.9	0.013	0.000	0.000	0.2	1.1	113.3	1
02	SE v	SL=	56.3	3.733	0.042	1.977	13.5	13.5	231.1	6
02	SE n	SL=	56.3	3.733	0.042	1.977	13.5	13.5	231.1	6
02	SE n	SL=	1.1	0.000	0.000	0.000	0.0	0.0	286.4	0
03	SOLv	SL=	56.3	0.014	0.002	0.007	0.1	56.4	150.7	37
03	SOLn	SL=	56.3	0.014	0.002	0.007	0.1	56.4	150.7	37
03	SOLn	SL=	1.1	0.000	0.000	0.000	0.0	1.1	150.7	1

Pkt 700 Strg 5 v Da= 21.3 mm s= 1.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 5 n Da= 29.3 mm s= 5.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	0.9	0.010	0.000	0.000	0.2	1.1	113.3	1
01	SL n	2.0	0.2	0.010	0.000	0.000	0.0	0.2	113.3	0
02	SE v	SL=	1.1	0.000	0.000	0.000	0.0	0.0	286.4	0
02	SE n	SL=	0.2	0.000	0.000	0.000	0.0	0.0	287.3	0
03	SOLv	SL=	1.1	0.000	0.000	0.000	0.0	1.1	150.7	1

03	SOLn	SL=	0.2	0.000	0.000	0.000	0.0	0.2	150.7	0

Pkt 710 Strg 5 v Da= 29.3 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	0.2	0.000	0.000	0.000	0.0	0.2	113.3	0
02	SE v	SL=	0.2	0.000	0.000	0.000	0.0	0.0	287.3	0
03	SOLv	SL=	0.2	0.000	0.000	0.000	0.0	0.2	150.7	0

Pkt 100 Strg 23 v Da= 610.0 mm s= 5.3 mm (TTU) T-Stck Uverstaerkt
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 9.2 io= 11.9
Strg 6 n Da= 21.3 mm s= 1.0 mm

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	5.6	0.726	8.248	0.676	50.4	56.0	113.3	49
01	SL n	2.0	5.6	0.726	8.248	0.676	50.4	56.0	113.3	49
01	SL n	2.0	0.9	0.013	0.000	0.000	0.2	1.1	113.3	1
02	SE v	SL=	56.0	3.733	0.295	1.523	10.6	10.6	231.5	5
02	SE n	SL=	56.0	3.733	0.295	1.523	10.6	10.6	231.5	5
02	SE n	SL=	1.1	0.000	0.000	0.000	0.0	0.0	286.4	0
03	SOLv	SL=	56.0	0.014	0.002	0.008	0.1	56.1	150.7	37
03	SOLn	SL=	56.0	0.014	0.002	0.008	0.1	56.1	150.7	37
03	SOLn	SL=	1.1	0.000	0.000	0.000	0.0	1.1	150.7	1

Pkt 800 Strg 6 v Da= 21.3 mm s= 1.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 6 n Da= 29.3 mm s= 5.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	0.9	0.010	0.000	0.000	0.2	1.1	113.3	1
01	SL n	2.0	0.2	0.010	0.000	0.000	0.0	0.2	113.3	0
02	SE v	SL=	1.1	0.000	0.000	0.000	0.0	0.0	286.4	0
02	SE n	SL=	0.2	0.000	0.000	0.000	0.0	0.0	287.3	0
03	SOLv	SL=	1.1	0.000	0.000	0.000	0.0	1.1	150.7	1
03	SOLn	SL=	0.2	0.000	0.000	0.000	0.0	0.2	150.7	0

Pkt 810 Strg 6 v Da= 29.3 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	0.2	0.000	0.000	0.000	0.0	0.2	113.3	0
02	SE v	SL=	0.2	0.000	0.000	0.000	0.0	0.0	287.3	0
03	SOLv	SL=	0.2	0.000	0.000	0.000	0.0	0.2	150.7	0

Pkt 110 Strg 23 v Da= 610.0 mm s= 5.3 mm (TTU) T-Stck Uverstaerkt
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 9.2 io= 11.9
Strg 7 n Da= 48.3 mm s= 1.6 mm

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	5.6	0.726	7.465	0.428	45.5	51.1	113.3	45
01	SL n	2.0	5.6	0.726	7.465	0.428	45.5	51.1	113.3	45
01	SL n	2.0	1.4	0.012	0.000	0.000	0.1	1.4	113.3	1
02	SE v	SL=	51.1	3.733	1.641	0.293	9.0	9.0	236.4	4
02	SE n	SL=	51.1	3.733	1.641	0.293	9.0	9.0	236.4	4
02	SE n	SL=	1.4	0.000	0.000	0.000	0.0	0.0	286.1	0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
03 SOLv	SL=	51.1	0.014	0.001	0.013	0.1	51.2	150.7	34
03 SOLn	SL=	51.1	0.014	0.001	0.013	0.1	51.2	150.7	34
03 SOLn	SL=	1.4	0.000	0.000	0.000	0.0	1.4	150.7	1

Pkt 900 Strg 7 v Da= 48.3 mm s= 1.6 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	1.4	0.000	0.000	0.000	0.0	1.4	113.3	1
02 SE v	SL=	1.4	0.000	0.000	0.000	0.0	0.0	286.1	0
03 SOLv	SL=	1.4	0.000	0.000	0.000	0.0	1.4	150.7	1

Pkt 1210 Strg 24 v Da= 610.0 mm s= 7.0 mm (TTU) T-Stck Uverstaerkt
Strg 24 n Da= 610.0 mm s= 7.0 mm ii= 8.5 io= 11.1
Strg 13 n Da= 324.0 mm s= 5.0 mm

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	4.2	0.202	0.032	0.805	4.5	8.7	82.1	11
01 SL n	2.0	4.2	0.139	0.029	0.749	4.2	8.4	82.1	10
01 SL n	2.0	3.1	0.158	0.061	0.184	3.8	6.9	82.1	8
02 SE v	SL=	8.7	1.514	0.198	1.058	6.1	6.1	198.0	3
02 SE n	SL=	8.4	2.850	1.742	1.560	11.7	11.7	198.4	6
02 SE n	SL=	6.9	0.501	1.544	1.337	35.6	35.6	199.9	18
03 SOLv	SL=	8.7	0.000	0.000	0.000	0.0	8.7	109.2	8
03 SOLn	SL=	8.4	0.000	0.000	0.000	0.0	8.4	109.2	8
03 SOLn	SL=	6.9	0.000	0.000	0.000	0.0	6.9	109.2	6

Pkt 1255 Strg 13 v Da= 324.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 13 n Da= 324.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.1	0.158	0.011	0.025	0.1	3.2	82.1	4
01 SL n	2.0	3.1	0.158	0.011	0.025	0.1	3.2	82.1	4
02 SE v	SL=	3.2	0.501	0.044	1.849	4.9	4.9	203.6	2
02 SE n	SL=	3.2	0.501	0.044	1.849	4.9	4.9	203.6	2
03 SOLv	SL=	3.2	0.000	0.000	0.000	0.0	3.2	109.2	3
03 SOLn	SL=	3.2	0.000	0.000	0.000	0.0	3.2	109.2	3

Pkt 1260 Strg 13 v Da= 324.0 mm s= 4.6 mm (BGL) Bogen GLatt
Strg 13 m Da= 324.0 mm s= 4.6 mm R= 457.0 mm
Strg 13 n Da= 324.0 mm s= 4.6 mm ii= 4.2 io= 3.5

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.4	0.158	0.025	0.011	0.3	3.7	82.1	5
01 SL m	2.0	3.4	0.294	0.030	0.012	0.4	3.8	82.1	5
01 SL n	2.0	3.4	0.303	0.016	0.028	0.4	3.8	82.1	5
02 SE v	SL=	3.7	0.501	1.849	0.044	21.5	21.5	203.1	11
02 SE m	SL=	3.8	0.499	0.608	0.039	7.2	7.2	203.0	4
02 SE n	SL=	3.8	0.556	2.675	0.099	31.0	31.0	203.0	15
03 SOLv	SL=	3.7	0.000	0.000	0.000	0.0	3.7	109.2	3
03 SOLm	SL=	3.8	0.000	0.000	0.000	0.0	3.8	109.2	3
03 SOLn	SL=	3.8	0.000	0.000	0.000	0.0	3.8	109.2	3

Pkt 1265 Strg 13 v Da= 324.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 13 n Da= 324.0 mm s= 10.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.1	0.303	0.028	0.016	0.1	3.2	82.1	4
01	SL n	2.0	1.5	0.303	0.028	0.016	0.1	1.5	82.1	2
02	SE v	SL=	3.2	0.556	0.099	2.675	7.0	7.0	203.5	3
02	SE n	SL=	1.5	0.556	0.099	2.675	3.7	3.7	205.2	2
03	SOLv	SL=	3.2	0.000	0.000	0.000	0.0	3.2	109.2	3
03	SOLn	SL=	1.5	0.000	0.000	0.000	0.0	1.5	109.2	1

Pkt 1270 Strg 13 v Da= 324.0 mm s= 10.0 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	1.5	0.621	0.050	0.176	0.3	1.8	82.1	2
02	SE v	SL=	1.8	0.556	1.701	15.288	20.6	20.6	205.0	10
03	SOLv	SL=	1.8	0.000	0.000	0.000	0.0	1.8	109.2	2

Pkt 1230 Strg 24 v Da= 610.0 mm s= 7.0 mm (TTU) T-Stck Uverstaerkt
Strg 24 n Da= 610.0 mm s= 7.0 mm ii= 8.5 io= 11.1
Strg 14 n Da= 324.0 mm s= 5.0 mm

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	4.2	0.085	0.008	0.040	0.2	4.4	82.1	5
01	SL n	2.0	4.2	0.039	0.037	0.002	0.2	4.4	82.1	5
01	SL n	2.0	3.1	0.346	0.044	0.606	12.1	15.2	82.1	18
02	SE v	SL=	4.4	0.552	0.066	3.036	17.1	17.1	202.3	8
02	SE n	SL=	4.4	1.798	4.814	1.517	22.6	22.6	202.4	11
02	SE n	SL=	15.2	1.519	4.880	1.245	79.0	79.0	191.6	41
03	SOLv	SL=	4.4	0.000	0.000	0.000	0.0	4.4	109.2	4
03	SOLn	SL=	4.4	0.000	0.000	0.000	0.0	4.4	109.2	4
03	SOLn	SL=	15.2	0.000	0.000	0.000	0.0	15.2	109.2	14

Pkt 1275 Strg 14 v Da= 324.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 14 n Da= 324.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.1	0.346	0.008	0.069	0.2	3.3	82.1	4
01	SL n	2.0	3.1	0.346	0.008	0.069	0.2	3.3	82.1	4
02	SE v	SL=	3.3	1.519	0.174	1.844	6.1	6.1	203.4	3
02	SE n	SL=	3.3	1.519	0.174	1.844	6.1	6.1	203.4	3
03	SOLv	SL=	3.3	0.000	0.000	0.000	0.0	3.3	109.2	3
03	SOLn	SL=	3.3	0.000	0.000	0.000	0.0	3.3	109.2	3

Pkt 1280 Strg 14 v Da= 324.0 mm s= 4.6 mm (BGL) Bogen GLatt
Strg 14 m Da= 324.0 mm s= 4.6 mm R= 457.0 mm
Strg 14 n Da= 324.0 mm s= 4.6 mm ii= 4.2 io= 3.5

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.4	0.346	0.069	0.008	0.9	4.2	82.1	5
01	SL m	2.0	3.4	0.662	0.068	0.009	0.9	4.3	82.1	5
01	SL n	2.0	3.4	0.634	0.037	0.021	0.6	4.0	82.1	5

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
02	SE v	SL=	4.2	1.519	1.844	0.174	21.8	21.8	202.5	11
02	SE m	SL=	4.3	1.503	0.624	0.135	8.4	8.4	202.5	4
02	SE n	SL=	4.0	1.710	2.660	0.365	31.4	31.4	202.8	15
03	SOLv	SL=	4.2	0.000	0.000	0.000	0.0	4.2	109.2	4
03	SOLm	SL=	4.3	0.000	0.000	0.000	0.0	4.3	109.2	4
03	SOLn	SL=	4.0	0.000	0.000	0.000	0.0	4.0	109.2	4

Pkt 1285 Strg 14 v Da= 324.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 14 n Da= 324.0 mm s= 10.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.1	0.634	0.021	0.037	0.2	3.3	82.1	4
01	SL n	2.0	1.5	0.634	0.021	0.037	0.1	1.6	82.1	2
02	SE v	SL=	3.3	1.710	0.365	2.660	8.1	8.1	203.4	4
02	SE n	SL=	1.6	1.710	0.365	2.660	4.3	4.3	205.2	2
03	SOLv	SL=	3.3	0.000	0.000	0.000	0.0	3.3	109.2	3
03	SOLn	SL=	1.6	0.000	0.000	0.000	0.0	1.6	109.2	1

Pkt 1290 Strg 14 v Da= 324.0 mm s= 10.0 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	1.5	0.953	0.036	0.385	0.6	2.1	82.1	3
02	SE v	SL=	2.1	1.710	5.389	15.312	21.8	21.8	204.7	11
03	SOLv	SL=	2.1	0.000	0.000	0.000	0.0	2.1	109.2	2

Pkt 1220 Strg 24 v Da= 610.0 mm s= 7.0 mm (TTU) T-Stck Uverstaerkt
Strg 24 n Da= 610.0 mm s= 7.0 mm ii= 8.5 io= 11.1
Strg 15 n Da= 324.0 mm s= 5.0 mm

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	4.2	0.139	0.028	0.746	4.2	8.4	82.1	10
01	SL n	2.0	4.2	0.085	0.020	0.693	3.9	8.1	82.1	10
01	SL n	2.0	3.1	0.198	0.048	0.417	8.3	11.4	82.1	14
02	SE v	SL=	8.4	2.850	1.691	1.562	11.5	11.5	198.4	6
02	SE n	SL=	8.1	0.552	0.108	2.070	11.7	11.7	198.7	6
02	SE n	SL=	11.4	0.508	1.583	2.298	51.7	51.7	195.4	26
03	SOLv	SL=	8.4	0.000	0.000	0.000	0.0	8.4	109.2	8
03	SOLn	SL=	8.1	0.000	0.000	0.000	0.0	8.1	109.2	7
03	SOLn	SL=	11.4	0.000	0.000	0.000	0.0	11.4	109.2	10

Pkt 1295 Strg 15 v Da= 324.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 15 n Da= 324.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.1	0.198	0.013	0.066	0.2	3.3	82.1	4
01	SL n	2.0	3.1	0.198	0.013	0.066	0.2	3.3	82.1	4
02	SE v	SL=	3.3	0.508	0.053	2.018	5.3	5.3	203.5	3
02	SE n	SL=	3.3	0.508	0.053	2.018	5.3	5.3	203.5	3
03	SOLv	SL=	3.3	0.000	0.000	0.000	0.0	3.3	109.2	3
03	SOLn	SL=	3.3	0.000	0.000	0.000	0.0	3.3	109.2	3

Pkt 1300 Strg 15 v Da= 324.0 mm s= 4.6 mm (BGL) Bogen GLatt
Strg 15 m Da= 324.0 mm s= 4.6 mm R= 457.0 mm
Strg 15 n Da= 324.0 mm s= 4.6 mm ii= 4.2 io= 3.5

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.4	0.198	0.066	0.013	0.8	4.2	82.1	5
01 SL m	2.0	3.4	0.442	0.038	0.011	0.5	3.9	82.1	5
01 SL n	2.0	3.4	0.471	0.033	0.029	0.6	3.9	82.1	5
02 SE v	SL=	4.2	0.508	2.018	0.053	23.4	23.4	202.6	12
02 SE m	SL=	3.9	0.501	0.576	0.036	6.8	6.8	202.8	3
02 SE n	SL=	3.9	0.559	2.746	0.104	31.8	31.8	202.8	16
03 SOLv	SL=	4.2	0.000	0.000	0.000	0.0	4.2	109.2	4
03 SOLm	SL=	3.9	0.000	0.000	0.000	0.0	3.9	109.2	4
03 SOLn	SL=	3.9	0.000	0.000	0.000	0.0	3.9	109.2	4

Pkt 1305 Strg 15 v Da= 324.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 15 n Da= 324.0 mm s= 10.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.1	0.471	0.029	0.033	0.2	3.3	82.1	4
01 SL n	2.0	1.5	0.471	0.029	0.033	0.1	1.6	82.1	2
02 SE v	SL=	3.3	0.559	0.104	2.746	7.2	7.2	203.5	4
02 SE n	SL=	1.6	0.559	0.104	2.746	3.8	3.8	205.2	2
03 SOLv	SL=	3.3	0.000	0.000	0.000	0.0	3.3	109.2	3
03 SOLn	SL=	1.6	0.000	0.000	0.000	0.0	1.6	109.2	1

Pkt 1310 Strg 15 v Da= 324.0 mm s= 10.0 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	1.5	0.789	0.036	0.208	0.4	1.8	82.1	2
02 SE v	SL=	1.8	0.559	1.738	15.154	20.4	20.4	204.9	10
03 SOLv	SL=	1.8	0.000	0.000	0.000	0.0	1.8	109.2	2

Pkt 1240 Strg 24 v Da= 610.0 mm s= 7.0 mm (TTU) T-Stck Uverstaerkt
Strg 24 n Da= 610.0 mm s= 7.0 mm ii= 8.5 io= 11.1
Strg 16 n Da= 324.0 mm s= 5.0 mm

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	4.2	0.039	0.035	0.003	0.2	4.4	82.1	5
01 SL n	2.0	4.2	0.000	0.000	0.043	0.2	4.4	82.1	5
01 SL n	2.0	3.1	0.338	0.035	0.740	14.7	17.8	82.1	22
02 SE v	SL=	4.4	1.798	4.867	1.518	22.8	22.8	202.4	11
02 SE n	SL=	4.4	0.000	0.000	0.000	0.0	0.0	202.3	0
02 SE n	SL=	17.8	1.518	4.867	1.798	82.9	82.9	189.0	44
03 SOLv	SL=	4.4	0.000	0.000	0.000	0.0	4.4	109.2	4
03 SOLn	SL=	4.4	0.000	0.000	0.000	0.0	4.4	109.2	4
03 SOLn	SL=	17.8	0.000	0.000	0.000	0.0	17.8	109.2	16

Pkt 1315 Strg 16 v Da= 324.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 16 n Da= 324.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.1	0.338	0.010	0.097	0.3	3.4	82.1	4

01	SL	n	2.0	3.1	0.338	0.010	0.097	0.3	3.4	82.1	4

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
02	SE v	SL=	3.4	1.518	0.169	1.963	6.4	6.4	203.4	3
02	SE n	SL=	3.4	1.518	0.169	1.963	6.4	6.4	203.4	3
03	SOLv	SL=	3.4	0.000	0.000	0.000	0.0	3.4	109.2	3
03	SOLn	SL=	3.4	0.000	0.000	0.000	0.0	3.4	109.2	3

Pkt 1320 Strg 16 v Da= 324.0 mm s= 4.6 mm (BGL) Bogen GLatt
Strg 16 m Da= 324.0 mm s= 4.6 mm R= 457.0 mm
Strg 16 n Da= 324.0 mm s= 4.6 mm ii= 4.2 io= 3.5

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.4	0.338	0.097	0.010	1.2	4.6	82.1	6
01	SL m	2.0	3.4	0.721	0.070	0.008	1.0	4.3	82.1	5
01	SL n	2.0	3.4	0.726	0.054	0.022	0.8	4.2	82.1	5
02	SE v	SL=	4.6	1.518	1.963	0.169	23.2	23.2	202.2	11
02	SE m	SL=	4.3	1.505	0.616	0.137	8.4	8.4	202.4	4
02	SE n	SL=	4.2	1.711	2.728	0.362	32.1	32.1	202.6	16
03	SOLv	SL=	4.6	0.000	0.000	0.000	0.0	4.6	109.2	4
03	SOLm	SL=	4.3	0.000	0.000	0.000	0.0	4.3	109.2	4
03	SOLn	SL=	4.2	0.000	0.000	0.000	0.0	4.2	109.2	4

Pkt 1325 Strg 16 v Da= 324.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 16 n Da= 324.0 mm s= 10.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.1	0.726	0.022	0.054	0.3	3.4	82.1	4
01	SL n	2.0	1.5	0.726	0.022	0.054	0.2	1.6	82.1	2
02	SE v	SL=	3.4	1.711	0.362	2.728	8.3	8.3	203.4	4
02	SE n	SL=	1.6	1.711	0.362	2.728	4.3	4.3	205.1	2
03	SOLv	SL=	3.4	0.000	0.000	0.000	0.0	3.4	109.2	3
03	SOLn	SL=	1.6	0.000	0.000	0.000	0.0	1.6	109.2	1

Pkt 1330 Strg 16 v Da= 324.0 mm s= 10.0 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	1.5	1.044	0.026	0.358	0.6	2.1	82.1	3
02	SE v	SL=	2.1	1.711	5.377	15.415	22.0	22.0	204.7	11
03	SOLv	SL=	2.1	0.000	0.000	0.000	0.0	2.1	109.2	2

Pkt 150 Strg 23 v Da= 610.0 mm s= 11.5 mm (TTU) T-Stck Uverstaerkt
Strg 23 n Da= 610.0 mm s= 11.5 mm ii= 5.9 io= 7.5
Strg 21 n Da= 406.4 mm s= 7.8 mm

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	2.5	0.646	5.956	1.790	11.8	14.3	113.3	13
01	SL n	2.0	2.5	0.853	6.032	1.977	12.1	14.6	113.3	13
01	SL n	2.0	2.5	1.178	0.076	0.205	1.2	3.7	113.3	3
02	SE v	SL=	14.3	6.629	5.285	5.318	14.9	14.9	273.2	5
02	SE n	SL=	14.6	2.713	6.313	0.167	10.9	10.9	272.9	4
02	SE n	SL=	3.7	5.150	1.028	3.916	19.7	19.7	283.8	7
03	SOLv	SL=	14.3	0.064	0.002	0.066	0.2	14.4	150.7	10
03	SOLn	SL=	14.6	0.120	0.023	0.071	0.2	14.8	150.7	10
03	SOLn	SL=	3.7	0.021	0.021	0.036	0.2	3.9	150.7	3

Pkt 500 Strg 21 v Da= 406.4 mm s= 7.8 mm (VUU) V-Naht Umf.,Ubear.
Strg 21 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	2.5	1.522	0.008	0.165	0.3	2.8	113.3	2
01	SL n	2.0	3.7	1.522	0.008	0.165	0.5	4.2	113.3	4
02	SE v	SL=	2.8	5.150	0.112	3.364	5.8	5.8	284.7	2
02	SE n	SL=	4.2	5.150	0.112	3.364	8.0	8.0	283.3	3
03	SOLv	SL=	2.8	0.021	0.002	0.008	0.0	2.8	150.7	2
03	SOLn	SL=	4.2	0.021	0.002	0.008	0.0	4.2	150.7	3

Pkt 505 Strg 21 v Da= 406.4 mm s= 5.3 mm (BGL) Bogen GLatt
Strg 21 m Da= 406.4 mm s= 5.3 mm R= 610.0 mm
Strg 21 n Da= 406.4 mm s= 5.3 mm ii= 4.1 io= 3.4

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	1.522	0.165	0.008	1.3	4.9	113.3	4
01	SL m	2.0	3.7	1.928	0.252	0.037	1.9	5.6	113.3	5
01	SL n	2.0	3.7	0.912	0.434	0.060	2.9	6.6	113.3	6
02	SE v	SL=	4.9	5.150	3.364	0.112	19.3	19.3	282.5	7
02	SE m	SL=	5.6	4.223	1.759	2.351	15.2	15.2	281.9	5
02	SE n	SL=	6.6	1.826	0.943	3.437	16.4	16.4	280.9	6
03	SOLv	SL=	4.9	0.021	0.008	0.002	0.1	5.0	150.7	3
03	SOLm	SL=	5.6	0.063	0.019	0.023	0.2	5.7	150.7	4
03	SOLn	SL=	6.6	0.069	0.022	0.030	0.2	6.8	150.7	4

Pkt 510 Strg 21 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 21 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	0.912	0.060	0.434	0.8	4.5	113.3	4
01	SL n	2.0	3.7	0.912	0.060	0.434	0.8	4.5	113.3	4
02	SE v	SL=	4.5	1.826	3.437	0.943	5.2	5.2	283.0	2
02	SE n	SL=	4.5	1.826	3.437	0.943	5.2	5.2	283.0	2
03	SOLv	SL=	4.5	0.069	0.030	0.022	0.1	4.6	150.7	3
03	SOLn	SL=	4.5	0.069	0.030	0.022	0.1	4.6	150.7	3

Pkt 515 Strg 21 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 21 n Da= 431.6 mm s= 17.9 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	0.912	0.045	0.587	1.0	4.7	113.3	4
01	SL n	2.0	1.1	0.912	0.045	0.587	0.3	1.4	113.3	1
02	SE v	SL=	4.7	1.826	3.235	1.353	5.1	5.1	282.8	2
02	SE n	SL=	1.4	1.826	3.235	1.353	1.7	1.7	286.0	1
03	SOLv	SL=	4.7	0.069	0.034	0.021	0.1	4.8	150.7	3
03	SOLn	SL=	1.4	0.069	0.034	0.021	0.0	1.4	150.6	1

Pkt 520 Strg 21 v Da= 431.6 mm s= 17.9 mm (VUU) V-Naht Umf.,Ubear.
Strg 21 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	1.1	0.912	0.024	0.957	0.5	1.5	113.3	1
01	SL n	2.0	3.7	0.912	0.024	0.957	1.6	5.3	113.3	5

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
02	SE v	SL=	1.5	1.826	2.948	1.935	1.7	1.7	285.9	1
02	SE n	SL=	5.3	1.826	2.948	1.935	5.1	5.1	282.2	2
03	SOLv	SL=	1.5	0.069	0.040	0.018	0.0	1.5	150.6	1
03	SOLn	SL=	5.3	0.069	0.040	0.018	0.1	5.3	150.7	4

Pkt 530 Strg 21 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 22 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	0.912	0.089	3.824	5.9	9.6	113.3	8
01	SL n	2.0	3.7	0.912	0.089	3.824	5.9	9.6	113.3	8
02	SE v	SL=	9.6	1.826	1.420	5.036	7.2	7.2	277.9	3
02	SE n	SL=	9.6	1.826	1.420	5.036	7.2	7.2	277.9	3
03	SOLv	SL=	9.6	0.069	0.071	0.007	0.1	9.7	150.7	6
03	SOLn	SL=	9.6	0.069	0.071	0.007	0.1	9.7	150.7	6

WWWWW Bei Pkt 540 DO/T > 100 WWWWWWW

Pkt 540 Strg 22 v Da= 406.4 mm s= 5.3 mm (RKR) Reduz. Kl.Radien
Strg 22 n Da= 800.0 mm s= 4.0 mm A= 53.0 Grd
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	0.912	0.127	4.950	7.6	11.3	113.3	10
01	SL n	2.0	9.9	0.912	0.127	4.950	2.6	12.4	109.0	11
02	SE v	SL=	11.3	1.826	0.898	6.096	8.3	8.3	276.2	3
02	SE n	SL=	12.4	1.826	0.898	6.096	2.6	2.6	265.5	1
03	SOLv	SL=	11.3	0.069	0.081	0.003	0.1	11.4	150.7	8
03	SOLn	SL=	12.4	0.069	0.081	0.003	0.0	12.5	145.0	9

Pkt 545 Strg 22 v Da= 800.0 mm s= 4.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 22 n Da= 800.0 mm s= 4.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	9.9	0.912	0.151	5.653	2.9	12.8	109.0	12
01	SL n	2.0	9.9	0.912	0.151	5.653	2.9	12.8	109.0	12
02	SE v	SL=	12.8	1.826	0.578	6.746	2.9	2.9	265.1	1
02	SE n	SL=	12.8	1.826	0.578	6.746	2.9	2.9	265.1	1
03	SOLv	SL=	12.8	0.069	0.088	0.001	0.1	12.8	145.0	9
03	SOLn	SL=	12.8	0.069	0.088	0.001	0.1	12.8	145.0	9

Pkt 550 Strg 22 v Da= 800.0 mm s= 4.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 22 n Da= 800.0 mm s= 4.0 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	9.9	0.912	0.192	6.917	3.6	13.4	109.0	12
01	SL n	2.0	9.9	0.236	0.192	7.356	3.7	13.6	109.0	12
02	SE v	SL=	13.4	1.826	0.016	7.886	3.3	3.3	264.5	1
02	SE n	SL=	13.6	0.007	0.016	7.040	2.9	2.9	264.3	1
03	SOLv	SL=	13.4	0.069	0.099	0.003	0.1	13.5	145.0	9
03	SOLn	SL=	13.6	0.013	0.099	0.040	0.1	13.6	145.0	9

Pkt 560 Strg 22 v Da= 800.0 mm s= 4.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 22 n Da= 800.0 mm s= 4.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	9.9	0.236	0.000	0.119	0.1	9.9	109.0	9
01 SL n	2.0	9.9	0.000	0.000	0.272	0.1	10.0	109.0	9
02 SE v	SL=	9.9	0.096	0.000	0.189	0.1	0.1	268.0	0
02 SE n	SL=	10.0	0.000	0.000	0.000	0.0	0.0	267.9	0
03 SOLv	SL=	9.9	0.013	0.000	0.008	0.0	9.9	145.0	7
03 SOLn	SL=	10.0	0.000	0.000	0.000	0.0	10.0	145.0	7

Pkt 570 Strg 22 v Da= 800.0 mm s= 4.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 22 n Da= 800.0 mm s= 4.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	9.9	0.000	0.000	0.106	0.1	9.9	109.0	9
01 SL n	2.0	9.9	0.000	0.000	0.106	0.1	9.9	109.0	9
02 SE v	SL=	9.9	0.000	0.000	0.000	0.0	0.0	268.0	0
02 SE n	SL=	9.9	0.000	0.000	0.000	0.0	0.0	268.0	0
03 SOLv	SL=	9.9	0.000	0.000	0.000	0.0	9.9	145.0	7
03 SOLn	SL=	9.9	0.000	0.000	0.000	0.0	9.9	145.0	7

WWWWW Bei Pkt 580 DO/T > 100 WWWWWWW

Pkt 580 Strg 22 v Da= 800.0 mm s= 4.0 mm (RKR) Reduz. Kl.Radien
Strg 22 n Da= 610.0 mm s= 5.3 mm A= 34.0 Grd
ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	9.9	0.000	0.000	0.061	0.0	9.9	109.0	9
01 SL n	2.0	5.6	0.000	0.000	0.061	0.0	5.6	113.3	5
02 SE v	SL=	9.9	0.000	0.000	0.000	0.0	0.0	268.0	0
02 SE n	SL=	5.6	0.000	0.000	0.000	0.0	0.0	281.8	0
03 SOLv	SL=	9.9	0.000	0.000	0.000	0.0	9.9	145.0	7
03 SOLn	SL=	5.6	0.000	0.000	0.000	0.0	5.6	150.7	4

Pkt 590 Strg 22 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.000	0.000	0.000	0.0	5.6	113.3	5
02 SE v	SL=	5.6	0.000	0.000	0.000	0.0	0.0	281.9	0
03 SOLv	SL=	5.6	0.000	0.000	0.000	0.0	5.6	150.7	4

Pkt 30 Strg 24 n Da= 610.0 mm s= 5.3 mm (TTU) T-Stck Uverstaerkt
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 9.2 io= 11.9
Strg 24 v Da= 21.3 mm s= 1.0 mm

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL n	2.0	5.6	0.054	2.347	0.122	14.3	19.9	113.3	18
01 SL n	2.0	5.6	0.054	2.347	0.122	14.3	19.9	113.3	18
01 SL v	2.0	0.9	0.004	0.000	0.000	0.1	1.0	113.3	1
02 SE n	SL=	19.9	0.108	1.472	0.042	7.6	7.6	267.6	3
02 SE n	SL=	19.9	0.108	1.472	0.042	7.6	7.6	267.6	3

02	SE v	SL=	1.0	0.000	0.000	0.000	0.0	0.0	286.5	0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
03 SOLn	SL=	19.9	0.000	0.000	0.000	0.0	19.9	150.7	13
03 SOLn	SL=	19.9	0.000	0.000	0.000	0.0	19.9	150.7	13
03 SOLv	SL=	1.0	0.000	0.000	0.000	0.0	1.0	150.7	1

Pkt 35 Strg 23 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.054	0.245	4.026	2.7	8.3	113.3	7
01 SL n	2.0	5.6	0.054	0.245	4.026	2.7	8.3	113.3	7
02 SE v	SL=	8.3	0.108	3.051	1.446	1.9	1.9	279.2	1
02 SE n	SL=	8.3	0.108	3.051	1.446	1.9	1.9	279.2	1
03 SOLv	SL=	8.3	0.000	0.000	0.000	0.0	8.3	150.7	5
03 SOLn	SL=	8.3	0.000	0.000	0.000	0.0	8.3	150.7	5

Pkt 40 Strg 23 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.054	0.246	4.042	2.7	8.3	113.3	7
01 SL n	2.0	5.6	0.810	0.246	4.042	2.8	8.4	113.3	7
02 SE v	SL=	8.3	0.108	3.071	1.445	1.9	1.9	279.2	1
02 SE n	SL=	8.4	0.108	3.071	1.445	1.9	1.9	279.1	1
03 SOLv	SL=	8.3	0.000	0.000	0.000	0.0	8.3	150.7	6
03 SOLn	SL=	8.4	0.000	0.000	0.000	0.0	8.4	150.7	6

Pkt 50 Strg 23 v Da= 610.0 mm s= 5.3 mm (BGL) Bogen GLatt
Strg 23 m Da= 610.0 mm s= 5.3 mm R= 914.0 mm
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 5.1 io= 4.3

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.810	1.291	0.079	4.5	10.1	113.3	9
01 SL m	2.0	5.6	3.645	1.075	0.177	4.1	9.7	113.3	9
01 SL n	2.0	5.6	5.005	1.776	0.329	6.6	12.2	113.3	11
02 SE v	SL=	10.1	0.108	6.679	1.466	19.8	19.8	277.4	7
02 SE m	SL=	9.7	0.914	6.822	1.001	20.0	20.0	277.8	7
02 SE n	SL=	12.2	1.308	6.035	0.051	17.6	17.6	275.3	6
03 SOLv	SL=	10.1	0.000	0.000	0.000	0.0	10.1	150.7	7
03 SOLm	SL=	9.7	0.000	0.000	0.000	0.0	9.7	150.7	6
03 SOLn	SL=	12.2	0.000	0.000	0.000	0.0	12.2	150.7	8

Pkt 60 Strg 23 v Da= 610.0 mm s= 5.3 mm (BGL) Bogen GLatt
Strg 23 m Da= 610.0 mm s= 5.3 mm R= 914.0 mm
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 5.1 io= 4.3

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	11.474	3.923	0.082	14.5	20.1	113.3	18
01 SL m	2.0	5.6	9.154	1.259	0.043	5.2	10.8	113.3	10
01 SL n	2.0	5.6	0.810	6.591	0.144	22.6	28.2	113.3	25
02 SE v	SL=	20.1	1.308	5.082	1.270	15.1	15.1	267.4	6
02 SE m	SL=	10.8	1.869	5.869	0.085	17.1	17.1	276.7	6
02 SE n	SL=	28.2	1.428	5.725	1.149	16.9	16.9	259.3	7

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
03 SOLv	SL=	20.1	0.000	0.000	0.000	0.0	20.1	150.7	13
03 SOLm	SL=	10.8	0.000	0.000	0.000	0.0	10.8	150.7	7
03 SOLn	SL=	28.2	0.000	0.000	0.000	0.0	28.2	150.7	19

Pkt 70 Strg 23 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.810	0.154	10.471	7.0	12.6	113.3	11
01 SL n	2.0	5.6	0.133	0.154	10.471	7.0	12.6	113.3	11
02 SE v	SL=	12.6	1.428	1.097	5.462	3.3	3.3	274.9	1
02 SE n	SL=	12.6	1.428	1.097	5.462	3.3	3.3	274.9	1
03 SOLv	SL=	12.6	0.000	0.000	0.000	0.0	12.6	150.7	8
03 SOLn	SL=	12.6	0.000	0.000	0.000	0.0	12.6	150.7	8

Pkt 80 Strg 23 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.133	0.075	3.364	2.2	7.8	113.3	7
01 SL n	2.0	5.6	0.726	2.600	17.069	11.5	17.1	113.3	15
02 SE v	SL=	7.8	1.428	0.534	2.656	1.7	1.7	279.6	1
02 SE n	SL=	17.1	3.733	15.595	10.135	10.7	10.7	270.4	4
03 SOLv	SL=	7.8	0.000	0.000	0.000	0.0	7.8	150.7	5
03 SOLn	SL=	17.1	0.014	0.034	0.008	0.0	17.1	150.7	11

Pkt 120 Strg 23 v Da= 610.0 mm s= 5.3 mm (BGL) Bogen GLatt
Strg 23 m Da= 610.0 mm s= 5.3 mm R= 914.0 mm
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 5.1 io= 4.3

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.726	1.453	0.193	5.1	10.7	113.3	9
01 SL m	2.0	5.6	3.494	0.853	0.915	4.2	9.9	113.3	9
01 SL n	2.0	5.6	4.876	1.574	1.100	6.7	12.3	113.3	11
02 SE v	SL=	10.7	3.733	5.007	4.834	18.8	18.8	276.8	7
02 SE m	SL=	9.9	6.544	4.818	1.953	15.3	15.3	277.6	6
02 SE n	SL=	12.3	6.495	2.620	2.072	9.9	9.9	275.2	4
03 SOLv	SL=	10.7	0.014	0.001	0.027	0.1	10.7	150.7	7
03 SOLm	SL=	9.9	0.009	0.005	0.015	0.0	9.9	150.7	7
03 SOLn	SL=	12.3	0.001	0.014	0.006	0.1	12.3	150.7	8

Pkt 130 Strg 23 v Da= 610.0 mm s= 5.3 mm (BGL) Bogen GLatt
Strg 23 m Da= 610.0 mm s= 5.3 mm R= 914.0 mm
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 5.1 io= 4.3

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	6.186	1.454	0.541	5.8	11.4	113.3	10
01 SL m	2.0	5.6	5.017	0.157	0.211	1.3	6.9	113.3	6
01 SL n	2.0	5.6	0.248	4.740	0.243	16.2	21.8	113.3	19
02 SE v	SL=	11.4	6.495	0.512	3.011	8.3	8.3	276.1	3
02 SE m	SL=	6.9	7.781	1.326	0.095	5.9	5.9	280.6	2
02 SE n	SL=	21.8	6.629	0.942	2.877	8.4	8.4	265.7	3

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
03	SOLv	SL=	11.4	0.001	0.001	0.033	0.1	11.5	150.7	8
03	SOLm	SL=	6.9	0.003	0.005	0.010	0.0	6.9	150.7	5
03	SOLn	SL=	21.8	0.005	0.007	0.019	0.1	21.9	150.7	15

Pkt 140 Strg 23 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	5.6	0.248	1.404	17.929	11.9	17.5	113.3	15
01	SL n	2.0	5.6	0.646	1.404	17.929	12.0	17.6	113.3	16
02	SE v	SL=	17.5	6.629	3.455	1.212	4.3	4.3	269.9	2
02	SE n	SL=	17.6	6.629	3.455	1.212	4.3	4.3	269.9	2
03	SOLv	SL=	17.5	0.005	0.002	0.008	0.0	17.6	150.7	12
03	SOLn	SL=	17.6	0.064	0.002	0.008	0.0	17.6	150.7	12

Pkt 145 Strg 23 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 610.0 mm s= 11.5 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	5.6	0.646	1.668	9.494	6.5	12.1	113.3	11
01	SL n	2.0	2.5	0.646	1.668	9.494	3.1	5.6	113.3	5
02	SE v	SL=	12.1	6.629	4.729	3.233	5.0	5.0	275.4	2
02	SE n	SL=	5.6	6.629	4.729	3.233	2.6	2.6	281.9	1
03	SOLv	SL=	12.1	0.064	0.046	0.001	0.0	12.1	150.7	8
03	SOLn	SL=	5.6	0.064	0.046	0.001	0.0	5.6	150.7	4

Pkt 155 Strg 23 v Da= 610.0 mm s= 11.5 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	2.5	0.853	1.705	2.322	0.9	3.4	113.3	3
01	SL n	2.0	5.6	0.853	1.705	2.322	2.0	7.6	113.3	7
02	SE v	SL=	3.4	2.713	0.168	5.902	1.9	1.9	284.0	1
02	SE n	SL=	7.6	2.713	0.168	5.902	3.7	3.7	279.9	1
03	SOLv	SL=	3.4	0.120	0.062	0.017	0.0	3.5	150.7	2
03	SOLn	SL=	7.6	0.120	0.062	0.017	0.1	7.7	150.7	5

Pkt 160 Strg 23 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 635.2 mm s= 17.9 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	5.6	0.853	1.339	2.279	1.8	7.4	113.3	7
01	SL n	2.0	1.6	0.853	1.339	2.279	0.5	2.2	113.3	2
02	SE v	SL=	7.4	2.713	0.170	5.350	3.4	3.4	280.0	1
02	SE n	SL=	2.2	2.713	0.170	5.350	1.1	1.1	285.2	0
03	SOLv	SL=	7.4	0.120	0.049	0.010	0.0	7.5	150.7	5
03	SOLn	SL=	2.2	0.120	0.049	0.010	0.0	2.2	150.6	1

Pkt 170 Strg 23 v Da= 635.2 mm s= 17.9 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	1.6	0.853	1.242	3.023	0.7	2.3	113.3	2
01	SL n	2.0	5.6	0.853	1.242	3.023	2.3	7.9	113.3	7
02	SE v	SL=	2.3	2.713	0.170	5.203	1.1	1.1	285.1	0
02	SE n	SL=	7.9	2.713	0.170	5.203	3.3	3.3	279.6	1
03	SOLv	SL=	2.3	0.120	0.045	0.007	0.0	2.3	150.6	2
03	SOLn	SL=	7.9	0.120	0.045	0.007	0.0	7.9	150.7	5

Pkt 171 Strg 23 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	5.6	0.853	0.282	5.005	3.4	9.0	113.3	8
02	SE v	SL=	9.0	2.713	0.174	3.753	2.6	2.6	278.5	1
03	SOLv	SL=	9.0	0.120	0.011	0.013	0.0	9.0	150.7	6

Pkt 175 Strg 23 n Da= 610.0 mm s= 11.5 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL n	2.0	2.5	0.853	0.247	4.153	1.3	3.9	113.3	3
02	SE n	SL=	3.9	2.713	0.176	2.953	1.2	1.2	283.6	0
03	SOLn	SL=	3.9	0.120	0.007	0.024	0.0	3.9	150.7	3

Pkt 185 Strg 23 v Da= 610.0 mm s= 11.5 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 610.0 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	2.5	0.496	0.309	1.317	0.4	3.0	113.3	3
01	SL n	2.0	5.6	0.496	0.309	1.317	0.9	6.6	113.3	6
02	SE v	SL=	3.0	1.061	0.723	5.387	1.6	1.6	284.5	1
02	SE n	SL=	6.6	1.061	0.723	5.387	3.1	3.1	280.9	1
03	SOLv	SL=	3.0	0.085	0.002	0.011	0.0	3.0	150.7	2
03	SOLn	SL=	6.6	0.085	0.002	0.011	0.0	6.6	150.7	4

Pkt 190 Strg 23 v Da= 610.0 mm s= 5.3 mm (RKR) Reduz. Kl.Radien
Strg 23 n Da= 406.4 mm s= 5.3 mm A= 35.0 Grd
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	5.6	0.496	0.222	1.445	1.0	6.6	113.3	6
01	SL n	2.0	3.7	0.496	0.222	1.445	2.3	6.0	113.3	5
02	SE v	SL=	6.6	1.061	0.517	5.280	3.1	3.1	280.9	1
02	SE n	SL=	6.0	1.061	0.517	5.280	7.0	7.0	281.5	2
03	SOLv	SL=	6.6	0.085	0.002	0.010	0.0	6.6	150.7	4
03	SOLn	SL=	6.0	0.085	0.002	0.010	0.0	6.0	150.7	4

Pkt 195 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P	SLP	Qx,Mt	Mi	Mo	S(Q,M)	S-ges	S-zul	Ausn

	(bar)	(N/mm2)	(kN,kNm)	(kNm)	(kNm)	(N/mm2)	(N/mm2)	(N/mm2)	(%)
01 SL v	2.0	3.7	0.496	0.135	1.525	2.4	6.1	113.3	5

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
02	SE v	SL=	6.1	1.061	0.311	5.173	6.9	6.9	281.4	2
03	SOLv	SL=	6.1	0.085	0.001	0.008	0.0	6.1	150.7	4

Pkt 198 Strg 23 n Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL n	2.0	3.7	0.496	0.109	1.286	2.0	5.7	113.3	5
02	SE n	SL=	5.7	1.061	0.268	4.871	6.5	6.5	281.8	2
03	SOLn	SL=	5.7	0.085	0.000	0.005	0.0	5.7	150.7	4

Pkt 200 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	0.496	0.643	0.875	1.7	5.4	113.3	5
01	SL n	2.0	3.7	0.304	0.643	0.875	1.7	5.4	113.3	5
02	SE v	SL=	5.4	1.061	1.535	4.211	6.0	6.0	282.1	2
02	SE n	SL=	5.4	1.061	1.535	4.211	6.0	6.0	282.1	2
03	SOLv	SL=	5.4	0.085	0.002	0.003	0.0	5.4	150.7	4
03	SOLn	SL=	5.4	0.020	0.002	0.003	0.0	5.4	150.7	4

Pkt 202 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	0.304	0.134	0.461	0.8	4.5	113.3	4
02	SE v	SL=	4.5	1.061	0.269	6.093	8.0	8.0	283.0	3
03	SOLv	SL=	4.5	0.020	0.001	0.007	0.0	4.5	150.7	3

Pkt 208 Strg 23 n Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL n	2.0	3.7	0.304	0.115	0.394	0.7	4.4	113.3	4
02	SE n	SL=	4.4	1.061	0.352	7.017	9.2	9.2	283.1	3
03	SOLn	SL=	4.4	0.020	0.000	0.008	0.0	4.4	150.7	3

Pkt 210 Strg 23 v Da= 406.4 mm s= 5.3 mm (BGL) Bogen GLatt
Strg 23 m Da= 406.4 mm s= 5.3 mm R= 610.0 mm
Strg 23 n Da= 406.4 mm s= 5.3 mm ii= 4.1 io= 3.4

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	3.7	0.304	0.394	0.115	2.6	6.3	113.3	6
01	SL m	2.0	3.7	0.891	0.102	0.160	1.2	4.9	113.3	4
01	SL n	2.0	3.7	1.248	0.045	0.111	0.8	4.5	113.3	4
02	SE v	SL=	6.3	1.061	7.017	0.352	37.7	37.7	281.2	13
02	SE m	SL=	4.9	1.155	5.007	0.126	26.9	26.9	282.6	10
02	SE n	SL=	4.5	0.883	0.961	0.531	5.8	5.8	283.0	2
03	SOLv	SL=	6.3	0.020	0.008	0.000	0.1	6.3	150.7	4
03	SOLm	SL=	4.9	0.016	0.006	0.005	0.0	4.9	150.7	3
03	SOLn	SL=	4.5	0.003	0.002	0.007	0.0	4.6	150.7	3

Pkt 220 Strg 23 v Da= 406.4 mm s= 5.3 mm (BGL) Bogen GLatt
Strg 23 m Da= 406.4 mm s= 5.3 mm R= 610.0 mm
Strg 23 n Da= 406.4 mm s= 5.3 mm ii= 4.1 io= 3.4

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	1.370	0.181	0.105	1.5	5.2	113.3	5
01 SL m	2.0	3.7	1.422	0.053	0.026	0.6	4.3	113.3	4
01 SL n	2.0	3.7	0.349	0.668	0.143	4.3	8.0	113.3	7
02 SE v	SL=	5.2	0.883	0.357	3.835	17.3	17.3	282.3	6
02 SE m	SL=	4.3	5.904	0.213	8.286	37.9	37.9	283.2	13
02 SE n	SL=	8.0	12.602	0.615	7.884	39.0	39.0	279.5	14
03 SOLv	SL=	5.2	0.003	0.007	0.006	0.1	5.2	150.7	3
03 SOLm	SL=	4.3	0.001	0.008	0.013	0.1	4.3	150.7	3
03 SOLn	SL=	8.0	0.001	0.009	0.013	0.1	8.1	150.7	5

Pkt 225 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.349	0.143	0.668	1.1	4.8	113.3	4
01 SL n	2.0	3.7	0.349	0.143	0.668	1.1	4.8	113.3	4
02 SE v	SL=	4.8	12.602	7.884	0.615	19.3	19.3	282.7	7
02 SE n	SL=	4.8	12.602	7.884	0.615	19.3	19.3	282.7	7
03 SOLv	SL=	4.8	0.001	0.013	0.009	0.0	4.8	150.7	3
03 SOLn	SL=	4.8	0.001	0.013	0.009	0.0	4.8	150.7	3

Pkt 230 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 431.6 mm s= 17.9 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.349	0.121	0.810	1.3	5.0	113.3	4
01 SL n	2.0	1.1	0.349	0.121	0.810	0.4	1.4	113.3	1
02 SE v	SL=	5.0	12.602	8.919	0.708	20.0	20.0	282.5	7
02 SE n	SL=	1.4	12.602	8.919	0.708	6.5	6.5	286.0	2
03 SOLv	SL=	5.0	0.001	0.014	0.009	0.0	5.0	150.7	3
03 SOLn	SL=	1.4	0.001	0.014	0.009	0.0	1.4	150.6	1

Pkt 240 Strg 23 v Da= 431.6 mm s= 17.9 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	1.1	0.349	0.090	1.148	0.5	1.6	113.3	1
01 SL n	2.0	3.7	0.349	0.090	1.148	1.8	5.5	113.3	5
02 SE v	SL=	1.6	12.602	10.384	0.840	6.8	6.8	285.8	2
02 SE n	SL=	5.5	12.602	10.384	0.840	21.2	21.2	282.0	8
03 SOLv	SL=	1.6	0.001	0.016	0.010	0.0	1.6	150.6	1
03 SOLn	SL=	5.5	0.001	0.016	0.010	0.0	5.5	150.7	4

Pkt 250 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.349	0.015	2.313	3.6	7.2	113.3	6
01 SL n	2.0	3.7	0.349	0.000	2.313	3.6	7.2	113.3	6

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
02 SE v	SL=	7.2	12.602	13.934	1.159	24.4	24.4	280.2	9
02 SE n	SL=	7.2	0.000	0.000	1.218	1.6	1.6	280.2	1
03 SOLv	SL=	7.2	0.001	0.021	0.010	0.0	7.3	150.7	5
03 SOLn	SL=	7.2	0.001	0.000	0.010	0.0	7.3	150.7	5

Pkt 270 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.349	0.000	1.822	2.8	6.5	113.3	6
01 SL n	2.0	3.7	0.349	0.000	1.822	2.8	6.5	113.3	6
02 SE v	SL=	6.5	0.000	0.000	1.037	1.3	1.3	281.0	0
02 SE n	SL=	6.5	0.000	0.000	1.037	1.3	1.3	281.0	0
03 SOLv	SL=	6.5	0.001	0.000	0.009	0.0	6.5	150.7	4
03 SOLn	SL=	6.5	0.001	0.000	0.009	0.0	6.5	150.7	4

WWWWW Bei Pkt 275 DO/T > 100 WWWWWWW

Pkt 275 Strg 23 v Da= 406.4 mm s= 5.3 mm (RKR) Reduz. Kl.Radien
Strg 23 n Da= 800.0 mm s= 5.0 mm A= 53.0 Grd
ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.349	0.000	1.461	2.3	5.9	113.3	5
01 SL n	2.0	7.9	0.349	0.000	1.461	0.6	8.5	109.0	8
02 SE v	SL=	5.9	0.000	0.000	0.828	1.1	1.1	281.5	0
02 SE n	SL=	8.5	0.000	0.000	0.828	0.3	0.3	269.4	0
03 SOLv	SL=	5.9	0.001	0.000	0.008	0.0	6.0	150.7	4
03 SOLn	SL=	8.5	0.001	0.000	0.008	0.0	8.5	145.0	6

Pkt 280 Strg 23 v Da= 800.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 800.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	7.9	0.349	0.000	1.275	0.5	8.4	109.0	8
01 SL n	2.0	7.9	0.349	0.000	1.275	0.5	8.4	109.0	8
02 SE v	SL=	8.4	0.000	0.000	0.672	0.2	0.2	269.5	0
02 SE n	SL=	8.4	0.000	0.000	0.672	0.2	0.2	269.5	0
03 SOLv	SL=	8.4	0.001	0.000	0.007	0.0	8.4	145.0	6
03 SOLn	SL=	8.4	0.001	0.000	0.007	0.0	8.4	145.0	6

Pkt 285 Strg 23 v Da= 800.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 800.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	7.9	0.349	0.000	1.651	0.7	8.5	109.0	8
01 SL n	2.0	7.9	0.773	0.000	1.927	0.8	8.7	109.0	8
02 SE v	SL=	8.5	0.000	0.000	0.796	0.3	0.3	269.4	0
02 SE n	SL=	8.7	0.000	0.000	1.429	0.5	0.5	269.2	0
03 SOLv	SL=	8.5	0.001	0.000	0.003	0.0	8.5	145.0	6
03 SOLn	SL=	8.7	0.002	0.000	0.005	0.0	8.7	145.0	6

Pkt 290 Strg 23 v Da= 800.0 mm s= 5.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 800.0 mm s= 5.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	7.9	0.773	0.000	0.111	0.1	8.0	109.0	7
01 SL n	2.0	7.9	0.773	0.000	0.111	0.1	8.0	109.0	7
02 SE v	SL=	8.0	0.000	0.000	0.529	0.2	0.2	270.0	0
02 SE n	SL=	8.0	0.000	0.000	0.529	0.2	0.2	270.0	0
03 SOLv	SL=	8.0	0.002	0.000	0.001	0.0	8.0	145.0	5
03 SOLn	SL=	8.0	0.002	0.000	0.001	0.0	8.0	145.0	5

WWWWW Bei Pkt 292 DO/T > 100 WWWWWWW

Pkt 292 Strg 23 v Da= 800.0 mm s= 5.0 mm (RKR) Reduz. Kl.Radien
Strg 23 n Da= 406.4 mm s= 5.3 mm A= 53.0 Grd
ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	7.9	0.773	0.000	0.114	0.1	8.0	109.0	7
01 SL n	2.0	3.7	0.773	0.000	0.114	0.3	4.0	113.3	4
02 SE v	SL=	8.0	0.000	0.000	0.272	0.1	0.1	269.9	0
02 SE n	SL=	4.0	0.000	0.000	0.272	0.4	0.4	283.5	0
03 SOLv	SL=	8.0	0.002	0.000	0.000	0.0	8.0	145.0	5
03 SOLn	SL=	4.0	0.002	0.000	0.000	0.0	4.0	150.7	3

Pkt 294 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.773	0.000	0.302	0.6	4.3	113.3	4
01 SL n	2.0	3.7	0.773	0.000	0.302	0.6	4.3	113.3	4
02 SE v	SL=	4.3	0.000	0.000	0.125	0.2	0.2	283.2	0
02 SE n	SL=	4.3	0.000	0.000	0.125	0.2	0.2	283.2	0
03 SOLv	SL=	4.3	0.002	0.000	0.001	0.0	4.3	150.7	3
03 SOLn	SL=	4.3	0.002	0.000	0.001	0.0	4.3	150.7	3

Pkt 298 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 23 n Da= 406.4 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.773	0.000	0.340	0.6	4.3	113.3	4
01 SL n	2.0	3.7	0.773	0.000	0.340	0.6	4.3	113.3	4
02 SE v	SL=	4.3	0.000	0.000	0.259	0.3	0.3	283.2	0
02 SE n	SL=	4.3	0.000	0.000	0.259	0.3	0.3	283.2	0
03 SOLv	SL=	4.3	0.002	0.000	0.002	0.0	4.3	150.7	3
03 SOLn	SL=	4.3	0.002	0.000	0.002	0.0	4.3	150.7	3

Pkt 300 Strg 23 v Da= 406.4 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	3.7	0.773	0.000	0.332	0.6	4.3	113.3	4
02 SE v	SL=	4.3	0.000	0.000	0.345	0.4	0.4	283.2	0
03 SOLv	SL=	4.3	0.002	0.000	0.002	0.0	4.3	150.7	3

Pkt 600 Strg 24 n Da= 21.3 mm s= 1.0 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL n	2.0	0.9	0.000	0.000	0.000	0.0	0.9	113.3	1
02 SE n	SL=	0.9	0.000	0.000	0.000	0.0	0.0	286.6	0
03 SOLn	SL=	0.9	0.000	0.000	0.000	0.0	0.9	150.7	1

Pkt 20 Strg 24 v Da= 610.0 mm s= 5.3 mm (BGL) Bogen GLatt
Strg 24 m Da= 610.0 mm s= 5.3 mm R= 914.0 mm
Strg 24 n Da= 610.0 mm s= 5.3 mm ii= 5.1 io= 4.3

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.054	0.101	2.104	6.0	11.6	113.3	10
01 SL m	2.0	5.6	0.181	0.015	0.428	1.2	6.8	113.3	6
01 SL n	2.0	5.6	0.202	0.033	1.049	3.0	8.6	113.3	8
02 SE v	SL=	11.6	0.108	0.452	1.476	3.8	3.8	275.9	1
02 SE m	SL=	6.8	0.979	2.617	1.146	8.1	8.1	280.6	3
02 SE n	SL=	8.6	1.514	1.457	0.145	4.3	4.3	278.9	2
03 SOLv	SL=	11.6	0.000	0.000	0.000	0.0	11.6	150.7	8
03 SOLm	SL=	6.8	0.000	0.000	0.000	0.0	6.8	150.7	5
03 SOLn	SL=	8.6	0.000	0.000	0.000	0.0	8.6	150.7	6

Pkt 15 Strg 24 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 24 n Da= 610.0 mm s= 5.3 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.202	0.033	1.049	0.7	6.3	113.3	6
01 SL n	2.0	5.6	0.202	0.033	1.049	0.7	6.3	113.3	6
02 SE v	SL=	6.3	1.514	1.457	0.145	1.2	1.2	281.2	0
02 SE n	SL=	6.3	1.514	1.457	0.145	1.2	1.2	281.2	0
03 SOLv	SL=	6.3	0.000	0.000	0.000	0.0	6.3	150.7	4
03 SOLn	SL=	6.3	0.000	0.000	0.000	0.0	6.3	150.7	4

Pkt 10 Strg 24 v Da= 610.0 mm s= 5.3 mm (VUU) V-Naht Umf.,Ubear.
Strg 24 n Da= 610.0 mm s= 7.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	5.6	0.202	0.029	1.131	0.8	6.4	113.3	6
01 SL n	2.0	4.2	0.202	0.029	1.131	0.6	4.8	82.1	6
02 SE v	SL=	6.4	1.514	1.149	0.149	1.1	1.1	281.1	0
02 SE n	SL=	4.8	1.514	1.149	0.149	1.0	1.0	202.0	0
03 SOLv	SL=	6.4	0.000	0.000	0.000	0.0	6.4	150.7	4
03 SOLn	SL=	4.8	0.000	0.000	0.000	0.0	4.8	109.2	4

Pkt 1340 Strg 24 v Da= 610.0 mm s= 7.0 mm (VUU) V-Naht Umf.,Ubear.
Strg 24 n Da= 610.0 mm s= 7.0 mm ii= 1.0 io= 1.0

Na Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01 SL v	2.0	4.2	0.202	0.013	1.149	0.6	4.8	82.1	6
01 SL n	2.0	4.2	0.202	0.013	1.149	0.6	4.8	82.1	6
02 SE v	SL=	4.8	1.514	0.003	0.161	0.8	0.8	202.0	0
02 SE n	SL=	4.8	1.514	0.003	0.161	0.8	0.8	202.0	0
03 SOLv	SL=	4.8	0.000	0.000	0.000	0.0	4.8	109.2	4

03 SOLn	SL=	4.8	0.000	0.000	0.000	0.0	4.8	109.2	4

Pkt 1250 Strg 24 v Da= 610.0 mm s= 7.0 mm (VUU) V-Naht Umf.,Ubear.
ii= 1.0 io= 1.0

Na	Gl	P (bar)	SLP (N/mm2)	Qx,Mt (kN,kNm)	Mi (kNm)	Mo (kNm)	S(Q,M) (N/mm2)	S-ges (N/mm2)	S-zul (N/mm2)	Ausn (%)
01	SL v	2.0	4.2	0.000	0.000	0.000	0.0	4.2	82.1	5
02	SE v	SL=	4.2	0.000	0.000	0.000	0.0	0.0	202.6	0
03	SOLv	SL=	4.2	0.000	0.000	0.000	0.0	4.2	109.2	4

EXTRAKT DER SPANNUNGSANALYSE NACH ASME B31.3:

Nachweis 01 Spannungen infolge staendiger Lasten (SL)

Bauteile mit maximaler Spannungsausnutzung

Pkt		ii	io	Errechn. Spannung (N/mm2)	Zulaess. Spannung (N/mm2)	Aus-nutzung (%)
90	(TTU)	9.15	11.87	56.3	113.3	49.7
100	(TTU)	9.15	11.87	56.0	113.3	49.4
110	(TTU)	9.15	11.87	51.1	113.3	45.1
60	(BGL)	5.14	4.29	28.2	113.3	24.8
1240	(TTU)	8.54	11.06	17.8	82.1	21.7
130	(BGL)	5.14	4.29	21.8	113.3	19.2
1230	(TTU)	8.54	11.06	15.2	82.1	18.5
30	(TTU)	9.15	11.87	19.9	113.3	17.5
140	(VUU)	1.00	1.00	17.6	113.3	15.5
80	(VUU)	1.00	1.00	17.1	113.3	15.1
405	(BGL)	4.14	3.45	16.9	113.3	14.9
1220	(TTU)	8.54	11.06	11.4	82.1	13.9
150	(TTU)	5.85	7.47	14.6	113.3	12.9
550	(VUU)	1.00	1.00	13.6	109.0	12.5
545	(VUU)	1.00	1.00	12.8	109.0	11.7
540	(RKR)	1.00	1.00	12.4	109.0	11.4
70	(VUU)	1.00	1.00	12.6	113.3	11.1
120	(BGL)	5.14	4.29	12.3	113.3	10.9
50	(BGL)	5.14	4.29	12.2	113.3	10.8
425	(VUU)	1.00	1.00	12.1	113.3	10.7
145	(VUU)	1.00	1.00	12.1	113.3	10.6
1210	(TTU)	8.54	11.06	8.7	82.1	10.6
20	(BGL)	5.14	4.29	11.6	113.3	10.2
180	(TTU)	5.85	7.47	11.0	113.3	9.7
560	(VUU)	1.00	1.00	10.0	109.0	9.2
570	(VUU)	1.00	1.00	9.9	109.0	9.1
430	(VUU)	1.00	1.00	10.3	113.3	9.1
580	(RKR)	1.00	1.00	9.9	109.0	9.1
440	(RKR)	1.00	1.00	9.3	109.0	8.5
530	(VUU)	1.00	1.00	9.6	113.3	8.5

0 Schnitte mit Spannungsueberschreitungen (*)

EXTRAKT DER SPANNUNGSANALYSE NACH ASME B31.3:

Nachweis 02 Spannungen infolge Staend. u. Temperaturlast

Bauteile mit maximaler Spannungsausnutzung

Pkt		ii	io	Errechn. Spannung (N/mm2)	Zulaess. Spannung (N/mm2)	Aus-nutzung (%)
1240	(TTU)	8.54	11.06	82.9	189.0	43.9
1230	(TTU)	8.54	11.06	79.0	191.6	41.2
1220	(TTU)	8.54	11.06	51.7	195.4	26.5
1210	(TTU)	8.54	11.06	35.6	199.9	17.8
1320	(BGL)	4.18	3.49	32.1	202.6	15.9
1300	(BGL)	4.18	3.49	31.8	202.8	15.7
1280	(BGL)	4.18	3.49	31.4	202.8	15.5
1260	(BGL)	4.18	3.49	31.0	203.0	15.3
220	(BGL)	4.14	3.45	39.0	279.5	14.0
210	(BGL)	4.14	3.45	37.7	281.2	13.4
180	(TTU)	5.85	7.47	32.0	276.4	11.6
1330	(VUU)	1.00	1.00	22.0	204.7	10.7
1290	(VUU)	1.00	1.00	21.8	204.7	10.7
1270	(VUU)	1.00	1.00	20.6	205.0	10.0
1310	(VUU)	1.00	1.00	20.4	204.9	10.0
250	(VUU)	1.00	1.00	24.4	280.2	8.7
240	(VUU)	1.00	1.00	21.2	282.0	7.5
50	(BGL)	5.14	4.29	20.0	277.8	7.2
230	(VUU)	1.00	1.00	20.0	282.5	7.1
150	(TTU)	5.85	7.47	19.7	283.8	7.0
225	(VUU)	1.00	1.00	19.3	282.7	6.8
505	(BGL)	4.14	3.45	19.3	282.5	6.8
120	(BGL)	5.14	4.29	18.8	276.8	6.8
60	(BGL)	5.14	4.29	16.9	259.3	6.5
405	(BGL)	4.14	3.45	17.6	270.5	6.5
90	(TTU)	9.15	11.87	13.5	231.1	5.8
100	(TTU)	9.15	11.87	10.6	231.5	4.6
1325	(VUU)	1.00	1.00	8.3	203.4	4.1
1285	(VUU)	1.00	1.00	8.1	203.4	4.0
80	(VUU)	1.00	1.00	10.7	270.4	4.0

0 Schnitte mit Spannungsueberschreitungen (*)

EXTRAKT DER SPANNUNGSANALYSE NACH ASME B31.3:

Nachweis 03 Spannungen infolge staend. + gelegentl. Lasten (SOL)

Bauteile mit maximaler Spannungsausnutzung

Pkt		ii	io	Errechn. Spannung (N/mm2)	Zulaess. Spannung (N/mm2)	Aus-nutzung (%)
90	(TTU)	9.15	11.87	56.4	150.7	37.4
100	(TTU)	9.15	11.87	56.1	150.7	37.2
110	(TTU)	9.15	11.87	51.2	150.7	34.0
60	(BGL)	5.14	4.29	28.2	150.7	18.7
1240	(TTU)	8.54	11.06	17.8	109.2	16.3
130	(BGL)	5.14	4.29	21.9	150.7	14.5
1230	(TTU)	8.54	11.06	15.2	109.2	13.9
30	(TTU)	9.15	11.87	19.9	150.7	13.2
140	(VUU)	1.00	1.00	17.6	150.7	11.7
405	(BGL)	4.14	3.45	17.2	150.7	11.4
80	(VUU)	1.00	1.00	17.1	150.7	11.4
1220	(TTU)	8.54	11.06	11.4	109.2	10.4
150	(TTU)	5.85	7.47	14.8	150.7	9.8
550	(VUU)	1.00	1.00	13.6	145.0	9.4
545	(VUU)	1.00	1.00	12.8	145.0	8.9
540	(RKR)	1.00	1.00	12.5	145.0	8.6
70	(VUU)	1.00	1.00	12.6	150.7	8.4
120	(BGL)	5.14	4.29	12.3	150.7	8.2
425	(VUU)	1.00	1.00	12.2	150.7	8.1
50	(BGL)	5.14	4.29	12.2	150.7	8.1
145	(VUU)	1.00	1.00	12.1	150.7	8.0
1210	(TTU)	8.54	11.06	8.7	109.2	8.0
20	(BGL)	5.14	4.29	11.6	150.7	7.7
180	(TTU)	5.85	7.47	11.2	150.7	7.5
560	(VUU)	1.00	1.00	10.0	145.0	6.9
430	(VUU)	1.00	1.00	10.3	150.7	6.9
570	(VUU)	1.00	1.00	9.9	145.0	6.8
580	(RKR)	1.00	1.00	9.9	145.0	6.8
530	(VUU)	1.00	1.00	9.7	150.7	6.5
440	(RKR)	1.00	1.00	9.3	145.0	6.4

0 Schnitte mit Spannungsueberschreitungen (*)

6 Warnung(en)