MINIMUM LOAD CASE._J

	Load Cases	Stress Type	Load Cycles
L1	WW+HP	HYD	
L2	W+P1	SUS	
L3	T1-T2	EXP	
L4	W+T1+P1	OPE	
L5	W+T2+P1	OPE	
L6	WIN1	OCC	
L7	U1	SUS	
L8	U2	SUS	
L9	U3	SUS	
L10	D1	EXP	
L11	D2	EXP	
L12	D3	EXP	
L13	D4	EXP	
L14	D5	EXP	
L15	D6	EXP	
L16	L10,L11,L12,L13	EXP	
L17	-L7+L8-L9	SUS	
L18	-L7+L8+L9	SUS	
L19	L7+L8-L9	SUS	
L20	L7+L8+L9	SUS	
L21	-L7-L8-L9	SUS	
L22	-L7-L8+L9	SUS	
L23	L7-L8-L9	SUS	
L24	L7-L8+L9	SUS	
L25	L7+L8+L9	SUS	
L26	L4+L17+L10+L14+L15	OPE	
L27	L4+L18+L11+L14+L15	OPE	
L28	L4+L19+L12+L14+L15	OPE	
L29	L4+L20+L13+L14+L15	OPE	
L30	L4+L21-L13+L14+L15	OPE	
L31	L4+L22-L12+L14+L15	OPE	
L32	L4+L23-L11+L14+L15	OPE	
L33	L4+L24-L10+L14+L15	OPE	
L34	L4+L17+L10-L14-L15	OPE	
L35	L4+L18+L11-L14-L15	OPE	
L36	L4+L19+L12-L14-L15	OPE	
L37	L4+L20+L13-L14-L15	OPE	
L38	L4+L21-L13-L14-L15	OPE	
L39	L4+L22-L12-L14-L15	OPE	
L40	L4+L23-L11-L14-L15	OPE	
L41	L4+L24-L10-L14-L15	OPE	
L42	L2+L25	SUS	
L43	L2+L25+L6	OCC	
L44	L3+L16+2L14+2L15	EXP	
L45	2L14	FAT	
L46	L25+L16+2L15	FAT	

	Load Case Name	Output Status	Output Type	Comb Method	Snubbers Active?	Hanger Stiffness
L1	HYDRO TEST CASE	Keep	Disp/Force/Stress		☐	Rigid
L2	W+P1(SUS)	Keep	Disp/Force/Stress		☐	As Design
L3	T1-T2(EXP)	Keep	Disp/Force/Stress		☐	As Design
L4	OPERATING CASE CONDITION 1	Keep	Disp/Force/Stress		☐	As Design
L5	OPERATING CASE CONDITION 2	Keep	Disp/Force/Stress		☐	As Design
L6	WIN1(OCC)	Keep	Disp/Force/Stress		☐	As Design
L7	U1(SUS)	Keep	Disp/Force/Stress		☐	As Design
L8	U2(SUS)	Keep	Disp/Force/Stress		☐	As Design
L9	U3(SUS)	Keep	Disp/Force/Stress		☐	As Design
L10	D1(EXP)	Keep	Disp/Force/Stress		☐	As Design
L11	D2(EXP)	Keep	Disp/Force/Stress		☐	As Design
L12	D3(EXP)	Keep	Disp/Force/Stress		☐	As Design
L13	D4(EXP)	Keep	Disp/Force/Stress		☐	As Design
L14	D5(EXP)	Keep	Disp/Force/Stress		☐	As Design
L15	D6(EXP)	Keep	Disp/Force/Stress		☐	As Design
L16	L10,L11,L12,L13(EXP)	Keep	Disp/Force/Stress	Max	☐	
L17	-L7+L8-L9(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L18	-L7+L8+L9(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L19	L7+L8-L9(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L20	L7+L8+L9(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L21	-L7-L8-L9(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L22	-L7-L8+L9(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L23	L7-L8-L9(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L24	L7-L8+L9(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L25	L7+L8+L9(SUS)	Keep	Disp/Force/Stress	SRSS	☐	
L26	L4+L17+L10+L14+L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L27	L4+L18+L11+L14+L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L28	L4+L19+L12+L14+L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L29	L4+L20+L13+L14+L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L30	L4+L21-L13+L14+L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L31	L4+L22-L12+L14+L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L32	L4+L23-L11+L14+L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L33	L4+L24-L10+L14+L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L34	L4+L17+L10-L14-L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L35	L4+L18+L11-L14-L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L36	L4+L19+L12-L14-L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L37	L4+L20+L13-L14-L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L38	L4+L21-L13-L14-L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L39	L4+L22-L12-L14-L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L40	L4+L23-L11-L14-L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L41	L4+L24-L10-L14-L15(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L42	L2+L25(SUS)	Keep	Disp/Force/Stress	Abs	☐	
L43	L2+L25+L6(OCC)	Keep	Disp/Force/Stress	Abs	☐	
L44	L3+L16+2L14+2L15(EXP)	Keep	Disp/Force/Stress	Abs	☐	
L45	2L14(FAT)	Keep	Disp/Force/Stress	Abs	☐	
L46	L25+L16+2L15(FAT)	Keep	Disp/Force/Stress	Abs	☐	

MINIMUM LOAD CASE + F1._J

	Load Cases	Stress Type	Load Cycles
L1	WW+HP	HYD	
L2	W+P1	SUS	
L3	T1-T2	EXP	
L4	W+T1+P1+F1	OPE	
L5	W+T2+P1+F1	OPE	
L6	WIN1	OCC	
L7	F1	OCC	
L8	U1	SUS	
L9	U2	SUS	
L10	U3	SUS	
L11	D1	EXP	
L12	D2	EXP	
L13	D3	EXP	
L14	D4	EXP	
L15	D5	EXP	
L16	D6	EXP	
L17	L11,L12,L13,L14	EXP	
L18	-L8+L9-L10	SUS	
L19	-L8+L9+L10	SUS	
L20	L8-L9-L10	SUS	
L21	L8+L9+L10	SUS	
L22	-L8-L9-L10	SUS	
L23	-L8-L9+L10	SUS	
L24	L8-L9-L10	SUS	
L25	L8-L9+L10	SUS	
L26	L8+L9+L10	SUS	
L27	L4+L18+L11+L15+L16	OPE	
L28	L4+L19+L12+L15+L16	OPE	
L29	L4+L20+L13+L15+L16	OPE	
L30	L4+L21+L14+L15+L16	OPE	
L31	L4+L22-L14+L15+L16	OPE	
L32	L4+L23-L13+L15+L16	OPE	
L33	L4+L24-L12+L15+L16	OPE	
L34	L4+L25-L11+L15+L16	OPE	
L35	L4+L18+L11-L15-L16	OPE	
L36	L4+L19+L12-L15-L16	OPE	
L37	L4+L20+L13-L15-L16	OPE	
L38	L4+L21+L14-L15-L16	OPE	
L39	L4+L22-L14-L15-L16	OPE	
L40	L4+L23-L13-L15-L16	OPE	
L41	L4+L24-L12-L15-L16	OPE	
L42	L4+L25-L11-L15-L16	OPE	
L43	L2+L26	SUS	
L44	L2+L26+L6+L7	OCC	
L45	L3+L17+2L15+2L16	EXP	
L46	2L15	FAT	
L47	L26+L17+2L16	FAT	

	Load Case Name	Output Status	Output Type	Comb Method	Snubbers Active?	Hanger Stiffness
L1	HYDRO TEST CASE	Keep	Disp/Force/Stress		☐	Rigid
L2	W+P1(SUS)	Keep	Disp/Force/Stress		☐	As Design
L3	T1-T2(EXP)	Keep	Disp/Force/Stress		☐	As Design
L4	OPERATING CASE CONDITION 1	Keep	Disp/Force/Stress		☐	As Design
L5	OPERATING CASE CONDITION 2	Keep	Disp/Force/Stress		☐	As Design
L6	WIN1(OCC)	Keep	Disp/Force/Stress		☐	As Design
L7	F1(OCC)	Keep	Disp/Force/Stress		☐	As Design
L8	U1(SUS)	Keep	Disp/Force/Stress		☐	As Design
L9	U2(SUS)	Keep	Disp/Force/Stress		☐	As Design
L10	U3(SUS)	Keep	Disp/Force/Stress		☐	As Design
L11	D1(EXP)	Keep	Disp/Force/Stress		☐	As Design
L12	D2(EXP)	Keep	Disp/Force/Stress		☐	As Design
L13	D3(EXP)	Keep	Disp/Force/Stress		☐	As Design
L14	D4(EXP)	Keep	Disp/Force/Stress		☐	As Design
L15	D5(EXP)	Keep	Disp/Force/Stress		☐	As Design
L16	D6(EXP)	Keep	Disp/Force/Stress		☐	As Design
L17	L11,L12,L13,L14(EXP)	Keep	Disp/Force/Stress	Max	☐	
L18	-L8+L9-L10(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L19	-L8+L9+L10(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L20	L8-L9-L10(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L21	L8+L9+L10(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L22	-L8-L9-L10(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L23	-L8-L9+L10(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L24	L8-L9-L10(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L25	L8-L9+L10(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L26	L8+L9+L10(SUS)	Keep	Disp/Force/Stress	SRSS	☐	
L27	L4+L18+L11+L15+L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L28	L4+L19+L12+L15+L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L29	L4+L20+L13+L15+L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L30	L4+L21+L14+L15+L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L31	L4+L22-L14+L15+L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L32	L4+L23-L13+L15+L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L33	L4+L24-L12+L15+L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L34	L4+L25-L11+L15+L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L35	L4+L18+L11-L15-L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L36	L4+L19+L12-L15-L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L37	L4+L20+L13-L15-L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L38	L4+L21+L14-L15-L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L39	L4+L22-L14-L15-L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L40	L4+L23-L13-L15-L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L41	L4+L24-L12-L15-L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L42	L4+L25-L11-L15-L16(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L43	L2+L26(SUS)	Keep	Disp/Force/Stress	Abs	☐	
L44	L2+L26+L6+L7(OCC)	Keep	Disp/Force/Stress	Abs	☐	
L45	L3+L17+2L15+2L16(EXP)	Keep	Disp/Force/Stress	Abs	☐	
L46	2L15(FAT)	Keep	Disp/Force/Stress	Abs	☐	
L47	L26+L17+2L16(FAT)	Keep	Disp/Force/Stress	Abs	☐	

MINIMUM LOAD CASE + SPRING._J

	Load Cases	Stress Type	Load Cycles
L1	W	HGR	
L2	W+T1+P1	HGR	
L3	WW+HP	HYD	
L4	W+P1+H	SUS	
L5	T1-T2	EXP	
L6	W+T1+P1+H	OPE	
L7	W+T2+P1+H	OPE	
L8	WIN1	OCC	
L9	U1	SUS	
L10	U2	SUS	
L11	U3	SUS	
L12	D1	EXP	
L13	D2	EXP	
L14	D3	EXP	
L15	D4	EXP	
L16	D5	EXP	
L17	D6	EXP	
L18	L12,L13,L14,L15	EXP	
L19	-L9+L10-L11	SUS	
L20	-L9+L10+L11	SUS	
L21	L9+L10-L11	SUS	
L22	L9+L10+L11	SUS	
L23	-L9-L10-L11	SUS	
L24	-L9-L10+L11	SUS	
L25	L9-L10-L11	SUS	
L26	L9-L10+L11	SUS	
L27	L9+L10+L11	SUS	
L28	L6+L19+L12+L16+L17	OPE	
L29	L6+L20+L13+L16+L17	OPE	
L30	L6+L21+L14+L16+L17	OPE	
L31	L6+L22+L15+L16+L17	OPE	
L32	L6+L23-L15+L16+L17	OPE	
L33	L6+L24-L14+L16+L17	OPE	
L34	L6+L25-L13+L16+L17	OPE	
L35	L6+L26-L12+L16+L17	OPE	
L36	L6+L19+L12-L16-L17	OPE	
L37	L6+L20+L13-L16-L17	OPE	
L38	L6+L21+L14-L16-L17	OPE	
L39	L6+L22+L15-L16-L17	OPE	
L40	L6+L23-L15-L16-L17	OPE	
L41	L6+L24-L14-L16-L17	OPE	
L42	L6+L25-L13-L16-L17	OPE	
L43	L6+L26-L12-L16-L17	OPE	
L44	L4+L27	SUS	
L45	L4+L27+L8	OCC	
L46	L5+L18+2L16+2L17	EXP	
L47	2L16	FAT	
L48	L27+L18+2L17	FAT	

	Load Case Name	Output Status	Output Type	Comb Method	Snubbers Active?	Hanger Stiffness
L1	WEIGHT FOR HANGER LOADS	Supress	Disp/Force/Stress		☐	Rigid
L2	OPERATING FOR HANGER TRAVEL	Supress	Disp/Force/Stress		☐	Ignore
L3	HYDRO TEST CASE	Keep	Disp/Force/Stress		☐	Rigid
L4	W+P1+H(SUS)	Keep	Disp/Force/Stress		☐	As Design
L5	T1-T2(EXP)	Keep	Disp/Force/Stress		☐	As Design
L6	OPERATING CASE CONDITION 1	Keep	Disp/Force/Stress		☐	As Design
L7	OPERATING CASE CONDITION 2	Keep	Disp/Force/Stress		☐	As Design
L8	WIN1(OCC)	Keep	Disp/Force/Stress		☐	As Design
L9	U1(SUS)	Keep	Disp/Force/Stress		☐	As Design
L10	U2(SUS)	Keep	Disp/Force/Stress		☐	As Design
L11	U3(SUS)	Keep	Disp/Force/Stress		☐	As Design
L12	D1(EXP)	Keep	Disp/Force/Stress		☐	As Design
L13	D2(EXP)	Keep	Disp/Force/Stress		☐	As Design
L14	D3(EXP)	Keep	Disp/Force/Stress		☐	As Design
L15	D4(EXP)	Keep	Disp/Force/Stress		☐	As Design
L16	D5(EXP)	Keep	Disp/Force/Stress		☐	As Design
L17	D6(EXP)	Keep	Disp/Force/Stress		☐	As Design
L18	L12,L13,L14,L15(EXP)	Keep	Disp/Force/Stress	Max	☐	
L19	-L9+L10-L11(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L20	-L9+L10+L11(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L21	L9+L10-L11(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L22	L9+L10+L11(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L23	-L9-L10-L11(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L24	-L9-L10+L11(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L25	L9-L10-L11(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L26	L9-L10+L11(SUS)	Keep	Disp/Force/Stress	Algebraic	☐	
L27	L9+L10+L11(SUS)	Keep	Disp/Force/Stress	SRSS	☐	
L28	L6+L19+L12+L16+L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L29	L6+L20+L13+L16+L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L30	L6+L21+L14+L16+L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L31	L6+L22+L15+L16+L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L32	L6+L23-L15+L16+L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L33	L6+L24-L14+L16+L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L34	L6+L25-L13+L16+L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L35	L6+L26-L12+L16+L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L36	L6+L19+L12-L16-L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L37	L6+L20+L13-L16-L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L38	L6+L21+L14-L16-L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L39	L6+L22+L15-L16-L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L40	L6+L23-L15-L16-L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L41	L6+L24-L14-L16-L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L42	L6+L25-L13-L16-L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L43	L6+L26-L12-L16-L17(OPE)	Keep	Disp/Force/Stress	Algebraic	☐	
L44	L4+L27(SUS)	Keep	Disp/Force/Stress	Abs	☐	
L45	L4+L27+L8(OCC)	Keep	Disp/Force/Stress	Abs	☐	
L46	L5+L18+2L16+2L17(EXP)	Keep	Disp/Force/Stress	Abs	☐	
L47	2L16(FAT)	Keep	Disp/Force/Stress	Abs	☐	
L48	L27+L18+2L17(FAT)	Keep	Disp/Force/Stress	Abs	☐	

MINIMUM LOAD CASE + SPRING + F1._J

	Load Cases	Stress Type	Load Cycles
L1	W	HGR	
L2	W+T1+P1	HGR	
L3	WW+HP	HYD	
L4	W+P1+H	SUS	
L5	T1-T2	EXP	
L6	W+T1+P1+H+F1	OPE	
L7	W+T2+P1+H+F1	OPE	
L8	WIN1	OCC	
L9	F1	OCC	
L10	U1	SUS	
L11	U2	SUS	
L12	U3	SUS	
L13	D1	EXP	
L14	D2	EXP	
L15	D3	EXP	
L16	D4	EXP	
L17	D5	EXP	
L18	D6	EXP	
L19	L13,L14,L15,L16	EXP	
L20	-L10+L11-L12	SUS	
L21	-L10+L11+L12	SUS	
L22	L10+L11-L12	SUS	
L23	L10+L11+L12	SUS	
L24	-L10-L11-L12	SUS	
L25	-L10-L11+L12	SUS	
L26	L10-L11-L12	SUS	
L27	L10-L11+L12	SUS	
L28	L10+L11+L12	SUS	
L29	L6+L20+L13+L17+L18	OPE	
L30	L6+L21+L14+L17+L18	OPE	
L31	L6+L22+L15+L17+L18	OPE	
L32	L6+L23+L16+L17+L18	OPE	
L33	L6+L24-L16+L17+L18	OPE	
L34	L6+L25-L15+L17+L18	OPE	
L35	L6+L26-L14+L17+L18	OPE	
L36	L6+L27-L13+L17+L18	OPE	
L37	L6+L20+L13-L17-L18	OPE	
L38	L6+L21+L14-L17-L18	OPE	
L39	L6+L22+L15-L17-L18	OPE	
L40	L6+L23+L16-L17-L18	OPE	
L41	L6+L24-L16-L17-L18	OPE	
L42	L6+L25-L15-L17-L18	OPE	
L43	L6+L26-L14-L17-L18	OPE	
L44	L6+L27-L13-L17-L18	OPE	
L45	L4+L28	SUS	
L46	L4+L28+L8+L9	OCC	
L47	L5+L19+2L17+2L18	EXP	
L48	2L17	FAT	
L49	L28+L19+2L18	FAT	

	Load Case Name	Output Status	Output Type	Comb Method	Snubbers Active?	Hanger Stiffness
L1	WEIGHT FOR HANGER LOADS	Supress	Disp/Force/Stress		☐	Rigid
L2	OPERATING FOR HANGER TRAVEL	Supress	Disp/Force/Stress		☐	Ignore
L3	HYDRO TEST CASE	Keep	Disp/Force/Stress		☐	Rigid
L4	W+P1+H(SUS)	Keep	Disp/Force/Stress		☐	As Design
L5	T1-T2(EXP)	Keep	Disp/Force/Stress		☐	As Design
L6	OPERATING CASE CONDITION 1	Keep	Disp/Force/Stress		☐	As Design
L7	OPERATING CASE CONDITION 2	Keep	Disp/Force/Stress		☐	As Design
L8	WIN1(OCC)	Keep	Disp/Force/Stress		☐	As Design
L9	F1(OCC)	Keep	Disp/Force/Stress		☐	As Design
L10	U1(SUS)	Keep	Disp/Force/Stress		☐	As Design
L11	U2(SUS)	Keep	Disp/Force/Stress		☐	As Design
L12	U3(SUS)	Keep	Disp/Force/Stress		☐	As Design
L13	D1(EXP)	Keep	Disp/Force/Stress		☐	As Design
L14	D2(EXP)	Keep	Disp/Force/Stress		☐	As Design
L15	D3(EXP)	Keep	Disp/Force/Stress		☐	As Design
L16	D4(EXP)	Keep	Disp/Force/Stress		☐	As Design
L17	D5(EXP)	Keep	Disp/Force/Stress		☐	As Design
L18	D6(EXP)	Keep	Disp/Force/Stress		☐	As Design
L19	L13,L14,L15,L16(EXP)	Keep	Disp/Force/Stress	Max	☑	
L20	-L10+L11-L12(SUS)	Keep	Disp/Force/Stress	Algebraic	☑	
L21	-L10+L11+L12(SUS)	Keep	Disp/Force/Stress	Algebraic	☑	
L22	L10+L11-L12(SUS)	Keep	Disp/Force/Stress	Algebraic	☑	
L23	L10+L11+L12(SUS)	Keep	Disp/Force/Stress	Algebraic	☑	
L24	-L10-L11-L12(SUS)	Keep	Disp/Force/Stress	Algebraic	☑	
L25	-L10-L11+L12(SUS)	Keep	Disp/Force/Stress	Algebraic	☑	
L26	L10-L11-L12(SUS)	Keep	Disp/Force/Stress	Algebraic	☑	
L27	L10-L11+L12(SUS)	Keep	Disp/Force/Stress	Algebraic	☑	
L28	L10+L11+L12(SUS)	Keep	Disp/Force/Stress	SRSS	☑	
L29	L6+L20+L13+L17+L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L30	L6+L21+L14+L17+L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L31	L6+L22+L15+L17+L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L32	L6+L23+L16+L17+L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L33	L6+L24-L16+L17+L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L34	L6+L25-L15+L17+L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L35	L6+L26-L14+L17+L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L36	L6+L27-L13+L17+L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L37	L6+L20+L13-L17-L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L38	L6+L21+L14-L17-L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L39	L6+L22+L15-L17-L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L40	L6+L23+L16-L17-L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L41	L6+L24-L16-L17-L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L42	L6+L25-L15-L17-L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L43	L6+L26-L14-L17-L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L44	L6+L27-L13-L17-L18(OPE)	Keep	Disp/Force/Stress	Algebraic	☑	
L45	L4+L28(SUS)	Keep	Disp/Force/Stress	Abs	☑	
L46	L4+L28+L8+L9(OCC)	Keep	Disp/Force/Stress	Abs	☑	
L47	L5+L19+2L17+2L18(EXP)	Keep	Disp/Force/Stress	Abs	☑	
L48	2L17(FAT)	Keep	Disp/Force/Stress	Abs	☑	
L49	L28+L19+2L18(FAT)	Keep	Disp/Force/Stress	Abs	☑	