

APPLICATION FOR OSHED SPECIAL SEISMIC	OFFICE USE ONLY			
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #:	OSP – 0628		
OSHPD Special Seismic Certification Preapproval (OSP)				
Type: 🛛 New 🗌 Renewal				
Manufacturer Information				
Manufacturer: GE Healthcare				
Manufacturer's Technical Representative: Tom Farnow				
Mailing Address: 3000 N. Grandview Blvd., Waukesha, WI 53188-169	6			
Telephone: 888-406-1101	arnow@gehcseismic.com	<u>1</u>		
Product Information	MP			
Product Name: Revolution Maxima; Revolution Ace SHPD	T.			
Product Type: CT System OSP-0628	Se .			
Product Model Number: <u>See Attachment 1</u> (List all unique product identification numbers and/or part numbers) OTAV J Pla	nd			
General Description: <u>System components of multiple-component me</u> Seismic Certification is limited to components identified in Attachmen Tomography (CT) imaging services only. Seismic enhancements inc into the certified units.	edical diagnostic imaging t 1 for functions related to orporated into the test un	systems. Special Computed its shall be incorporated		
Mounting Description: Rigid Base mount.	0			
COPA -	DE.			
Applicant Information				
Applicant Company Name: EASE				
Contact Person: Jonathan Roberson, S.E.				
Mailing Address: _ 5877 Pine Ave, Suite 210, Chino Hills, CA. 91709				
Telephone: (909) 606-7622 Email: <u>j.robers</u>	son@easeco.com			
I hereby agree to reimburse the Office of Statewide Health F accordance with the California Administrative Code, 2016.	Planning and Develop	oment review fees in		
Signature of Applicant:	Date:	December 2, 2019		
Title: Principal Structural Engineer Company Name: EASE				
"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dvnamic Needs"	A AMAN	OSHPD		
STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY OSH-FD-759 (REV 12/16/15)	JANKAMM	Page 1 of 3		
		5		



California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)
Company Name: EASE
Name: Jonathan Roberson, S.E. California License Number: S4197
Mailing Address: _5877 Pine Ave, Suite 210, Chino Hills, CA. 91709
Telephone: (909) 606-7622 Email: j.roberson@easeco.com
Supports and Attachments Preapproval
 Supports and attachments are preapproved under OPM- (Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required) Supports and attachments are not preapproved
Certification Method
 Testing in accordance with: ICC-ES AC156 Other (Please Specify): OSP-0628
BY:Timothy J Piland
Testing Laboratory DATE: 12/18/2020
Company Name: Environmental Testing Laboratory, Inc.
Contact Name: Brady Richard
Mailing Address: 11034 Indian Trail, Dallas, TX. 75229-3513
Telephone: (972) 247-9657 Email: brady@etIdallas.com



Page 2 of 3

OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

Design in accordance with ASCE 7-10 Chapter 13: 🛛 Yes 🗌 No	
Design Basis of Equipment or Components $(F_p/W_p) = $ <u>See Attachment</u>	t 1
S_{DS} (Design spectral response acceleration at short period, g) =	2.00 (z/h = 1); 2.50 (z/h = 0)
a_{P} (In-structure equipment or component amplification factor) =	See Attachment 1
R_{P} (Equipment or component response modification factor) =	See Attachment 1
Ω_0 (System overstrength factor) = See Attachment 1	
I _p (Importance factor) = 1.5	
z/h (Height factor ratio) = <u>1 (S_{DS} = 2.00); 0 (S_{DS} = 2.50)</u>	
Equipment or Component Natural Frequencies (Hz) = <u>See At</u>	tachment 2
Overall dimensions and weight (or range thereof) = See At	tachment 1
Equipment or Components @ grade designed in accordance with ASCE	
Design Basis of Equipment or Components (V/W) =	
S_{DS} (Design spectral response acceleration at short period, g) =	P
S _{D1} (Design spectral response acceleration at 1 second period,	g) =
R (Response modification coefficient) =	
Ω_0 (System overstrength factor) = $R_{\rm BV}$. Timothy of Pilar	bo
C₄ (Deflection amplification factor) =	
I_{P} (Importance factor) = 1.5	
Height to Center of Gravit <mark>y above</mark> base =	
Equipment or Component Natural Frequencies (Hz) =	0
Overall dimensions and weight (or range thereof) =	Ste.
Tank(s) designed in accordance with ASME BPVC, 2015: 🔲 Yes 🔀	No
List of Attachments Supporting Special Seismic Certification	
	Manufacturer's Catalog
\square Other(s) (Please Specify): Attachments 1 & 2	
OSHPD Approval (For Office Use Only) – Approval Expires on	December 31, 2025
Signature: 14. 1 /	Date: December 18, 2020
Print Name: Timothy I Piland	Title: SSE
Special Seismic Certification Valid Up to: $S_{PS}(a) = See Above$	z/h = See Above
\square openial continue continuation valid op to. Obs (g) = <u>Dee Above</u>	

Condition of Approval (if applicable):

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY OSH-FD-759 (REV 12/16/15)

12/18/2020

Seismic Parameters



EASE EQUIPMENT ANCHORAGE & SEISMIC ENGINEERING

ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS

GE Healthcare

ATTACHMENT PAGE | 1 OF 1

TABLE 1:

SYSTEM MFR. GE Health	care												
SYSTEM Revolutio	n Maxima / Revolu	ution Ace											
	MODEL	APPRO	X. DIMENS	IONS (IN.)	MAX. WT.						 	 	
COMPONENT	NUMBER	W	D	H	(LB.)	MOUNT [6]	BASIS ^[1]	F _P /W _P	SDS	z/h	a _P	R _P	Ω0
GANTRIES	5]												
Revolution Maxima Gantry	6670000-2	80.4	40.2	76.3	3434	Floor	UUT1914-1						
Revolution Maxima Gantry	6670000-4	80.4	40.2	76.3	3434	Floor	SAME	2.40	2.40 2.0	1		4 1/	1 1/
Revolution Ace Gantry	6670000-3	80.4	40.2	76.3	3434	Floor	SAME	1.13	2.5	0	1	1 72	1 72
Revolution Ace Gantry	6670000-5	80.4	40.2	76.3	3434	Floor	SAME						
PATIENT TABLES	5]		N		7211		12						
GT1700V Table	5122080-11 [4]	25.6	93.3	19.2 / 41.2	2 1059 [2]	Floor	UUT1126-2	2.40	2.0	1 0	1	4.1/	4.1/
GT1700V Table	5122080-12	25.6	93.3	19.2 / 41.2	1059	Floor	SAME	1.13	2.5			I 72	1 /2
CONSOLES										•	<u>.</u>	-	
Open Console w/ Z8G4	5946404-15	15.8	26.4	22.7	142 (^[3]	PFloond	UUT1914-2	1.44	2.0	1		0.1/	
Open Console w/ Z8G4	5946404-25	15.8	26.4	22.7	142 [3]	Floor	SAME	1.13	2.5 0	0	1	Z 72	2
POWER DISTRIBUTION			W		401401	2000				•	<u>.</u>	-	
Power Distribution Unit	2326492-80 [4]	27.6	21.7	41.8	2841 0[3]	Floor	UUT1126-3	1.44	2.0	1		0.1/	
Power Distribution Unit	2326492-81	27.6	21.7	41.8	841 ^[3]	Floor	SAME	1.13	2.5	0	1	Z 1/2	2
MOUNT Floor (Rigid Base): free-standing, base-mounted tower configuration with the component rigidly attached to a supporting structure and no lateral support above the base.													
NOTES 1. BASI • UU • SA 2. 1700 3. Weig 4. Mode 5. Requ	S T#: Indicates that a ME: Model is physic V Patient Table weig ht includes mounting el is not used with th uires use of addition	test specin ;ally, mecha ght does nc g bracket h ie system(s al GE bush	nen matchin anically & el- ot include the ardware. o) identified i ing kit B766	g these char ectrically ider e 350 lb. sim n this table; i 32DA (P/N 5	acteristics was ntical to a test ulated patient t is included o 841169).	s tested as p ed unit, exce load present nly to establi	art of this testir pt for possible during testing sh basis for se	ng program variations ismic quali	ı. in model r fication.	number, ce	olor and/o	r software.	

6. See Attachment 2 for additional mounting information.



EQUIPMENT ANCHORAGE & SEISMIC ENGINEERING

ATTACHMENT 2: TEST SPECIMEN SUMMARY

GE Healthcare

ATTACHMENT PAGE | 1 OF 2

UUT 1914-1	Revolution I	Maxima CT Ga	antry			
Manufacturer:	GE Hangwei Meo	lical Systems Co., L	_TD.			
Identification:	Model No.: 667000 Serial No.: 000000	0-2 HM11		Revolution	L. UUTA	
Description:	Component of Revo - Non-tilt Gantry - Touchscreen disp - Configuration com standard production	olution Maxima lay on front (x2) trolled verification unit on.	that is equivalent to			
Mounting:	<u>Rigid Base (Floor) r</u> (4) – 5/8" dia. SAE GE Bushing Kit P/N	<u>nounted using:</u> J429 Grade 8 bolts to I 5841169.	test fixture.			
	Dimensions (in			Lowes	t Resonant Frequen	cy (Hz.)
Width	Depth	Height	Weight (lb.)	Front-Axis	Side-Axis	Vertical-Axis
80.4	40.2	76.3	3434	9.9	11.6	14.0
ICC-ES AC156 Sha	ake Table Test Paran	neters				Code: 2016 CBC
S _{DS} (G)	z/h	₽ IP	G AFLX-H (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (G)
2.0 2.5	1 0	1.5	3.2 Bothy Dilo	2.4	1.68	0.68
Unit satisfied AC150	6 requirements for stru	uctural integrity and m	anufacturer requirement	ts for functionality afte	r AC156 test.	

UUT 1914-2 Open Console w/ Z8G4TE: 12/18/2020

Manufacturer:	GE Hangwei Medica	Systems Co., LTD.	+	Kurshall	The second	
Identification:	Model No.: 5946404 Serial No.: 000000H	15 W1				
Description:	Component of the Ro Systems - HP Z8G4 Compute - Open style console - Configuration contr standard production	evolution Maxima / R r olled verification unit	that is equivalent to			
Mounting:	Rigid Base (Floor) m GE Console Anchor (3) – 3/8" dia. SAE J NOTE: Console Anc console.	ounted using: Kit 5812703-2 429 Grade 8 bolts to nor Kit 5812703-2 is i	test fixture. ncluded standard w/		13 - 27 - 1	\bigcirc
	Dimensions (in.)			Lowes	st Resonant Frequen	cy (Hz.)
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vertical-Axis
15.8	26.4	22.7	141.5 w/ brackets	14.6	30.1	26.2
ICC-ES AC156 S	Shake Table Test Parame	eters				Code: 2016 CBC
S _{DS} (G)	z/h	I _P	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (G)
2.0 2.5	1 0	1.5	3.2	2.4	1.68	0.68
Unit satisfied AC1	156 requirements for struc	tural integrity and ma	anufacturer requiremen	ts for functionality afte	er AC156 test.	



EQUIPMENT ANCHORAGE & SEISMIC ENGINEERING

ATTACHMENT 2: TEST SPECIMEN SUMMARY

GE Healthcare

ATTACHMENT PAGE | 2 OF 2

UUT 1126-2	GT1700V Table	•				
Manufacturer:	GE Hangwei Medical	Systems Co., LTD			T	
Identification:	Model No.: 5122080-	11				T
Description:	System component o Also used with other Test specimen includ Requires additional k B7660MY (Op B76632DA (Re	f the Optima CT660 CT systems. ed a simulated patie it as follows: tima CT660 system evolution Maxima	System. Int load of 350 lb. m) / Revolution Ace)		Left	
Mounting:	<u>Rigid Base (Floor) ma</u> (4) – 5/8" dia. hex hea	ounted using ad bolts to test fixtur	e.			1
	Dimensions (in.)	COF.		Lowes	st Resonant Frequenc	y (Hz.)
Width	Depth	Height	Weight (lb.)	Transverse-Axis	Longitudinal-Axis	Vertical-Axis
25.6	93.3	19.2 / 41.2	1059+ 350 Patient	3.9	15.2	14.2
ICC-ES AC156 Sha	ake Table Test Parame	ters		16		Code: 2016 CBC
S _{DS} (G)	z/h	k Ip	OSAFLX-H (G) O	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (G)
2.0 2.6	1 0	1.5	3.2	2.4	1.74	0.70
Unit satisfied AC15	6 requirements for struc	tural integrity and m	anufacturer requirement	ts for functionality afte	er AC156 test.	

UUT 1126-3	Power Distrib	ution Unit (PDU	12/18/2020) / /				
Manufacturer:	GE Hangwei Medica	Systems Co., LTD.	4	5				
Identification:	Model No.: 2326492-80 Serial No.: 270337HM9							
Description:	System component of the Optima CT660 System. Also used with other CT systems.							
Mounting:	Rigid Base (Floor)(4) - 3/8" dia. ASTIwasher througanchors ea. bGE mounting asser(2) - Seismic BrackEach bracket mour(2) - M10 x 25mm(2) - M10 Lock Wa(2) - M10 Flat Was	mounted using: M A574 Socket Head (gh GE mounting brack rracket) <u>mbly including:</u> (et, System Cabinet (F ted to cabinet w/: Class 12.9 bolt (Torqu sher (P/N 2203-M10-0 her (P/N 2000-M10-0)	Cap Screws w/ tets to floor plate. (2 P/N 2354563-2) ne= 38.4 N-m) 07) 3)		Front			
	Dimensions (in.)			Lowes	st Resonant Frequer	icy (Hz.)		
Width	Depth	Height	Weight (lb.)	Front-Axis	Side-Axis	Vertical-Axis		
27.6	21.7	41.8	841	20.4	20.6	13.8		
ICC-ES AC156 Sha	ake Table Test Param	eters				Code: 2016 CBC		
S _{DS} (G)	z/h	l _P	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (G)		
2.0 2.6	1 0	1.5	3.2	2.4	1.74	0.70		
Unit satisfied AC15	6 requirements for struc	ctural integrity and mai	nufacturer requiremen	its for functionality afte	er AC156 test.			