DEV NUMBER: ORIGINATOR:		DATE	E:	RAIN BIRD		BUSINESS UNIT (SBU and PLANT) W/ PRIMARY DESIGN CONTROL: SHEET:											
DEV25-0113		Α	bdul Castil	llo		25-Mar-25				025 OTY >>		>>>	GLF	L	or 7		
DMR# (IF APPLICABLE): DEVIATION NEW ✓				DE	VIATIO	ON FOR	M (DRAWING)						1	OF 7			
TYPE: EXTENSION OF DEV#:										AFFEC1	TED MFG PI	LANTS (WHERI	E USED):				
TOP-LEVEL SKU P/N(S) AND MODEL NUMBER(S):					EFFE	CTIVITY D	ATE: E	XPIRATION DATE:	005 1	LAM 🔲	013S STL		025 OTY 🔽	041 NO	G 🔲		
Golf: All Rotors						25-Mar-	25	25-Jun-25	008	BUY 🔲	019 AZU		028 TUC	047 TU	c 🗖		
PROJECT NAME OR NO. (OPTIONAL):										013E	EEX 🔲	020MX NMD		026 ELG 🔲		IA 🗖	
REASON FOR DEVIATION:											, <u></u> '			APPROVALS (ALL RE	QUIRED)		
Allow to run the 2149	30 low c	apability (PP	K) QAP; no	data is out of s	pecification	. Additional sh	neets for	the proces	s capability	report. This version allo	ws for the	use of 2149	30 components	with poor	QUALITY MGR. OR QU	IALITY E	NG.
· ·										inspections should be					Arturo Ramos /	Ramiro (Casas
of each 700 and 900.						assembled wit	thout inci	dent. In ad	idition, winte	rization TR-80364 and 1	1R-80365 v	were utilized	to evaluate five	internals	MANUFACTURING EN	SINEER	
RISK ASSESSMENT						MMITMENT:									Guillermo		
				. (,										PROD. ENG. MGR. OR		NG MGR
1,- Run 20 weeks of					antillan										Paul Dibene		
 Take mold out for Run QAP1001. se 					ro										BUYER OR BUYER/PL		Cia
4Evaluate parts 3															Diana Rincon /0		stillon
	-n. r		EVICION:	DEVIATION E	EV/ICION:	DD AVAUNO T	TT E / DA	DT DECC	DIDTION				VENDOE	١.		oscai Sai	ıtılları
DRAWING NUMBE	ER. L	DRAWING REVISION: DEVIATION REVISION: DRAWING T			IILE/ PA	KI DESCI				VENDOR:		PLANT MANAGER					
214930		С		C2					Bearing F	Housing			Westfall	· · · · · · · · · · · · · · · · · · ·	Jorge B		
															SBU PRODUCT MGR.		
															Altan Tolan / Ja		
														TOOLING ENGINEER (MOLDED PARTS ONLY)			
								Jorge Rivero / (esar Roo	driguez			
														OTHER:			
												D. Bush / E. Inig	uez/ C. C	Olvera			
DESCRIPTION OF D	EVIATIO	ON (IS/WAS	CONDITION	N AND DRAWII	NG ZONE F	OR EACH PA	ART NO.	OR ATTA	CH REDLINE	E PRINTS):					QUALITY DIRECTOR (REQUIRE	ED FOR
IS															BACK-TO-BAC		
2.859 ±	005	1 315	0.005 -	0.006	2 233	±.009	0 116	0.006	-0 004						Blanca	Salac	
	PK		CPK P		CPK		00	CPK							Dialica	Jaias	
C1 0.912		C1			1.549		C1	1.482	1.255								
C2 1.126 0.83 C2		C2	2.203	1.568 C2	1.972	1.196	C2		1.648								
			1.164		C3		1.523						/		/		
C4 0.823		C4	2.15		0.976		C4		1.116						7/ ////	-///	
C5 1.102		C5		1.613 C			C5 C6	0.963 1.045								///	
C6 1.407 C7 1.042		C6 C7		1.829 C6 2.758 C7			C7	1.244							CE .116	.00é	
C8 1.115		C8			0.969		C8		0.865				_		_	DETAIL F SCALE 10 :	
00 1.110	0.002	00	1.022	1.400	0.700	0.014	-	02.	0.000				L	2 850			_
	Г												1	2.859 C 9 2.854-2			
		Deviation 24-0154	Deviati	on 24-0184	Dovis	ation 24-039	7	Deviat	ion 25-011	3 Proposal		Diference		9 2.854-2	.080 —		
	-	5/2/2024		23/2024		0/23/2024	51		26/2025	5 FTOPOSAI		Dileterice		_			_
0.116 +0.006/-0.0	004			0.007/-0.004		+0.007/-0.0	204		Ppk (0.873	0.116 +0.008/0	0.004	0.001"	1.315 ^{+.00}	5	// '	İ	
									-pk (0.673	Ppk: 1.47	5	0.001	9 1.314-1.33	26)			
2x 0.16 +/-0.015				+0.016/-0.015	2x 0.16	2 +0.016/-0	0.015	<u> </u>		, 2.233 + 0.016 /	0.015		14	4			<u> </u>
2.233 +/- 0.009			2.233	3 +/- 0.015	2.23	33 +/- 0.015	5 6	Low F	Ppk (0.674	Ppk: 1.41		0.001"	립	- 🔠		2.	233±.009 C AVG
2.050 . / 0.005								1	Onle (0. 777	2.858 +/- 0.0		0.000"	7.77		_		+
2.859 +/- 0.005									Ppk (0.777	Ppk: 1.59)	0.006"		T C	(E)	,	
1.315 +0.005 / -0									Ppk (0.717	,		0.005"	9 0.072 - 0.095 .09	0			\perp
LOT: 1.314"-1.326	b"	Eloch			1			LOT:	Ppk (0.310	Ppk: 1.68	4			11			_
Flash?		Flash			1								J				



PART DESCRIPTION: BEARING HOUSING

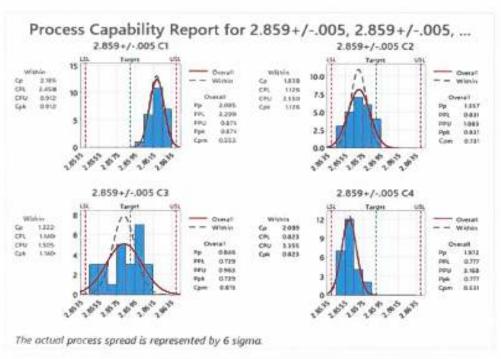
PART #: 214930

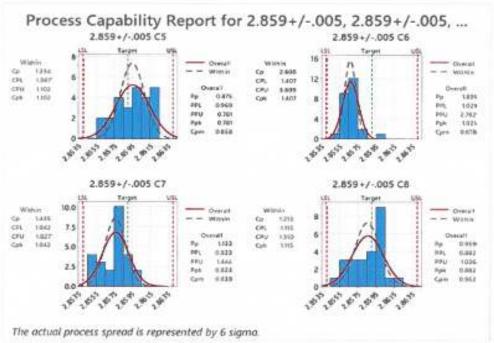
Issuing Dept: Quality

Page 1 of 6

Histograms/Capability

Process Capability Report for 2.859+/-.005







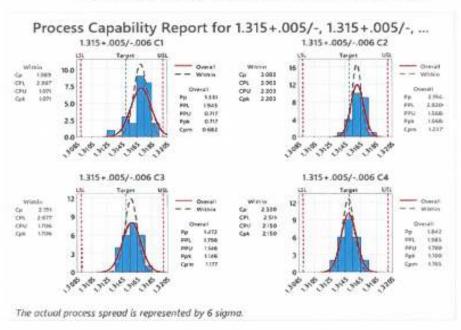
PART DESCRIPTION: BEARING HOUSING	Page
DART #: 214020	5037923

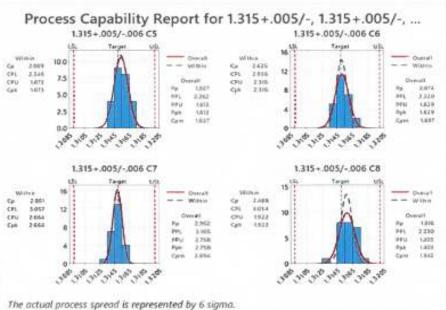
Issuing Dept: Quality

Histograms/Capability

2 of 6

Process Capability Report for 1.315+.005/-.006

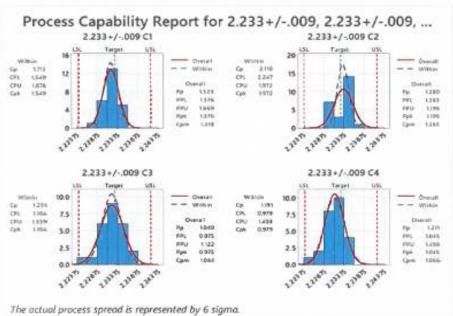


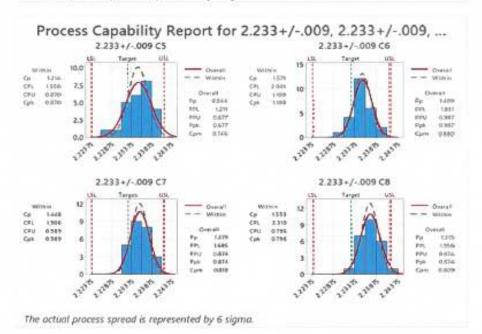




PART DESCRIPTION: BEARING HOUSING	Page 3 of 6
PART #: 214930	
Issuing Dent: Quality	Histograms/Capability

Process Capability Report for 2.233+/-.009

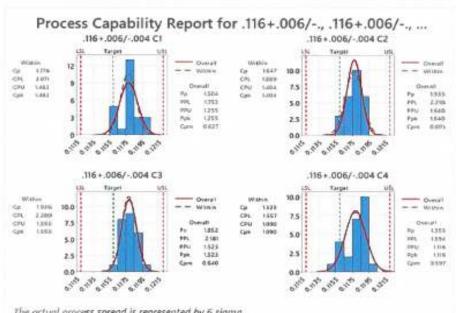




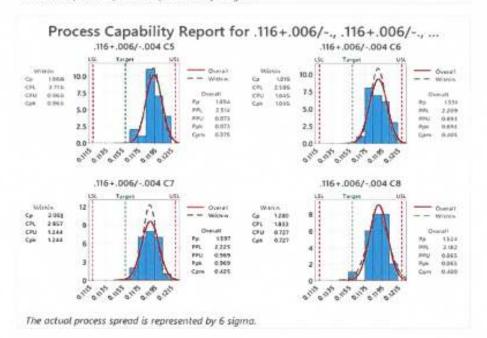


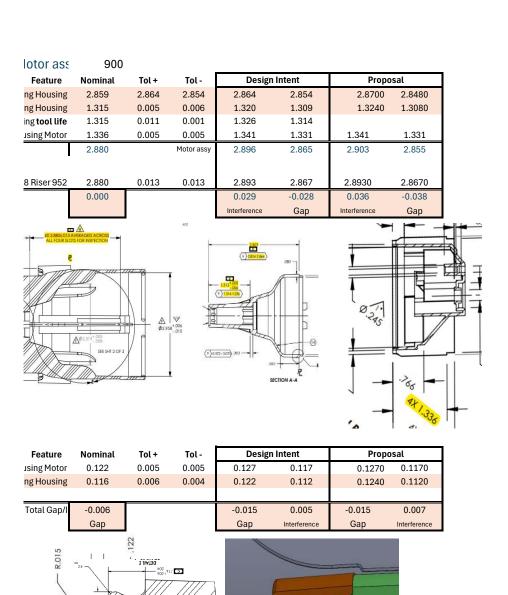
PART DESCRIPTION: BEARING HOUSING	Page 5 of 6			
PART #: 214930	====			
Issuing Dept: Quality	Histograms/Canability			

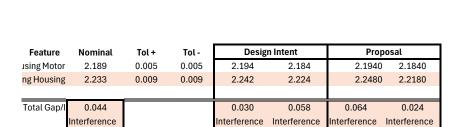
Process Capability Report for .116+.006/-.004

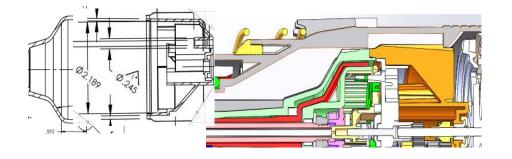


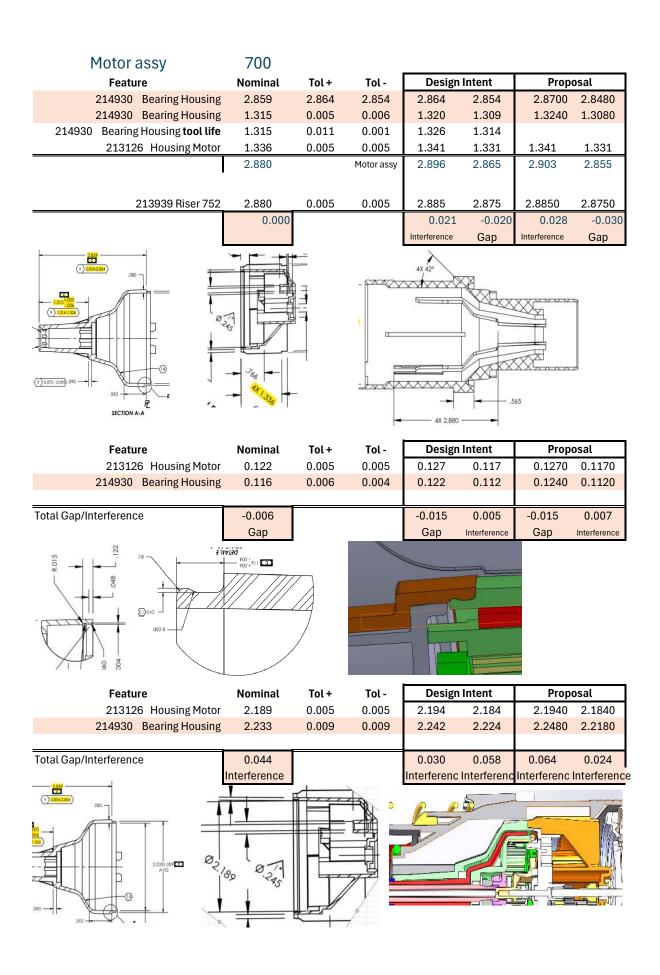
The actual process spread is represented by 6 sigma.











	Deviation 24-0154 5/2/2024	Deviation 24-0184 5/23/2024	Deviation 24-0397 10/23/2024	
0.116 +0.006/-0.004		0.116 +0.007/-0.004	0.116 +0.007/-0.004	
2x 0.16 +/-0.015		2x 0.16 +0.016/-0.015	2x 0.162 +0.016/-0.015	Repair
2.233 +/- 0.009		2.233 +/- 0.015	2.233 +/- 0.015	Re
2.859 +/- 0.005				
1.315 +0.005 / -0.006 LOT: 1.314"-1.326"				
Flash?	Flash			

Deviation 25-0113 3/26/2025	Proposal	Diference
Low Ppk (0.873)	0.116 +0.008/0.004 Ppk: 1.475	0.001"
Low Ppk (0.674)	2.233 + 0.016 / -0.015 Ppk: 1.411	0.001"
Low Ppk (0.777)	2.858 +/- 0.011 Ppk: 1.59	0.006"
Low Ppk (0.717) LOT: Ppk (0.310)	1.315" +0.009" / -0.007" Ppk: 1.684	0.005"

Castillo, Abdul Ivan OTY 4332

From: Castillo, Abdul Ivan OTY 4332

Sent: Wednesday, March 26, 2025 12:14 PM

To: Ramos, Arturo OTY2 4313; Casas, Ramiro OTY 4364; Acosta, Guillermo OTY 4319;

Dibene, Paul OTY2 4687; Vela, Xavier OTY 4377; Rincon, Diana OTY 4341; Santillan, Oscar OTY 4311; Borquez, Jorge OTY 4398; Tolan, Altan SOPT 6553; Guardado, Javier OTY 4310; Rivero, Jorge ELAG 4342; Rodriguez, Cesar Alberto NOG 5053; Busch, Doug SOPT 6533; Iniguez, Efrain OTY 3810; Olvera, Charles ELAG 1271; Salas, Blanca LAM2

4020

Subject: DEV25-0113 Permit the usage of the low capability (PPK) QAP run of 214930.

Attachments: DEV25-0113 Bearing Housing Run with QAP samples .xls

Importance: High

Follow Up Flag: Follow up Flag Status: Flagged

Tracking:	Recipient	Read	Response
	Ramos, Arturo OTY2 4313	Read: 3/26/2025 5:00 PM	Reject: 3/26/2025 5:11 PM
	Casas, Ramiro OTY 4364	Read: 3/26/2025 1:17 PM	Approve: 3/26/2025 1:18 PM
	Acosta, Guillermo OTY 4319		Approve: 3/26/2025 2:25 PM
	Dibene, Paul OTY2 4687		Approve: 3/26/2025 1:26 PM
	Vela, Xavier OTY 4377	Read: 3/26/2025 1:16 PM	Approve: 3/26/2025 1:16 PM
	Rincon, Diana OTY 4341		Approve: 4/1/2025 11:33 AM
	Santillan, Oscar OTY 4311		Approve: 3/26/2025 1:20 PM
	Borquez, Jorge OTY 4398	Read: 3/26/2025 1:42 PM	Approve: 3/26/2025 1:43 PM
	Tolan, Altan SOPT 6553	Read: 3/26/2025 12:23 PM	Approve: 3/26/2025 12:26 PM
	Guardado, Javier OTY 4310	Read: 3/27/2025 3:15 PM	Approve: 3/27/2025 3:17 PM
	Rivero, Jorge ELAG 4342	Read: 3/26/2025 12:35 PM	Approve: 3/26/2025 12:35 PM
	Rodriguez, Cesar Alberto NOG 5053		Approve: 3/26/2025 12:21 PM
	Busch, Doug SOPT 6533	Read: 3/26/2025 12:57 PM	Approve: 3/26/2025 12:59 PM
	Iniguez, Efrain OTY 3810		Approve: 3/26/2025 12:30 PM
	Olvera, Charles ELAG 1271	Read: 3/26/2025 12:20 PM	Approve: 3/26/2025 12:21 PM
	Salas, Blanca LAM2 4020	Read: 3/26/2025 12:41 PM	

Hello everyone

Review and approve the attached DEV25-0113

Permit the usage of the low capability (PPK) QAP run of 214930. The process capability report on xtra sheets shows that the most recent fix only affected cav 5, 6, 7, and 8. With this deviation, 214930 parts with a low capability PPK can be used. Under DEV24-0184 & DEV24-0397, deviations of $2.233 \pm .009$ & .116 + .006 - .005 were formerly permitted.

Let me know if you need more information, I'll be happy to provide it. 24-hour rule is invoked for indicated approvals

Castillo, Abdul Ivan OTY 4332

From: Salas, Blanca LAM2 4020

Sent: Wednesday, April 2, 2025 3:58 PM

To: Castillo, Abdul Ivan OTY 4332; Ramos, Arturo OTY2 4313; Casas, Ramiro OTY 4364;

Acosta, Guillermo OTY 4319; Dibene, Paul OTY2 4687; Vela, Xavier OTY 4377; Rincon, Diana OTY 4341; Santillan, Oscar OTY 4311; Borquez, Jorge OTY 4398; Tolan, Altan SOPT 6553; Guardado, Javier OTY 4310; Rivero, Jorge ELAG 4342; Rodriguez, Cesar Alberto NOG 5053; Busch, Doug SOPT 6533; Iniquez, Efrain OTY 3810; Olvera, Charles ELAG

1271

Subject: RE: DEV25-0113 Permit the usage of the low capability (PPK) QAP run of 214930.

Hello,

Deviation approved.

Regards,

Blanca Salas

Director of Quality (619) 671-4020

From: Castillo, Abdul Ivan OTY 4332 < AbCastillo@rainbird.com>

Sent: Tuesday, April 1, 2025 11:41 AM

To: Ramos, Arturo OTY2 4313 <arramos@rainbird.com>; Casas, Ramiro OTY 4364 <rcasas@rainbird.com>; Acosta, Guillermo OTY 4319 <gacosta@rainbird.com>; Dibene, Paul OTY2 4687 <PDibene@RainBird.com>; Vela, Xavier OTY 4377 <XVela@rainbird.com>; Rincon, Diana OTY 4341 <drincon@rainbird.com>; Santillan, Oscar OTY 4311 <OSantillan@rainbird.com>; Borquez, Jorge OTY 4398 <jborquez@rainbird.com>; Tolan, Altan SOPT 6553 <atolan@rainbird.com>; Guardado, Javier OTY 4310 <Jguardado@RainBird.com>; Rivero, Jorge ELAG 4342 <JRivero@rainbird.com>; Rodriguez, Cesar Alberto NOG 5053 <CeRodriguez@rainbird.com>; Busch, Doug SOPT 6533 <DBusch@rainbird.com>; Iniguez, Efrain OTY 3810 <EIniguez@rainbird.com>; Olvera, Charles ELAG 1271 <colvera@rainbird.com>; Salas, Blanca LAM2 4020 <bsalas@rainbird.com>

Subject: RE: DEV25-0113 Permit the usage of the low capability (PPK) QAP run of 214930.

Importance: High

Hi Arturo/Blanca

Deviation has been revised; units have passed the PRC test, and Tolerance Stack up has been added to the XLS file.

Please approve DEV25-0133

Let me know if you need more information, I'll be happy to provide it.

Greetings

Abdul I. Castillo

Sr. Product Engineer at Ensambles Hyson

US Phone: 619-661-4332 **MX Phone**: 664-973-4332

Castillo, Abdul Ivan OTY 4332

From: Ramos, Arturo OTY2 4313
Sent: Tuesday, April 1, 2025 3:28 PM

To: Castillo, Abdul Ivan OTY 4332; Casas, Ramiro OTY 4364; Acosta, Guillermo OTY 4319;

Dibene, Paul OTY2 4687; Vela, Xavier OTY 4377; Rincon, Diana OTY 4341; Santillan, Oscar OTY 4311; Borquez, Jorge OTY 4398; Tolan, Altan SOPT 6553; Guardado, Javier OTY 4310; Rivero, Jorge ELAG 4342; Rodriguez, Cesar Alberto NOG 5053; Busch, Doug SOPT 6533; Iniguez, Efrain OTY 3810; Olvera, Charles ELAG 1271; Salas, Blanca LAM2

4020

Subject: RE: DEV25-0113 Permit the usage of the low capability (PPK) QAP run of 214930.

Hello Abdul,

Thanks for the follow up, approved.

Arturo

From: Castillo, Abdul Ivan OTY 4332 < AbCastillo@rainbird.com>

Sent: Tuesday, April 1, 2025 11:41 AM

To: Ramos, Arturo OTY2 4313 <arramos@rainbird.com>; Casas, Ramiro OTY 4364 <rcasas@rainbird.com>; Acosta, Guillermo OTY 4319 <gacosta@rainbird.com>; Dibene, Paul OTY2 4687 <PDibene@RainBird.com>; Vela, Xavier OTY 4377 <XVela@rainbird.com>; Rincon, Diana OTY 4341 <drincon@rainbird.com>; Santillan, Oscar OTY 4311 <OSantillan@rainbird.com>; Borquez, Jorge OTY 4398 <jborquez@rainbird.com>; Tolan, Altan SOPT 6553 <atolan@rainbird.com>; Guardado, Javier OTY 4310 <Jguardado@RainBird.com>; Rivero, Jorge ELAG 4342 <JRivero@rainbird.com>; Rodriguez, Cesar Alberto NOG 5053 <CeRodriguez@rainbird.com>; Busch, Doug SOPT 6533 <DBusch@rainbird.com>; Iniguez, Efrain OTY 3810 <EIniguez@rainbird.com>; Olvera, Charles ELAG 1271 <colvera@rainbird.com>; Salas, Blanca LAM2 4020 <bsalas@rainbird.com>

Subject: RE: DEV25-0113 Permit the usage of the low capability (PPK) QAP run of 214930.

Importance: High

Hi Arturo/Blanca

Deviation has been revised; units have passed the PRC test, and Tolerance Stack up has been added to the XLS file.

Please approve DEV25-0133

Let me know if you need more information, I'll be happy to provide it.

Greetings

Abdul I. Castillo

Sr. Product Engineer at Ensambles Hyson

US Phone: 619-661-4332 **MX Phone**: 664-973-4332

From: Castillo, Abdul Ivan OTY 4332

Sent: Wednesday, March 26, 2025 12:14 PM

To: Ramos, Arturo OTY2 4313 arramos@rainbird.com">arramos@rainbird.com; Casas, Ramiro OTY 4364 rcasas@rainbird.com; Acosta, Guillermo OTY 4319 gacosta@rainbird.com; Dibene, Paul OTY2 4687 PDibene@RainBird.com; Vela, Xavier OTY