

Part Name <u>CVR WIR SHLD</u>		Cust. Part Number <u>H1BT-14A390-APB</u>	
Shown on Drawing No. <u>H1BT-14A390-APB</u>		Org. Part Number <u>7176-1234-30</u>	
Engineering Change Level <u>EE00 E 13161202 000</u>		Dated <u>29/06/2016</u>	
Additional Engineering Changes <u>N/A</u>		Dated <u>N/A</u>	
Safety and/or Government Regulation ☐ Yes ☒ No		Purchase Order No. <u>N/A</u> Weight (kg) <u>0,022</u>	
Checking Aid No. <u>N/A</u> Checking Aid Engineering Change Level		<u>N/A</u> Dated <u>N/A</u>	
ORGANIZATION MANUFACTURING INFORMATION YAZAKI EUROPE LTD <u>323047696</u> Organization Name & Supplier/Vendor Code <u>Robert Bosch Strasse., 43</u> Street Address Cologne NRW D-50769 Germany City Region Postal Code Country		CUSTOMER SUBMITTAL INFORMATION <u>NURSAN</u> Buyer/Buyer Code <u>FORD</u>	
MATERIALS REPORTING Has customer-required Substances of Concern information been reported? ☒ Yes ☐ No ☐ n/a Submitted by IMDS or other customer format: <u>IMDS</u> <u>IMDS ID: 960136504 / 1</u> Are polymeric parts identified with appropriate ISO marking codes? ☐ Yes ☐ No ☒ n/a			
REASON FOR SUBMISSION (Check at least one) ☐ Initial submission ☐ Engineering Change(s) ☐ Tooling: Transfer, Replacement, Refurbishment, or additional ☐ Correction of Discrepancy ☐ Tooling Inactive > than 1 year ☐ Change to Optional Construction or Material ☐ Supplier or Material Source Change ☐ Change in Part Processing ☐ Parts produced at Additional Location ☒ Other - please specify below <u>Customer Request</u>			
REQUESTED SUBMISSION LEVEL (Check one) ☐ Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer. ☒ Level 2 - Warrant with product samples and limited supporting data submitted to customer. ☐ Level 3 - Warrant with product samples and complete supporting data submitted to customer. ☐ Level 4 - Warrant and other requirements as defined by customer. ☐ Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.			
SUBMISSION RESULTS The results for ☒ dimensional measurements ☒ material and functional tests ☐ appearance criteria ☐ statistical process package These results meet all drawing and specification requirements: ☒ Yes ☐ NO (If "NO" - Explanation Required) Mold / Cavity / Production Process <u>2 Cavities serial tool</u>			
DECLARATION I affirm that the samples represented by this warrant are representative of our parts which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of 856 / 8 hours . I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from this declaration below.			
EXPLANATION/COMMENTS: _____			
Is each Customer Tool properly tagged and numbered? ☐ Yes ☐ No ☒ n/a			
Organization Authorized Signature <u>Graça Ferreira</u>		Date <u>20 March 2023</u>	
Print Name <u>Graça Ferreira</u>		Phone No. _____ FAX No. _____	
Title <u>QE</u>		E-mail <u>tdc@yazaki-europe.com</u>	
FOR CUSTOMER USE ONLY (IF APPLICABLE)			
PPAP Warrant Disposition: ☐ Approved ☐ Rejected ☐ Other _____			
Customer Signature _____		Date _____	
Print Name _____		Customer Tracking No. (optional) _____	



Date: 20.05.2015

Component Development Team

		Core Team	Extended Team		
PM	John Burden		x	john.burden@yazaki-europe.com	+49 (0) 221 / 888899-71
PL (electr. Design)	Steffen Köhler	x		steffen.koehler@yazaki-europe.com	+49 (0) 4401 / 981-362
PL (mech. Design)	Volker Dierkes		x	volker.dierkes@yazaki-europe.com	+49 (0) 221 / 597997-475
Comp Eng.	Rüdiger Liedtke	x		ruediger.liedtke@yazaki-europe.com	+49 (0) 4401 / 981-493
Comp Eng.	Dirk Jansen		x	dirk.jansen@yazaki-europe.com	+49 (0) 221 / 888899-40
SQE	Andreas Erbe	x		andreas.erbe@yazaki-europe.com	+49 (0) 4401 / 981-393
Q Eng. Planning	Bernd Lange		x	bernd.lange@yazaki-europe.com	+49 (0) 4401 / 981-468
Comp. Qualification	Sebastian Scharf	x		sebastian.scharf@yazaki-europe.com	+49 (0) 4401 / 981-231
AP	Bernd Bohlen		x	bernd.bohlen@yazaki-europe.com	+49 (0) 4401 / 981-368
S	Tilo Dauelsberg		x	tilo.dauelsberg@yazaki-europe.com	+49 (0) 4401 / 981-228

Organizasyon / Organisation :	A.RAYMOND TR	AR Parça No - Varyant - Seviye/ AR Part No :	240507	000	Ba
Ölçüm Yapılan Yer / Inspection Facility :	A.RAYMOND TR	Müşteri Parça No / Customer Part No :	H1BT 14A390 APB		
Ölçüm Talep Nedeni / Reason for Test :	Modification	Parça İsmi / Part Name :	WIR SHLD		
		Referans - Resim Tipi / Reference - Drawing Type :	Z DRAWING		
Hammadde / Raw Material :	HOSTACOM M2U01 Black 102942 (PP-T20)	Deneme - Üretim Tarihi / Trial - Production Date :	5 Ağustos 2016		T0
Parça nem oranı / Humidity of Part :	0,25 %	Deneme - Montaj Tarihi / Trial - Assembly Date :	NA		NA
Enjeksiyon Makinası / Injection Machine :	160 T	Test Tarihi / Test Date :	08.08.2016		
Göz x Baskı x Ölçüm / Cavity x Shot x Test Per Part :	2	2	10	Lab. Sıcaklığı ve Nemi / Lab. Temp. / Hum. (20°C ±2°C / %50 ±10) :	20,9

Ölçülen Değerler / Measured Values

TEST NO	Test Tipi / Test Type	Test Araçları Bilgisi / Test Tools Info						Belirlenen Limit / Specification Limit (Force : N, Torque : N.m)		Göz Sayısı / Cavity Number	Test Sonuçları / Test Results (Force : N, Torque : N.m)										Karar / Result
		1. Malzeme / 1. Support	Ölçüler / Dimensions (mm)	2. Malzeme / 2. Support	Ölçüler / Dimensions (mm)	Hız / Speed (mm/s, rpm)	Test Aleti / Test Device				Shot 1	Shot 2	Shot 3	Shot 4	Shot 5	Shot 6	Shot 7	Shot 8	Shot 9	Shot 10	
1	Push In Force	Metal Plate	12.2*6.2*2			100mm/min	Force Testing Machine	75	MAX	1	38,95	50,81	49,69	38,75	49,26	49,88	40,77	49,10	47,92	40,55	OK
2	Push In Force	Metal Plate	12.2*6.2*2			100mm/min	Force Testing Machine	75	MAX	2	41,90	40,86	53,04	41,68	39,19	53,19	43,81	39,02	51,63	43,61	OK
3	Pull Out Force	Metal Plate	12.4*6.4*2			100mm/min	Force Testing Machine	80	MIN	1	176,28	193,95	188,03	175,57	186,93	188,77	183,08	186,20	181,32	182,35	OK
4	Pull Out Force	Metal Plate	12.4*6.4*2			100mm/min	Force Testing Machine	80	MIN	2	129,40	176,54	184,18	128,66	171,40	184,86	136,06	170,84	178,03	135,35	OK
5	Push In Force	Metal Plate	6.5*2			100mm/min	Force Testing Machine	75	MAX	1	21,17	21,67	19,24	21,09	20,82	19,32	21,86	20,73	18,49	21,79	OK
6	Push In Force	Metal Plate	6.5*2			100mm/min	Force Testing Machine	75	MAX	2	21,64	21,35	19,37	21,56	20,48	19,45	22,34	20,39	18,63	22,27	OK
7	Pull Out Force	Metal Plate	6.7*2			100mm/min	Force Testing Machine	80	MIN	1	243,42	231,22	234,74	242,48	221,52	235,62	251,91	220,51	226,81	250,99	OK
8	Pull Out Force	Metal Plate	6.7*2			100mm/min	Force Testing Machine	80	MIN	2	220,93	215,07	202,55	220,11	206,26	203,37	228,25	205,35	195,16	227,47	OK
9	Handling Drop Test									1	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
10	Handling Drop Test									2	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

REFERANS / REFERENCE DOCUMENT		AÇIKLAMALAR / OBSERVATION		KONTROL EDEN / CONTROLLED BY		ONAYLAYAN / APPROVAL	
Z DRAWING				Selçuk YILMAZ		Burcu Eroğlu	

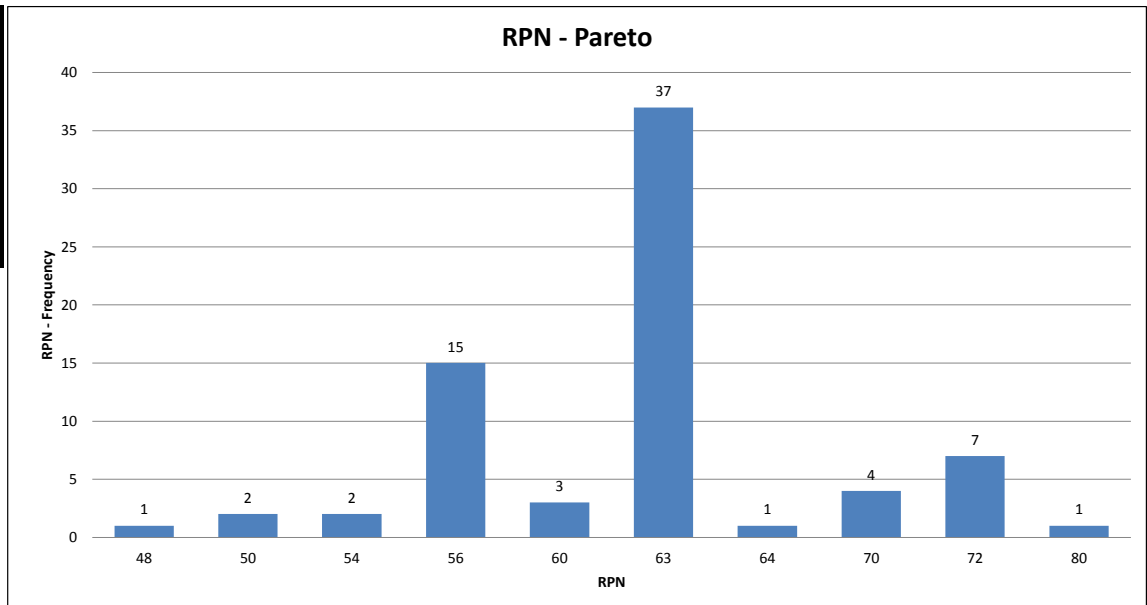
TEST PARÇASI / TEST PART		EKİPMANLAR / EQUIPMENTS (Test Plate, Test Machine, Plate, Pin...)			TEST GÖRÜNTÜSÜ / TEST PHOTOGRAPH	
						

Gönderi Referansı <i>Submission Reference</i>	2016_25_08_1
Gönderi Amacı <i>Submission Aim</i>	SAMPLES AFTER MODIFICATION
Müşteri Parça Numarası <i>Customer Part Number</i>	H1BT14A390 ARB/APB/ALA/AMA
A Raymond Parça Numarası <i>A Raymond Part Number</i>	240504000/24050700/239946000/239947000
Miktar <i>Quantity</i>	3+3+3+3
Gönderen <i>Sender</i>	BURCU KARAKUŞ EROĞLU
Tarih <i>Date</i>	24.08.2016
Alan <i>Receiver</i>	ANDREAS ERBE
Adres <i>Address</i>	Yazaki Systems Technologies GmbH FBU AP Heinrich-Addicks-Straße 1-3 26919 Brake
Telefon	49 (4401) 981-393
Tel : +90 262 658 10 58	

**ÖNEMLİ NOT : Yukarıdaki etiket, hem kutuya
hem de kutunun içindeki numune poşetine
(varsa) yapıştırılmalıdır.**

Design-FMEA Overview				
Company Name:	A. Raymond GmbH & Co. KG			
FMEA Number:			FMEA Date / Start:	24.09.2015
Part Name:	RHD Cockpit A-Pillar Guide		FMEA Date / Revision:	04.03.2016
Part Number(s):	H1BT-14A390-APA		Team:	T. Tausendfreund, A. Glagau, C. Kolb
			Production Plant:	AR Turkey

RPN	Frequency
48	1
50	2
54	2
56	15
60	3
63	37
64	1
70	4
72	7
80	1



No.	RPN	Failure Description	Process number	Rootcause
1	80	Wire harness not fastened permanently		Radii at cable strap holes not sufficient
2	72	Assembly of cable channel not warranted		Distance between fastening points not adjusted correctly
3	72	Assembly of cable channel not warranted		Investigation of installation space incomplete
4	72	Assembly of cable channel not warranted		Cable channel gets deformed by wire harness
5	72	Cross section area not sufficient		Customer specification not considered
6	72	Cross section area not sufficient		Customer specification incomplete / has changed
7	72	Wire harness gets damaged		Sharp edges in or at the ends of the channels
8	72	Guiding of wire harness not sufficient		Cable channel constructed too weak
9	70	Assembly of component not possible		Spring legs designed to stiff
10	70	Spring leg gets damaged during assembly		Setting angle too smaller too tall

Carline / Component: B479 / H1BT-14A390-APA
 Supplier: A. Raymond GmbH & Co. KG
 Date of FMEA: 04.03.16

☒ Design-FMEA
 ☐ Process-FMEA

I. General & Formalism

		YES	NO*
1	Is there a systematical approach to identify potential failures ? <i>Gibt es eine systematische Vorgehensweise zur Erkennung möglicher Fehler ?</i>	☒	☐
2	Has the FMEA been created by a cross-functional team ? <i>Wurde die FMEA vom einem aus mehreren Funktionsbereichen zusammengesetzten Team erstellt ?</i>	☒	☐
3	Are all formsheet header data complete and correct ? <i>Sind alle Daten im Formulkopf vollständig und korrekt ?</i>	☒	☐
4	Do have all single pages a clear reference to the header data and revision level ? <i>Haben alle Einzelblätter eine klare Referenz zu den Kopfdaten und dem Ausgabestand ?</i>	☒	☐
5	Do have the single pages a subsequent numbering and show the total number of pages ? <i>Haben alle Einzelblätter eine fortlaufende Numerierung und Angabe der Gesamtzahl der Einzelblätter ?</i>	☒	☐
6	Is a unique date format used in the entire document ? <i>Wird ein einheitliches Format für Datumsangaben im ganzen Dokument verwendet ?</i>	☒	☐
7	Does the status of the FMEA conform to the latest status of the product development/ process planning ? <i>Entspricht der Stand der FMEA dem aktuellen Stand der Produktentwicklung / Prozessplanung ?</i>	☒	☐
8	Has the team reviewed relevant information, e.g. specifications, concern/warranty data from previous/other projects, ... ? <i>Hat das Team wichtige Informationen, z.B. Spezifikation, Beanstandungs-/Gewährleistungsdaten früherer/anderer Projekte, berücksichtigt ?</i>	☒	☐

II. Structure and Failure Analysis

		YES	NO*
1	Has the scope of the D-FMEA (including interfaces) defined by a comprehensive boundary diagram ? <i>Ist das bei der D-FMEA zu untersuchende System in einem Blockdiagramm umfassend dargestellt (einschl. Schnittstellen) ?</i>	☒	☐
2	<i>for PFMEA only:</i> Are all relevant process steps according work-flow listed ? <i>Sind alle wichtigen Prozessschritte entsprechend dem Arbeitsablauf aufgeführt ?</i>		
3	<i>for PFMEA only:</i> Are the tasks/functions of the "5 M" (men, machine, material, method, medium) for each process step listed ? <i>Sind für jeden Prozessschritt die Aufgaben/Funktionen der "5 M" (Mensch, Maschine, Material, Methode, Mitwelt) aufgeführt ?</i>		
4	Are more than one malfunction assigned to each function/task ? <i>Sind den einzelnen Funktionen/Aufgaben mehr als eine Fehlfunktion zugeordnet ?</i>	☒	☐
5	Are the malfunctions/potential effects of failure on the product, next operation, ... described clearly and traceable ? <i>Sind die Fehlfunktionen/Auswirkung des potentiellen Fehlers auf das Produkt, den nächsten Arbeitsschritt, ... eindeutig und nachvollziehbar beschrieben ?</i>	☒	☐
6	Are all potential Special Characteristics known from other projects considered in the D-FMEA ? <i>Wurden alle potentiellen besonderen Merkmale bekannt aus anderen Projekten in der D-FMEA berücksichtigt ?</i>	☒	☐
7	Are all potential Special Characteristics (YS, YC) correctly identified and marked ? <i>Sind alle potentiellen besonderen Merkmale (YS, YC) korrekt identifiziert und markiert ?</i>	☒	☐

YS = potential significant characteristic (D-FMEA only)
 YC = potential critical characteristic (D-FMEA only)
 SC = significant characteristic (P-FMEA only)
 CC = critical characteristic (P-FMEA only)

B = Bedeutung
 A = Auftretenswahrscheinlichkeit
 E = Entdeckungswahrscheinlichkeit
 RPZ = Risikoprioritätszahl
 (RPZ = B x A x E)

S = Severity
 O = Occurrence
 D = Detection
 RPN = Risk Priority Number
 (RPN = S x O x D)

"NO" in orange lines : no approval possible
 "NO" in beige lines : revision of documents necessary

"NO" in orange Zeilen : KEINE Abnahme möglich
 "NO" in beige Zeilen : Überarbeitung der Dokumente erforderlich

Carline / Component: B479 / H1BT-14A390-APA
 Supplier: A. Raymond GmbH & Co. KG
 Date of FMEA: 04.03.16

☒ Design-FMEA

☐ Process-FMEA

III. Risk analysis

		YES	NO*
1	Are evaluation catalogues available for severity, occurrence and detection likelihood? <i>Sind Bewertungskataloge für Bedeutung, Auftretens- und Entdeckungswahrscheinlichkeit verfügbar?</i>	☒	☐
2	Have equal failure effects an equal S-ranking (in the own system)? <i>Haben gleiche Fehlerfolgen die gleiche B-Bewertung (im eigenen System)?</i>	☒	☐
3	Have equal failure causes (with preventive measures) an equal O-ranking? <i>Haben gleiche Fehlersachen (mit Vermeidungsmassnahmen) die gleiche A-Bewertung?</i>	☒	☐
4	Have equal failure causes (with detecting measures) an equal D-ranking? <i>Haben gleiche Fehlersachen/Fehler (mit Entdeckungsmassnahmen) die gleiche E-Bewertung?</i>	☒	☐
5	Have the single factors S, O and D and the RPN respectively been analyzed for the determination of improving measures? <i>Wurden bei der Festlegung von Verbesserungs- massnahmen die Einzelfaktoren B, A und E bzw. die RPZ ausgewertet?</i>	☒	☐

IV. Optimisation

		YES	NO*
1	Have effective preventive measures been determined, if necessary. <i>Wurden ggf. wirksame Vermeidungsmassnahmen festgelegt?</i>	☒	☐
2	Have effective detective measures been determined, if necessary? <i>Wurden ggf. wirksame Entdeckungsmassnahmen festgelegt?</i>	☒	☐
3	Have the responsible and the target completion date been determined for all planned measures? <i>Sind zu allen geplanten Massnahmen Verantwortliche und Termine festgelegt?</i>	☒	☐
4	Is the status of implementation tracked and updated for all determined measures? <i>Wird für alle festgelegte Massnahmen der Bearbeitungsstand verfolgt und aktualisiert?</i>	☒	☐
5	Have closed measures been implemented in due time? <i>Erfolgte die Umsetzung abgeschlossener Massnahmen termingerecht?</i>	☒	☐
6	Was the FMEA updated after preventive measures were implemented? <i>Wurde die FMEA nach der Implementierung der Vorbeugungsmassnahmen aktualisiert?</i>	☒	☐

* In case of open issues (evaluation "NO") a feedback must be given to the supplier within two weeks

V. Review & Approval

		YES	NO
1	Is the FMEA from partner/supplier available at S-Y ST Europe? If not, please see item 2 and 3. <i>Ist die FMEA vom Partner/Lieferanten bei Yazaki FBU verfügbar? Wenn nicht, siehe Punkte 2 + 3.</i>	☒	☐
2	Was the FMEA examined and are appropriate records existing at Yazaki FBU? <i>Wurde die FMEA geprüft und gibt es Aufzeichnungen darüber bei Yazaki FBU?</i>	☒	☐
3	Is a summary of the top 10 issues and a Pareto-Diagram of examined FMEA available at Yazaki FBU? <i>Ist eine Zusammenfassung der Top 10 Punkte und ein Pareto-Diagramm der geprüften FMEA bei Yazaki FBU verfügbar?</i>	☒	☐

- ☒ Approved and feedback given to supplier
☐ Reviewed and feedback given to supplier:
☐ Revised FMEA / documents necessary

04.03.2016 Bluetchen, Norbert



Date

Name

Signature

 KALİTE KONTROL PLANI CONTROL PLAN												
☐ Prototip/Prototype ☐ On Seri/Pre-Launch ☒ Seri Üretim/Production				Yayın Tarihi / Original Date		Rev. Tarihi / Date of Update		Kalite Onayı Quality Approval		Diğer Onaylar Other Approva(if required)		
Kalite Kontrol Plan no / Control Plan no QM-509 Kalite resim rev. no / Quality Drawing. Rev.no: Rev:Aa				24/02/2016		29/06/2016						
Parça No / Part Number		Müşteri Parça No/Customer Part No		Teknik resim rev. no / Technical Drawing. revision.no								
240504000		H1BT-14A390-APB		H1BT-14A390-APB / 20160629								
Parça Adı / Part Name				Hazırlayan / Edited by								
CVR WIR SHLD				Elif UYANIK								
Firma Adı / Supplier Plant		Firma Kodu / Supplier Code		Ekip Üyeleri / Core Team		Engineering:Damien FOUESNEAU						
A Raymond Turkey		DUNS 565524845		PPL:Semra Çakıroğulları								
Sıra Item	Proses Adı /Operasyon/Tanımı Process Name/ Operation description	Sorumlu bölüm Res.dept.	Üretim Aracı Production equip	Karakteristikler / Characteristics			ÖKS SCC	Metot / Methods			Kontrol Metodu Control method	Reaksiyon planı Reaction Plan
				No No	Ürün Product	Proses Process		Kabul sınırı specifications/ tolerances	Ölçüm/değerlenme tekniği Evaluation/Measur. Technique	Numune Büyük./sıklık Sample size/freq.		
1.	Malz. Girişi Incoming Material	PPL									QI-104	QP-102 QP-103
2.	Tanımlama Testi Identification Test	PPL	HOSTACOM M2 U01	.01	Malz.Sertifika Kontrolü CertificateControl		Malzeme Sertifikası doğru olmalı. Material Certificate should be available and correct.	Görsel Visual	Her Lot Each Batch	QI-104	QP-102 QP-103	
				.02	Miktar Kontrolü Quantity Control		Şipariş Miktarı ile aynı olmalı. According to order	Görsel Visual	Her Lot Each Batch	QI-104	QP-102 QP-103	
				.03	Amb. Kontrolü PackagingControl		Ambalajda hasar olmamalı. No damage	Görsel Visual	Her Lot Each Batch	QI-104	QP-102 QP-103	
3.	Transfer Transport	PPL		.01	Lab. Num. Gönderimi Material Sample To QM					Malzeme Sertifikası Numune tanımlama etiketi Material Certificate Sample Label		
4.	Tanımlama Testi Ident Test	QM		.01				Görsel Visual	Her Numune Each Sample	Malzeme Sertifikası Numune tanımlama etiketi Material Certificate Sample Label	QP-102 QP-103	
5.	G.K.K Incoming Inspection	QM	HOSTACOM M2 U01	.01	MVR Test 230 °C/2,16kg		Min: 15 g/10' Max : 21 g/10'	MFR Makinesi MFR Machine	QI-104 no'lu talimatta belirtilen frekansa göre According to frequency which defined in instruction QI-104	QF-114 QI-112	QP-102 QP-103 QI-104	
				.02	Yoğunluk Density		1,02 - 1,06 g/cm³	Yoğunluk Terazisi Density Balance	QI-104 no'lu talimatta belirtilen frekansa göre According to frequency which defined in instruction QI-104	QF-114 QI-103 QI-112	QP-102 QP-103 QI-104	
6.	Stok Storage	PPL		.01	Malzeme Material					Malzeme Giriş Formu Material entry Form Inventory System QF-415		
7.	Malz. Girişi Incoming	P		.01						SAP Çıktısı SAP Output		
8.	Tanımlama Ident Test	P		.01	Malz. Tanımlanması Material Identification		SAP Çıktısı SAP Output	Görsel Visual	Her Palet Each Pallet	QF-407		
				.02	Miktar Kontrolü Quantity Control		SAP Çıktısı SAP Output	Görsel Visual	Her Palet Each Pallet	QF-407		

Sıra Item	Proses Adı / Operasyon Tanımı Process Name / Operation description	Sorumlu bölüm Res. dept.	Üretim Aracı Production equip	Karakteristikler / Characteristics			ÖKS SCC	Metot / Methods			Kontrol Metodu Control method	Reaksiyon planı Reaction Plan
				No No	Ürün Product	Proses Process		Kabul sınırı specifications / tolerances	Ölçüm/değerleme tekniği Evaluation/Measur. Technique	Numune Büyüklüğü/sıklık Sample size/freq.		
9b.	Enjeksiyon Injection Moulding	P		.01	Enjeksiyon makinesi ayarı Injection machine set-up			Parametre sayfasına göre uygun olmalı Conformity to parameter sheet	Görsel Visual	Her üretim başlangıcı Every start-up	Kutu Etiketleri /Box Label QF-201 QF-202 QF-203 QF-237	QP-103
10	Seri Üret. İlk Bsl. Onayı First Sample Test	P		.01	Genel Görünüş Kontrol General Appearance Control	22 10		İlk Başlatma Numunesine Uygun olmalı Conformity to reference sample	Görsel Visual	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QF-151 QI-143	QP-102 QP-103
				.02	Tarih Kodlaması Date Marking Control	22 11		Güncel Olacak Conformity to actual month and year	Görsel Visual	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QI-126 QF-151	QP-102 QP-103
				.03	Markalama Kontrolü Marking control	22 12		ECLNF H1BT 14A390 APB >PP-TD20< 	Görsel Visual	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QF-151 QI-143	QP-102 QP-103
				.04	Ambalajlama Kontrol Packaging Control	22 13		Ambalajlama Talimatına uygunluk Conformity to packaging instruction	Görsel Visual	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QF-151 QI-1646	QP-102 QP-103
				.05	Fonksiyonel Kontrol Functional Control	22 20		Kalınlık 2mm. Slot ölçüsü 6.2x12.2mm olan ve Kalınlık 2mm. Slot ölçüsü 6.4x12.4mm olan metal plakaya metal plakaya kırılma olmadan takılabilmeli. Control with Thickness 2mm, slot diameter 6.2x12.2mm, Thickness 2mm, slot diameter 6.4x12.4 metal plate	Metal plaka 240504000 Metal plate 240504000	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QF-151 QI-127	QP-102 QP-103
				.06	Fonksiyonel Kontrol Functional Control	22 21		Kalınlık 2mm. Delik çapı Ø6.5 olan metal plakaya ve kalınlığı 2mm. Delik çapı Ø6.7 olan metal plakaya kırılma olmaksızın takılabilmeli. Control with Thickness 2mm, hole diameter Ø6.5, Thickness 2mm, hole diameter Ø6.7 metal plate	Metal plaka 240504000 Metal plate 240504000	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QF-151 QI-127	QP-102 QP-103
				.07	Ağırlık Kontrol Control of Weight	22 40		Bir baskı toplam ağırlığı Weight of 1 shot	Hassas Terazı Balance	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QI-109 QF-151	QP-102 QP-103
11	Seri Üretim Kontrol in-proc. Inspection	QM		.01	Genel Görünüş Kontrol General Appearance Control	24 10		İlk Başlatma Numunesine Uygun olmalı Conformity to reference sample	Görsel Visual	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QF-151 QI-143	QP-102 QP-103
				.02	Tarih Kodlaması Date Marking Control	24 11		Güncel Olacak Conformity to actual month and year	Görsel Visual	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QI-126 QF-151	QP-102 QP-103
12	Parça adedi Kontrolü Part quantity control	P		.01	Kutu içerisindeki parça adedi Quantity of parts inside the box			Talimatta belirtilen adetlere göre uygun olacak Quantity of part should be according to packaging instruction	Hassas Terazı Balance	Her Kutu Each box	QI-1646	QP-102 QP-103
13	Ambalaj Packaging	P		.01				Ambalajlama Talimatına uygun şekilde yapılacak According to packaging instruction			QI-1646	
14		QM		.01	Genel Görünüş Kontrol General Appearance Control	55 10		İlk Başlatma Numunesine Uygun olmalı Conformity to reference sample	Görsel Visual	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QF-151 QI-143	QP-102 QP-103

Sıra Item	Proses Adı / Operasyon Tanımı Process Name/ Operation description	Sorumlu bölüm Res. dept.	Üretim Aracı Production equip	Karakteristikler / Characteristics			ÖKS SCC	Metot / Methods			Kontrol Metodu Control method	Reaksiyon planı Reaction Plan
				No No	Ürün Product	Proses Process		Kabul sınırı specifications/ tolerances	Ölçüm/değerlenme tekniği Evaluation/Measur. Technique	Numune Büyük./sıkık Sample size/freq.		
	Final Kontrol Final Inspection			.02	Tarih Kodlaması Date Marking Control	55 11		Güncel Olacak Conformity to actual month and year	Görsel Visual	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QI-126 QF-151	QP-102 QP-103
				.03	Fonksiyonel Kontrol Functional Control	22 20		Kalınlık 2mm. Slot ölçüsü 6.2x12.2mm olan va Kalınlık 2mm. Slot ölçüsü 6.4x12.4mm olan metal plakaya metal plakaya kırılma olmadan takılabilmeli. Control with Thickness 2mm, slot diameter 6.2x12.2mm, Thickness 2mm, slot diameter 6.4x12.4 metal plate	Metal plaka 240504000 Metal plate 240504000	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QF-151 QI-127	QP-102 QP-103
				.04	Fonksiyonel Kontrol Functional Control	22 21		Kalınlık 2mm. Delik çapı Ø6.5 olan metal plakaya ve kalınlığı 2mm. Delik çapı Ø6.7 olan metal plakaya kırılma olmadan takılabilmeli. Control with Thickness 2mm, hole diameter Ø6.5, Thickness 2mm, hole diameter Ø6.7 metal plate	Metal plaka 240504000 Metal plate 240504000	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QF-151 QI-127	QP-102 QP-103
				.05	Ağırlık Kontrol Control of Weight	55 40		Bir baskı toplam ağırlığı Weight of 1 shot	Hassas Terazı Balance	QI-198 Seri Kalite Kontrol Talimatı Serial Quality Control Instruction	Kalite Resmi Q-Drawing QI-109 QF-151	QP-102 QP-103
15	Transfer Transport	P		.01							SAP Çıktısı SAP Output	
16	Stok Storage	PPL		.01							SAP Çıktısı SAP Output	
17	Sevkiyat Shipping	PPL		.01							SAP Çıktısı SAP Output	
18	Denetim Layout / requalification	QM		.01	Teknik resimdeki tüm ölçümlerin doğrulanması Verification of all inspections on drawing			Tüm ölçümlerin tolerans içinde olması All dimensions must be ok.	Teknik resim üzerindeki tüm kontroller. All inspections on drawing	QF-185 no'lu listede belirtilen frekansa göre According to frequency which defined in list QF- 185	QF-156	QP-102 QP-103

Geçmiş Revizyon no / Old Revision no	Revizyon tarihi / Revision date	Revizyon nedeni / Revision reason
0	24/02/2016	İlk yayın / First Issue
1	29/06/2016	Resim güncellendi / Drawing updated

Carline / Component: H1BT-14A390-APA
Supplier: A.Raymond (TK)
Date of FMEA: 22.04.2016 (generic P-FMEA for "hot runner")

☐ **Design-FMEA**
☒ **Process-FMEA**

I. General & Formalism

		YES	NO*
1	Is there a systematical approach to identify potential failures ? <i>Gibt es eine systematische Vorgehensweise zur Erkennung möglicher Fehler ?</i>	☒	☐
2	Has the FMEA been created by a cross-functional team ? <i>Wurde die FMEA vom einem aus mehreren Funktionsbereichen zusammengesetzten Team erstellt ?</i>	☒	☐
3	Are all formsheet header data complete and correct ? <i>Sind alle Daten im Formulkopf vollständig und korrekt ?</i>	☒	☐
4	Do have all single pages a clear reference to the header data and revision level ? <i>Haben alle Einzelblätter eine klare Referenz zu den Kopfdaten und dem Ausgabestand ?</i>	☒	☐
5	Do have the single pages a subsequent numbering and show the total number of pages ? <i>Haben alle Einzelblätter eine fortlaufende Numerierung und Angabe der Gesamtzahl der Einzelblätter ?</i>	☒	☐
6	Is a unique date format used in the entire document ? <i>Wird ein einheitliches Format für Datumsangaben im ganzen Dokument verwendet ?</i>	☒	☐
7	Does the status of the FMEA conform to the latest status of the product development/ process planning ? <i>Entspricht der Stand der FMEA dem aktuellen Stand der Produktentwicklung / Prozessplanung ?</i>	☒	☐
8	Has the team reviewed relevant information, e.g. specifications, concern/warranty data from previous/other projects, ... ? <i>Hat das Team wichtige Informationen, z.B. Spezifikation, Beanstandungs-/Gewährleistungsdaten früherer/anderer Projekte, berücksichtigt ?</i>	☒	☐

II. Structure and Failure Analysis

		YES	NO*
1	Is the scope of the P-FMEA (including interfaces) shown by a flowchart or a list of process steps ? <i>Ist der in der P-FMEA zu untersuchende Prozeß als Flußdiagramm oder Liste der Einzelschritte dargestellt ?</i>	☒	☐
2	for PFMEA only: Are all relevant process steps according work-flow listed ? <i>Sind alle wichtigen Prozessschritte entsprechend dem Arbeitsablauf aufgeführt ?</i>	☒	☐
3	for PFMEA only: Are the tasks/functions of the "5 M" (men, machine, material, method, medium) for each process step listed ? <i>Sind für jeden Prozessschritt die Aufgaben/Funktionen der "5 M" (Mensch, Maschine, Material, Methode, Mitwelt) aufgeführt ?</i>	☒	☐
4	Are more than one malfunction assigned to each function/task ? <i>Sind den einzelnen Funktionen/Aufgaben mehr als eine Fehlfunktion zugeordnet ?</i>	☒	☐
5	Are the malfunctions/potential effects of failure on the product, next operation, ... described clearly and traceable ? <i>Sind die Fehlfunktionen/Auswirkung des potentiellen Fehlers auf das Produkt, den nächsten Arbeitsschritt, ... eindeutig und nachvollziehbar beschrieben ?</i>	☒	☐
6	Are all Special Characteristics (SC, CC) demanded by customer considered and marked in the P-FMEA ? <i>Sind alle vom Kunden vorgegebenen besonderen Merkmale (SC, CC) in der P-FMEA berücksichtigt und markiert ?</i>	☒	☐
7	Are all Special Characteristics identified in the D-FMEA considered and marked in the P-FMEA ? <i>Sind alle in der D-FMEA identifizierten besonderen Merkmale in der P-FMEA berücksichtigt und markiert ?</i>	☒	☐

YS = potential significant characteristic (D-FMEA only)
 YC = potential critical characteristic (D-FMEA only)

SC = significant characteristic (P-FMEA only)
 CC = critical characteristic (P-FMEA only)

B = Bedeutung
 A = Auftretenswahrscheinlichkeit
 E = Entdeckungswahrscheinlichkeit
 RPZ = Risikoprioritätszahl
 (RPZ = B x A x E)

S = Severity
 O = Occurrence
 D = Detection
 RPN = Risk Priority Number
 (RPN = S x O x D)

"NO" in orange lines : no approval possible
 "NO" in beige lines : revision of documents necessary

"NO" in orange Zeilen : KEINE Abnahme möglich
 "NO" in beige Zeilen : Überarbeitung der Dokumente erforderlich

Carline / Component: H1BT-14A390-APA
 Supplier: A.Raymond (TK)
 Date of FMEA: 22.04.2016 (generic P-FMEA for "hot runner")

☐ Design-FMEA ☒ Process-FMEA

III. Risk analysis

		YES	NO*
1	Are evaluation catalogues available for severity, occurrence and detection likelihood ? <i>Sind Bewertungskataloge für Bedeutung, Auftretens- und Entdeckungswahrscheinlichkeit verfügbar ?</i>	☒	☐
2	Have equal failure effects an equal S-ranking (in the own system) ? <i>Haben gleiche Fehlerfolgen die gleiche B-Bewertung (im eigenen System) ?</i>	☒	☐
3	Have equal failure causes (with preventive measures) an equal O-ranking ? <i>Haben gleiche Fehlersachen (mit Vermeidungsmassnahmen) die gleiche A-Bewertung ?</i>	☒	☐
4	Have equal failure causes (with detecting measures) an equal D-ranking ? <i>Haben gleiche Fehlersachen/Fehler (mit Entdeckungsmassnahmen) die gleiche E-Bewertung ?</i>	☒	☐
5	Have the single factors S, O and D and the RPN respectively been analyzed for the determination of improving measures ? <i>Wurden bei der Festlegung von Verbesserungs- massnahmen die Einzelfaktoren B, A und E bzw. die RPZ ausgewertet ?</i>	☒	☐

IV. Optimisation

		YES	NO*
1	Have effective preventive measures been determined, if necessary. <i>Wurden ggf. wirksame Vermeidungsmassnahmen festgelegt ?</i>	☒	☐
2	Have effective detective measures been determined, if necessary? <i>Wurden ggf. wirksame Entdeckungsmassnahmen festgelegt ?</i>	☒	☐
3	Have the responsible and the target completion date been determined for all planned measures ? <i>Sind zu allen geplanten Massnahmen Verantwortliche und Termine festgelegt ?</i>	☒	☐
4	Is the status of implementation tracked and updated for all determined measures ? <i>Wird für alle festgelegte Massnahmen der Bearbeitungsstand verfolgt und aktualisiert ?</i>	☒	☐
5	Have closed measures been implemented in due time ? <i>Erfolgte die Umsetzung abgeschlossener Massnahmen termingerecht ?</i>	☒	☐
6	Was the FMEA updated after preventive measures were implemented ? <i>Wurde die FMEA nach der Implementierung der Vorbeugungsmassnahmen aktualisiert ?</i>	☒	☐

* In case of open issues (evaluation "NO") a feedback must be given to the supplier within two weeks

V. Review & Approval

		YES	NO
1	Is the FMEA from partner/supplier available at S-Y ST Europe? If not, please see item 2 and 3. <i>Ist die FMEA vom Partner/Lieferanten bei Yazaki FBU verfügbar? Wenn nicht, siehe Punkte 2 + 3.</i>	☐	☒
2	Was the FMEA examined and are appropriate records existing at Yazaki FBU ? <i>Wurde die FMEA geprüft und gibt es Aufzeichnungen darüber bei Yazaki FBU ?</i>	☒	☐
3	Is a summary of the top 10 issues and a Pareto-Diagram of examined FMEA available at Yazaki FBU ? <i>Ist eine Zusammenfassung der Top 10 Punkte und ein Pareto-Diagramm der geprüften FMEA bei Yazaki FBU verfügbat ?</i>	☒	☐

- ☐ Approved and feedback given to supplier
☒ Reviewed and feedback given to supplier:
☒ Revised FMEA / documents necessary

11.08.2016 Erbe, Andreas



Date

Name

Signature

Special Characteristics for:

Date Issued: 12/18/2009
Date Revised: 11/09/2010

PROSES / KONTROL AKIŞ DİYAGRAMI
PROCESS / INSPECTION FLOWCHART

☐ Prototip/Prototype

☐ Ön Seri/Pre-Launch

☒ Seri üretim/Production

Proje Adı
Product Program **B479**

Yayın Tarihi
Issue Date **24/02/2016**

Firma Adı
Supplier Plant **A.Raymond Turkey**

Rev. Tarihi
Rev. Date **29/06/2016**

Firma Kodu
Supplier Code **DUNS 565524845**

Parça Adı
Part Name **CVR WIR SHLD**

Müşteri Parça No
Customer Part No **H1BT-14A390-APB**

Parça No
Part Number **240507000**

Proses/Kontrol Akış Diyagramı No
PIF No **PIF-509**

Hazırlayan
Prepared by **Elif UYANIK**

Legend:

☐ Operasyon/Operation  Transfer/Transportation ☐ Kontrol/Inspection  Erteleme/Delay  Stok/Storage

Operasyon/Olay Operation	No	Operasyon/ Olay Tanımı Description of Operation	Degerlendirme ve Analiz Metodu Analysis Methods	Sorumlu Bölüm Responsible Dept.
☐  ☐  				
☐  ☐  	1	Malzeme Girişi Incoming Material	QI-104, QP-102, QP103	PPL
☐  ☐  	2	Tanımlama Testi Ident Test	QI-104, QP-102, QP103	PPL
☐  ☐  	3	Transfer QM Transport to QM	Malzeme sertifikası & Numune tanıtim etiketi Material Certificate&sample label	PPL
☐  ☐  	4	Tanımlama Testi Ident Test	Malzeme sertifikası & Numune tanıtim etiketi Material Certificate&sample label, QP-102, QP103	QM
☐  ☐  	5	Giriş Kalite Kontrol Incoming inspection	QF-114, QI-112, QI-104, QP-102, QP103,QI-122	QM
☐  ☐  	6	Stok Storage	QF-415	PPL
☐  ☐  	7	Malzeme Girişi Incoming	SAP Çıktısı SAP Output	P
☐  ☐  	8	Tanımlama Testi Ident Test	QF-407	P
☐  ☐  	9b	Enjeksiyon Injection Moulding	Kutu Etiketi /Box Label QF-201 QF-202 QF-203, QP103,QF-237	P

PROSES / KONTROL AKIŞ DİYAGRAMI
PROCESS / INSPECTION FLOWCHART

☐ Prototip/Prototype

☐ Ön Seri/Pre-Launch

☒ Seri üretim/Production

Proje Adı
Product Program **B479**

Yayın Tarihi
Issue Date **24/02/2016**

Firma Adı
Supplier Plant **A.Raymond Turkey**

Rev. Tarihi
Rev. Date **29/06/2016**

Firma Kodu
Supplier Code **DUNS 565524845**

Parça Adı
Part Name **CVR WIR SHLD**

Müşteri Parça No
Customer Part No **H1BT-14A390-APB**

Parça No
Part Number **240507000**

Proses/Kontrol Akış Diyagramı No
PIF No **PIF-509**

Hazırlayan
Prepared by **Elif UYANIK**

Legend:

☐ Operasyon/Operation  Transfer/Transportation ☐ Kontrol/Inspection  Erteleme/Delay  Stok/Storage

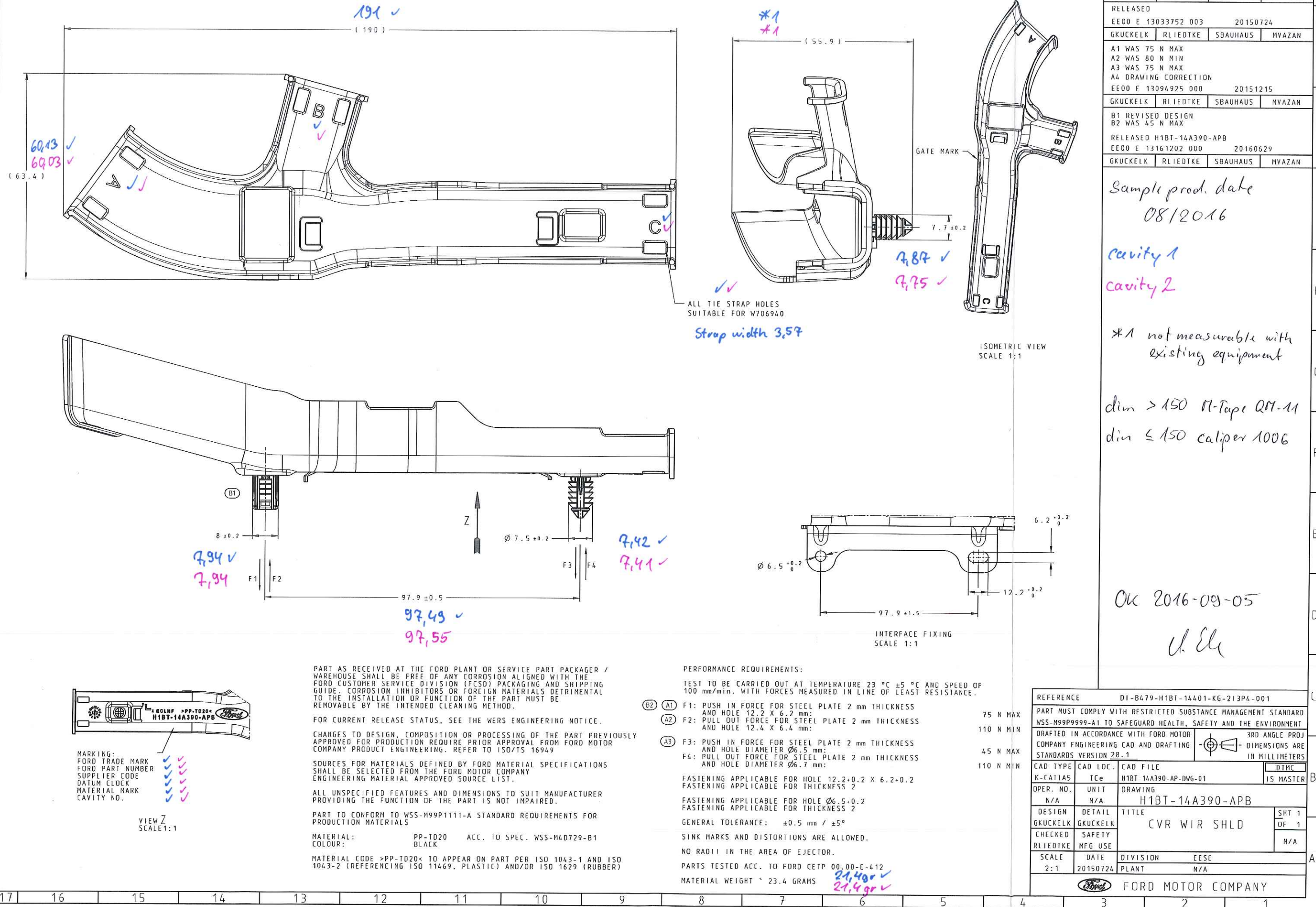
Operasyon/Olay Operation	No	Operasyon/ Olay Tanımı Description of Operation	Degerlendirme ve Analiz Metodu Analysis Methods	Sorumlu Bölüm Responsible Dept.
    				
    	10	Seri Üretim İlk Bşl. Onay First sample test	QF-151, QI-143,QI-126, QI-109,QP-102, QP103, QI-127, QI-1646	P
    	11	Seri Üretim Kontrol In-proc. Inspection	QF-151, QI-143,QI-126, QI-127,QI-109 ,QP-102, QP103	QM
    	12	Parça adedi Kontrolü Part quantity control	QI-1646, QP-102, QP103	P
    	13	Ambalajlama Packaging	QI-1646	P
    	14	Final Kontrol Final inspection	QF-151, QI-143,QI-126, QI-109,QP-102, QP103	QM
    	15	Transfer Transport	SAP Çıktısı SAP Output	P
    	16	Stok Storage	SAP Çıktısı SAP Output	PPL
    	17	Sevkiyat Shipping	SAP Çıktısı SAP Output	PPL
    	18	Denetim Audit	QF-156, QP-102, QP103	QM

QF-123

Rev.No:0

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

L K J I H G F E D C B A



REVISIONS			
ORIGINATOR	CHECKER	ENGR APP	MATL APP
RELEASED			
EE00 E 13033752 003		20150724	
GKUCKELK	RLIEDTKE	SBAUHAUS	MVAZAN
A1 WAS 75 N MAX			
A2 WAS 80 N MIN			
A3 WAS 75 N MAX			
A4 DRAWING CORRECTION			
EE00 E 13094925 000		20151215	
GKUCKELK	RLIEDTKE	SBAUHAUS	MVAZAN
B1 REVISED DESIGN			
B2 WAS 45 N MAX			
RELEASED H1BT-14A390-APB			
EE00 E 13161202 000		20160629	
GKUCKELK	RLIEDTKE	SBAUHAUS	MVAZAN

Sample prod. date
08/2016

cavity 1
cavity 2

*1 not measurable with
existing equipment

dim > 150 M-Tape QM-11
dim ≤ 150 caliper 1006

OK 2016-09-05
U. El

PART AS RECEIVED AT THE FORD PLANT OR SERVICE PART PACKAGER / WAREHOUSE SHALL BE FREE OF ANY CORROSION ALIGNED WITH THE FORD CUSTOMER SERVICE DIVISION (FCS) PACKAGING AND SHIPPING GUIDE. CORROSION INHIBITORS OR FOREIGN MATERIALS DETRIMENTAL TO THE INSTALLATION OR FUNCTION OF THE PART MUST BE REMOVABLE BY THE INTENDED CLEANING METHOD.

FOR CURRENT RELEASE STATUS, SEE THE WERS ENGINEERING NOTICE.

CHANGES TO DESIGN, COMPOSITION OR PROCESSING OF THE PART PREVIOUSLY APPROVED FOR PRODUCTION REQUIRE PRIOR APPROVAL FROM FORD MOTOR COMPANY PRODUCT ENGINEERING. REFER TO ISO/TS 16949

SOURCES FOR MATERIALS DEFINED BY FORD MATERIAL SPECIFICATIONS SHALL BE SELECTED FROM THE FORD MOTOR COMPANY ENGINEERING MATERIAL APPROVED SOURCE LIST.

ALL UNSPECIFIED FEATURES AND DIMENSIONS TO SUIT MANUFACTURER PROVIDING THE FUNCTION OF THE PART IS NOT IMPAIRED.

PART TO CONFORM TO WSS-M99P1111-A STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

MATERIAL: PP-TD20 ACC. TO SPEC. WSS-M4D729-B1

COLOUR: BLACK

MATERIAL CODE >PP-TD20< TO APPEAR ON PART PER ISO 1043-1 AND ISO 1043-2 (REFERENCING ISO 11469, PLASTIC) AND/OR ISO 1629 (RUBBER)

PERFORMANCE REQUIREMENTS:

TEST TO BE CARRIED OUT AT TEMPERATURE 23 °C ± 5 °C AND SPEED OF 100 mm/min. WITH FORCES MEASURED IN LINE OF LEAST RESISTANCE.

- (A1) F1: PUSH IN FORCE FOR STEEL PLATE 2 mm THICKNESS AND HOLE 12.2 X 6.2 mm: 75 N MAX
- (A2) F2: PULL OUT FORCE FOR STEEL PLATE 2 mm THICKNESS AND HOLE 12.4 X 6.4 mm: 110 N MIN
- (A3) F3: PUSH IN FORCE FOR STEEL PLATE 2 mm THICKNESS AND HOLE DIAMETER Ø6.5 mm: 45 N MAX
- F4: PULL OUT FORCE FOR STEEL PLATE 2 mm THICKNESS AND HOLE DIAMETER Ø6.7 mm: 110 N MIN

FASTENING APPLICABLE FOR HOLE 12.2 X 6.2 X 6.2 ± 0.2

FASTENING APPLICABLE FOR THICKNESS 2

FASTENING APPLICABLE FOR HOLE Ø6.5 ± 0.2

FASTENING APPLICABLE FOR THICKNESS 2

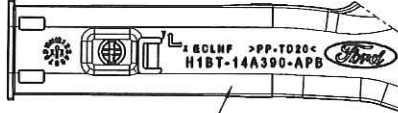
GENERAL TOLERANCE: ± 0.5 mm / ± 5°

SINK MARKS AND DISTORTIONS ARE ALLOWED.

NO RADII IN THE AREA OF EJECTOR.

PARTS TESTED ACC. TO FORD CETP 00.00-E-412

MATERIAL WEIGHT ~ 23.4 GRAMS



MARKING:
FORD TRADE MARK
FORD PART NUMBER
SUPPLIER CODE
DATUM CLOCK
MATERIAL MARK
CAVITY NO.

VIEW Z
SCALE 1:1

REFERENCE		DI-B479-H1BT-14A01-KG-213P4-001	
PART MUST COMPLY WITH RESTRICTED SUBSTANCE MANAGEMENT STANDARD WSS-M99P9999-A1 TO SAFEGUARD HEALTH, SAFETY AND THE ENVIRONMENT			
DRAFTED IN ACCORDANCE WITH FORD MOTOR COMPANY ENGINEERING CAD AND DRAFTING STANDARDS VERSION 28.1		 3RD ANGLE PROJ DIMENSIONS ARE IN MILLIMETERS	
CAD TYPE	CAD LOC.	CAD FILE	DTMC
K-CAT1A5	TCe	H1BT-14A390-AP-DWG-01	15 MASTER
OPER. NO.	UNIT	DRAWING	
N/A	N/A	H1BT-14A390-APB	
DESIGN	DETAIL	TITLE	SHT 1
GKUCKELK	GKUCKELK	CVR WIR SHLD	OF 1
CHECKED	SAFETY		N/A
RLIEDTKE	MFG USE		
SCALE	DATE	DIVISION	EESE
2:1	20150724	PLANT	N/A
 FORD MOTOR COMPANY			

Select One

☒ Phase 1 ☐ Phase 2 ☐ Phase 3 ☐ Interim (Non-PPAP)

PPAP Submission Warrant



PART INFORMATION

Customer Part Name CVR WIR SHLD Customer Part Number H1BT-14A390-APB
 Shown on Drawing Number H1BT-14A390-APB Organization Part Number 240507000
 Engineering Change Level EE00 E 13161202 000 Dated 29/06/2016
 Additional Engineering Changes N/A Purchase Order Number _____ Weight (kg) 0.0219
 Safety and/or Government Regulation ☐ Yes ☒ No Checking Aid Engineering Change Level N/A Dated N/A
 Checking Aid Number N/A

ORGANIZATION MANUFACTURING INFORMATION

A RAYMOND TURKEY 565524845
 Organization Name and Supplier/Vendor Code
 TOSB 1.Cadde 14.Sokak No:9 41480 Çayırova
 Street Address
 Kocaeli 41480 Turkey
 City State/Region Postal code Country

CUSTOMER SUBMITTAL INFORMATION

Yazaki Systems Technologies GmbH
 Customer Name/Division
 Andreas Erbe
 Buyer/Buyer Code
 B479
 Application

MATERIALS REPORTING

Has customer-required Substances of Concern information been reported? ☒ Yes ☐ No

Submitted by IMDS or other customer format
 (If submitted by IMDS, enter Module ID no., version and date transmitted)

IMDS #589401337 / 1.01

Are polymeric parts identified with appropriate ISO marking codes?

☐ Yes ☐ No ☒ n/a

REASON FOR SUBMISSION (Check at least one)

- ☒ Initial submission ☐ Tooling: Transfer, Replacement, Refurbishment, or additional
☐ Engineering Change(s) ☐ Tooling Inactive > than 1 year ☐ Supplier or Material Source Change
☐ Correction of Discrepancy ☐ Change to Optional Construction or Material ☐ Change in Part Processing
☐ Other - please specify _____ ☐ Parts produced at Additional Location

REQUESTED SUBMISSION LEVEL (Select one)

- ☒ Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
☐ Level 2 - Warrant with product samples and limited supporting data submitted to customer.
☐ Level 3 - Warrant with product samples and complete supporting data submitted to customer.
☐ Level 4 - Warrant and other requirements as defined by customer.
☐ Level 5 - Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.

SUBMISSION RESULTS

The results for ☒ dimensional measurements, ☒ material and functional tests ☐ appearance criteria ☒ statistical process package

These results meet all design requirements ☒ Yes ☐ No (If "No" - Explanation Required) _____

Mold / Cavity / Production Process 2 cavity serial tool

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts, which were made by a process that meets all Production Part Approval Process Manual 4th Edition requirements. I further affirm that these samples were produced at the production rate of 1400 assembly part / 8 hours I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from this declaration below.

EXPLANATION/COMMENTS FMEA is available in our house for inspection

Organization Authorized Signature _____ Print Name Elif UYANIK Date 24-Aug-16
 Title Project Quality Responsible Phone 262 658 10 58 (Ext:180) Fax _____ Email elif.uyanik@araymond.com

Is each Customer Tool properly tagged and numbered?

☒ Yes ☐ No ☐ n/a

Capacity Requirements

Source of the Program Approval requirements _____ Detail / Date 24-Aug-16
 Program Approval (<PA>) Requirements APW 5000 MPW 6000
 If Program Approval (<PA>) requirements are not met, indicate date when the requirements will be met _____ Date _____
 Source of the revised requirements after <PA> _____ Detail / Date _____
 Revised requirements after <PA> APW _____ MPW _____
 If the revised requirements after <PA> are not met, indicate date when the requirements will be met _____ Date _____
Demonstrated Capacity (record in Ford Capacity System [GCP or MCPV] as Purchased Part Capacity)
 Enter capacity commitment (PPC) based on Capacity Analysis Report "Predicted Good Parts per Week" and date of analysis APPC 5710 MPPC 6852 Date 24-Aug-16

PPAP

Non-PPAP^{a/}

FOR FORD USE ONLY

Phased PPAP
 Warrant Status

☒ Approved ☐ Rejected ☐ Interim
 Accepted

F13U SQE 1.11 2016-09-28 R. Erbe
 SQA Signature Date Name e-mail
 P.D. Signature^{b/} _____ Date Name e-mail

^{a/} Non-PPAP indicates the part does not satisfy one or more PPAP requirements and is incomplete

^{b/} P.D. signature for Priority suppliers on GPDS programs

Interim Status

(to be completed by the Organization)

Engineering
 Authorization _____
 Alert or Alert Report _____

Description:
 (Incomplete PPAP
 Requirements) _____

Supply Management Request

Control No: _____

Design/Sales Office:	YST Brake	Name Design / Sales-Engineer:	R. Liedtke
Lead Part Number:	H1BT-14A390-APB	Supplier:	Raymond (TK)
Part name:	A-Pillar Passenger Guide LHD	Drawing Number:	H1BT-14A390-APB
Program(s):	B479	Revision Level: (Delta 0, 1, etc.)	EE00 E 13161202-000
Model Year/Carline:	2017.5		

Engineering Statement
TEST RESULTS:

All vehicle tests completed successfully

All component tests according to Ford drawing & DVP & R completed successfully


Test Report Number


Some tests are not yet completed or completed unsuccessfully

⇒ Comment

FUNCTIONAL APPROVAL?

YES

NO

⇒ Fill in comment to give explanation why Approval can not be given!

COMMENTS:

Drop down test done and accepted with 10 parts (instead of 14 parts) because of shape of the part

ATTACHED DOCUMENTS:
Signatures

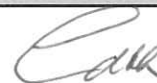
26.09.2016

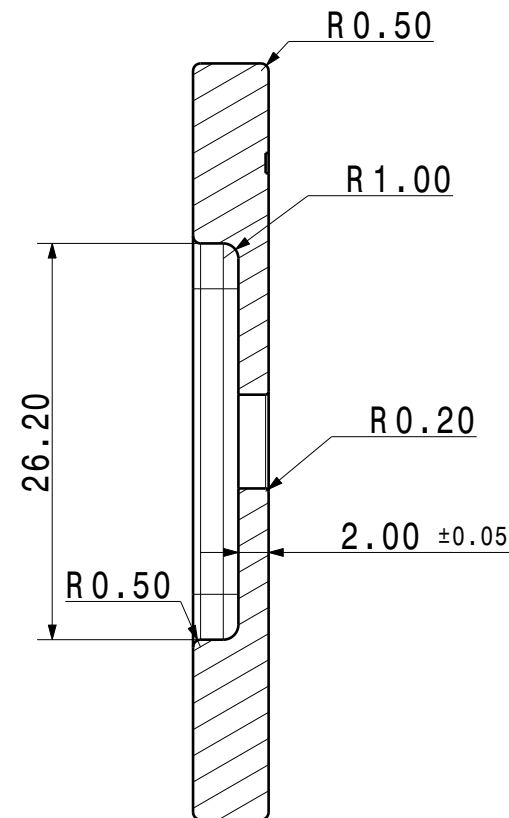
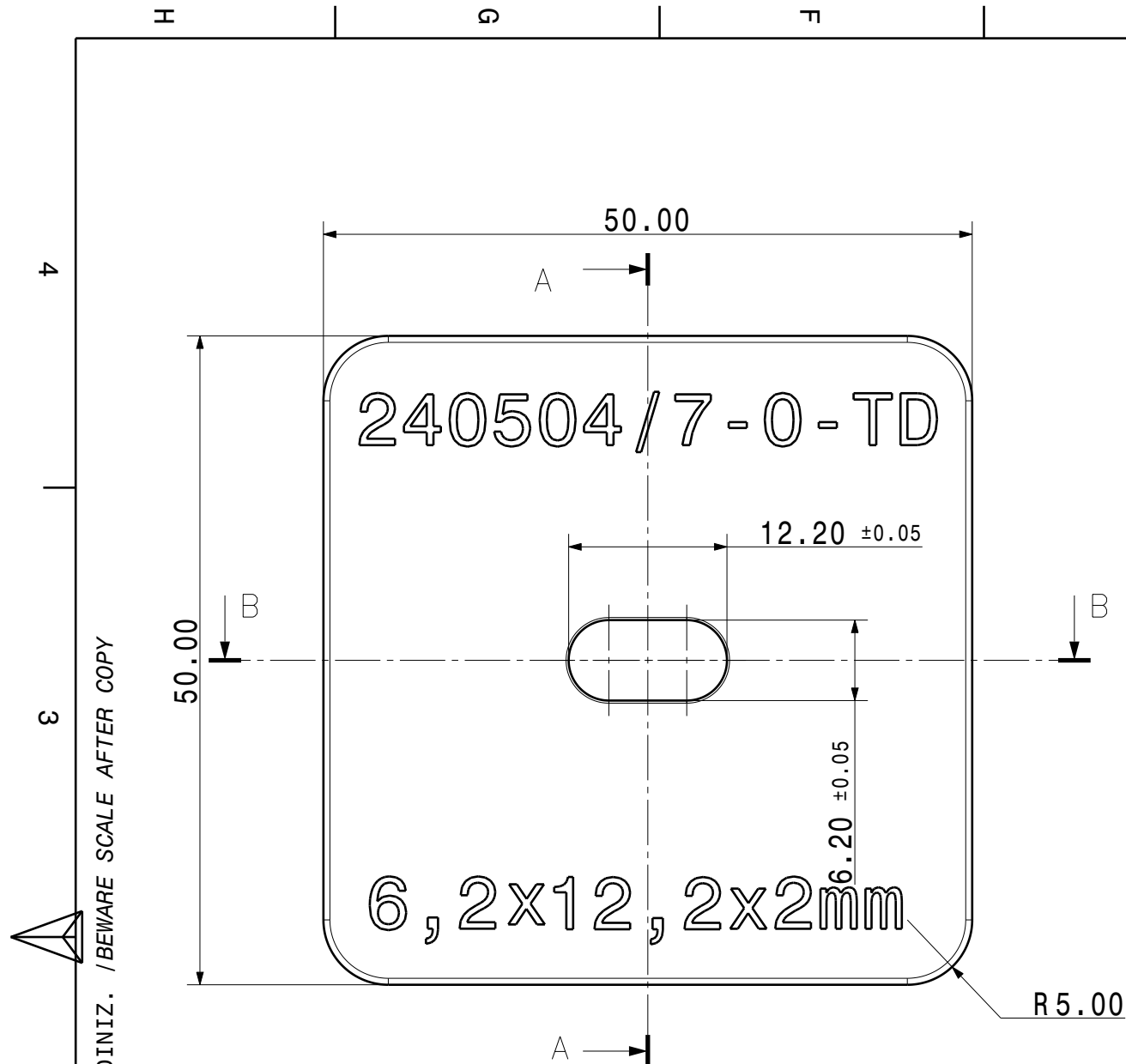
A. Erbe



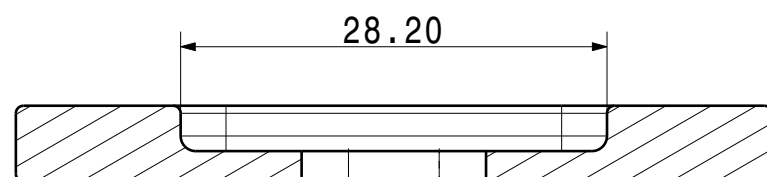
26.09.2016

R. Liedtke

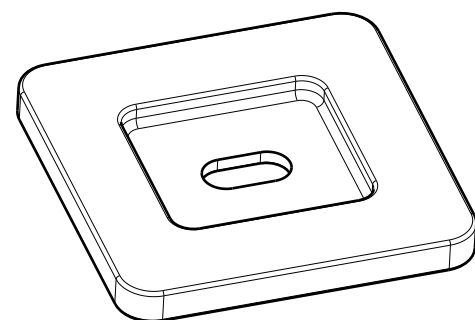

PREPARED BY: (SIGN AND DATE)
APPROVED BY: (SIGN AND DATE)
DOCUMENT TO BE RETURNED TO YEL SD/SUPPLIER QUALITY ENGINEER OR COMBU QUALITY PLANNER



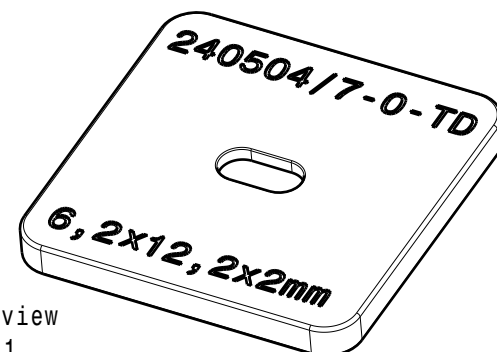
Section view A-A



Section view B-B



Isometric view
Scale: 1:1

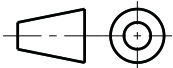


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41480 Çayirova - Kocaeli TURKEY
Tel : + 90 262 658 10 58
Fax : + 90 262 658 10 73

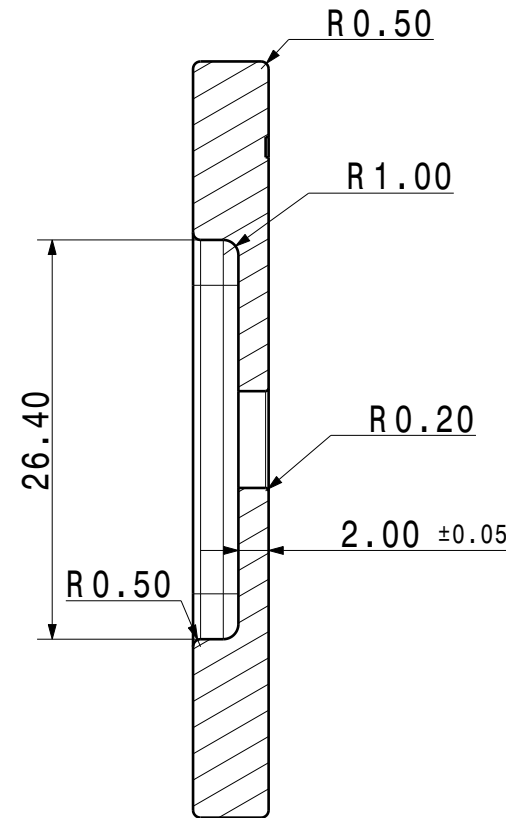
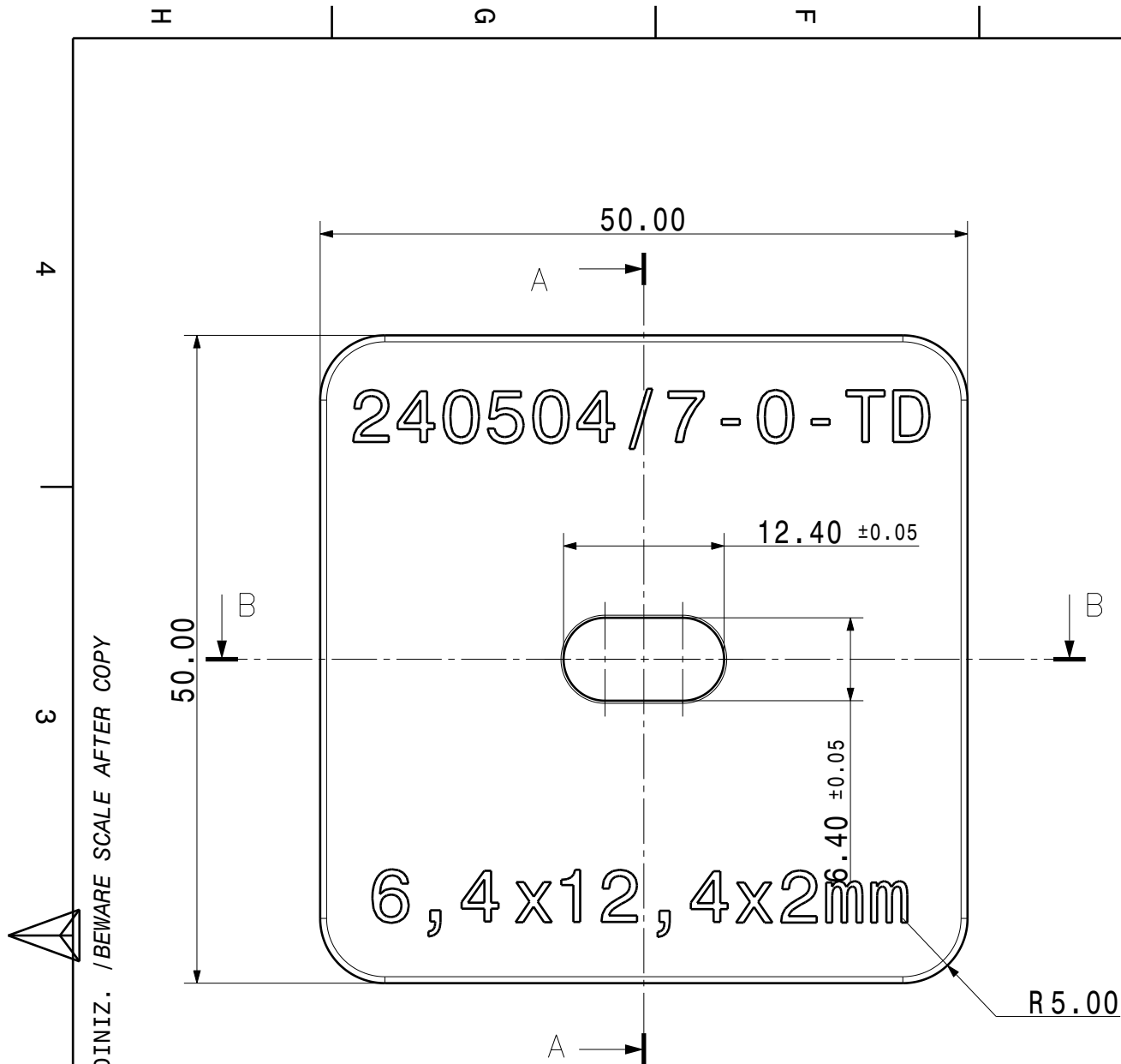
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Intellectual property rights				ALL RIGHTS RESERVED				Classification code						
				X----										
Proje Numarası /Project No.			Orjin /Origin			000001-0-Aa			Proje Müdürü /Project Manager			FOUESNEAU.D		
Ölçek /Scale		Format		General tolerance				Tarih /Date						
2 : 1		A3		See note See note				03.12.2015						
				ALL DIMENSIONS ARE IN MILLIMETERS				Hazırlayan /Prepared by						
				Malzeme Kalınlığı /Mat. thickness				DEDE.A						
				Onaylayan /Approved				20151204131819						
				Hacim (mm3) /Volume				10041		Ağırlık (g) /Weight		78,3		
Yüzey Finish & Renk / Finish										Finish Kodu /Finish code				
Yok Without										-				
Malzeme Sertleştirme /Material treatment														
Olmadan Without														
Malzeme /Material										Malz.Kodu /Mat. code				
STEEL IMPAX										-				
Parça Adı /Title														
Test Plate 6,2x12,2x2mm														
Parça Numarası /Part no.										Resim Tipi / Drawing type				
240504 - 0 - 00										--Other				
Müşteri Parça Numarası /Customer part no.										Sayfa /Sheet				
										1 / 1				
CAD system & version				CATIA V5 R24 SP4				Dosya Adı /File name		240504-0-00-TD-6,2x12,2x2mm				

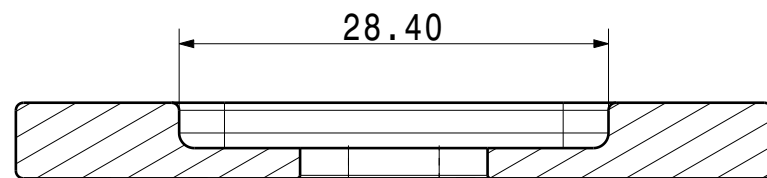
GENERAL TOLERANCE : ±0,05mm

Aa	-	Initial release	03.12.15	ADE
Rev.	Quant.	Indice / revision description	Date	Name

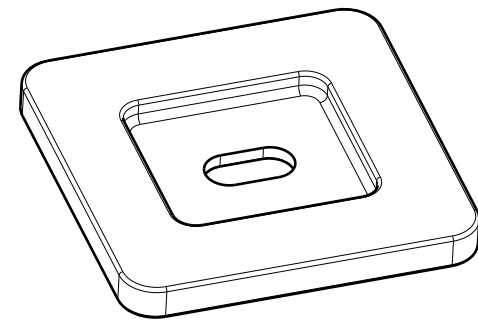
RESIM CIKTISI ALDIKTAN SONRA RESIM OLCEGINE DIKKAT EDINIZ. /BEWARE SCALE AFTER COPY



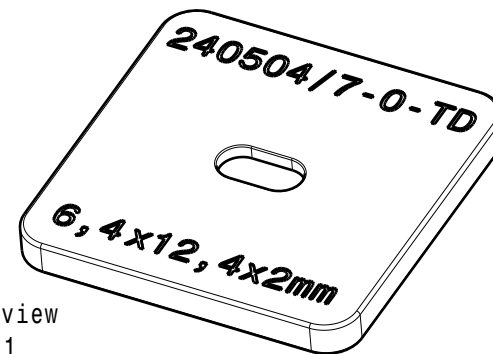
Section view A-A



Section view B-B



Isometric view
Scale: 1:1



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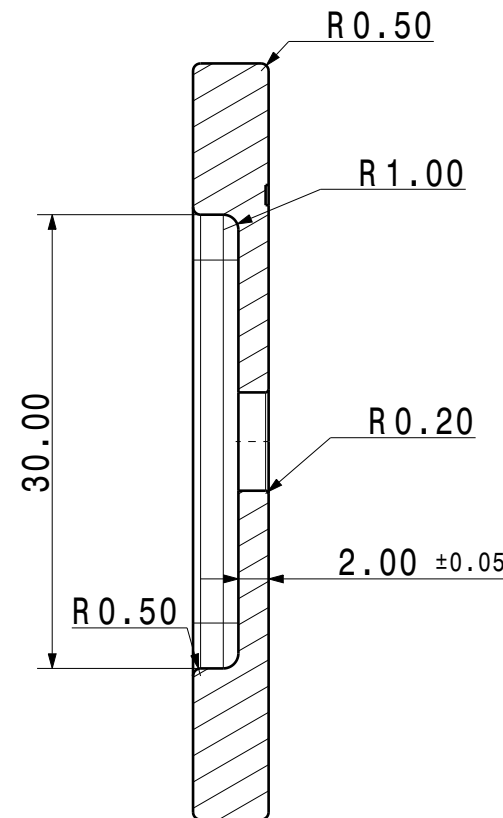
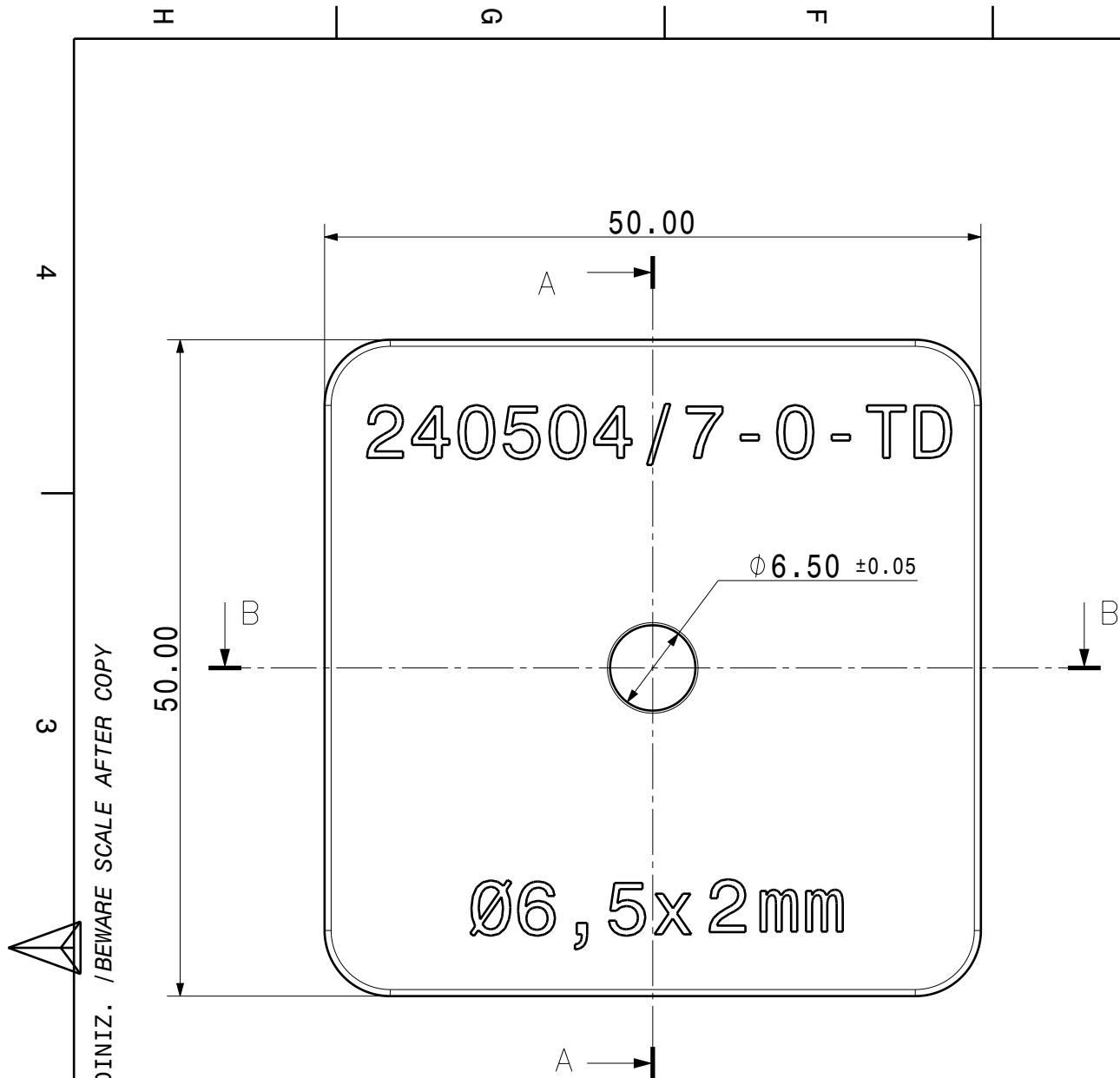
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Olçek /Scale		Format		General tolerance		Tarih /Date		
2:1		A3		See note See note		03.12.2015		
				Olcu /Dimensions Aci /Angle		Hazırlayan		
				See note See note		/Prepared by DEDE.A		
		ALL DIMENSIONS ARE IN MILLIMETERS				Onaylayan		
		Malzeme Kalınlığı /Mat. thickness -				/Approved 20151204131819		
					Hacim (mm3) /Volume		10003	
					Agirlik (g) /Weight		78	
Yüzey Finish & Renk / Finish							Finish Kodu /Finish code	
Yok							-	
Without								
Malzeme Sırtlandırma /Material treatment								
Olmadan								
Without								
Malzeme /Material							Malz.Kodu	
STEEL							/Mat. code	
IMPAX							-	
Parça Adı /Title								
Test Plate 6,4x12,4x2mm								
Parça Numarası /Part no.							Resim Tipi / Drawing type	
240504 - 0 - 00							--Other	
Musteri Parça Numarası /Customer part no.							Sayfa /Sheet	
							1/1	
CAD system & version			CATIA V5 R24 SP4			Dosya Adı /File name		
						240504-0-00-TD-6,4x12,4x2mm		

Test Plate 6,4x12,4x2mm

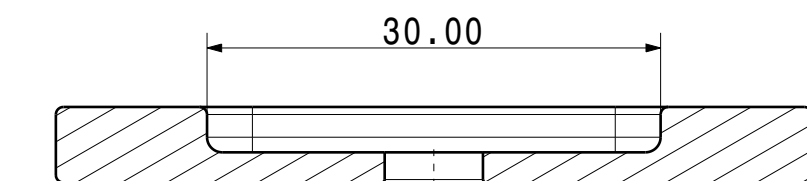
GENERAL TOLERANCE : ±0,05mm

Aa	-	Initial release	03.12.15	ADE
Rev.	Quant.	Indice / revision description	Date	Name

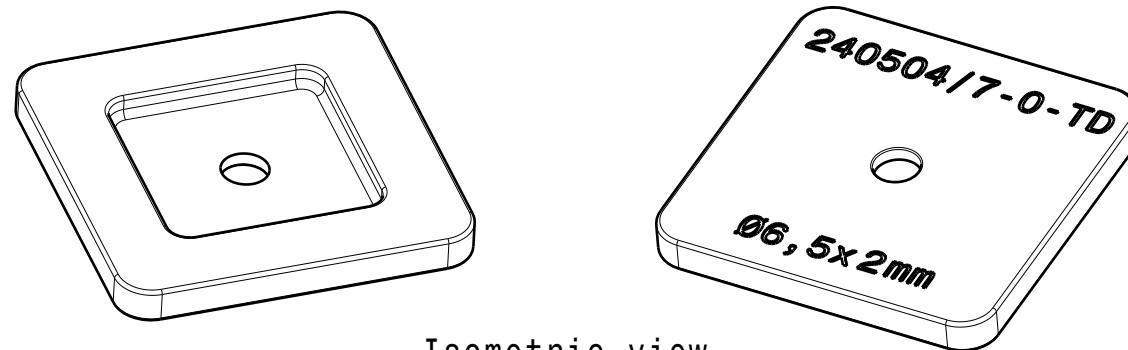
RESİM ÇIKTISI ALDIKTAN SONRA RESİM OLCEGINE DIKKAT EDİNİZ. /BEWARE SCALE AFTER COPY



Section view A-A



Section view B-B



Isometric view
Scale: 1:1

GENERAL TOLERANCE : $\pm 0,05$ mm

Aa	-	Initial release	03.12.15	ADE
Rev.	Quant.	Indice / revision description	Date	Name

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Proje Numarası /Project No.			Orjin /Origin	000001-0-Aa	Proje Muduru /Project Manager	
Olcek /Scale			Format	A3	Tarih /Date	
2:1			General tolerance		03.12.2015	
			Olcu /Dimensions		Hazirlayan /Prepared by	
			See note		DEDE.A	
			Aci /Angle		Onaylayan /Approved	
			See note		20151204131819	
			ALL DIMENSIONS ARE IN MILLIMETERS		Malzeme Kalinligi /Mat. thickness	
					Hacim (mm3) /Volume	
					9630	
					Agirlik (g) /Weight	
					75,1	

Yuzey Finish & Renk / Finish					Finish Kodu /Finish code
Yok					-
Without					

Malzeme Sartlandirma /Material treatment				
Olmadan				
Without				

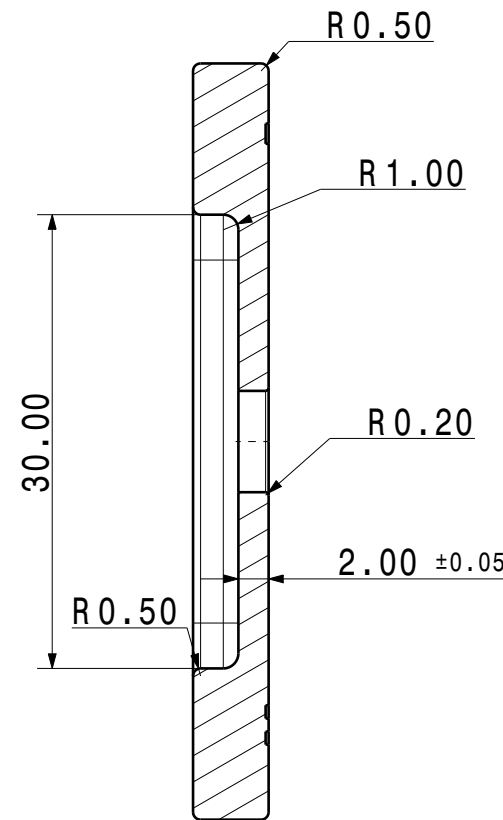
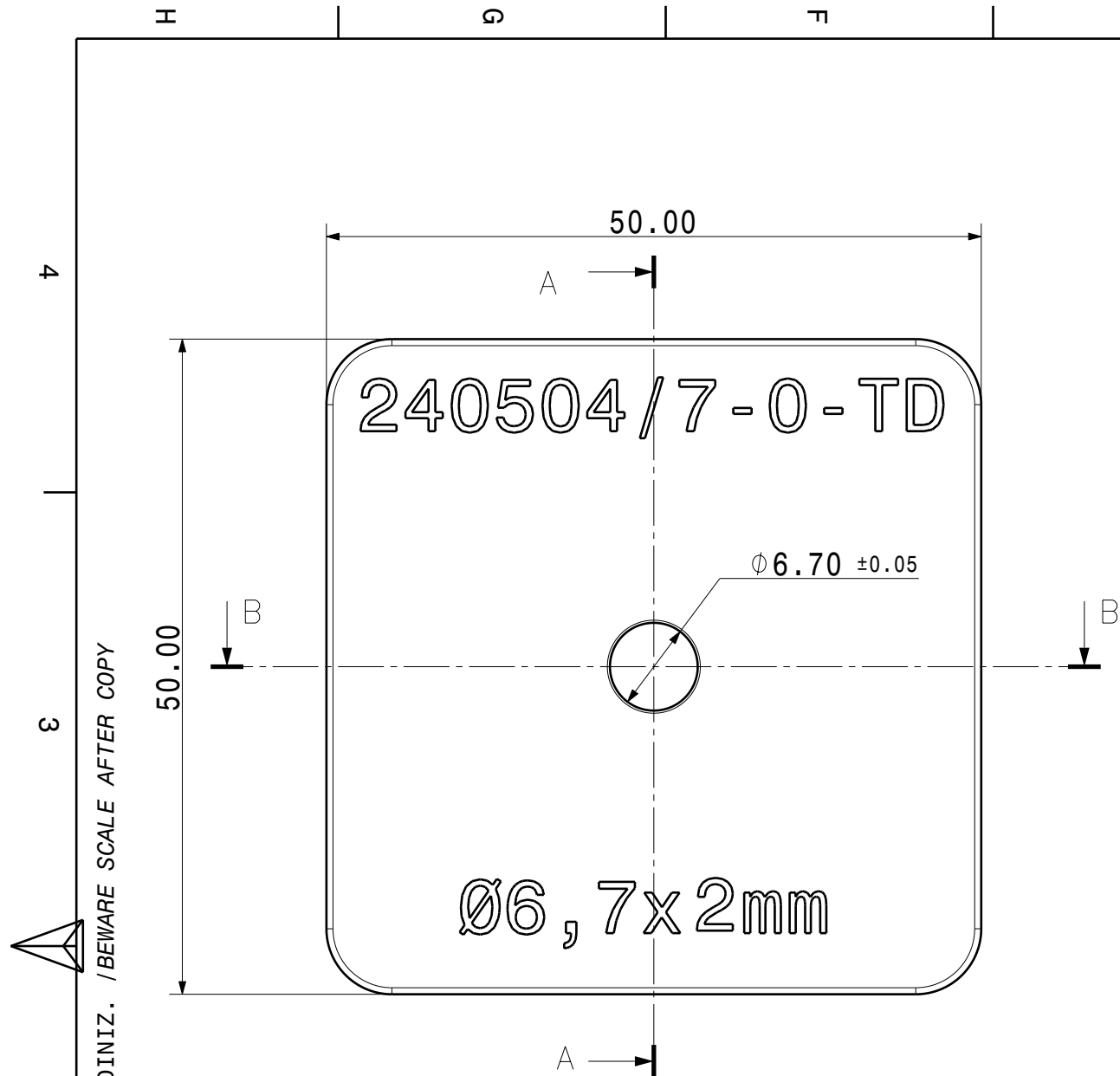
Malzeme /Material					Malz.Kodu /Mat. code
STEEL					-
IMPAX					

Parca Adi /Title				
Test Plate $\phi 6,5 \times 2$ mm				

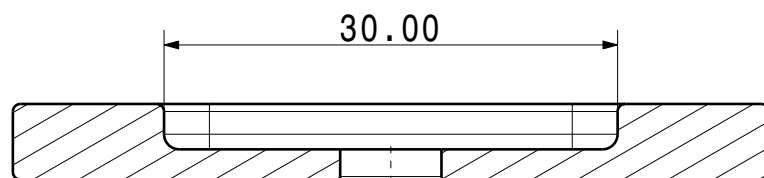
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240504 - 0 - 00					--Other

Musteri Parca Numarası /Customer part no.					Sayfa /Sheet
					1/1

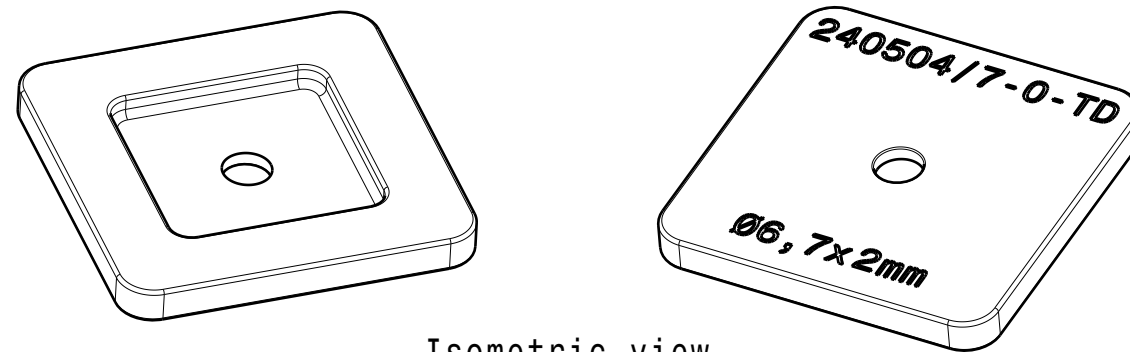
CAD system & version			Dosya Adi /File name		
CATIA V5 R24 SP4			240504-0-00-TD-6,5x2mm		



Section view A-A



Section view B-B



Isometric view
Scale: 1:1

GENERAL TOLERANCE : $\pm 0,05 \text{ mm}$

Aa	-	Initial release	03.12.15	ADE
Rev.	Quant.	Indice / revision description	Date	Name

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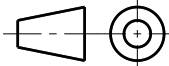
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						X----	
Proje Numarası /Project No. -			Orjin /Origin 000001-0-Aa		Proje Muduru /Project Manager FOUESNEAU.D		
Olçek /Scale		Format	General tolerance		Tarih /Date 03.12.2015		
2:1		A3	0lçü /Dimensions Açı /Angle See note See note		Hazırlayan /Prepared by DEDE.A		
			ALL DIMENSIONS ARE IN MILLIMETERS		Onaylayan /Approved 20151204131819		
			Malzeme Kalınlığı /Mat. thickness -		Hacim (mm3) /Volume 9626		Ağırlık (g) /Weight 75,1
Yüzey Finish & Renk / Finish							Finish Kodu /Finish code
Yok							-
Without							
Malzeme Sırtlama /Material treatment							
Olmadan							
Without							
Malzeme /Material							Malz.Kodu /Mat. code
STEEL							-
IMPAX							
Parça Adı /Title							
- Test Plate Ø6,7x2mm - -							
Parça Numarası /Part no.						Resim Tipi / Drawing type	
240504 - 0 - 00						--Other	
Müşteri Parça Numarası /Customer part no.						Sayfa /Sheet 1/1	
CAD system & version		CATIA V5 R24 SP4			Dosya Adı /File name		
					240504-0-00-TD-6,7x2mm		

RESIM CIKTISI ALDIKTAN SONRA RESİM OLCEGINE DIKKAT EDİNİZ. /BEWARE SCALE AFTER COPY

METKAL Ölçü ve Test Sistemleri
San. ve Tic. Ltd. Şti.

Çavuşoğlu Mah. Barbaros Hayrettin Paşa Cad. No:16 Kartal 34873 İSTANBUL

Sayfa 1 / 3
Page 1 of 3

Kalibrasyon Sertifikası
Calibration Certificate

AB-0016-K
15-33116
07-15

Cihazın Sahibi / Adresi : A RAYMOND BAĞLANTI ELEMANLARI SAN.VE TİC.LTD.ŞTİ.
Customer / Adress T.O.S.B. 3.CAD.14.SOK. NO:9

İstek Numarası : 41480 ÇAYIROVA / KOCAELİ
Order No. : 85654

Makine/Cihaz : TERAZİ
Instrument/Device

İmalatçı : METTLER TOLEDO
Manufacturer

Tip : ICS4X9-1
Type

Seri / Envanter Numarası : 3287396 / ---
Serial / Inventory Number

Kalibrasyon Tarihi : 24.07.2015
Date of Calibration

Sertifikanın Sayfa Sayısı : 3
Number of pages of the Certificate

Bu kalibrasyon sertifikası, Uluslararası Birimler Sisteminde (SI) tanımlanmış birimleri realize eden ulusal ölçüm standartlarına izlenebilirliği belgeler.

This calibration certificate documents the traceability to national standards, which realize the unit of measurement according to the International Systems of Units (SI).

Türk Akreditasyon Kurumu (TÜRKAK) kalibrasyon sertifikalarının tanınması konusunda Avrupa Akreditasyon Birliği (EA) ve Uluslararası Laboratuvar Akreditasyon Birliği (ILAC) ile karşılıklı tanınma antlaşmasını imzalamıştır.

The Turkish Accreditation Agency (TURKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation (EA) and of the International Laboratory Accreditation (ILAC) for the Mutual recognition of calibration certificates.

Ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri ve kalibrasyon metotları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir.

The measurements, the uncertainties with confidence probability and calibration methods are given on the following pages which are part of this certificate.

Mühür
Seal



Tarih
Date of Issue
29.07.2015

Kalibrasyonu Yapan
Calibrated by
Cihan YELESER
Kalibrasyon Uzmanı

Laboratuvar Müdürü
Head of the Calibration Laboratory
Ertan ÖZ

FORM NO:F-1.01 REV:2

Bu sertifika, laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. İmzasız ve mührsüz kalibrasyon sertifikaları geçersizdir.
This certificate shall not be reproduced other than in full except with the permission of the laboratory.
Calibration certificates without signature and seal are not valid.

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Customer / Adress T.O.S.B. 3. CAD. 14. YOL NO:9 ŞEKERPINAR

41480

GEBZE / KOCAELİ

İstek Numarası : 94302
Order No.

Makine/Cihaz : DİJİTAL KUMPAS
Instrument/Device

İmalatçı : MITUTOYO
Manufacturer

Tip : 500-181-20
Type

Seri / Envanter Numarası : 12361101 / 089
Serial / Inventory Number

Kalibrasyon Tarihi : 10.06.2016
Date of Calibration

Sertifikanın Sayfa Sayısı : 3
Number of pages of the Certificate

UYGUNDUR

24 / 06 / 16

Bu kalibrasyon sertifikası, Uluslararası Birimler Sisteminde (SI) tanımlanmış birimleri realize eden ulusal ölçüm standartlarına izlenebilirliği belgeler.

This calibration certificate documents the traceability to national standards, which realize the unit of measurement according to the International Systems of Units (SI).

Türk Akreditasyon Kurumu (TÜRKAK) kalibrasyon sertifikalarının tanınması konusunda Avrupa Akreditasyon Birliği (EA) ve Uluslararası Laboratuvar Akreditasyon Birliği (ILAC) ile karşılıklı tanınma antlaşmasını imzalamıştır.

The Turkish Accreditation Agency (TURKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation (EA) and of the International Laboratory Accreditation (ILAC) for the Mutual recognition of calibration certificates.

Ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri ve kalibrasyon metotları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir.

The measurements, the uncertainties with confidence probability and calibration methods are given on the following pages which are part of this certificate.

Mühür



Tarih

Date of Issue

10.06.2016

Kalibrasyonu Yapan

Calibrated by

Muammer DEĞERLİ

Kalibrasyon Uzmanı

Laboratuvar Müdürü

Head of the Calibration Laboratory

Ertan ÖZ

FORM NO:F-1.01 REV:2

Bu sertifika, laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. İmzasız ve mührsüz kalibrasyon sertifikalar geçersizdir.

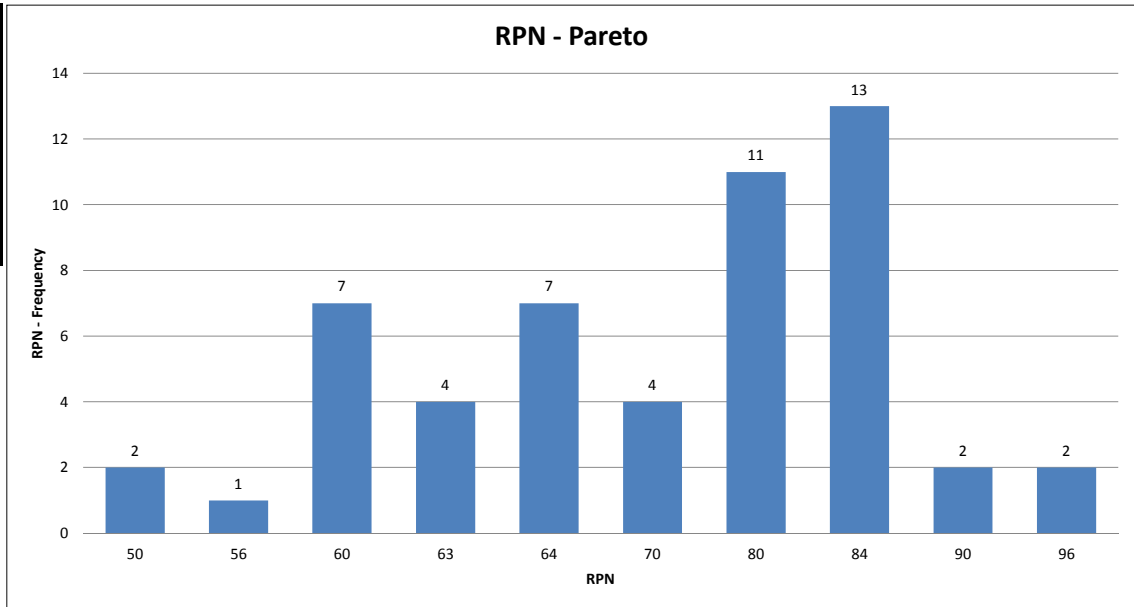
This certificate shall not be reproduced other than in full except with the permission of the laboratory.

Calibration certificates without signature and seal are not valid.

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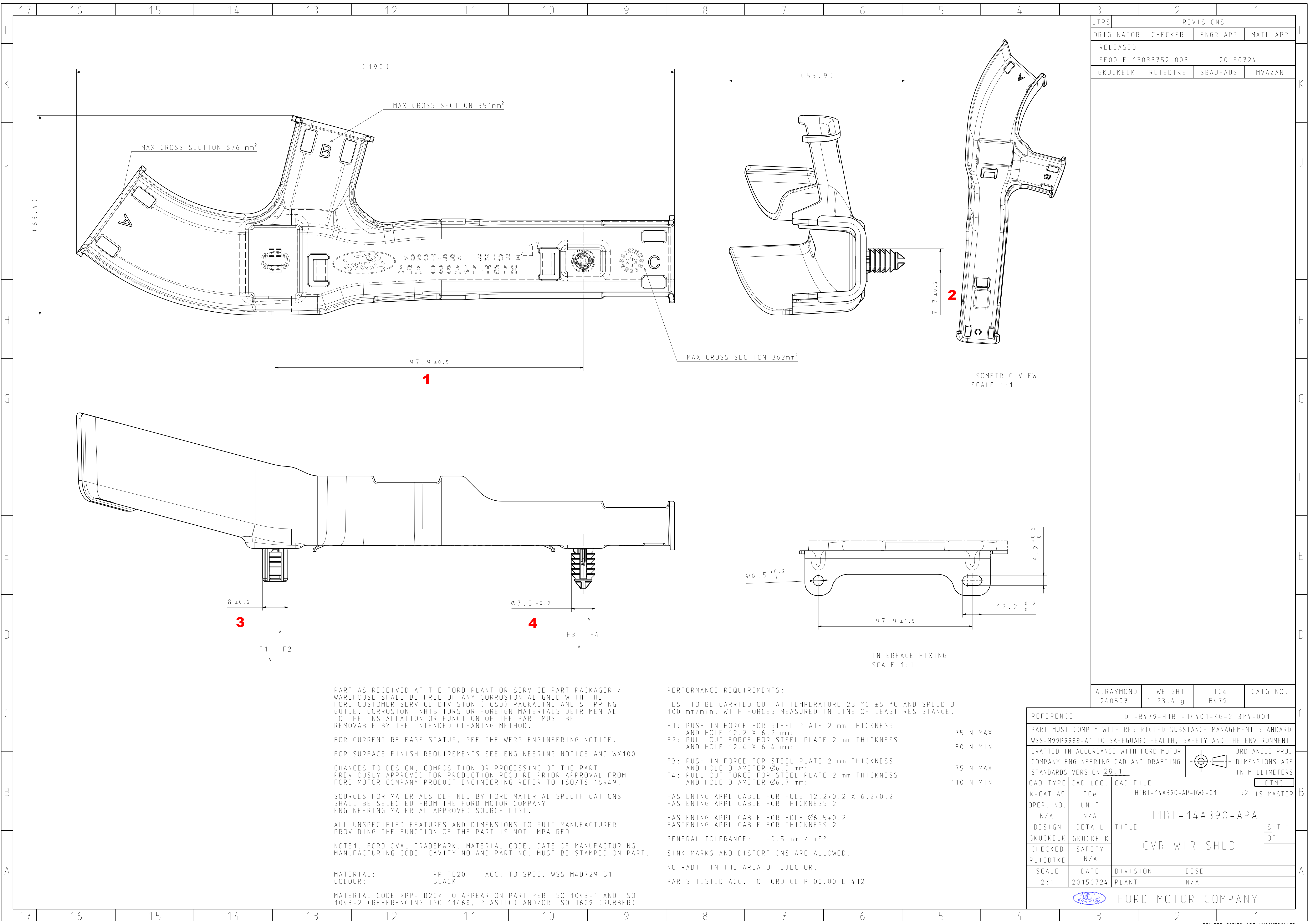
Process-FMEA Overview				
Company Name:	ARaymond Bağlantı Elemanları			
FMEA Number:			FMEA Date / Start:	14/06/2007
Part Name:	CVR WIR SHLD		FMEA Date / Revision:	19/02/2016
Part Number(s):	H1BT-14A390-APA		Team:	Quality: Esin Çolak Erdem, Ercüment Güven, Şule Günel, Ahmet Güzel, Selçuk Yılmaz,
			Production Plant:	Araymond Turkey

RPN	Frequency
50	2
56	1
60	7
63	4
64	7
70	4
80	11
84	13
90	2
96	2

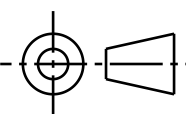


No.	RPN	Failure Description	Process number	Rootcause
1	96	Oil stain on the part	9b	Oil from tool
2	96	Oil stain on the part	9b	Oil from machine
3	90	Burr	9b	Incorrect tool cooling connection
4	90	Deformaiton on the functional area	9b	Cooling of the tool in functional ares is not enough
5	84	Short shot	9b	Low tool temperature
6	84	Short shot	9b	Injection gate blok
7	84	Short shot	9b	Raw material leakage from injection gate
8	84	Breakage or crack	9b	Deformation on the tool
9	84	Breakage or crack	9b	Welding line on critical area
10	84	Breakage or crack	9b	Degredation of raw material

YAZAKI				PACKAGING SPECIFICATION	
Yazaki Part number:	H1BT 14A390 APA		Supplier Name:		A.Raymond Bağlantı Elemanları San.ve Tic.Ltd.Şti.
Supplier Part number:	240507 000				
Part Description:	Cable Channel				
PLASTIC BAG - STACK METHOD Include Sketch/Picture: N/A			Bag size: _____ x _____ mm Quantity of bags/carton: _____ pcs or Quantity of cartons/stage: _____ pcs Total Qty per box - SPS: _____ pcs (SPS - Standard packsize)		
BLANC CARTON BOX Include Sketch/Picture of Box and Label:			Box type: _____ Carton box Box dimensions: _____ 60 x _____ 40 x _____ 30 mm (Length x Width x Height) Wall thickness: _____ mm Full box weight: _____ 4.75 kg Label type: _____ Odette Label (*) Label colour: _____ white (*) Label position: _____ Please see photo (*) Label details / size: _____ 165 x _____ 210 mm (*)		
PALLET Include Sketch/Picture of complete pallet: (incl. cartons & wrapping/strapping)			Pallet type: _____ Returnable Euro palet (one-way Euro pallet - fumigated) Empty pallet size (LxWxH): _____ 1200 x _____ 800 x _____ 150 mm Max. Height 1.80 m Full pallet size (LxWxH): _____ 1200 x _____ 800 x _____ 1350 mm Max. Height 1.80 m Total nr of boxes per stage: _____ 16 boxes Nr of stages per pallet: _____ 4 stages Full pallet weight (max. 800 kg): _____ 76 kg Wrapping : _____ No Strapping : _____ No Pallet stackable : _____ No		
(*) Notes to labels: 1. Label type: each primary product packaging must be labelled with an adhesive bar-code label, type Odette, VDA, etc. 2. Label info: label info shall be clear and scannable and include as a minimum; Supplier name, Yazaki part number, Supplier reference nr, Quantity, Trace-ability info (e.g. Lot nr, Production info, Order ref., etc.). 3. Additional/specific labels: Orange: Whenever an Engineering Change occurs, the next three (3) consecutive deliveries have to be identified with an extra orange / otherwise agreed label. Green: Whenever a quality concern has occurred, the next three (3) separate O.K. deliveries (Good Job) must be identified with an extra green label.					
Signature Supplier: 		Quality Engineer: Ercument Guven Signed by: Function: Date:			
Signature					



LTRS	REVISIONS		
ORIGINATOR	CHECKER	ENGR APP	MATL APP
RELEASED			
EE00 E 13033752 003		20150724	
GKUCKELK	RLIEDTKE	SBAUHAUS	MVAZAN

REFERENCE			DI-B479-H1BT-14401-KG-213P4-001		
PART MUST COMPLY WITH RESTRICTED SUBSTANCE MANAGEMENT STANDARD WSS-M99P9999-A1 TO SAFEGUARD HEALTH, SAFETY AND THE ENVIRONMENT					
DRAFTED IN ACCORDANCE WITH FORD MOTOR COMPANY ENGINEERING CAD AND DRAFTING STANDARDS VERSION <u>28.1</u>			 3RD ANGLE PROJ DIMENSIONS ARE IN MILLIMETERS		
CAD TYPE	CAD LOC.	CAD FILE			
K-CATIAS	TcE	H1BT-14A390-AP-DWG-01	:2	IS MASTER	
OPER. NO.	UNIT	H1BT-14A390-APA			
N/A	N/A				
DESIGN	DETAIL	TITLE		SHT 1	
GKUCKELK	GKUCKELK	CVR WIR SHLD		OF 1	
CHECKED	SAFETY				
RLIEDTKE	N/A				
SCALE	DATE	DIVISION	ESEE		
2:1	20150724	PLANT	N/A		
		FORD MOTOR COMPANY			

PART AS RECEIVED AT THE FORD PLANT OR SERVICE PART PACKAGER / WAREHOUSE SHALL BE FREE OF ANY CORROSION ALIGNED WITH THE FORD CUSTOMER SERVICE DIVISION (FCSD) PACKAGING AND SHIPPING GUIDE. CORROSION INHIBITORS OR FOREIGN MATERIALS DETRIMENTAL TO THE INSTALLATION OR FUNCTION OF THE PART MUST BE REMOVABLE BY THE INTENDED CLEANING METHOD.

FOR CURRENT RELEASE STATUS, SEE THE WERS ENGINEERING NOTICE.

FOR SURFACE FINISH REQUIREMENTS SEE ENGINEERING NOTICE AND WX100.

CHANGES TO DESIGN, COMPOSITION OR PROCESSING OF THE PART PREVIOUSLY APPROVED FOR PRODUCTION REQUIRE PRIOR APPROVAL FROM FORD MOTOR COMPANY PRODUCT ENGINEERING REFER TO ISO/TS 16949.

SOURCES FOR MATERIALS DEFINED BY FORD MATERIAL SPECIFICATIONS SHALL BE SELECTED FROM THE FORD MOTOR COMPANY ENGINEERING MATERIAL APPROVED SOURCE LIST.

ALL UNSPECIFIED FEATURES AND DIMENSIONS TO SUIT MANUFACTURER PROVIDING THE FUNCTION OF THE PART IS NOT IMPAIRED.

NOTE1: FORD OVAL TRADEMARK, MATERIAL CODE, DATE OF MANUFACTURING, MANUFACTURING CODE, CAVITY NO AND PART NO. MUST BE STAMPED ON PART.

MATERIAL: PP-TD20 ACC. TO SPEC. WSS-M4D729-B1
COLOUR: BLACK

MATERIAL CODE >PP-TD20< TO APPEAR ON PART PER ISO 1043-1 AND ISO 1043-2 (REFERENCING ISO 11469, PLASTIC) AND/OR ISO 1629 (RUBBER)

PERFORMANCE REQUIREMENTS:

TEST TO BE CARRIED OUT AT TEMPERATURE 23 °C ±5 °C AND SPEED OF 100 mm/min. WITH FORCES MEASURED IN LINE OF LEAST RESISTANCE.

F1: PUSH IN FORCE FOR STEEL PLATE 2 mm THICKNESS AND HOLE 12.2 X 6.2 mm: 75 N MAX
F2: PULL OUT FORCE FOR STEEL PLATE 2 mm THICKNESS AND HOLE 12.4 X 6.4 mm: 80 N MIN

F3: PUSH IN FORCE FOR STEEL PLATE 2 mm THICKNESS AND HOLE DIAMETER Ø6.5 mm: 75 N MAX
F4: PULL OUT FORCE FOR STEEL PLATE 2 mm THICKNESS AND HOLE DIAMETER Ø6.7 mm: 110 N MIN

FASTENING APPLICABLE FOR HOLE 12.2+0.2 X 6.2+0.2
FASTENING APPLICABLE FOR THICKNESS 2

FASTENING APPLICABLE FOR HOLE Ø6.5+0.2
FASTENING APPLICABLE FOR THICKNESS 2

GENERAL TOLERANCE: ±0.5 mm / ±5°

SINK MARKS AND DISTORTIONS ARE ALLOWED.

NO RADII IN THE AREA OF EJECTOR.

PARTS TESTED ACC. TO FORD CETP 00.00-E-412

			Dimensional Inspection Report											
			Ölçü Kontrol Raporu											
Organizasyon / Organisation			A.Raymond TR				Parça No (PART NO)				240507000_H1BT-14A390-APA			
Ölçüm Yapılan Yer / Inspection Facility			A.Raymond TR				Parça Adı (PART NAME)				Kabelkanal cable channel			
Ölçüm Talep Nedeni / Reason For Request			T0 deneme-full ölçüm				Resim No / Seviye (Drawing/Level)				Aa 02.10.15			
Measurement Equipment Ölçüm Ekipmanı			CMM-Measurement Device		GP-Gauge Plug		Deneme -Üretim Tarihi / Trial-Production Date				24/12/2015			
			FT-Force Test		M-Mihengir (comparator)		Hammadde / Raw Material				HOSTACOM M2U01 BK 102942			
			C-Caliper		MM-Micrometer		Tarih (Date) 19/01/2016							
			PM-Pin/Mastar		PP-Profile Projector									
Lab.Sıcaklığı ve Nem (Lab.Temperature / Humidity): 20°C ±2°C / %50 ±10							Ölçülen (Measured): 22°C / %45,2							
No	Date Tarih	Dimension Ölçü	Tolerance Tolerans	Min.	Max.	Measurement Equipment Ölçüm Cihazı	Measured Values Ölçülen Değerler						Result Sonuç	
							Cavity1-1	Cavity1-2	Cavity1-3	Cavity1-4	Cavity1-5		OK	NOK
1	19/01/2016	97.90 mm	0.50	97.40	98.40	C	98.14	98.05	98.11	98.04	98.13		OK	
2	19/01/2016	7.70 mm	0.20	7.50	7.90	C	7.62	7.58	7.62	7.58	7.62		OK	
3	19/01/2016	8.00 mm	0.20	7.80	8.20	C	7.94	7.94	7.94	7.94	7.94		OK	
4	19/01/2016	7.50 mm	0.20	7.30	7.70	C	7.47	7.48	7.47	7.48	7.47		OK	
ÖLÇÜM BELİRSİZLİĞİ			AÇIKLAMALAR(Observation)				KONTROL EDEN (Controlled By)				ONAYLAYAN (Approved by)			
CMM FT C ±0,3µm ±0,1N ±11µm PM MM M ±0,5µm ±2µm ±15µm PP GP ±0,6µm							Selçuk YILMAZ				Eroğlu BURCU			

Not : Uygunluk Onayı, proje aşamasında yapılan ölçümlerin raporlarının müşteriye gönderilmeden önce Proje Lideri tarafından gözden geçirildiğini gösterir.

Note : OK for Submission, is to validate the measurement report is approved by the Project Leader before submission to the customer.

			Dimensional Inspection Report											
			Ölçü Kontrol Raporu											
Organizasyon / Organisation			A.Raymond TR				Parça No (PART NO)				240507000_H1BT-14A390-APA			
Ölçüm Yapılan Yer / Inspection Facility			A.Raymond TR				Parça Adı (PART NAME)				Kabelkanal cable channel			
Ölçüm Talep Nedeni / Reason For Request			T0 deneme-full ölçüm				Resim No / Seviye (Drawing/Level)				Aa 02.10.15			
Measurement Equipment Ölçüm Ekipmanı			CMM-Measurement Device		GP-Gauge Plug		Deneme -Üretim Tarihi / Trial-Production Date				24/12/2015			
			FT-Force Test		M-Mihengir (comparator)		Hammadde / Raw Material				HOSTACOM M2U01 BK 102942			
			C-Caliper		MM-Micrometer		Tarih (Date) 19/01/2016							
			PM-Pin/Mastar		PP-Profile Projector									
Lab.Sıcaklığı ve Nem (Lab.Temperature / Humidity): 20°C ±2°C / %50 ±10							Ölçülen (Measured):				22°C / %45,2			
No	Date Tarih	Dimension Ölçü	Tolerance Tolerans	Min.	Max.	Measurement Equipment Ölçüm Cihazı	Measured Values Ölçülen Değerler						Result Sonuç	
							Cavity2-1	Cavity2-2	Cavity2-3	Cavity2-4	Cavity2-5		OK	NOK
1	19/01/2016	97.90 mm	0.50	97.40	98.40	C	98.04	98.07	98.01	98.06	98.03		OK	
2	19/01/2016	7.70 mm	0.20	7.50	7.90	C	7.50	7.58	7.50	7.58	7.51		OK	
3	19/01/2016	8.00 mm	0.20	7.80	8.20	C	7.95	7.95	7.95	7.95	7.95		OK	
4	19/01/2016	7.50 mm	0.20	7.30	7.70	C	7.44	7.46	7.44	7.46	7.44		OK	
ÖLÇÜM BELİRSİZLİĞİ			AÇIKLAMALAR(Observation)				KONTROL EDEN (Controlled By)		ONAYLAYAN (Approved by) ☐					
UYGUNLUK ONAYI (OK for Submission) ☐							Selçuk YILMAZ		Eroğlu BURCU					
CMM	FT	C												
±0,3µm	±0,1N	±11µm												
PM	MM	M												
±0,5µm	±2µm	±15µm												
PP	GP													
±0,6µm														

Not : Uygunluk Onayı, proje aşamasında yapılan ölçümlerin raporlarının müşteriye gönderilmeden önce Proje Lideri tarafından gözden geçirildiğini gösterir.

Note : OK for Submission, is to validate the measurement report is approved by the Project Leader before submission to the customer.