

Association Connecting Electronics Industries



Marcus von Gegerfelt

having successfully completed the Application Specialist course of study on

**IPC/WHMA-A-620
Requirements and Acceptance for Cable
and Wire Harness Assemblies**

is hereby designated

Certified IPC Specialist

Serial No. 620-S 4857370447

This certificate is your official notification of meeting all the necessary requirements to be a Certified IPC Specialist (CIS) in the industry developed and approved IPC/WHMA-A-620 Training and Certification Program. You may now use the CIS designation on letterhead, business cards, and all forms of address.

2 Maj 2017

Date of Completion of Mandatory Module 1

Maj 2019

Certification Expiration Month/Year of All Modules
Regardless of Training Completion Date

IPC/WHMA-A-620 Certified IPC Trainer
Mats Bohman

Swentech Utbildning AB
CIT's Company/Employer

620-T4806895602

Serial No. of Certified IPC Trainer

**Additional
Discrimination
Modules**

DATE OF CIT
COMPLETION INITIALS

05.03.17	MB	M2
05.03.17	MB	M3
05.04.17	MB	M4
05.05.17	MB	M5
05.04.17	MB	M6
05.05.17	MB	M7
05.05.17	MB	M8

MODULE NUMBER
AND NAME

Preparation
Crimp
Soldered
Connectorization
Splices
Marking, Securing, & Covers
Multi-axial Assemblies
Solderless Wrap

**Additional Hands-on
Modules**

DATE OF CIT
COMPLETION INITIALS

H1	/ /	
H2	/ /	
H4	/ /	
H3	/ /	
H5	/ /	
H6	/ /	

Association Connecting Electronics Industries



Marcus Pellfolk

having successfully completed the Application Specialist course of study on

IPC/WHMA-A-620

Requirements and Acceptance for Cable and Wire Harness Assemblies

is hereby designated

Certified IPC Specialist

Serial No. 620-S 44515339

This certificate is your official notification of meeting all the necessary requirements to be a Certified IPC Specialist (CIS) in the industry developed and approved IPC/WHMA-A-620 Training and Certification Program. You may now use the CIS designation on letterhead, business cards, and all forms of address.

11 Juni 2015

Date of Completion of Mandatory Module 1

Juni 2017

Certification Expiration Month/Year of All Modules
Regardless of Training Completion Date

IPC/WHMA-A-620 Certified IPC Trainer
Mats Bohman

Swentech Utbildning AB

CIT's Company/Employer

620-T 99423

Serial No. of Certified IPC Trainer

Optional Modules (May be Completed in Any Order)

DATE OF COMPLETION	CIT INITIALS	MODULE NUMBER AND NAME
11/06/15	MB	2. Crimp Terminations; Insulation Displacement Connections (IDC)
11/06/15	MB	3. Soldered Terminations (Terminals)
11/06/15	MB	4. Connectorization, Molding and Potting
11/06/15	MB	5. Splices (Soldered and Crimp)
11/06/15	MB	6. Marking & Labeling; Wire Bundle Securing, Shielding, Protective Coverings
11/06/15	MB	7. Coaxial and Twinaxial Cable Assemblies
11/06/15	MB	8. Solderless Wire Wrap

Association Connecting Electronics Industries



Miguel Ponce

having successfully completed the Application Specialist course of study on

**IPC/WHMA-A-620
Requirements and Acceptance for Cable
and Wire Harness Assemblies**

is hereby designated

Certified IPC Specialist

Serial No. 620-S 4856460678

This certificate is your official notification of meeting all the necessary requirements to be a Certified IPC Specialist (CIS) in the industry developed and approved IPC/WHMA-A-620 Training and Certification Program. You may now use the CIS designation on letterhead, business cards, and all forms of address.

10/26/2015

Date of Completion of Mandatory Module 1

Sven Ek

IPC/WHMA-A-620 Certified IPC Trainer

10/2017

Certification Expiration Month/Year of All Modules
Regardless of Training Completion Date

Swentech Utbildning AB

CIT's Company/Employer

620-T 99424

Serial No. of Certified IPC Trainer

Optional Modules (May be Completed in Any Order)

DATE OF COMPLETION	CIT INITIALS	MODULE NUMBER AND NAME
<u>10/27/16</u>	<u>[Signature]</u>	2. Crimp Terminations; Insulation Displacement Connections (IDC)
<u>10/27/16</u>	<u>[Signature]</u>	3. Soldered Terminations (Terminals)
<u>10/27/16</u>	<u>[Signature]</u>	4. Connectorization, Molding and Potting
<u>10/27/16</u>	<u>[Signature]</u>	5. Splices (Soldered and Crimp)
<u>10/27/16</u>	<u>[Signature]</u>	6. Marking & Labeling; Wire Bundle Securing, Shielding, Protective Coverings
<u>10/27/16</u>	<u>[Signature]</u>	7. Coaxial and Twinaxial Cable Assemblies
<u>10/27/16</u>	<u>[Signature]</u>	8. Solderless Wire Wrap

BEHÖRIGHETSBEVIS

utfärdat till

Marcus Pellfolk 861125

som bevis på godkända slutprov i

*FÖRNYELSEKURS I MJUKLÖDNING
ENLIGT FSD5115*

under tiden 150817 - 150819

*Normgivande för provens bedömning är
IPC/ANSI*

<i>Prov nr.</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>Totalt</i>
<i>Betyg</i>		<i>8</i>			<i>6</i>	<i>7</i>	<i>21</i>

Utfärdat 150819

*Behörigheten gäller under högst 4 år
från ovanstående datum*

SWENTECH UTBILDNING AB



Mats Bohman

Kursledare

SWENTECH

UTBILDNING

Betyg skala	Normer för bedömning	Prov					
		1	2	3	4	5	6
9--10	Lödningsen är anmärkningsfri						
7--8	Mindre ojämnheter eller blåsor		X				X
	Mindre anmärkningar på avisolerings- eller anliggningslängd						
	Mindre anmärkningar gällande rengöring						
	Det allmänna utförandet är bra		X				X
5--6	Ojämnheter eller blåsor (t ex. högttemperaturlod)					X	
	Anmärkningar på avisolerings- eller anliggningslängd					X	
	Mindre kvarvarande flussrester eller andra föroreningar						
	Mindre anmärkningar gällande lodets utflytning					X	
	Mindre överskott eller underskott av lod						
	Lodet flutit utanför det egentliga lödstället						
	Olämpligt monterade komponenter och ledare etc.						
	Mindre skador på ledare eller lödtytor						
	Mindre värme- eller mekaniska skador på kort alt. komponent						
	Reparerad anslutningspunkt						
	Tiden har överskridits						
	Det allmänna utförandet godtagbart						
3--4	Stora ojämnheter eller blåsor						
	Felaktig avisolerings- eller anliggningslängd						
	Kvarvarande flussrester (förhindrar avsyning)						
	Lodet har inte flutit väl ut över lödstället						
	Överskott eller underskott av lod						
	Lodet har flutit långt utanför det egentliga lödstället						
	Felaktigt monterade ledare, komponenter etc.						
	Skador på ledare eller lödtytor (t ex. foliesläpp)						
	Värme- eller mekaniska skador på kort alt. komponent						
	Lödstället har mekaniskt efterbearbetats						
	Överhettning av lödstället						
	Kvarvarande lodpärlor, lodflagor etc.						
	Den beräknade tiden väsentligt överskriden (>20%)						
	Det allmänna utförandet är otillfredsställande						
1--2	Lodet har inte flutit ut över lödstället						
	Kraftigt överskott av lod						
	Kraftiga värme- eller mekaniska skador på kort alt. komponent						
	Kraftig överhettning av lödstället (lodet grått och gryningt)						
	Sprickor i lödförbindningen, rubbad lödning						
	Saknat ledningsmönster						
	Det allmänna utförandet är dåligt						
0	Olödd förbindning						
	Kalllödning						
	Lodbrygga						
	Felvärd komponent (riktningskänslig)						
	Felkoppling						
	Det allmänna utförandet är mycket dåligt						
Poäng/prov		8				6	7

Namn: Marcus Pellfolk
Personnr: 861125
Företag: Garam Elektronik AB
Kursnamn: Förnyelsekurs enligt FSD5115
Kursdatum: 150817-150819
Kvalitetsstd: IPC - standarder

Synkontroll: Godkänd
Resultat: 21
Teori: Godkänd
Giltighetstid: 150819-190819
Sign: *Mats Bohman*
 Mats Bohman, kontrollant

BEHÖRIGHETSBEVIS

utfärdat till
Marcus Pellfolk 861125

som bevis på godkända slutprov i

BEHÖRIGHETSKURS I MJUKLÖDNING
ENLIGT FSD5115

under tiden 190916 - 190920

Normgivande för provens bedömning är
IPC/ANSI

<i>Prov nr.</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>Totalt</i>
<i>Betyg</i>	<i>6</i>	<i>6</i>	<i>7</i>	<i>6</i>	<i>6</i>	<i>7</i>	<i>38</i>

Utfärdat 190920

Behörigheten gäller under högst 4 år
från ovanstående datum

SWENTECH UTBILDNING AB



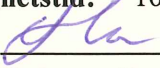
Mats Bohman
Kursledare

SWENTECH

UTBILDNING

Betyg skala	Normer för bedömning	Prov					
		1	2	3	4	5	6
9--10	Lödningsfri						
7--8	Mindre ojämnheter eller blåsor						
	Mindre anmärkningar på avisolerings- eller anliggningslängd						X
	Mindre anmärkningar gällande rengöring						
	Det allmänna utförandet är bra						X
5--6	Ojämnheter eller blåsor (t ex. högttemperaturlod)		X			X	
	Anmärkningar på avisolerings- eller anliggningslängd						
	Mindre kvarvarande flussrester eller andra föroreningar						
	Mindre anmärkningar gällande lodets utflytning	X				X	
	Mindre överskott eller underskott av lod	X		X	X	X	
	Lodet flutit utanför det egentliga lödstället						
	Olämpligt monterade komponenter och ledare etc.			X		X	
	Mindre skador på ledare eller lödtytor						
	Mindre värme- eller mekaniska skador på kort alt. komponent	X	X		X		
	Reparerad anslutningspunkt						
	Tiden har överskridits						
	Det allmänna utförandet godtagbart	X	X	X	X	X	
3--4	Stora ojämnheter eller blåsor						
	Felaktig avisolerings- eller anliggningslängd						
	Kvarvarande flussrester (förhindrar avsyning)						
	Lodet har inte flutit väl ut över lödstället						
	Överskott eller underskott av lod						
	Lodet har flutit långt utanför det egentliga lödstället						
	Felaktigt monterade ledare, komponenter etc.						
	Skador på ledare eller lödtytor (t ex. foliesläpp)						
	Värme- eller mekaniska skador på kort alt. komponent						
	Lödstället har mekaniskt efterbearbetats						
	Överhettning av lödstället						
	Kvarvarande lodpärlor, lodflagor etc.						
	Den beräknade tiden väsentligt överskriden (>20%)						
	Det allmänna utförandet är otillfredsställande						
1--2	Lodet har inte flutit ut över lödstället						
	Kraftigt överskott av lod						
	Kraftiga värme- eller mekaniska skador på kort alt. komponent						
	Kraftig överhettning av lödstället (lodet grått och gryningt)						
	Sprickor i lödförbindningen, rubbad lödning						
	Saknat ledningsmönster						
	Det allmänna utförandet är dåligt						
0	Olödd förbindning						
	Kalllödning						
	Lodbrygga						
	Felvänd komponent (riktningskänslig)						
	Felkoppling						
	Det allmänna utförandet är mycket dåligt						
Poäng/prov		6	6	5	6	5	8

Namn: Miguel Ponce
Personnr: 630507
Företag: Garam Elektronik AB
Kursnamn: Behörighetskurs enligt FSD5115
Kursdatum: 160822-160826
Kvalitetsstd: IPC - standarder

Synkontroll: Godkänd
Resultat: 36
Teori: Godkänd
Giltighetstid: 160826-200826
Sign: 
 Sven Ek, kontrollant

Association Connecting Electronics Industries



Kädi Ojaste

having successfully completed the Application Specialist course of study on

**IPC/WHMA-A-620
Requirements and Acceptance for Cable
and Wire Harness Assemblies**

is hereby designated

Certified IPC Specialist

Serial No. 620-S 4856172415

This certificate is your official notification of meeting all the necessary requirements to be a Certified IPC Specialist (CIS) in the industry developed and approved IPC/WHMA-A-620 Training and Certification Program. You may now use the CIS designation on letterhead, business cards, and all forms of address.

6 June 2016

Date of Completion of Mandatory Module 1

June 2018

Certification Expiration Month/Year of All Modules
Regardless of Training Completion Date

Ivar Kaljula

IPC/WHMA-A-620 Certified IPC Trainer

Tallinn Polytechnic School

CIT's Company/Employer

620-T 4805559647

Serial No. of Certified IPC Trainer

Optional Modules (May be Completed in Any Order)

DATE OF COMPLETION	CIT INITIALS	MODULE NUMBER AND NAME
<u>07/06/16</u>	<u>IK</u>	2. Crimp Terminations; Insulation Displacement Connections (IDC)
<u>07/06/16</u>	<u>IK</u>	3. Soldered Terminations (Terminals)
<u>08/06/16</u>	<u>IK</u>	4. Connectorization, Molding and Potting
<u>09/06/16</u>	<u>IK</u>	5. Splices (Soldered and Crimp)
<u>08/06/16</u>	<u>IK</u>	6. Marking & Labeling; Wire Bundle Securing, Shielding, Protective Coverings
<u>09/06/16</u>	<u>IK</u>	7. Coaxial and Twinaxial Cable Assemblies
<u>07/06/16</u>	<u>IK</u>	8. Solderless Wire Wrap

Association Connecting Electronics Industries



Piret-Ann Anvelt

having successfully completed the Application Specialist course of study on

**IPC/WHMA-A-620
Requirements and Acceptance for Cable
and Wire Harness Assemblies**

is hereby designated

Certified IPC Specialist

Serial No. 620-S 4856172427

This certificate is your official notification of meeting all the necessary requirements to be a Certified IPC Specialist (CIS) in the industry developed and approved IPC/WHMA-A-620 Training and Certification Program. You may now use the CIS designation on letterhead, business cards, and all forms of address.

6 June 2016

Date of Completion of Mandatory Module 1

June 2018

Certification Expiration Month/Year of All Modules
Regardless of Training Completion Date

Ivar Kaljula

IPC/WHMA-A-620 Certified IPC Trainer

Tallinn Polytechnic School

CIT's Company/Employer

620-T 4805559647

Serial No. of Certified IPC Trainer

Optional Modules (May be Completed in Any Order)

DATE OF COMPLETION	CIT INITIALS	MODULE NUMBER AND NAME
07/06/16	IK	2. Crimp Terminations; Insulation Displacement Connections (IDC)
07/06/16	IK	3. Soldered Terminations (Terminals)
08/06/16	IK	4. Connectorization, Molding and Potting
09/06/16	IK	5. Splices (Soldered and Crimp)
08/06/16	IK	6. Marking & Labeling; Wire Bundle Securing, Shielding, Protective Coverings
09/06/16	IK	7. Coaxial and Twinaxial Cable Assemblies
07/06/16	IK	8. Solderless Wire Wrap

Association Connecting Electronics Industries



Tiia Suigusaar

having successfully completed the Application Specialist course of study on

**IPC/WHMA-A-620
Requirements and Acceptance for Cable
and Wire Harness Assemblies**

is hereby designated

Certified IPC Specialist

Serial No. 620-S 4856172864

This certificate is your official notification of meeting all the necessary requirements to be a Certified IPC Specialist (CIS) in the industry developed and approved IPC/WHMA-A-620 Training and Certification Program. You may now use the CIS designation on letterhead, business cards, and all forms of address.

6 June 2016

Date of Completion of Mandatory Module 1

June 2018

Certification Expiration Month/Year of All Modules
Regardless of Training Completion Date

Ivar Kaljula

IPC/WHMA-A-620 Certified IPC Trainer

Tallinn Polytechnic School

CIT's Company/Employer

620-T 4805559647

Serial No. of Certified IPC Trainer

Optional Modules (May be Completed in Any Order)

DATE OF COMPLETION	CIT INITIALS	MODULE NUMBER AND NAME
07/06/16	IK	2. Crimp Terminations; Insulation Displacement Connections (IDC)
07/06/16	IK	3. Soldered Terminations (Terminals)
08/06/16	IK	4. Connectorization, Molding and Potting
09/06/16	IK	5. Splices (Soldered and Crimp)
08/06/16	IK	6. Marking & Labeling; Wire Bundle Securing, Shielding, Protective Coverings
09/06/16	IK	7. Coaxial and Twinaxial Cable Assemblies
07/06/16	IK	8. Solderless Wire Wrap

Association Connecting Electronics Industries



Eda Luht

having successfully completed the Application Specialist course of study on

**IPC/WHMA-A-620
Requirements and Acceptance for Cable
and Wire Harness Assemblies**

is hereby designated

Certified IPC Specialist

Serial No. 620-S 4856172429

This certificate is your official notification of meeting all the necessary requirements to be a Certified IPC Specialist (CIS) in the industry developed and approved IPC/WHMA-A-620 Training and Certification Program. You may now use the CIS designation on letterhead, business cards, and all forms of address.

6 June 2016

Date of Completion of Mandatory Module 1

June 2018

Certification Expiration Month/Year of All Modules
Regardless of Training Completion Date

Ivar Kaljula

IPC/WHMA-A-620 Certified IPC Trainer

Tallinn Polytechnic School

CIT's Company/Employer

620-T 4805559647

Serial No. of Certified IPC Trainer

Optional Modules (May be Completed in Any Order)

DATE OF COMPLETION	CIT INITIALS	MODULE NUMBER AND NAME
07/06/16	IK	2. Crimp Terminations; Insulation Displacement Connections (IDC)
07/06/16	IK	3. Soldered Terminations (Terminals)
08/06/16	IK	4. Connectorization, Molding and Potting
09/06/16	IK	5. Splices (Soldered and Crimp)
08/06/16	IK	6. Marking & Labeling; Wire Bundle Securing, Shielding, Protective Coverings
09/06/16	IK	7. Coaxial and Twinaxial Cable Assemblies
07/06/16	IK	8. Solderless Wire Wrap

Association Connecting Electronics Industries



Inna Horn

having successfully completed the Application Specialist course of study on

**IPC/WHMA-A-620
Requirements and Acceptance for Cable
and Wire Harness Assemblies**

is hereby designated

Certified IPC Specialist

Serial No. 620-S 4856172414

This certificate is your official notification of meeting all the necessary requirements to be a Certified IPC Specialist (CIS) in the industry developed and approved IPC/WHMA-A-620 Training and Certification Program. You may now use the CIS designation on letterhead, business cards, and all forms of address.

6 June 2016

Date of Completion of Mandatory Module 1

June 2018

Certification Expiration Month/Year of All Modules
Regardless of Training Completion Date

Ivar Kaljula

IPC/WHMA-A-620 Certified IPC Trainer

Tallinn Polytechnic School

CIT's Company/Employer

620-T 4805559647

Serial No. of Certified IPC Trainer

Optional Modules (May be Completed in Any Order)

DATE OF COMPLETION	CIT INITIALS	MODULE NUMBER AND NAME
<u>07/06/16</u>	<u>IK</u>	2. Crimp Terminations; Insulation Displacement Connections (IDC)
<u>07/06/16</u>	<u>IK</u>	3. Soldered Terminations (Terminals)
<u>08/06/16</u>	<u>IK</u>	4. Connectorization, Molding and Potting
<u>09/06/16</u>	<u>IK</u>	5. Splices (Soldered and Crimp)
<u>08/06/16</u>	<u>IK</u>	6. Marking & Labeling; Wire Bundle Securing, Shielding, Protective Coverings
<u>09/06/16</u>	<u>IK</u>	7. Coaxial and Twinaxial Cable Assemblies
<u>07/06/16</u>	<u>IK</u>	8. Solderless Wire Wrap

Association Connecting Electronics Industries



Kristel Markus

having successfully completed the Application Specialist course of study on

**IPC/WHMA-A-620
Requirements and Acceptance for Cable
and Wire Harness Assemblies**

is hereby designated

Certified IPC Specialist

Serial No. 620-S 4856172416

This certificate is your official notification of meeting all the necessary requirements to be a Certified IPC Specialist (CIS) in the industry developed and approved IPC/WHMA-A-620 Training and Certification Program. You may now use the CIS designation on letterhead, business cards, and all forms of address.

6 June 2016

Date of Completion of Mandatory Module 1

June 2018

Certification Expiration Month/Year of All Modules
Regardless of Training Completion Date

Ivar Kaljula

IPC/WHMA-A-620 Certified IPC Trainer

Tallinn Polytechnic School

CIT's Company/Employer

620-T 4805559647

Serial No. of Certified IPC Trainer

Optional Modules (May be Completed in Any Order)

DATE OF COMPLETION	CIT INITIALS	MODULE NUMBER AND NAME
<u>07/06/16</u>	<u>IK</u>	2. Crimp Terminations; Insulation Displacement Connections (IDC)
<u>07/06/16</u>	<u>IK</u>	3. Soldered Terminations (Terminals)
<u>08/06/16</u>	<u>IK</u>	4. Connectorization, Molding and Potting
<u>09/06/16</u>	<u>IK</u>	5. Splices (Soldered and Crimp)
<u>08/06/16</u>	<u>IK</u>	6. Marking & Labeling; Wire Bundle Securing, Shielding, Protective Coverings
<u>09/06/16</u>	<u>IK</u>	7. Coaxial and Twinaxial Cable Assemblies
<u>07/06/16</u>	<u>IK</u>	8. Solderless Wire Wrap