HEADQUARTERS
PHILIPPINE ARMY
OFFICE OF THE ARMY QUARTERMASTER
Fort Andres Bonifacio, Makati City

PA SPECIFICATION

QM SPEC NR IE-22HPOD
JUL 28 2015
(Interim)

HYDRATION PACK, OLIVE DRAB (OD) – 3L CAPACITY

1. GENERAL

1.1 Scope – This specification covers one (1) type of Hydration Pack, Olive Drab (OD) – 3L Capacity as means of water storage for use of military personnel of the Philippine Army.

1.2 Grade – The finished Hydration Pack, Olive Drab (OD) shall conform with the quality and grade of product prescribed by this specification.

1.3 Size – The finished Hydration Pack, Olive Drab (OD) shall be one (1) size only, the dimension of which are shown in the attached illustration.

2. REQUIREMENTS

2.1 First Article – Two (2) samples of the finished Hydration, Pack, Olive Drab (OD) – 3L Capacity submitted to the Office of the Army Quartermaster for first article inspection in accordance with para 3.1.

2.2 Material

2.2.1 Hydration System

2.2.1.1 Reservoir – The reservoir shall be made of thermoplastic polyurethane (TPU) exterior bonded to polyethylene (PE) interior impregnated with FDA - approved antimicrobial technology or multi-layer polyurethane (PU) with the inner layer impregnated with FDA - approved antimicrobial technology. The reservoir shall have a capacity of three (3) liters. The reservoir shall have an opening of 8.0-10.0 cm in diameter with a matching screw-on threaded type cap or the opening shall be of the zip-lock type.

2.2.1.2 Sip Tube – The sip tube shall be made of transparent polyurethane or polyvinyl chloride impregnated with FDA - approved antimicrobial technology. The sip tube shall be an outside diameter of 11.0 ± 1.0 mm, 2.0 ± 0.2 mm thick and with a minimum length of 100 cm. The sip tube shall be provided with cover made of three (3) layered laminated fabrics. First and third layer shall be knitted nylon or polyester fabric, olive drab (OD) in color. Second layer is 2.0 – 3.0 mm thick black rubberized foam.

2.2.1.3 Bite Valve Assembly – The bite valve assembly shall consist of the bite valve; bite valve cover and shut-off valve. The bite valve shall be made of medical grade silicone or styrene-butadiene rubber impregnated with FDA - approved antimicrobial technology, OD or black in color. The bite valve shall be provided with a cover made of hard plastic with same color as the bite valve. The shut-off valve shall be made of hard plastic, OD or black in color.

2.2.1.4 BPA Free – The reservoir, sip tube and bite valve assembly shall be free of any trace of BPA (Bisphenol A). A certificate of compliance shall be submitted by the supplier to guarantee the absence of BPA.

2.2.1.5 Cleaning Paraphernalia – The hydration system shall be provided with cleaning paraphernalia placed inside the pocket as illustrated and composed of two (2) cylindrical brushes (large brush for the inside of the reservoir and thin one with handle long enough to run through the length of the sip tube) and collapsible plastic frame for reservoir drying.

2.2.1.6 Instruction Manual – The hydration system shall be provided with instruction manual as per manufacturer's standard.

2.2.2 Backpack Carrier

2.2.2.1 Basic Material – The basic material of the back pack carrier shall be polyester, OD in color and shall conform to the following requirements:

Type of Weave	- Plain with ripstop design	
Thread Count/2.54 cm	**Coarse Yarn**	**Fine Yarn**
Warp	- 4 quadruples (min)	30 doubles (min)
Filling	- 4 quadruples (min)	20 doubles (min)
Yarn Size, Denier	**Coarse Yarn**	**Fine Yarn**
Warp	- 1,000 (min	500 (min)
Filling	- 1,000 (min)	500 (min)
Thickness, mm	- 0.45 (minimum)	
Weight, g/m²	- 350 (maximum)	
Breaking Strength, kg (Grab Method)		
Warp	- 150 (minimum)	
Filling	- 100 (minimum)	
Water Repellency Rating, %	- 80 (minimum)	
Water Resistance, grams of water absorbed by blotter	- 0	

2.2.2.2 Lining – The lining of the backpack carrier shall be made of polyester, OD in color and shall conform to the following requirements:

Type of Weave	-	Plain
Thread Count/2.54 cm		
Warp	-	90 (minimum)
Filling	-	65 (minimum)
Yarn Size, Denier (Coarse Yarn)		
Warp	-	85 (minimum)
Filling	-	80 (minimum)
Thickness, mm	-	0.15 (minimum)
Weight, g/m²	-	110 (maximum)
Breaking Strength, kg (Strip Method)		
Warp	-	900 (minimum)
Filling	-	500 (minimum)

2.2.2.3 Insulation Padding – The insulation padding shall be made of foam with aluminized sheet on one side and has an overall thickness of 5.0 mm (minimum).

2.2.2.4 Straps – All straps shall be made of nylon, polyester or polypropylene (olefin) webbing, OD in color and shall conform to the following requirements:

Parameters	Strap # 1 Shoulder Strap (Top)	Strap # 2 Shoulder Strap (Bottom)	Strap # 3 Horizontal Chest Strap
Type of Weave	Plain-Double	Plain-Double	Plain-Double
Width, cm	4.0 ± 0.5	2.5 ± 0.5	2.0 ± 0.5
Thickness, mm	0.8 (minimum)	0.8 (minimum)	0.4 (minimum)
Weight, g/lin m	50 (maximum)	40 (maximum)	30 (maximum)
Breaking Strength, kg (Full width)	500 (minimum)	350 (minimum)	100 (minimum)

2.2.2.5 Binding Tape – The binding tape shall be made of nylon, polyester or polypropylene (olefin) webbing, olive drab (OD) in color. It shall have a width of 2.0 ± 0.5 cm.

2.2.2.6 D-Ring – There shall be eight (8) pieces D-rings made of hard plastic, black or olive drab (OD) in color and having dimensions of 3.5 ± 0.5 cm L x 2.5 ± 0.5 cm W.

2.2.2.7 Grommet – There shall be one (1) piece grommet made of brass, black chemical finish with an inside diameter of 8.0 ± 2.0 mm.

2.2.2.8 Adjustment Buckle – There shall be two (2) pieces adjustment buckle made of hard plastic, black or olive drab (OD) in color and having dimensions of 2.5 ± 0.5 cm L x 4.0 ± 0.5 cm W.

2.2.2.9 Quick Release Buckle – The quick release buckle shall be made of hard plastic, black or olive drab (OD) in color and shall conform to the following requirements:

Parameters	Quick Release Buckle (Big)	Quick Release Buckle (Small)
Quantity, prs	2	1
Overall length, cm	6.0 ± 1.0	5.0 ± 1.0
Overall Width, cm	3.0 ± 0.5	2.5 ± 0.5
Breaking Strength, kg(closed position)	40 (minimum)	10 (minimum)

2.2.2.10 Zipper – The zipper shall be made of nylon, No. 5, two-way, head-to-head type, olive drab (OD) in color.

2.2.2.11 Thread – The thread to be used in all sewing and stitching shall be nylon or polyester, 2 ply (minimum), OD with a minimum breaking strength of 2.0 kg.

2.3 Construction

2.3.1 Hydration System - The largest dimensions of the reservoir shall be along the vertical axis with the sip tube attached to the bottom portion of the reservoir to maximize the amount of accessible water. The sip tube shall be provided with cover that envelops the entire length of the sip tube. The sip tube cover is used to reduce heat transfer between the environment and the water in the tube to keep drinks cool or to fend-off freeze-up in cold weather.

2.3.2 Backpack Carrier

2.3.2.1 Design – The design shall be cut and made in strict compliance with the design and dimensions as illustrated.

2.3.2.2 Location of Insulation Padding – The insulation padding shall be inserted between the basic material and lining on both front and back parts of the carrier to keep the water warm or cold.

2.3.2.3 Front Cover of Carrier – The front part of the carrier shall have a front cover as illustrated to serve as cover for the opening of the reservoir. The cover shall be provided with 42.0 cm (minimum) long zipper for closure with properties as stated in para 2.2.2.11.

2.3.2.4 Placing of Sip Tube – There shall be one (1) slit each on both sides of the carrier, near the shoulder strap to serve as exit for the sip tube to hang over either the right or left shoulder, depending on the preference of the end-user. The slits shall be provided with binding tape with properties as stated in para 2.2.2.5.

2.3.2.5 Placing of Grommet – A grommet with properties as stated in para 2.2.2.7 shall be placed on the bottom portion of the front part of the carrier as illustrated, for the purpose of drainage in case of water seepage from the reservoir. The grommet shall be placed 3.0 ± 0.5 cm from the bottom as illustrated.

2.3.2.6 Placing of D-Ring – There shall be six (6) pieces D-rings attached on the top/sides of the carrier via the use of strap #2 sewed with bartacks. The D-rings with properties as stated in para 2.2.2.6 shall function as attachment of other accessories to the backpack carrier.

2.3.2.7 Carrier Top Handle – A top handle made of strap #1, 21.0 ± 2.0 cm long shall be sewed along the top portion of the carrier as illustrated.

2.3.2.8 Pocket and Cover of Cleaning Paraphernalia – The pocket and cover of cleaning paraphernalia shall be made of the same basic material as stated in para 2.2.2.1. The location of the pocket and cover shall be as illustrated. The cover shall be provided with Velcro tape for closure.

2.3.2.9 Shoulder Strap – The adjustable shoulder strap shall be made of two (2) portions, the top and bottom straps and shall be connected by using a quick release buckle (big). The top portion is made of strap #1 and shall be 40 ± 2 cm long, while the bottom portion shall be made of strap #2 and shall be 20 ± 2 cm long and the excess portion of the straps firmly secured with garter as illustrated. One (1) additional reinforcement strap made of strap #2, 20 ± 2 cm long shall each be sewed on the right and left shoulder strap. It shall be located 15 ± 2 cm from the upper end of the top portion of the shoulder strap as illustrated. One (1) piece D-ring as stated in para 2.2.2.6 shall be attached on each reinforcement strap, at the upper portion for insertion of the sip tube and in order to align it with shoulder strap. One (1) piece adjustment buckle with properties stated in para 2.2.2.8 shall as well be attached along the body of each reinforcement strap as illustrated for adjustment of the horizontal chest strap.

2.3.2.10 Horizontal Chest Strap – The horizontal chest strap shall be made of strap #3 and shall have a minimum length of 17.0 cm when closed across the chest. The left portion of the chest strap shall have a fixed length of 11.0 ± 1.0 cm, while the right portion shall be adjustable and shall have a minimum length of 25.0 cm when extended fully and the excess portion of the strap firmly secured with garter, as illustrated. The left and right portion of the chest strap shall be attached to the respective reinforcement straps via the adjustable buckles provided. The male part of a quick release buckle (small) shall be attached to the right portion of the chest strap while the female part of the quick release buckle (small) shall be attached to the left portion of the chest strap, as illustrated.

2.4 Performance Test

2.4.1 Load Test – The backpack carrier with the hydration system filled up to its full capacity shall not show evidence of water seepage when subjected to 50 kg load for five (5) minutes.

2.4.2 Drop Test – The backpack carrier with the hydration system filled up to its full capacity withstand the impact force without any damage on its part and accessory and shall not show evidence of water seepage when dropped from a height of 5 ft unto a concrete floor.

2.5 Shut-off Valve Test

2.5.1 OFF POSITION – The water shall not flow down the bite valve when the user bites into it and shall not show evidence of water leakage on the hydration system.

2.5.2 ON POSITION – The water shall flow down the bite valve when the user bite into it and shall not show evidence of water leakage on the hydration system.

2.6 Taste Test – The water in the reservoir shall not have an unpleasant taste after storage for one (1) week as observed by at least three (3) witnesses/testers. One (1) gallon distilled water shall be used for the taste test and change in taste shall be based on initial taste of distilled water which is not placed inside the reservoir.

2.7 Workmanship

2.7.1 Design – The hydration pack shall be of the design essentially the same as shown in the attached illustrations.

2.7.2 Contractor's Label – Each hydration pack shall have a contractor's label printed at the inside back part of the cover using black waterproof paint, Arial font, Size 10. The label shall consist of the following:

HYDRATION PACK, OD – 3L CAPACITY
QM SPEC NR IE-22HPOD
(Name of Manufacturer)

2.7.3 "ARMY" Marking – The "ARMY" marking shall be printed on the center of the flap cover using black water proof paint, Stencil font, Size 150.

2.7.4 Finish – The hydration pack shall be well finished, clean and free from all defects or blemishes which may affect its appearance or serviceability. Overall workmanship shall be the best known to the trade. Poor quality sewing or workmanship shall be sufficient ground for rejection of the finish article.

3. VERIFICATION

3.1 First Article Inspection – The contractor shall furnish two samples of the hydration pack for first article inspection and approval against the bid sample. The samples shall be subjected to test and examination to verify if the requirements in para 2.2 through 2.7 are satisfied with reference to the attached test parameters and classification of defects for this document.

3.2 Sampling

3.2.1 Samples of materials, components and other items entering into the manufacture of the hydration pack shall be taken at random by PA inspector for purposes of examination and test to determine compliance with the requirements of this specification prior to its acceptance.

3.2.2 Pre-production Sample – Before actual production starts, unless otherwise specified, one (1) finished item covered by this specification will be inspected by a committee for verification whether the quality of materials used conformed to the characteristic/requirements of this specification.

3.3 Inspection

3.3.1 Inspection may be conducted anytime throughout the entire process of manufacture to determine compliance with the requirements of this specification. The passing as satisfactory of any detail of construction or quality of materials used shall not relieve the contractor/manufacturer of the responsibility for faulty workmanship or defective material which may be discovered any time prior to final acceptance.

3.4 Test

3.4.1 Government standard methods of test to determine compliance with the requirements of this specification shall be followed whenever applicable. Potential or prospective bidders are encouraged to become familiar with the scope of test to which the hydration pack shall be subjected.

3.4.2 The bid samples of the hydration pack shall be submitted to the RDC, ASCOM, PA to determine the extent of compliance with this specification insofar as quality of materials used is concerned. The Office of the Army Quartermaster shall determine the extent of compliance with this specification insofar as workmanship, style and finish are concerned.

4. QUALITY ASSURANCE PROVISION

4.1 Responsibility for Inspection – Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the government. The government reserves the right to perform any of the inspections set forth in the specifications which are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.2 Responsibility for Compliance – All items must meet all the requirements of sections 2 and 3. The inspections set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all the requirements of the contract.

4.3 Bid Samples – Two (2) pieces bid samples and swatch materials of Hydration Pack, OD shall be submitted to RDC, ASCOM, PA to determine the extent of compliance with the specification insofar as quality of materials used is concerned. The Office of the Army Quartermaster shall determine the extent of compliance with the specification insofar as workmanship, style and finish are concerned.

5. PACKAGING

5.1 Packaging – Each hydration pack, OD shall be placed in a transparent (cellophane) bag. The open end of the bag shall be folded and closed with transparent tape.

5.2 Packing – Twenty (20) pieces of hydration pack shall be packed in a corrugated carton. The top cover when closed shall be sealed with a binding tape and finally secured with nylon straps. The box shall be labeled as follows:

HYDRATION PACK, OD – 3L CAPACITY
QM SPEC NR IE-22HPOD
Name of Manufacturer:
Date Manufactured:
Quantity: 20 pieces

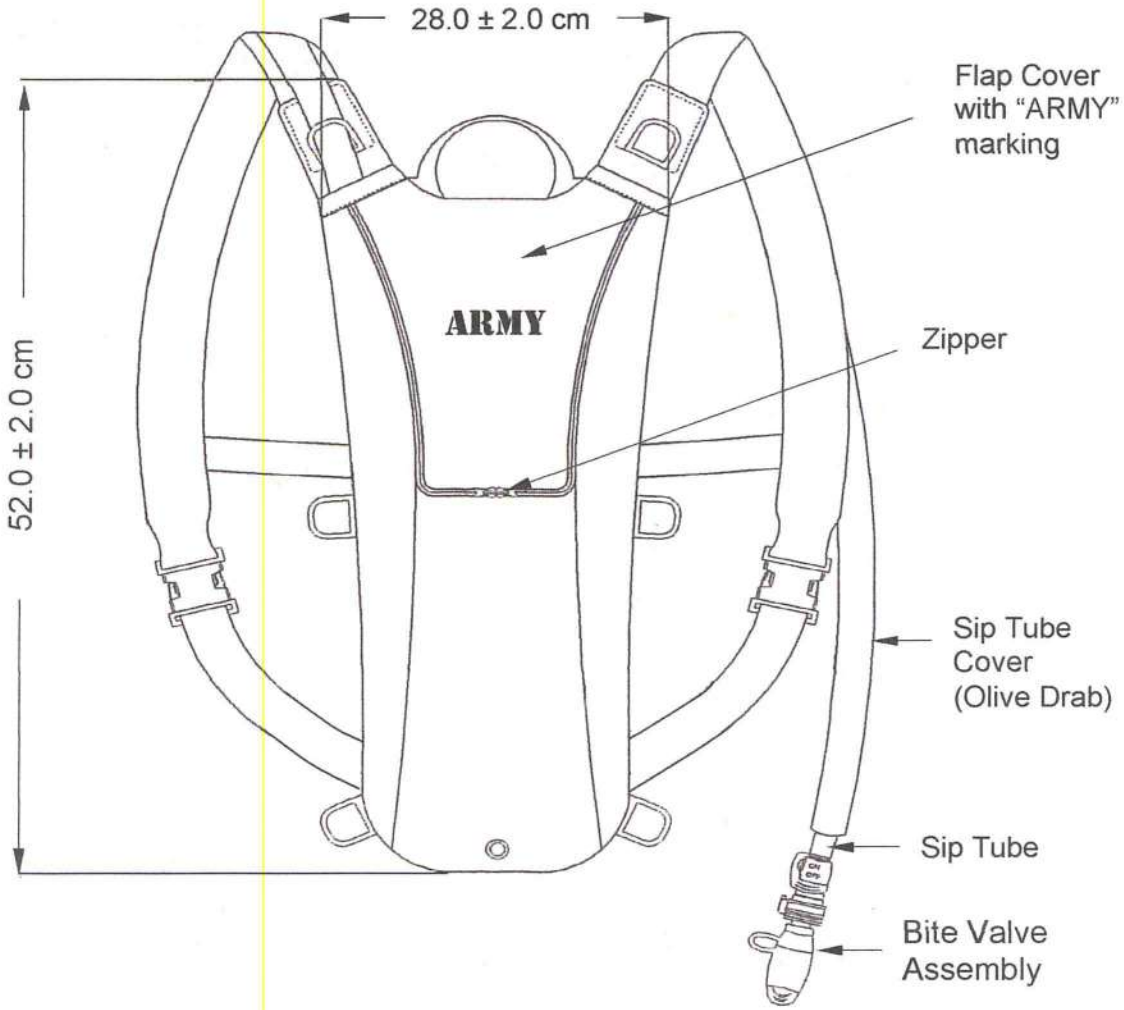
6. NOTES

6.1 The contractor/manufacturer shall notify the Office of the Army Quartermaster at least seven (7) days before actual production starts so that PA inspectors can be assigned to oversee the process of manufacture to be followed and to inspect the quality of materials to be used.

6.2 Any point not covered by the text shall be governed by the attached illustrations which shall be followed in every detail.

AURELIO T BADAJOS
Colonel, QMS (GSC) PA
Chief

NOTED
CG, PA
JUL 28 2015
DATE:



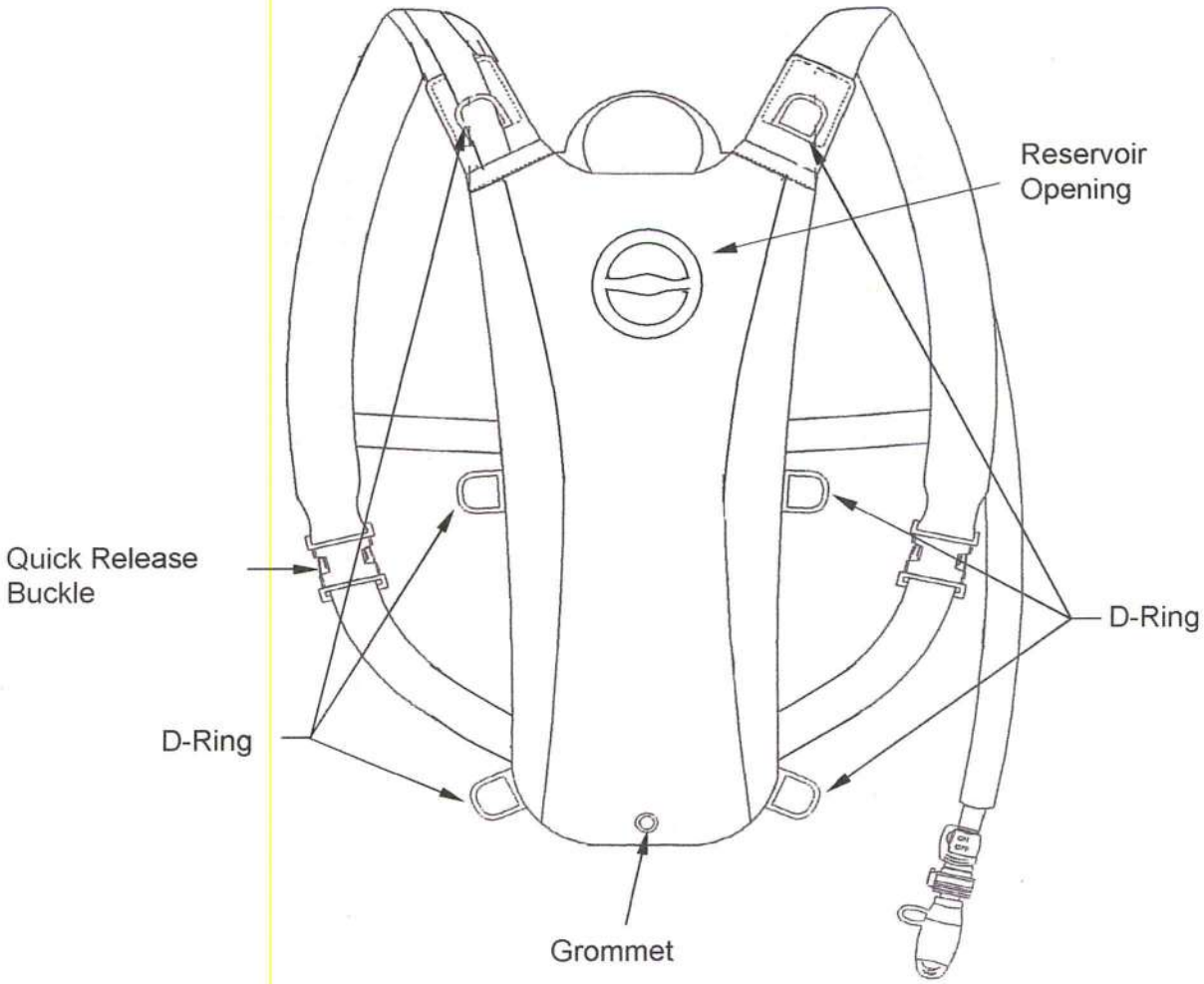
FRONT VIEW WITH FLAP COVER

PA SPECIFICATION

QM SPEC NR IE-22HPOD

JUL 28 2015

(Interim)



FRONT VIEW WITHOUT FLAP COVER

PA SPECIFICATION

QM SPEC NR IE-22HPOD

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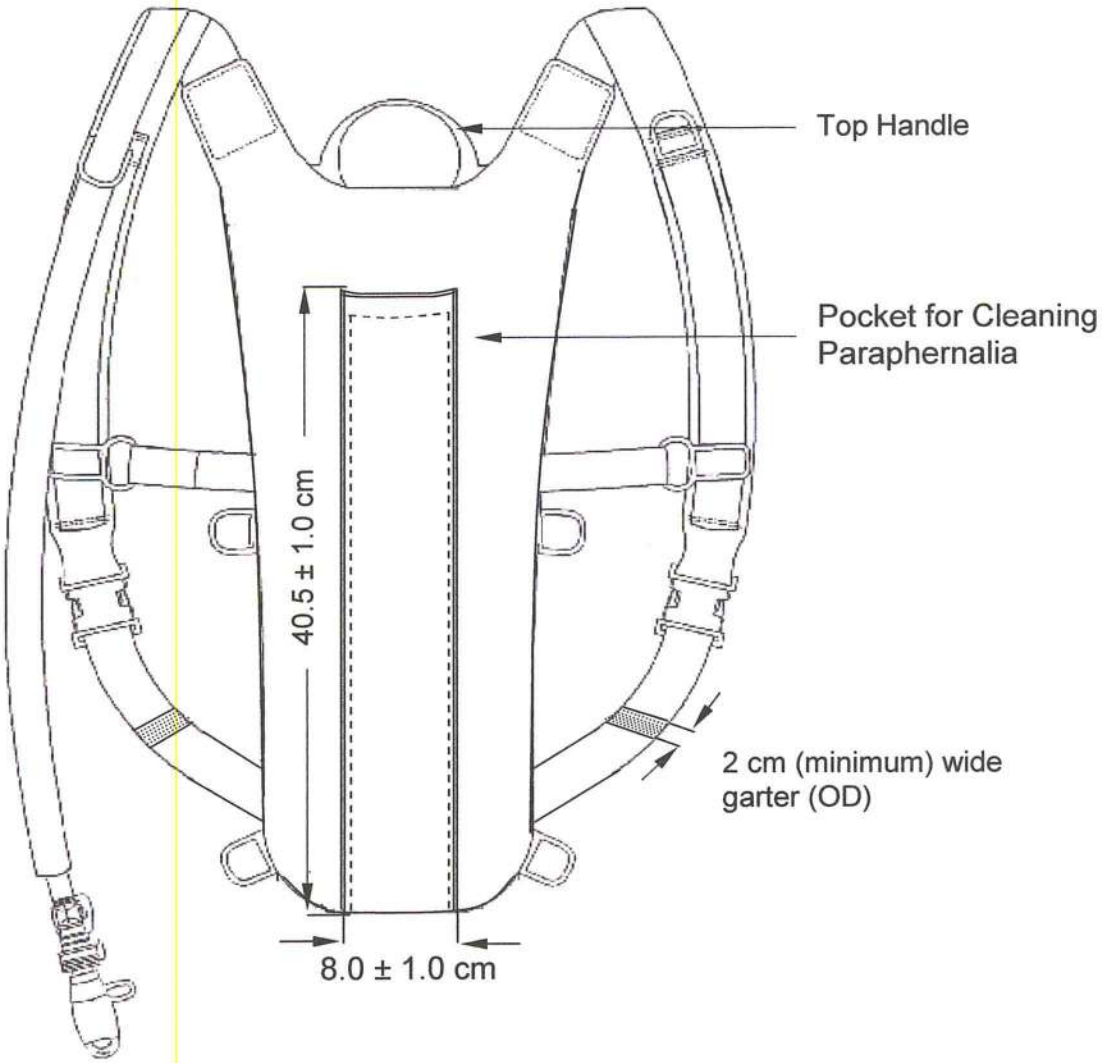
(Interim)



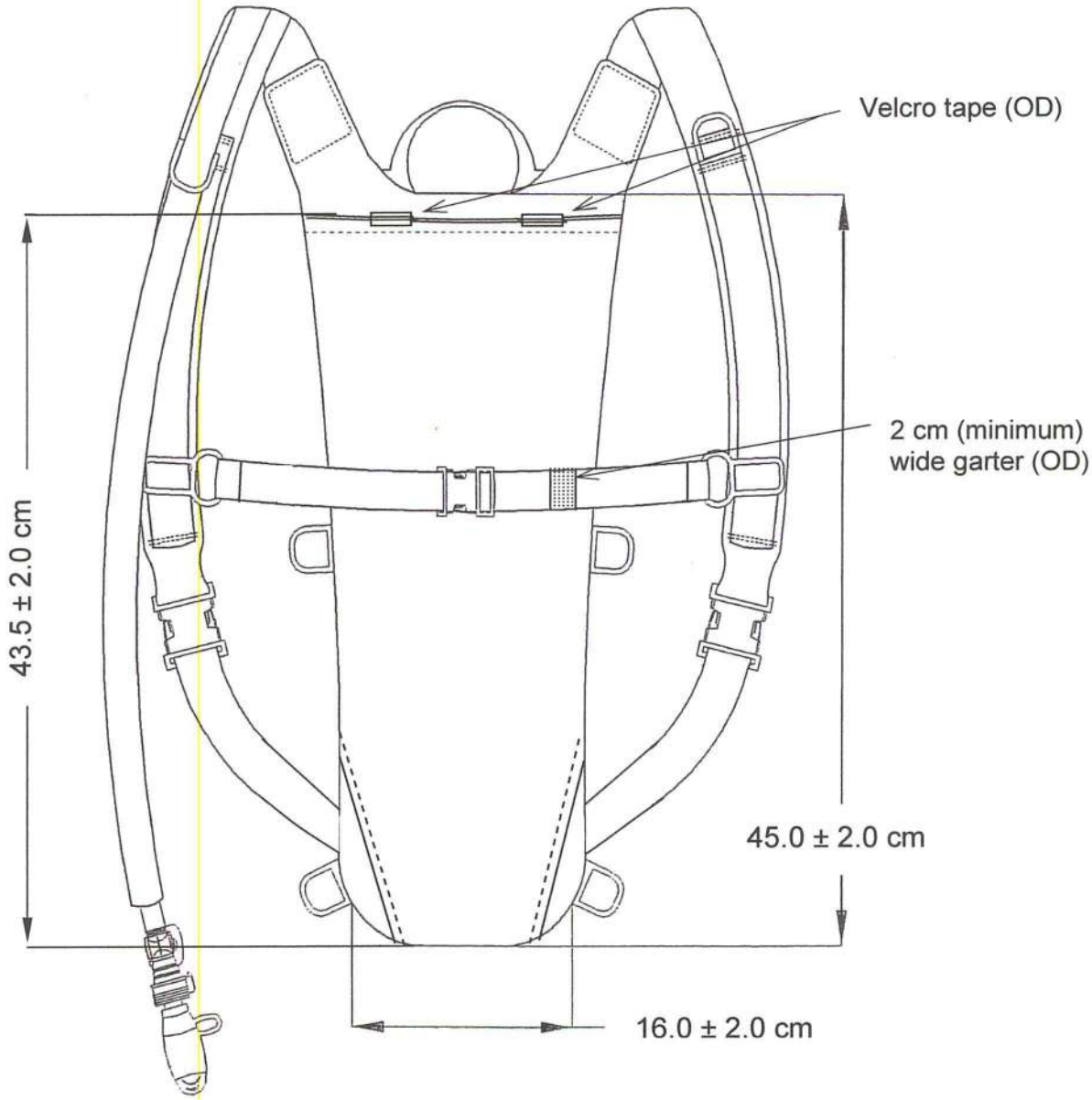
BACK VIEW WITHOUT COVER

PA SPECIFICATION

QM SPEC NR IE-22HPOD

JUL 28 2015

(Interim)



BACK VIEW WITH COVER

HEADQUARTERS
PHILIPPINE ARMY
OFFICE OF THE ARMY QUARTERMASTER
Fort Andres Bonifacio, Metro Manila

TEST PARAMETERS

HYDRATION PACK, OD - 3L CAPACITY

TEST PARAMETERS	QM SPEC NR IE-22HPOD dated 28 July 2015	Classification	
		Major	Minor
Material			
Hydration System Reservoir	Shall have a volume capacity of three (3) liters.	x	
	Shall be made of thermoplastic polyurethane (TPU) exterior bonded to polyurethane (PE) interior or multi-layer polyurethane.	x	
Total Plate Count Coliform	Not more than 2CFU Less than 1CFU.	x	
Opening	Shall be provided with a matching screw-on threaded type cap or the opening shall be of the zip-lock type.	x	
Diameter, cm	8.0 - 10.0	x	
Sip Tube	Shall be made of transparent polyurethane or polyvinyl chloride.	x	
Total Plate Count Coliform	Not more than 2CFU Less than 1CFU.	x	
Dimensions			
Outside Diameter, mm	11.0 ± 1.0		x
Thickness, mm	2.0 ± 0.2		x
Length, cm	100 (minimum)		x
Cover	The sip tube shall be provided with a cover made of three-layered laminated fabric.	x	
First Layer	Knitted nylon or polyester fabric, Olive Drab (OD)	x	
Second Layer	2.0 to 3.0 mm thick black rubberized foam	x	
Third Layer	Knitted nylon or polyester fabric, Olive Drab (OD)	x	
Bite Valve Assembly			
Bite Valve	The bite valve shall be made of medical grade silicone or stryrene-butadiene rubber.	x	
Color	Olive Drab (OD)/black	x	
Total Plate Count Coliform	Not more than 2CFU Less than 1CFU.	x	
Bite Valve Cover	Made of hard plastic with same color shade as the bite valve.	x	
Shut-off valve	Shall be made of hard plastic	x	
Color	Olive Drab (OD)/black	x	
BPA Free	The reservoir, sip tube and bite valve assembly shall be free of any trace of BPA (Bisphenol A). A certificate of compliance shall be submitted by the supplier to guarantee the absence of BPA.	x	

TEST PARAMETERS	QM SPEC NR IE-22HPOD dated 28 July 2015	Classification	
		Major	Minor
Cleaning Paraphernalia	Shall be provided with cleaning paraphernalia placed inside the pocket as illustrated and composed of two (2) cylindrical brushes (large brush for the inside of the reservoir and thin one with handle long enough to run through the length of the sip tube) and collapsible plastic frame for reservoir drying.	x	
Instruction Manual	Shall be provided with manual as per manufacturer's standard.		x
Backpack Carrier			
Basic Material	Polyester	x	
Color	Olive Drab (OD)	x	
Type of Weave	Plain with ripstop design		x
Thread Count/2.54 cm	Coarse Fine		
Warp	4 quadruples (minimum) 30 doubles (minimum)		x
Filling	4 quadruples (minimum) 20 doubles (minimum)		x
Yarn Size (Denier)	Coarse Fine		
Warp	1,000 (minimum) 500 (minimum)		x
Filling	1,000 (minimum) 500 (minimum)		x
Thickness, mm	0.45 (minimum)		x
Weight, g/m²	350 (maximum)		x
Breaking Strength, kg			
(Grab Method)			
Warp	150 (minimum)	x	
Filling	100 (minimum)	x	
Water Repellency Rating, %	80 (minimum)	x	
WaterResistance, grams of water absorbed by blotter	0	x	
Lining	Polyester	x	
Color	Olive Drab (OD)	x	
Type of Weave	Plain		x
Thread Count/2.54 cm			
Warp	90 (minimum)		x
Filling	65 (minimum)		x
Yarn Size (Denier)			
Warp	85 (minimum)		x
Filling	80 (minimum)		x
Thickness, mm	0.15 (minimum)		x
Weight, g/m²	110 (maximum)		x
Breaking Strength, kg			
(Strip Method)			
Warp	900 (minimum)	x	
Filling	500 (minimum)	x	

TEST PARAMETERS	QM SPEC NR IE-22HPOD dated 28 July 2015	Classification	
		Major	Minor
Insulation Padding	Shall be made of foam with aluminized sheet on one side.		x
Thickness, mm	5.0 (minimum)		x
Straps	Nylon, Polyester or Polypropylene (Olefin) Webbing	x	
Color	Olive Drab (OD)	x	
Strap # 1 Shoulder Strap (Top)			
Type of Weave	Plain Double		x
Width, cm	4.0 ± 0.5		x
Thickness, mm	0.8 (minimum)		x
Weight, g/linear meter	50 (maximum)		x
Breaking Strength, kg (full width)	500 (minimum)	x	
Strap # 2 Shoulder Strap (Bottom)			
Type of Weave	Plain Double		x
Width, cm	2.5 ± 0.5		x
Thickness, mm	0.8 (minimum)		x
Weight, g/linear meter	40 (maximum)		x
Breaking Strength, kg (full width)	350 (minimum)	x	
Strap # 3 Horizontal Chess Strap			
Type of Weave	Plain Double		x
Width, cm	2.0 ± 0.5		x
Thickness, mm	0.4 (minimum)		x
Weight, g/linear meter	30 (maximum)		x
Breaking Strength, kg (full width)	100 (minimum)	x	
Binding Tape	Made of nylon, polyester or polypropylene (olefin) webbing	x	
Color	Olive Drab (OD)	x	
Width, cm	2.0 ± 0.5		x
D-Ring	Shall be made of hard plastic	x	
Color	Black or Olive Drab (OD)		x
Nr of pieces	8 pcs		x
Length, cm	3.5 ± 0.5		x
Width, cm	2.5 ± 0.5		x
Grommet	Brass, black chemical finish	x	
Nr of pieces	1 pc		x
Inside Diameter, mm	8.0 ± 2.0		x

TEST PARAMETERS	QM SPEC NR IE-22HPOD dated 28 July 2015	Classification	
		Major	Minor
Adjustment Buckle	Shall be made of hard plastic	x	
Color	Black or Olive Drab (OD)		x
Nr of pieces	2 pcs		x
Length, cm	2.5 ± 0.5		x
Width, cm	4.0 ± 0.5		x
Quick Release Buckle (Big)	Shall be made of hard plastic	x	
Color	Black or Olive Drab (OD)		x
Nr of pieces	2 prs		x
Overall Length, cm	6.0 ± 1.0		x
Overall Width, cm	3.0 ± 0.5		x
Breaking Strength, kg (closed position)	40 (minimum)	x	
Quick Release Buckle (Small)	Shall be made of hard plastic	x	
Color	Black or Olive Drab (OD)		x
Nr of pieces	1 pr		x
Overall Length, cm	5.0 ± 1.0		x
Overall Width, cm	2.5 ± 0.5		x
Breaking Strength, kg (closed position)	10 (minimum)	x	
Zipper	Made of nylon, No. 5, two-way, head-to-head type	x	
Color	Olive Drab (OD)		x
Length, cm	42.0 (minimum)		x
Thread	Nylon or polyester		x
Color	Olive Drab (OD)	x	
No. of Ply	2 (minimum)		x
Breaking Strength, kg	2.0 (minimum)	x	
Construction **Hydration system**	The largest dimensions of the reservoir shall be along the vertical axis with the sip tube attached to the bottom portion of the reservoir to maximize the amount of accessible water.	x	
	The sip tube shall be provided with cover that envelops the entire length of the sip tube.		x
Backpack Carrier Design	The design shall be cut and made in strict compliance with the design and dimensions as illustrated.	x	
Location of Insulation Padding	The insulation padding shall be inserted between the basic material and the lining on both front and back parts of the carrier.	x	

TEST PARAMETERS	QM SPEC NR IE-22HPOD dated 28 July 2015	Classification	
		Major	Minor
Front Cover of Carrier	Shall have a front cover as illustrated.	x	
Placing of Sip Tube	There shall be one (1) slit each on both side of the carrier, near the shoulder strap.	x	
	The slits shall be provided with binding tape with properties as stated in para 2.2.2.5.	x	
Placing of Grommet	The grommet shall be placed 3.0 ± 0.5 cm from the bottom as illustrated.		x
Placing of D-Ring	Attached on the top/sides of the carrier via the use of strap #2.	x	
Carrier Top Handle	Made of strap #1, 21.0 ± 2.0 cm long shall be sewed along the top portion of the carrier as illustrated.	x	
Pocket and Cover of Cleaning Paraphernalia	The pocket and cover of the cleaning paraphernalia shall be made of same basic material as stated in 2.2.2.1. The location of the pocket and cover shall be as illustrated. The cover shall be provided with Velcro tape for closure.	x	
Shoulder Strap	The adjustable shoulder strap is made of two (2) portion the top and the bottom straps and shall be connected by using quick release buckle (big).	x	
	The top portion is made of strap #1 and shall be 40 ± 2 cm long.		x
	The bottom portion shall be made of strap #2 and shall be 20 ± 2 cm long and the excess portion of the straps firmly secured with garter 2 cm wide (minimum) as illustrated.		x
	One (1) additional reinforcement strap made of strap #2, 20 ± 2 cm long shall each be sewed on the right and left shoulder strap. It shall be located 15 ± 2 cm from the upper end of the top portion of the shoulder strap.		x
	One (1) piece D-Ring as stated in para 2.2.2.6 shall be attached on each reinforcement strap, at the upper portion for insertion of the sip tube.		x
	One (1) piece adjustment buckle with properties stated in para 2.2.2.8 shall as well attached along the body of each reinforcement strap as illustrated.		x
Horizontal Chest Strap	Shall be made of strap #3 and shall have a minimum length of 17.0 cm when closed across the chest.	x	
	The left portion of the chest strap shall have a fixed length of 11.0 ± 1.0 cm, while the right portion shall be adjustable and shall have a minimum length of 25.0 cm when extended fully and the excess portion of the strap firmly secured with garter 2 cm wide (minimum).	x	
	The male part of quick release buckle (small) shall be attached to the right portion of the chest strap while the female part of the quick release buckle (small) shall be attached to the left portion of the chest strap as illustrated.		x

TEST PARAMETERS	QM SPEC NR IE-22HPOD dated 28 July 2015	Classification	
		Major	Minor
PERFORMANCE TEST **Load Test**	The backpack carrier with the hydration system filled up to its full capacity shall not show evidence of water seepage when subjected to 50 kg load for five (5) minutes.	x	
Drop Test	The backpack carrier with the hydration system filled up to its full capacity withstand the impack force without any damage on its part and accessory and shall not show of water seepage when dropped from a height of 5 ft unto a concrete floor.	x	
SHUT-OFF VALVE TEST **OFF Position**	The water shall not flow down the bite valve when the user bites into it and shall not show evidence of water leakage on the hydration system.	x	
ON Position	The water shall flow down the bite valve when the user bites into it and shall not show evidence of water leakage on the hydration system.	x	
TASTE TEST	The water in the reservoir shall not have an unpleasant taste after storage for one (1) week.	x	
Contractor's Label	With contractor's label	x	
Location	Printed at the inside back part of the cover.		x
Type of Ink	Black waterproof paint	x	
Contents of Label	HYDRATION PACK, OD - 3L CAPACITY		x
	QM SPEC NR IE-22HPOD		
	Name of Manufacturer:		
Type and Size of Letterings	Arial font, Size 10		x
"ARMY" Marking	With "ARMY" Marking	x	
Location	Printed on the center of the flap cover		x
Type of Ink	Black waterproof paint	x	
Type and Size of Letterings	Stencil font, Size 150		x
Total Test Points		**67**	**68**

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Chief

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Hydration Pack, Olive Drab (OD)-3L Capacity
QM SPEC NR IE-22HPOD dtd 28 July 2015

TEST CRITERIA

FOR POST-QUALIFICATION TEST:

Destructive Testing Criteria based on Logistic Letter Directive Number SC-07-04 dtd 25 October 2007 para 5f.

TOTAL MINOR TEST POINTS	NO. OF ALLOWABLE DEFECTS	
	MAJOR	MINOR
68	0	6

1. No major defect allowed.
2. Maximum allowable minor defect is nine & 9/10 percent (9.9%) of total minor test points **"CONDUCTED"**

FOR ACCEPTANCE TEST:

III. Visual Inspection Criteria based on Mil Std 105E dtd 10 May 1989
- All defects noted in 1st and 2nd sampling are cumulative.
- In case of rejection, destructive testing will not be conducted

Classification of Defects	TABLE III-A General Inspection Level I Code Letter H Double Sampling Plan for Normal Inspection				
	Lot size 1,201 – 3,200 pcs	Number of Defects			
	Sample Size: 32 pcs + 32 pcs	1st Sampling		2nd Sampling	
	AQL	Accept	Reject	Accept	Reject
MAJOR	6.5	3	7	8	9
MINOR	25	11	16	26	27

IV. Destructive Testing Criteria based on Logistic Letter Directive Number SC-07-04 dtd 25 October 2007 para 5f.

TOTAL MINOR TEST POINTS	NO. OF ALLOWABLE DEFECTS	
	MAJOR	MINOR
68	0	6

1. No major defect allowed.
2. Maximum allowable minor defect is nine & 9/10 percent (9.9%) of total minor test points **"CONDUCTED"**

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HYDRATION PACK, OLIVE DRAB (OD) – 3 L CAPACITY
QM SPEC NR IE-22HPOD dtd 28 July 2015

VISUAL INSPECTION CHECKLIST

DESCRIPTION OF DEFECTS	CLASSIFICATION		FINDINGS
	MAJOR	MINOR	
1. Packaging and Packing			
a. Carton label not as specified- Item, Name of Manufacturer and Quality.		x	
b. Quantity not as specified in the carton label.	x		
c. Each Hydration Pack not individually packed in a transparent cellophane bag.		x	
2. Not Olive Drab in color	x		
3. Any component part missing:			
a. Sip Tube with cover	x		
b. Bite Valve	x		
c. Cleaning Paraphernalia	x		
d. Snap Fastener	x		
e. D-ring	x		
f. Grommet	x		
g. Quick Release Buckles	x		
h. Adjustable Buckles	x		
i. Padding	x		
j. Straps	x		
4. Loose stitching/ untrimmed thread ends		x	
5. Missing contractor's label.	x		
6. Missing "Army" marking	x		
7. Presence of dirt, stains and other defects			
a. Affecting appearance	x		
b. Does not affect appearance		x	

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Hydration Pack, Olive Drab (OD)-3L Capacity
QM SPEC NR IE-22HPOD dtd 28 July 2015

LIST OF REQUIRED PROTOTYPE SAMPLES AND SWATCH MATERIALS FOR TESTING

1. FOR POST QUALIFICATION TEST

PROTOTYPE SAMPLES

RDC - Three (3) pcs Hydration Pack
SGS - One (1) pc Hydration System
DOST - One (1) pc Hydration System

SWATCH MATERIALS (Minimum requirements)

Basic Material - - -	- 1 m (full width)
Inner Lining Material - -	- 0.5 m (full width)
Insulation Padding - -	- 0.3 m x 0.3 m
Binding Tape - -	- 0.5 m
Straps	
2.0 cm wide - -	- 1.5 m
2.5 cm wide - -	- 1.5 m
4.0 cm wide - -	- 1.5 m
Thread Sewing - -	- 10 m
Plastic Quick release buckle (small)-	- 3 pcs
Plastic Quick release buckle (large)-	- 3 pcs

2. FOR ACCEPTANCE TEST

Four (4) pcs Hydration Pack – Picked at random from delivery

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