

PURCHASE ORDER

GOVERNMENT ARSENAL

Entity Name

Supplier: <u>POONGSAN CORPORATION</u>	P. O. No.: <u>2020-01-007</u>
Address: <u>Poongsan Building, 23, Chungjeong-ro,</u> <u>Seodaemun-gu, Seoul, Korea</u>	Date: <u>January 16, 2020</u>
Represented by: <u>Ms. Ma. Cristina B. Espiritu</u> <u>Atty-In-Fact</u> <u>Yung Sung Industrial Philippines Inc.</u> <u>E1901 B PSE Center, Exchange Road,</u> <u>Ortigas Complex, Pasig City</u>	Mode of Procurement: <u>Public Bidding</u>

Gentlemen:

Please furnish this Office the following articles subject to the terms and conditions contained herein:

Place of Delivery: <u>Government Arsenal, Limay, Bataan, Philippines</u>	Delivery Term: <u>DAP, Camp General Antonio Luna,</u> <u>Lamao, Limay, Bataan, Philippines</u>
Date of Delivery: <u>Within one hundred fifty (150) calendar days</u> <u>from the receipt of Notice to Proceed (NTP)</u>	Payment Term: <u>Letter of Credit</u>

Stock/ Property No.	Unit	Description	Qty	Unit Cost	Amount
	pc	LOT I - 5.56mm M855/SS109 Bullet	7,000,000	P 4.99	P 34,930,000.00
		Technical Specifications based on US Military Standards			
	A. WORKMANSHIP	1. Metal Defect - the finished bullet shall be free from defects which include but not limited to dent, perforation, scratch, split bullet jacket, missing cannelure, scaly metal, crooked point, blunt point and other defects which will render it unsuitable for the purpose intended. 2. Foreign Matter - the finished bullet shall be free of corrosion, stains, discoloration, dirt and smears of lacquer. Cleaning methods used shall not be injurious to any part, nor shall the parts be contaminated by any cleaning agent.			
	B. DIMENSION AND WEIGHT	Refer to Drawing No. ACS-201-02 [BULLET, CART., BALL GA556110 (M855)]			
	C. METHODS OF INSPECTION (Bullet Integrity, Accuracy, and Penetration)	Shall be conducted in accordance with Small Caliber Ammunition Test Procedures 5.56mm (Heavy Bullet) Cartridges (SCATP - 5.56mm - HB)			
	D. BULLET INTEGRITY TEST	The bullet of the cartridge shall not burst either in its passage through the barrel or in flight, neither shall the jacket of the bullet nor any part thereof, strip from the other bullet components when the cartridge is fired.			

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		<p>E. VISUAL AND DIMENSIONAL INSPECTION CRITERIA</p> <p>Sample size and Acceptance Criteria for Visual and Dimensional Inspection shall be in accordance with ANSI/ASQ Z1.4-2003 using Double Sampling Plan (Normal) and General Inspection Level II.</p> <p>Table and Classification of Visual Defects shall be in accordance with MIL-STD-636 (Visual Inspection Standards and Inspection Procedures for Small Arms Ammunition Through Cal .50).</p>			
		<p>Acceptable Quality Level (AQL):</p> <p>Major Defect for Visual & Gaging / Weight - 1.5%</p> <p><u>Major Visual Defects</u> - Split Bullet Jacket, Scaly Metal, Missing Cannelure, Perforation</p> <p><u>Major Gaging/Weighing Defects</u> - deviation in Total Length, Location of Cannelure, Cannelure Diameter, Outside Diameter, and Weight of Bullet</p> <p>Minor Defect for Visual - 2.5%</p> <p><u>Minor Visual Defects</u> - Scratch, Dent, Defective Cannelure, Crooked Point, Blunt Point, Exposed Steel (Clad Jacket), Dirty, Oily, Discolored/ Stained, Corroded</p>			
<p>Table 2. Requirements for Accuracy Test</p>					
<p style="text-align: center;">DESCRIPTION</p>					
Standard	Reading Distance	Indoor Range	Outdoor Range		
		200 yards (183 meters)	492 yards (450 meters)	600 yards (550 meters)	
US Mil Standard	Average Horizontal & Vertical Standard Deviation, max	1.8 inches (46mm)	-	6.8 inches (173 mm)	
<p>Table 3. Requirements for Penetration Test</p>					
<p style="text-align: center;">DESCRIPTION</p>					
Parameters		US Military Standard			
<p>The bullet shall demonstrate complete penetration of target plate positioned at the required obliquity. Additionally, a witness plate is placed behind the target plate which shall be perforated with at least one splinter.</p>					
1. Test Conditions					
	a. Air temperature	30 °F - 95 °F (-1°C - 35 °C)			
	b. Air density	-			

Stock/ Property No.	Unit	Description	Qty	Unit Cost	Amount
		All charges for the opening of LC and / or incidental expenses thereto (i.e. bank commission, documentary stamp, tax, cable, etc.) shall be for the account of the supplier.			
(Total Amount in Words) THIRTY FOUR MILLION NINE HUNDRED THIRTY THOUSAND PESOS only					P 34,930,000.00

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one percent for every day of delay shall be imposed on the undelivered item/s.

Conforme:

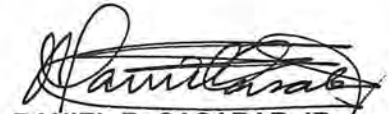
Very truly yours,


MA. CRISTINA B. ESPIRITU

Atty-In-Fact
 Poongsan Corporation


30 JAN 2020

Date


DANIEL R. CASABAR JR

Director

Fund Cluster: 101101
 Funds Availab'e: PHP 34,930,000.00


MS. ALLECIAH D. CARREON, CPA

Chief Accountant

ORS/BURS No.: 02-101101-2020-01-0053
 Date of the ORS/BURS: 29 JAN 2020

Amount: PHP 34,930,000.00

PURCHASE ORDER
GOVERNMENT ARSENAL

Entity Name

Supplier: POONGSAN CORPORATION Address: <u>Poongsan Building, 23, Chungjeong-ro,</u> <u>Seodaemun-gu, Seoul, Korea</u> Represented by: <u>Ms. Ma. Cristina B. Espiritu</u> <u>Atty-In-Fact</u> <u>Yung Sung Industrial Philippines Inc.</u> <u>E1901 B PSE Center, Exchange Road,</u> <u>Ortigas Complex, Pasig City</u>	P. O. No.: <u>2020-01-008</u> Date: <u>January 16, 2020</u> Mode of Procurement: <u>Public Bidding</u>
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 Please furnish this Office the following articles subject to the terms and conditions contained herein:

Place of Delivery: <u>Government Arsenal, Lamao, Limay, Bataan</u> Date of Delivery: <u>Within one hundred fifty (150) calendar days</u> <u>from the receipt of Notice to Proceed (NTP)</u>	Delivery Term: <u>DAP Camp General Antonio Luna,</u> <u>Lamao, Limay, Bataan, Philippines</u> Payment Term: <u>Letter of Credit</u>
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Stock/ Property No.	Unit	Description	Qty	Unit Cost	Amount																																
	rds	7.62mm Tracer Cartridge A. CARTRIDGE - The cartridge shall comply with all requirements specified in drawing number GCT 402 and with all requirements specified in applicable specifications and standards. B. WORKMANSHIP The cartridge shall be in accordance with the following: B.1. Metal Defects - The metal parts of the cartridge shall be free of folds, wrinkles, deep draw scratches, scaly metal, dents, cracks, splits, perforations, burrs and foreign matter. The cleaning method used shall not be injurious to any part nor shall the parts be contained by any cleaning agent. B.2. Foreign Matter - The cartridge shall be free of corrosion, stains, discolorations, dirt, and smears of lacquer. C. BALLISTIC REQUIREMENTS: <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th></th> <th>UNIT</th> <th>Test Barrel Method</th> <th>EPVAT Method (Electro-Mechanical Piezo)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">C.1. Average Velocity at 78.0 ft.</td> <td>m/s</td> <td>817 ^{±9}</td> <td>814 ^{±9}</td> </tr> <tr> <td>fps</td> <td>2,680 ^{±30}</td> <td>2,670 ^{±30}</td> </tr> <tr> <td rowspan="2">C.1.1 Max. Standard Deviation</td> <td>m/s</td> <td>9.75</td> <td>9.75</td> </tr> <tr> <td>fps</td> <td>32</td> <td>32</td> </tr> <tr> <td rowspan="4">C.2. Chamber Pressure</td> <td></td> <td>Copper-Crush Cylinder Test Method</td> <td>EPVAT Method (Electro-Mechanical Piezo)</td> </tr> <tr> <td rowspan="3">C.2.1 Average</td> <td>kg/cm²</td> <td>3,515</td> <td>4,007</td> </tr> <tr> <td>psi</td> <td>50,000</td> <td>57,000</td> </tr> <tr> <td>Mpa</td> <td>345</td> <td>393</td> </tr> </tbody> </table>		UNIT	Test Barrel Method	EPVAT Method (Electro-Mechanical Piezo)	C.1. Average Velocity at 78.0 ft.	m/s	817 ^{±9}	814 ^{±9}	fps	2,680 ^{±30}	2,670 ^{±30}	C.1.1 Max. Standard Deviation	m/s	9.75	9.75	fps	32	32	C.2. Chamber Pressure		Copper-Crush Cylinder Test Method	EPVAT Method (Electro-Mechanical Piezo)	C.2.1 Average	kg/cm ²	3,515	4,007	psi	50,000	57,000	Mpa	345	393	300,000	P 44.97	P 13,491,000.00
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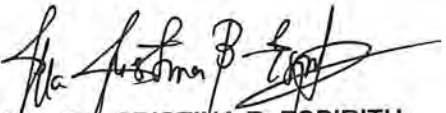
Stock/ Property No.	Unit	Description	Qty	Unit Cost	Amount										
		<p><i>C.2.2 Average + 3 Standard Deviation</i></p>	<p>kg/cm²</p>	<p>3,867</p>	<p>4,359</p>										
			<p>psi</p>	<p>55,000</p>	<p>62,000</p>										
			<p>Mpa</p>	<p>379</p>	<p>427</p>										
		<p><i>C.3. Average Port Pressure</i></p>		<p>Copper-Crush Cylinder Test Method</p>	<p>EPVAT Method (Electro-Mechanical Piezo)</p>										
			<p>kg/cm²</p>	<p>879 ± 140</p>	<p>643 - 889</p>										
			<p>psi</p>	<p>12,500 ± 2000</p>	<p>9,150 - 12,650</p>										
			<p>Mpa</p>	<p>86.19 ± 13.79</p>	<p>63 - 87</p>										
		<p>C.4. Action Time - The action time (overall primer ignition, propellant burning, plus the time taken for the bullet to exit the barrel) of the cartridge when conditioned at 70°F ± 2°F (21°C ± 1°C), shall not be greater than 4 milliseconds.</p> <p>C.5. Accuracy -</p> <p>US MIL SPECS</p> <p>The average of the mean radii of all targets of the sample cartridges, fired at 600 yards, shall not be greater than 381mm (15 inches). When accuracy testing is conducted on ranges shorter than 600 yards, the average of the mean radii of the target shall be of the following:</p> <table border="1" data-bbox="323 1273 930 1390"> <tr> <td>Range (yards)</td> <td>200</td> <td>300</td> <td>400</td> <td>500</td> </tr> <tr> <td>Mean radius, mm maximum</td> <td>121</td> <td>183</td> <td>243</td> <td>305</td> </tr> </table> <p>C.6. Function and Casualty - The cartridges shall function without casualty when subjected to 70°F ± 2°F (21°C ± 1°C), 125°F ± 2°F (52°C ± 1°C) and -65°F ± 2°F (-54°C ± 1°C) storage conditions.</p> <p>C.7. Trace - When viewed at night from a line parallel to the plane of trajectory, with the line of sight perpendicular to the plane of the trajectory at each point of observation, the bullet of the tracer cartridge shall exhibit a visible trace of full luminosity from a point not greater than 91.44 meters (100 yards) from the muzzle of the weapon to a point not less than 777.24 meters (850 yards) from the muzzle. The trace shall be of a level below the full luminosity, and preferably invisible from the muzzle of the weapon to a point at least 13.72 meters (15 yards) from the muzzle.</p> <p>C.8. Bullet Integrity - The bullet of the cartridge shall not burst either in its passage through the barrel or in flight; neither shall the jacket of the bullet or any part thereof strip from the slug when the cartridge is fired.</p> <p>D. OTHER TEST</p> <p>D.1. Waterproof - The cartridge shall not release more than one (1) bubble of air when subjected to a pressure differential of 0.527 kg/cm² (7.5 psi) for 30 sec.</p>				Range (yards)	200	300	400	500	Mean radius, mm maximum	121	183	243	305
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		<p>D.2. Residual stress - The cartridge case shall not split when subjected to a one percent (1%) mercurous nitrate test solution for 15 minutes.</p> <p>D.3. Bullet extraction - The force required to extract the bullet from the cartridge case shall not be less than 27 kg (60 pounds).</p> <p>D.4. Point identification - Orange / Red Tip</p> <p>E. FOR VISUAL AND DIMENSIONAL INSPECTION - Sampling plan is based on ANSI / ASQ Z1.4-2003 using double sampling plan (Normal) and General Inspection Level II. The AQL for Critical, Major and Minor defects shall be 0.01%, 0.25% and 1.50% respectively.</p> <p>F. MANUFACTURING REQUIREMENT The cartridge shall be manufactured by a single manufacturer only within one (1) year from date of award, with the manufacturing date indicated on the packaging.</p> <p>NOTE: Quality conformance examination for defects shall be based on MIL-DTL-46281G, Military Specification for 7.62mm Cartridge, NATO, Tracer-M62.</p> <p style="text-align: center;">***** nothing follows *****</p> <p>BASIS: Cartridge Assembly and Packaging Division ✓ REF: PR No. 2019-09-192, APP 2020, Page 2, IV-A.3 ✓ PURPOSE: For assembly of 7.62mm Linked Ammunition</p> <p>TERMS OF PAYMENT: Payment of ninety-five percent (95%) for each delivery shall be made thru Letter of Credit (LC) after delivery at the Government Arsenal and upon presentation of Certificate of Acceptance Inspection (Pre-delivery inspection) issued at manufacturer's plant site, shipping documents and Advice of Payment duly signed by the Director, Government Arsenal. The remaining five percent (5%) shall be retained to cover warranty obligations, to be released after three (3) months upon presentation of the Certificate of Final Acceptance Inspection and Advice of Payment duly signed by the Director, Government Arsenal or upon submission of an equivalent special bank guarantee.</p>			

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(Total Amount in Words) THIRTEEN MILLION FOUR HUNDRED NINETY ONE THOUSAND PESOS only					P 13,491,000.00

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one percent for every day of delay shall be imposed on the undelivered item/s.

Conforme:


MS. MA. CRISTINA B. ESPIRITU
 Atty-In-Fact
 Poongsan Corporation


30 JAN 2020
 Date

Very truly yours,


DANIEL R. CASABAR JR
 Director

Fund Cluster: 101101

Funds Available: PHP 13,491,000.00


MS. ALLECIAH D. CARREON, CPA
 Chief Accountant

ORS/BURS No.: 02-101101-2020-01-0054

Date of the ORS/BURS: 27 JAN 2020

Amount: PHP 13,491,000.00