Agreement No.: ZISHU-20251025

**Agreement Name: Hose Retrieval System Technical Agreement** 

Buyer:	
Address:	
Post code:	
Tel:	
Fax:	
Email:	
Seller:	Shanghai ZiShu Industrial Co.,Ltd
Address:	5942 Huyi Road, Jiading District, Shanghai 201806
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After friendly negotiations between both parties, Buyer has reached the following technical agreement with Seller for the procurement of the ZISHU-LD300-L9500-0 type hose retrieval system.

# **I** . Technical Specifications And Parameters

## **1.Specification And Model**

Name	Model	Remark
Hose Retrieval System For Fire Truck	ZISHU-LD300-L9500-0	

#### 2.Main Composition

The hose retrieval system includes a system rack, left-right moving rails, an automatic hose winding/guiding mechanism, an automatic hose arranging mechanism, a hose cleaning device, a hydraulic module, a hydraulic oil pump and its transmission, an electrical control system, and a hose compartment partition.etc.

No.	Name	Specifications And Models, Main Functions, Main Components	Remark
1	System rack	The main body is made of a steel structure treated with electrophoresis and finished with surface powder coating; the rails are made of stainless steel, and the entire unit is installed on the top of the carriage.	
2	Left-Right Moving Rails	It includes rails and a power unit	
3	Automatic Hose Winding/Guiding Mechanism	It has the functions of hose winding and guiding, with smooth winding/guiding processes; it is also equipped with automatic hose winding and compaction functions.  During operation, it extends forward from the system rack, and retracts into the rack when the vehicle is traveling.	
4	Automatic Hose Arranging Mechanism	It is located inside the system rack and relies on a manipulator to automatically grab the hose, move	

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		forward and backward, and then automatically place	
		the hose into the hose compartment.	
		Four cleaning nozzles and their connecting pipelines	
5		are installed on the hose winder; the hydraulically	
	Hose Cleaning Device	driven high-pressure cleaning pump is integrated into	
		the hydraulic module, and there is a 500L one-piece	
		water tank.	
		Hydraulic Oil Tank,Control Valve for Hose Winding &	
6	Hydraulic Module	Arranging Machine, High-Pressure Cleaning Pump for	
		Cleaning Purposes	
		The hydraulic oil pump adopts electro-hydraulic	
		proportional control <mark>(without a clutch)</mark> and is	
7	Hydraulic Oil Pump and	equipped with a drive shaft. It automatically operates	
,	Its Transmission	at low displacement and no load when the vehicle is	
		traveling, and automatically switches to full-flow	
		operation during work.	
		System voltage: 24V; components include an electrical	
8	Electrical Control System	control box, a wired remote controller, a hose	
		connector detection probe, etc.	
		It is equipped with partitions made by bending steel	
		pipes, which can be installed inside the hose	
	Partition Inside the Water  Tank Compartment	compartment. These partitions divide the interior of	
9		the hose compartment into 4 zones from left to right,	
		and each partition consists of three bent pipes; among	
		them, the last bent pipe has a built-in PP plate, which	
		allows the hose connectors to be laid smoothly.	
10	Top Covers on Both	The Buyer shall prepare it by itself, and the Seller shall	
	Sides (Not Included	provide 3D data and relevant supporting resources.	
	in the Supply Scope)	p. 5 35 data and relevant supporting resources.	

- 3. Main Performance Indicators and Technical Parameters
- 1)The hose recovery speed is 0–3 km/h, and the hose deployment speed is 0–15 km/h. When winding the hose, it is equipped with an automatic connector sensing function; the connected connectors can pass through automatically without manual auxiliary control.
- 2)It can automatically recover the hose and perform real-time partial cleaning of the hose as needed.
- 3)Operating temperature: -10  $^{\circ}$ C 45  $^{\circ}$ C (Note: The cleaning system needs to be used at temperatures above 0  $^{\circ}$ C).

#### 4. Product Features:

- 1) The automatic belt guiding mechanism winds the hose from the front of the cab, ensuring that the hose does not curl or twist during recovery, thus achieving smooth recovery.
- 2) The hose retrieval system is equipped with a compaction mechanism to ensure continuous and sufficient winding force, and has an automatic connector sensing function. (Note: This system is equipped with a rewinding function)
- 3) The hose cleaning device, composed of a hydraulic power unit, a high-pressure cleaning system, a water tank, high-pressure nozzles, etc., can clean the upper and lower surfaces of the hose when needed to ensure that the hose is stored cleanly.
- 4) The hose retrieval system is powered by a hydraulic system, enabling easy and quick operation.
- 5) The hose retrieval system can automatically arrange the hose neatly in the hose compartment (personnel assistance is required if the hose folds unsmoothly during the winding process).
- 6) The hose retrieval system can be operated by wired remote control, and the system can

automatically move left and right.

7) The hose compartment partition is made by bending steel pipes, and a PP plate is embedded in the partition bend pipe near the rear of the vehicle, which allows the hose connectors to be laid smoothly.

#### 5. The Shape And Main Dimensions Of Hose Retrieval System.

For details, please refer to Annex 1

### 6. Design Specifications and Standards

The products specified in this agreement shall comply with at least the following specifications and standards (without being limited thereto):

- 1) All operation switches and instruments shall be marked with standardized Chinese waterproof labels. The units of instruments related to pressure, etc., in the system shall conform to the statutory measurement units of the People's Republic of China.
- 2 ) The system performance shall comply with the provisions of GB 7956 Performance Requirements and Test Methods for Fire Fighting Vehicles.
- 3) All welds shall be firm, smooth, flat and free of rust, and comply with relevant national standards.

## 7. Installation and Commissioning

1) All components and accessories of the entire system shall be delivered to Buyer's factory. For the first set, Seller shall assign technical personnel to guide and train Buyer in completing the equipment installation and commissioning; after the installation is completed, Buyer's technical personnel and inspection personnel shall conduct acceptance inspection and confirmation. For the second set and subsequent sets, Buyer shall be responsible for installation, and Seller shall provide technical support.

- 2) After the contract is signed, Seller shall provide the welding structure drawing of the tank frame. Buyer and Seller shall mutually confirm the tank frame and installation structure, and integration and installation can only be carried out after confirmation of feasibility.
- 3) When Buyer's fire truck with hose layout undergoes factory testing, type inspection, and delivery to the end customer, Seller's technical personnel shall provide technical support and coordination.

#### II. Provision of Documents

#### Buyer shall provide the following documents:

1)Chassis drawings, and specifications and location of the engine flywheel power take-off (PTO) interface (Shandeka chassis wheelbase: 5800+1400; flywheel PTO speed ratio: 1.23; rotation direction: same as the engine; torque: ≥500 Nm);

- 2) Carriage frame drawings;
- 3)Installation positions of the hydraulic module, water tank, oil pump, etc.

#### Seller shall provide the following documents:

- 1) Chassis technical requirements and configuration requirements;
- 2)Installation drawings (CAD version) of the hose winding system and structural drawings of the carriage top;
- 3)Product manual of the hose winding system and operation, maintenance and service manual; 4)Product qualification certificate.

## **III. Acceptance Terms**

Inspection and acceptance shall be conducted in accordance with the technical clauses specified in this Technical Agreement and the relevant documents provided by Seller.

## IV. Quality Guarantee Clauses and After-Sales Service Commitments

1)Seller shall provide technical cooperation to Buyer during the system design and commissioning conducted by Buyer, and respond promptly to Buyer's needs.

2)Seller shall cooperate with Buyer in the installation, commissioning and testing of the hose winding system.

3)Seller shall provide remote technical support for Buyer's whole-vehicle delivery.

4)Seller shall be responsible for training Buyer's technical personnel, on-site installation personnel, inspection personnel and after-sales personnel during the commissioning process, so that the trained personnel can proficiently master the equipment performance, as well as the system operation, operation and maintenance.

5)The relevant clauses shall refer to the commercial contract.

V. Any modification to the matters covered in this Agreement shall be implemented only after mutual consent of Buyer and Seller parties; other unforeseen matters shall be resolved through negotiation between the Buyer and Seller.

# **VI. Confidentiality Clauses**

1)Without the written permission of the disclosing party, the receiving party shall not disclose

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any reports, plans, drawings, construction process and unit pictures, agreements, meeting

minutes, correspondence, or technical data of this project to any third party for use or other

purposes.

2)The receiving party shall keep the commercial secrets of the disclosing party confidential and

shall not disclose them to any third party in any form without the permission of the disclosing

party.

VII. This Agreement is made in duplicate, with one copy held by

Buyer and one copy held by Seller, and shall take effect upon

signature.

**VIII. Appendix:** The installation drawings are attached hereto.

甲方: 乙方: 上海紫书实业有限公司

Buyer: Seller: Shanghai ZiShu Industrial Co.,Ltd

代表: 代表:

Representative Representative

> 日期: 日期:

Date: Date: