



# UNI-DRAIN HOE

**INVENTORS**

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## PRODUCT DESCRIPTION

UNI-DRAIN HOE ORIGINAL CONCEPT LIKE SHOVELS (DRAIN HOE) BUT SYSTEMATIC DESIGN CREATION USER MAY EASILY USE IT. IT ALSO HAS FEATURES LIKE ERGONOMIC DOES NOT CHARGE USERS WHEN DOING THE CLEANING PROCESS MORE SAFELY AND EFFECTIVELY IN DOMESTIC DRAIN.

## PROBLEMS STATEMENT

- NOT THE ERGONOMIC OF DRAIN HOE
- NOT TO EFFICIENCY OF DRAIN HOE
- NOT TO THE EXISTING DRAIN HOE MADE BY THE MATERIAL THAT ARE NOT LONG-LASTING

## PRODUCT ADVANTAGES

- MORE ERGONOMIC
- EASY TO CLEANING PROCESS
- LOAD CAPACITY STORAGE HUGE
- TOUGH MATERIAL

## NOVELTIES

- ENVIRONMENTAL FRIENDLY
- MORE ERGONOMIC
- LONGER LIFETIME
- LOAD CAPACITY STORAGE HUGE

## PROCESS FLOW

Plate stainless stell, Cykinder stainless steel, Screw, washer and nut galvanized steel, and handle steel

Grinding



Finish Design



Milling Machine



Lathe Machine



## PRODUCT PERFORMANCES

PROPERTIES	INFORMATION
Maximum Load	2KG-5KG
Life Time	5 years
Tensile Strength	250 MPa
Ultimate Strength	450 MPa

## Different between Drain hoe and Uni-drain hoe

Drain hoe	Multipurpose drian hoe
Less agronomic	More agronomic
Comfort	Comfort
<ul style="list-style-type: none"> <li>• Fix angular handle</li> <li>• Need proper body posture</li> <li>• Need to control balanced process dumping.</li> <li>• Dumping process difficult.</li> </ul>	<ul style="list-style-type: none"> <li>• Flexible angular handle</li> <li>• No need proper body posture</li> <li>• No need to control balanced proces dumping.</li> <li>• Process dumping easy.</li> </ul>
Safety	Safety
<ul style="list-style-type: none"> <li>• Less protect the spine</li> <li>• Less protect the waist</li> </ul>	<ul style="list-style-type: none"> <li>• Protect the spine</li> <li>• Protect the waist</li> </ul>
Less waste load limit capacity reservoir	More waste load limit capacity reservoir
Material type strong and easy rust	Material type strong and hard also stainless
Can not separate garbage and water	Can separate garbage and water

## POTENTIAL APPLICATION

