



HydroVac Services

Protecting Infrastructure, People and the Environment

The Smart, Safe Alternative to Traditional Digging



WM HAMILTON & SONS LTD

AGENDA

1. What is Hydrovac Excavation?
2. How does Hydrovac Excavation Work?
3. Utility Strikes and Consequences
4. What Industries use Hydrovac Excavation ?
5. Common Applications of Hydrovac Technology
6. Hydrovac Specification and Technical details
7. Skilled Operators, Training and Experience
8. SEPA-Licensed Disposal & Recycling Solution
9. Hydrovac Key Capabilities



WHAT IS HYDROVAC EXCAVATION?

Hydro-vacuum excavation is a safe, non-destructive, soft-touch method of excavation

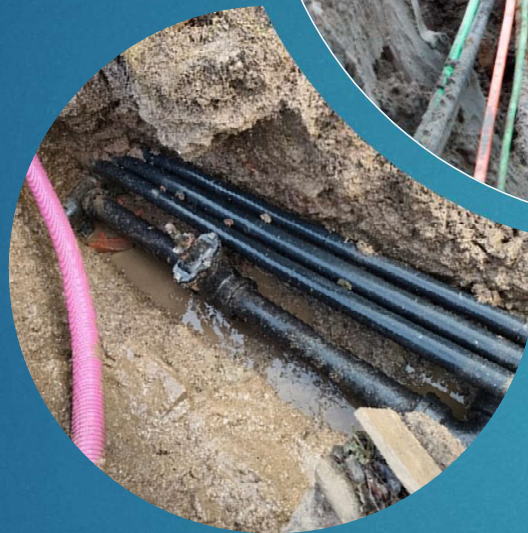
- Non-destructive digging – no risk of damage
- Safe working around underground services
- Reduces service strikes
- Precise and controlled excavation
- Versatile across various applications
- Efficient and time-saving excavation process
- Cost-effective – one machine, multiple uses





HOW DOES HYDROVAC EXCAVATION WORK?

1. **High-Pressure Lance** – Equipped with a turbo nozzle to break up and loosen soil
2. **Creates Slurry** – Water and soil combine to form an easily removable slurry
3. **Powerful Vacuum System** – 6" hydraulic suction boom extracts slurry into 8m³ debris tank
4. **Safe Utility Exposure** – Allows precise excavation around buried services without damage





Utility Strikes and Consequences

The Effects of Utility Strikes

- **Safety Hazards** – Injury, electrocution, fire, explosion
- **Health & Safety Risks** – Harm to workers and the public
- **Service Disruptions** – Power, water, gas, internet outages
- **Project Delays** – Stoppages, rescheduling, repairs, H&S investigations
- **Financial Costs** – Fines, legal claims, higher insurance
- **Reputational Damage** – Loss of trust, bad publicity
- **Environmental Impact** – Leaks and contamination



What Industries use Hydrovac Excavation?

Local Authorities:

- Road construction, maintenance and public infrastructure upgrades.

Housebuilding:

- Safe trenching and exposing plot service connections.

Utility & Construction:

- Locating and exposing gas, water, electricity and telecom lines.

Civil Engineering & Groundworks:

- Accurate, non-destructive excavation around complex site infrastructure.

Highways:

- Excavations include lighting column foundations, electrical cabling and underground services such as drainage, water, telecom and gas.



Applications of Hydrovac Technology

- **Utility Location:** Identifying and exposing underground utility lines for repair or maintenance.
- **Trenching:** Excavating narrow trenches for installing new utility lines alongside highways with minimal disturbance to surrounding soil
- **Potholing/Daylighting:** Creating precise test holes to verify the location and depth of underground utilities or structures without heavy excavation.
- **Working in congested areas:** Hydrovacs are capable of manoeuvring through restricted work spaces and around obstacles where traditional equipment may have difficulty, including air-vacuum system.
- **Sign/Light Pole Installations:** Excavating precise holes for installing highway signs, light poles and guardrails.



Hydrovac Specification and Technical Details



High Pressure Rotatory Nozzle



HydroSweeper



Water Pump rated at 15//min at 250Bar /3600PSI

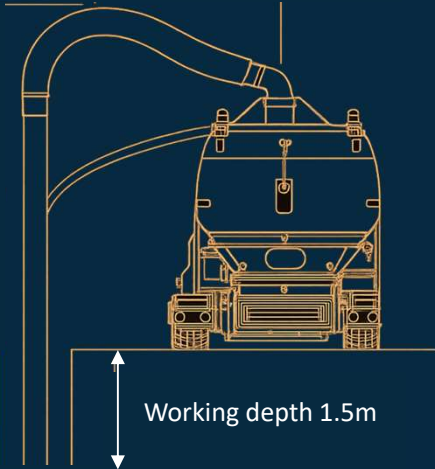
6 " Hydraulic Boom with Safety Break

Water Tank Capacity 2300lts

Mechanical Sweeping Assembly

Working reach 2m

Working depth 1.5m



Trained & Certified Hydrovac Teams



Hydrovac operators undergo specialised training to ensure safe, efficient and compliant excavation projects.

Key Competencies & Accreditations:

- NPORS – Suction Excavator
- CSCS: SVQ Level 2 in Construction Operations
- WJA – Water Jetting Association Certified
- EUSR – National Water Hygiene Card
- Scottish Water – DOMS (Distribution Operations Maintenance Strategy)
- HGV Class 2 Licence Holder
- Driver CPC – Certificate of Professional Competence

Our Hydrovac teams combine technical skill, safety awareness and regulatory compliance to deliver exceptional excavation services.

New Wash Plant: Recycling Solutions

- £5m Wash Plant complete with Effluent Treatment will enable us to recycle inert material using Industry-leading technology.

Tonnage: 80-100tph

Material: C&D Waste, Road Sweeping & Gully Waste

Output: Recycled Sands, Aggregates

- Fully closed loop water recycling system.
- This new facility further demonstrates Wm Hamilton's contribution to the circular economy by increasing recycling rates and reducing the amount of waste going to landfill.
- Transforming waste into valuable, high-quality Recycled products.
- Excavated material is classified and processed under EWC Code 17 05 04





Hydrovac Key Capabilities

- **Hydro-Vacuum Excavation** – Safe, non-destructive digging for utilities and sensitive areas.
- **Effective in Hard, Compacted and Saturated Ground** – Performs well in challenging ground conditions.
- **Road Sweeping** – Keeps roads, construction zones and industrial sites clean and compliant.
- **Gully Maintenance** – Removes silt, debris and clears blockages.
- **High-Pressure Hand Lancing** – Cleans grime, oil and debris from roads and hard-to-reach areas.
- **Skater Surface Cleaning** – Deep-cleans concrete and porous surfaces without damage.
- **Waste Disposal** – All waste removed to SEPA-licensed facilities.
- **Sustainable Operation** – Hydro Excavation with Built-In Cleaning Capabilities post operation



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QUESTIONS?



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