

## Hydraulic Starting Solution Example

**Project Name:** USAN  
**Application:** Containerised  
Emergency Genset  
**Engine:** MTU 16V4000  
**Solution:** MPS-G-600A



This Hydraulic Starting System was designed to enable the Black Start of a containerised Genset. The System provides for 6 start attempts, each of 5 seconds duration, when the Accumulators are fully charged.

Recharging of the Accumulators is via an electrically-driven Recharging Pump. All electronic components are suitable for Atex zone 2 and usable in hazardous areas.

Stainless steel Reservoir (316L), pipes and fittings were supplied fully assembled. Accumulators were supplied with Bureau Veritas pressure approval.

All components were mounted on the reservoir. The system is specially painted to resist corrosion in the defined offshore environment.

All Hydraulic Starting Systems from Huegli-Tech Ltd. include a hand-pump and manual starting valve and are, therefore, completely self-contained and independent of any outside power source.

**We have experience in building and constructing of starting solutions over 40 years!**

For more Information contact us under:

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or visit our website:

[www.huegli-tech.com](http://www.huegli-tech.com)

*Solutions for combustion engines,  
that work right from the beginning.*

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# Why HYDROTOR Hydraulic Starting?

## Here some Facts and Benefits

1) The HYDROTOR Starter, with over 90% efficiency, turns the engine **faster** than other means.

**Result:** Higher combustion temperature.  
**Reliable ignition, positive start.**

2) Even at  $-40^{\circ}\text{C}$  the HYDROTOR provides the **same high torque as at normal temperature.**

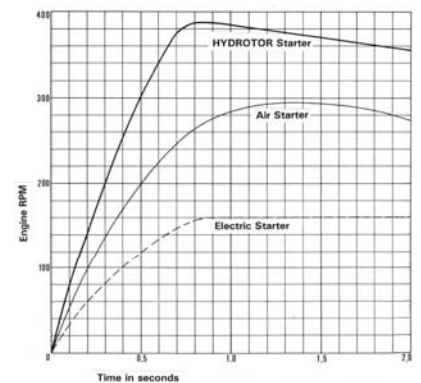
3) The HYDROTOR Starter is totally **spark free** (when fitted with a beryllium pinion).  
Ideal for fire hazard areas.

4) Each HYDROTOR System incorporates a Hand pump for manual recharging.  
**Starting is always possible, anywhere, anytime.**

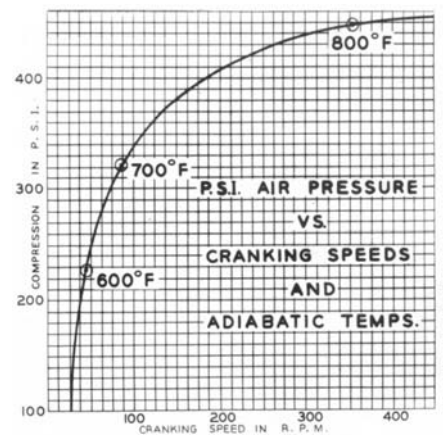
5) HYDROTOR Starting Systems are approved by classification societies.  
**Ideal for Marine applications.**

6) HYDROTOR Starting Systems are **virtually maintenance free**, last the life of the engine, save costs

7) HYDROTOR Starters are of modular construction and with a wide range of accumulator capacities and recharging methods available from stock, **even application-specific systems can be delivered quickly.**



Cranking speed comparison  
Hydraulic – Air - Electric



Higher combustion temperatures  
with faster cranking speeds