



宏达力生物化工-专业的絮凝剂生产基地

针对高致密油气厂压裂过程中对减阻剂和稠化剂的要求我公司所研发和生产的稠化剂具有一剂多用的功能，实现了在压裂过程中低浓度减阻，高浓度携砂的目的，在长庆油田苏里格气田压裂广泛使用并起到高抗盐，快速起粘可连续混配的技术特点。

According to the requirements of drag reducer and thickener in the fracturing process of high-density oil and gas plant, the thickener developed and produced by our company has a multi-purpose function, which realizes the purpose of low concentration drag reduction and high concentration sand carrying in the fracturing process. It is widely used in the fracturing of Sulige gas field in PCOC Oilfield and has the technical characteristics of high salt resistance, rapid viscosity and continuous mixing.

HDL 生产和研发用于现场的稠化剂:

HDL production and development of thickener for field use

产品名称	减阻滤 (%)	表观粘度	PH 值	表面张力	配伍性	抗盐效果
HDCH-233	>60	浓度 2%，25 摄氏 ≥150 (concentration 2%, 25 °C), ≥150mpa.s	5-8	≤32	无分层沉淀 No stratification	在特定环境中 有抗盐功 Salt resistant in specific environment

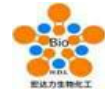
HDL 所研发和生产的非抗盐性稠化剂的主要特点有:

- 高黏度，低摩擦，良好的悬砂能力，滤失性小，黏度稳定性好，残渣少，配制方便和成本低。
- 配制的水溶液有增稠携砂，降低压裂液流失的作用。而且，本公司生产的聚丙烯酰胺有降阻作用，因而能使压力传递损失下降。
- 提高增稠效果，耐酸，耐高温，稳定性好；
- 溶解速度快，速溶、起黏快。



- The main characteristics of the thickener developed and produced by HDL are as follows: High viscosity, low friction, good sand suspension capacity, small filtration, good viscosity stability, less residue, convenient preparation and low cost.
- The prepared water solution can thicken sand carrying capacity and reduce the loss of fracturing fluid. Moreover, the polyacrylamide produced by our company has the function of reducing resistance, so it can reduce the loss of pressure transmission.
- Improve thickening effect, acid resistance, high temperature resistance, good stability.

Professional Poly-acrylamide Manufacturer



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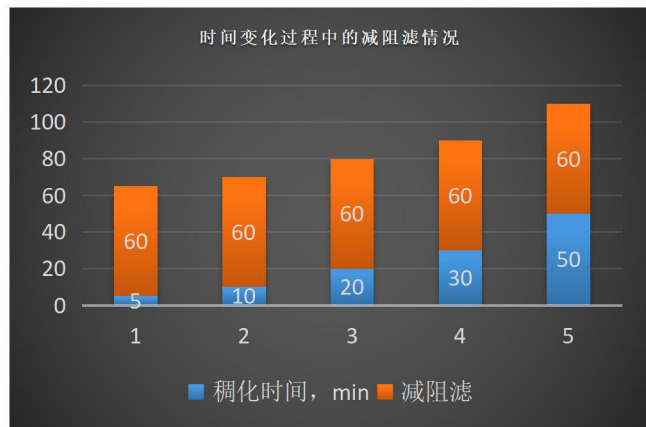
- Fast dissolving speed, quick dissolving and quick sticking.

产品性能数据:

HDL 生产的稠化剂通过现场的测试, 在不同时间段的减阻滤的表现如右图所使:

Product performance data:

The thickener produced by HDL has passed the field test, and the performance of drag reduction and filtration in different time periods is shown in the right figure:

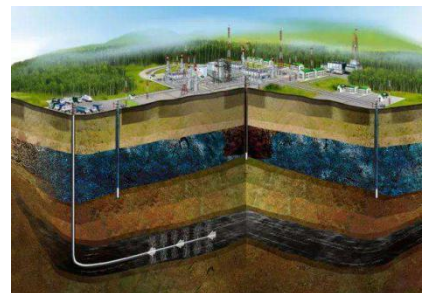


宏达力生物化工有限公司生产的压裂用高效稠化剂, 为聚丙烯酰胺类的反相乳液聚合物, 均匀乳白色或微黄色液体。具有低摩擦, 低伤害, 易返排, 性能稳定和溶胀速度快等特性, 性能好, 易于在线配制, 适应性强, 能够满足压裂工艺过程中的需求。

The high efficiency thickening agent produced by hondar Biochemical Co., Ltd. is polyacrylamide emulsion, and it is homogeneous in creamy white or yellowish liquid. It has the characteristics of low friction, low damage, easy flowback, stable performance, fast swelling speed, good performance, easy online preparation, strong adaptability, and can meet the needs of the fracturing process.

在当今充满挑战的世界形势下, 我们作为一家专业的絮凝剂研发机构和制造商, 对客户陈但这很多的责任, HDL 集团承诺, 并抑制秉承:

- ◆ 尽可能降低生产成本提高客户的经济效益
- ◆ 在不损害环境, 健康和安全标准的前提下
- ◆ 不断提高产品质量
- ◆ 在产业链整合和地区多样方面都保证安全可靠的供应。



In today's challenging world situation, as a professional flocculant R & D institution and manufacturer, we take a lot of responsibilities to our customers. HDL group promises and restrains the following:

- reduce the production cost as much as possible and improve the economic benefits of customers.
- Continuously improve product quality without damaging environment, health and safety standards.
- ensure safe and reliable supply in terms of industrial chain integration and regional diversity.