



KWS Frac Blender Screws
Ready for Painting
and Shipment

Replacement Screws for NOV Rolligon Frac Blenders

General Description of the Application

NOV is one of the largest oilfield service companies in the world and provides highly engineered equipment for the location and extraction of oil and gas. The level of technology and precision for oil and gas exploration is incomparable. Hydraulic fracturing is a process to stimulate the release of oil and gas from a downhole formation and improve production.

As part of the hydraulic fracturing operation, frac blenders mix various components such as frac sand or proppant, specialty chemicals, gels and water. The blended mixture is injected into a wellbore to fracture the deep rock formations through which oil and gas flow more freely.

Multiple screw feeders are mounted on the back of blender trucks to accurately meter sand or proppant to the blend tank. NOV Rolligon has special design requirements for their frac blender screws. KWS helped create the standard for NOV Rolligon and has provided frac blender screws for many years.

Design Parameters of Application

Product Type: Frac Sand or Proppant

Material Density: 50 to 60 Lbs. per Cubic Foot

Capacity: 18,000 Pounds per Hour

Duty: 24 Hours per Day, 7 Days per Week

Advantages Provided by KWS

As an ISO 9001-2015 certified company, KWS designs and manufactures equipment to the highest quality standards. The NOV Rolligon screws operate at high-speeds and close tolerance. Any imperfection could cause a catastrophic failure. Every KWS screw is straightened to within 0.015-inches Total Indicated Runout (TIR) in a special lathe prior to testing and shipment.

A very close tolerance between the outside diameter (OD) of the screw and the inside diameter (ID) of the housing improves metering accuracy. If the OD of the screw is too large, the screw flights could contact the inside of the housing and lead to failure. If the gap is too large, sand or proppant cannot be accurately metered to the blend tank. The screws provided by KWS to NOV Rolligon are very close tolerance. The outside diameter (OD) of each screw is checked with a special gauge to make sure tolerances are held.

Testimonial

"The KWS frac blender screws are the best quality I've ever seen. Thanks for your great quality. We appreciate the partnership with KWS."

- T. Matthews, Design Engineer – NOV Rolligon



**Design
Engineering
Manufacturing**

KWS Manufacturing

3041 Conveyor Drive
Burleson, Texas 76028

Toll Free: (800) 543-6558

Phone: (817) 295-2247

Fax: (817) 447-8528

www.kwsmfg.com



Made-To-Order Solutions



KWS Frac Blender Screws
Ready for Painting
and Shipment

Replacement Screws for NOV Rolligon Frac Blenders



Screw is Checked in Lathe
with Dial Indicators



Special Gauge Verifies Correct OD of Screw



Drive End of Frac Blender Screws
Utilize Special Keyed Hub



NOV Rolligon Frac Blender Truck in Field



Multiple Screws Accurately Meter
Sand to Blend Tank



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