



# Volgaburmash

## ROLLER CONE DRILL BIT

**444.5 GRDP135 (VU-KLS13TGP)**

Diameter ..... 444.5 mm (17 1/2")

IADC ..... 135

Product line ..... GrandPro

GrandPro bits are designed for multiple drilling of upper well sections (surface hole, conductor hole). Sealed bearings, optimum cutting structure and complex body protection provide excellent bit life and performance.

### Specification

Bearing type ..... Journal bearing  
Seal ..... Elastomer Seal  
Number of nozzles\* ..... 4  
Thread, API ..... Pin 7 5/8 Reg  
Gross weight, kg ..... 228,7

### Application

GrandPro bit is applied for drilling of oil and gas wells in soft formations with water or mud circulation.

### Drilling modes recommended

RPM ..... 300-40  
WOB, t ..... 16-35

### Design features

Combined circulation (Three side jets and one central jet).  
Shirttail and leg leading edge hard facing.  
Leg protection with TC compacts.  
Enhanced thick teeth hard facing.  
Single gauge of TC compacts.  
Near gauge of TCI.

**Quality management system is certified to ISO 9001 and API Specification Q1**

\* Standard specification may be changed on customer request

For the purpose of performance improvement, minor changes of the bit design may be introduced without prior customer notification

VOLGABURMASH, JSC  
Grozenskaya St. 1  
Samara, 443004, Russia

Tel./fax: +7 (846) 300-8000  
e-mail: mail@vbm.ru  
www.vbm.ru