

# Case Study

PetroMar Technologies, Inc.



## Custom, Super High Capacity Thrust Bearing

PetroMar Technologies, Inc., a world leader in energy technology products and services, set out to design and build a very robust linear motion assembly for a down-hole robotics device. The biggest challenge was the envelope size limitation combined with the high load requirement, creating an unusually high power-to-size ratio.

***“CMC not only brought an incredible bearing product to the table, but their excellent engineering support enabled a seamless package for our challenging envelope. To top it off, they provided unsolicited project status updates and supplied a training video featuring the actual product and how best to install and maintain it. That’s why we chose CMC.”***

*- Michael Joyce , Mechanical Engineering Manager, PetroMar*

PetroMar turned to Creative Motion Control (CMC) to assist in designing and building this highly customized and specialized assembly. *Cont. on page 2*



# Case Study

## PetroMar Technologies, Inc.



*Continued from page 1*

CMC's Roller Screw Support Bearings are the perfect fit for PetroMar. The core technology is CMC's Grooved Roller Bearing (GRB), which has 2 to 3 times the load capacity and lasts anywhere from 5 to 15 times longer than the competition's support bearings. This load capacity advantage allowed CMC to design a bearing support unit that is significantly smaller while maintaining the required load capacity and life requirements.

The patented GRB design uses grooved rollers which create significantly more contact points than competitive solutions.

### **More Contact Points = Higher Load Capacity**

The PetroMar design also has an integrated, custom flange. The flange and the outer race are one piece, eliminating the complication of a flanged 'housing' and the related additional parts required. The CMC design simplifies installation and dramatically reduces the size and weight of the bearing assembly.



Creative Motion Control, located in Redmond, WA, specializes in super long life thrust and radial industrial bearings, as well as high precision roller screws.

Corporate Address:  
2891 152<sup>nd</sup> Avenue NE  
Redmond, WA 98052

Phone: 425-519-9945  
Fax: 866-883-0810  
[www.creativemotioncontrol.com](http://www.creativemotioncontrol.com)  
[info@creativemotioncontrol.com](mailto:info@creativemotioncontrol.com)

**CMC: CREATIVE SOLUTIONS TO AUTOMATION CHALLENGES**