

UDC 621  
CODEN: MINSC5  
In print: ISSN 1857 – 5293  
On line: ISSN 1857 – 9191

**MECHANICAL ENGINEERING  
SCIENTIFIC JOURNAL**

**МАШИНСКО ИНЖЕНЕРСТВО  
НАУЧНО СПИСАНИЕ**

**Volume 38  
Number 1**

**Skopje, 2020**