In this study, effect of hard turning process parameters under condition DRY and MQL (Minimum Quantity Lubrication) on average main cutting force investigated. For this purpose cold work tool steel at 58 HRC hardness DIN 1.2842 (90MnCrV8), was machined at the processing parameters that four different cooling method: DRY 0,00 ml/h; MQL1 2,00 ml/h; MQL2 6,50 ml/h; MQL3 9,50 ml/h, three different cutting speeds: 80; 100; 120 m/min, three different feed rate: 0,05; 0,075; 0,1 mm/rev and constant cutting depth 0,25 mm with ceramic cutting tool (CNG 12 04 08 TO1020 650). Experimental design was determined as full factorial by Taguchi method and conducted 36 experiments. Depending on the cutting parameters determined during turning were determined as DRY and three different amount of MQL, the effect of DRY, MQL1, MQL2 and MQL3 on cutting force assessment through comparison between these conditions. As a result, MQL machining has reduced the main cutting force; 26,49% average compared to DRY condition.