



Stockpiles

- Indoors or outdoors
- Stockpile volumes



Asset inspection

- Digital Twin Creation
- Condition monitoring



BIM/inspection

- BIM/CAD model - Digital Twin
- Rehabilitation / repair
- Condition monitoring



Vertical shaft

- monitor shaft condition
- monitor shaft guides



Raise

- Monitor raise (convergence monitoring, shotcrete thickness, over-break)



Declines

- map declines
- identify and locate services
- check if new equipment will fit down decline
- road condition
- map new developments



New developments

- measure advancement
- geotech structure mapping
- shotcrete thickness



Stopes

- volumes
- over-break / under-break
- structure mapping
- backfill height



Drives

- convergence monitoring
- ground support audits
- geotech structure mapping



Draw points

- map hang-ups
- check actual bell shape vs design after blasting
- evaluation of new blast designs
- rock fragmentation size analysis



BVLOS for emergencies

- search and rescue
- map fall-of-ground
- safe for re-entry



Stope

- final stope volume / reconciliation



Ore passes

- monitor condition (over-break)
- locate hang-ups
- measure silo / stockpile level



Processing plant

KEY



Drone



Vehicle mount



Handheld



Cage mount